#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for rate increase by Florida	)	DOCKET NO. 20210015-EI
Power & Light Company	)	
	)	

# FLORIDA RISING'S, LEAGUE OF UNITED LATIN AMERICAN CITIZENS', & ENVIORNMENTAL CONFEDERATION OF SOUTHWEST FLORIDA'S MOTION FOR EVIDENTIARY HEARING

Florida Rising, League of United Latin American Citizens of Florida ("LULAC"), and Environmental Confederation of Southwest Florida ("ECOSWF"; collectively, "Movants"), pursuant to Rule 28-106.204(1), Florida Administrative Code, hereby respectfully file this motion for a limited evidentiary hearing, or in the alternative, to supplement the evidentiary record in this docket with data from the United States Energy Information Agency ("EIA"), Florida Power & Light Company ("FPL"), and the Florida Public Service Commission ("Commission" or "PSC"). Movants believe that the Commission should consider additional evidence and argument presented herein, consistent with the Florida Supreme Court's decision in Floridians Against Increased Rates, Inc. v. Clark, 371 So. 3d 905 (Fla. 2023) (remanding this case to the Commission with instructions to make additional findings) [hereinafter, "FAIR"]. As explained below, Movants request a limited evidentiary hearing to determine FPL's "performance" in relation to its goals under the Florida Energy Efficiency and Conservation Act ("FEECA") for the purpose of "establishing rates" for FPL in accordance with the Florida

Supreme Court's decision regarding this proceeding. § 366.82(10), Fla. Stat.; *FAIR*, 371 So. 3d at 912. In the alternative to a limited evidentiary hearing, Movants request the admission of additional argument and data from the PSC's reports on utility progress, including FPL, towards their FEECA goals ("PSC FEECA Reports"), included as Attachments A-C; from FPL on its performance in relation to its FEECA goals ("FPL DSM Reports"), included as Attachments D-F; and energy efficiency performance data from the EIA, included as Attachments G-I ("EIA Data"), to fulfill the Commission's obligations in light of the Supreme Court's ruling.

#### **Procedural Background**

On December 2, 2021, the Commission issued its Final Order Approving 2021 Stipulation and Settlement Agreement. *In re: Petition for rate increase by Florida Power & Light Company*, Docket No. 20210015-EI, Order No. PSC-2021-0446-S-EI (Fla. Pub. Serv. Comm'n, Dec. 2, 2021) [hereinafter "Remanded Order"]. Movants timely appealed the Remanded Order. On September 28, 2023, the Florida Supreme Court issued its opinion concerning the Remanded Order, in which the Court determined that the Remanded Order's findings of fact and law were insufficient to enable the Court's review. *FAIR*, 371 So. 3d at 911–12 ("The Commission must therefore give us . . . a decision that is reasoned and articulated enough to allow us to assess on what basis it has concluded that the settlement

agreement is in the public interest and results in rates that are fair, just, and reasonable."). Accordingly, the Court remanding the order to the Commission with instructions to make additional specified findings. *Id.* at 914. As relevant to this Motion, the Court informed the Commission that, consistent with Florida Statutes, a "reasonably explained" amended order on FPL's 2021 rate case "must reflect" consideration of FPL's performance pursuant to its goals under FEECA. *Id.* at 912 (citing § 366.82(10), Fla. Stat. (2021)).

Regarding the format of the Commission's proceedings on remand, the Court indicated that, beyond complying with any statutory requirements, "the form of the proceedings on remand will be up to the Commission, including the decision whether to allow parties to present additional evidence." *Id.* at 914.

#### **Argument**

## I. <u>The Commission Should Hold a Limited Evidentiary Hearing on FPL's FEECA Performance</u>

The Florida Supreme Court has expressly instructed the Commission to address FPL's energy efficiency performance head on in its revised order and indicated that it is appropriate for the Commission to allow additional evidence to inform the Commission's revised order. Nothing in Florida Statutes or the Florida Administrative Code prohibits the Commission from granting a limited hearing to present additional evidence regarding FPL's FEECA performance. A limited evidentiary hearing would allow the parties to put on witnesses and conduct cross-

examination, enhancing the Commission's ability to conduct the necessary fact-finding to carry out the Supreme Court's *FAIR* decision. Such an evidentiary hearing would be limited to FPL's energy efficiency performance in relation to its FEECA goals for the purpose of determining how FPL has performed and how that should impact its rates.

Should the Commission decide not to hold an additional hearing, Movants ask the Commission, in the alternative, to include the additional material attached to this motion in the record and consider it in rendering its revised order for the reasons stated below.

# II. The Commission Should Reopen the Record in this Docket for Entry into Evidence of the FPL FEECA Reports, PSC FEECA Reports, and EIA Data

FEECA was adopted by the Florida Legislature in 1980. Sections 366.82(2) and 366.82(6), Florida Statutes, require the Commission to establish goals for the FEECA utilities, and review the goals every five years, at a minimum. FPL is a FEECA utility.

Section 366.82(10), Florida Statutes, requires the Commission to provide an annual report to the Florida Legislature and the Governor by March 1 summarizing the goals each utility has adopted and the progress each FEECA utility has made

toward achieving its goals.<sup>1</sup> As part of that process, FPL submits a report on its progress towards meeting those goals.<sup>2</sup> The FEECA Reports and FPL demand-side management ("DSM") reports that Movants move the Commission to include in the record of this proceeding are the annual reports covering progress in the years 2020, 2021, and 2022 as required by Section 366.82(10), Florida Statutes.

The 2023 FEECA Report and FPL 2022 DSM Report indicate that FPL failed to meet 8 of its 9 FEECA goals for 2022. Attachment A at 19; Attachment D at 3. The 2022 FEECA Report and FPL 2021 DSM Report indicate that FPL (combining FPL and Gulf Power) failed to meet 7 of its 9 FEECA goals for 2021. Attachment B at 21; Attachment E at 5.3 The 2021 FEECA Report and FPL 2020

<sup>&</sup>lt;sup>1</sup> The PSC FEECA Reports are available at https://www.psc.state.fl.us/reports. Attachment A is available at https://www.floridapsc.com/pscfiles/websitefiles/PDF/Publications/Reports/ElectricGas/AnnualReport/2023.pdf; Attachment B is available at https://www.floridapsc.com/pscfiles/websitefiles/PDF/Publications/Reports/ElectricGas/AnnualReport/2022.pdf; and Attachment C is available at https://www.floridapsc.com/pscfiles/websitefiles/PDF/Publications/Reports/ElectricGas/AnnualReport/2021.pdf. <sup>2</sup> The FPL DSM Reports are available at <a href="https://www.psc.state.fl.us/ar-demand-">https://www.psc.state.fl.us/ar-demand-</a>

side. Attachment D is available at https://www.floridapsc.com/pscfiles/websitefiles/PDF/Utilities/Electricgas/ARDemandSide/2022/Florida%20Power%20and%2 0Light%20Company.pdf; Attachment E is available at https://www.floridapsc.com/pscfiles/website-

files/PDF/Utilities/Electricgas/ARDemandSide/2021/Florida%20Power%20and%2 0Light%20Company%20and%20Gulf%20Power%20Company.pdf; and Attachment F is available at https://www.floridapsc.com/pscfiles/websitefiles/PDF/Utilities/Electricgas/ARDemandSide/2020/Florida%20Power%20and%2 0Light%20Company%20and%20Gulf%20Power%20Company.pdf.

<sup>&</sup>lt;sup>3</sup> FPL as a stand-alone failed to meet 5 of its 9 FEECA goals, while Gulf Power as a stand-alone failed to meet 9 of its 9 FEECA goals. Attachment E at 6-7.

DSM Report indicate that FPL (combining FPL and Gulf Power) failed to meet 4 of its 9 FEECA goals for 2020. Attachment C at 21; Attachment F at 5.4

The EIA collects data from utilities nationwide regarding their energy efficiency activities. To properly put FPL's failure to meet its FEECA goals in context, it is important to view how its performance relates to other utilities. The EIA collects and compiles data pursuant to 15 U.S.C. § 772, and makes that data available on its website. EIA Form 861 data contains information on utility energy efficiency achievement from 2013 to the present and is available at <a href="https://www.eia.gov/electricity/data/eia861/">https://www.eia.gov/electricity/data/eia861/</a>. It is this data for 2022, 2021, and 2020 that Movants seek to include in the record and have attached to this motion, and have attached as Attachments G-I, respectively. This EIA Data shows that FPL, although the largest utility in the nation, is far surpassed by much smaller utilities in terms of energy savings achieved.

The Florida Supreme Court made clear that the Commission has discretion to allow the parties in this proceeding to present additional evidence on remand.

<sup>&</sup>lt;sup>4</sup> FPL as a stand-alone failed to meet 4 of its 9 FEECA goals, while Gulf Power as a stand-alone failed to meet 8 of its 9 FEECA goals. Attachment F at 6-7.

<sup>&</sup>lt;sup>5</sup> Attachment G is available at <a href="https://www.eia.gov/electricity/data/eia861/zip/f8612022.zip">https://www.eia.gov/electricity/data/eia861/zip/f8612022.zip</a>, and is the spreadsheet entitled "Energy\_Efficiency\_2022.xlsx"; Attachment H is available at <a href="https://www.eia.gov/electricity/data/eia861/archive/zip/f8612021.zip">https://www.eia.gov/electricity/data/eia861/archive/zip/f8612021.zip</a>, and is the spreadsheet entitled "Energy\_Efficiency\_2020.xlsx."

See FAIR, 371 So. 3d at 914. The Florida Supreme Court also made it clear that a "reasonably explained decision" from the Commission must reflect that the Commission considered FPL's performance pursuant to FEECA. See id. at 912. Movants respectfully suggest that to allow the Commission to make a fully informed and reasonably explained decision concerning FPL's performance under FEECA, the Commission must exercise its discretion to consider the FEECA Reports, FPL's DSM Reports, and EIA Data as part of the evidentiary record in this proceeding. Accordingly, Movants request that the Commission, at a minimum, reopen the record in this proceeding for the limited purpose of admitting the EIA Data (in addition to the FEECA Report subject to the joint motion).

#### III. Additional Evidence Also Weighs Against Approval of Settlement

Based on the existing record, Movants have previously argued that FPL should not be receiving the largest rate increase in United States history with an authorized return on equity far above its peers, excessive rate base, and a reserve surplus accounting mechanism that allows FPL to essentially guarantee that it will earn at the top of its authorized range (among many other reasons). Pursuant to section 366.82(10), Florida Statutes, FPL's failure to fulfill its FEECA goals—placing FPL far below much smaller utilities in energy savings—also weighs against approval of the settlement as FPL has failed repeatedly failed to comply with its minimal FEECA obligations. Movants believe that a limited evidentiary

proceeding is the best way to introduce this evidence and would allow the parties the opportunity to conduct post-hearing briefing on the meaning of that evidence in relation to Commission approval of the 2021 FPL settlement. Absent a limited evidentiary hearing with post-hearing briefing, in the alternative, Movants request the Commission consider the attached data and FEECA reports and conclude that FPL's performance in relation to its FEECA goals has been poor, and, therefore, that the 2021 Settlement should not be approved as being in the public interest nor as complying with section 366.82(10), Florida Statutes.

#### **Conferral With Other Parties**

Pursuant to Rule 28-106.204(3), Florida Administrative Code, undersigned counsel has conferred with the other parties in this docket and is authorized to represent that FPL opposes this motion. Floridians Against Increased Rates supports this motion. The Federal Executive Agencies, Florida Industrial Power Users Group, Florida Internet and Television Association, CLEO Institute, Office of Public Counsel, Southern Alliance for Clean Energy, Florida Retail Federation, Walmart, and Larson either take no position or do not oppose this motion. Despite multiple attempts to contact Vote Solar, including their attorney of record,<sup>6</sup> the undersigned has received no response on their position.

<sup>&</sup>lt;sup>6</sup> The undersigned understands that the attorney of record for Vote Solar, Katie Chiles Ottenweller, is no longer with that organization.

#### **Conclusion**

For the foregoing reasons and consistent with the Florida Supreme Court's mandate, Movants respectfully request that the Commission schedule a limited evidentiary hearing to introduce additional evidence and argument regarding FPL's FEECA performance, or in the alternative, to reopen the record to include the materials and conclude that FPL's FEECA performance has been poor and take that performance into consideration in evaluating the 2021 Settlement (as another reason to disapprove the Settlement).

Respectfully submitted this 7th day of February, 2024.

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#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true copy and correct copy of the foregoing was

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DATED this 7th day of February, 2024.

/s/ Bradley Marshall Attorney

## Attachment A



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

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

NOVEMBER 2023

## Florida Public Service Commission

# **Annual Report** on Activities Pursuant to

# The Florida Energy Efficiency and Conservation Act

As Required by Sections 366.82(10), 377.703(2)(f), and 553.975, Florida Statutes

November 2023

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#### **List of Acronyms**

C/I Commercial and Industrial (Customers)

Commission or FPSC Florida Public Service Commission

COVID-19 Coronavirus Disease of 2019
CUC Chesapeake Utilities Corporation

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

**ECCR** Energy Conservation Cost Recovery

**EV** Electric Vehicle

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

FCG Florida City Gas

FEECA Florida Energy Efficiency and Conservation Act

**FLBC** Florida Building Code

FPL Florida Power & Light Company
FPUC Florida Public Utilities Company

FRCC Florida Reliability Coordinating Council

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

GRIM Gas Rate Impact Measure Test

Gulf Power Company
GWh Gigawatt-Hour

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

IGCIndiantown Gas CompanyIOUInvestor-Owned Utility

**JEA** Formerly known as Jacksonville Electric Authority

**kWh** Kilowatt-Hour

LDC Natural Gas Local Distribution Company

MMBtu One Million British Thermal Units

MW Megawatt

MWh Megawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission
O&M Operations and Maintenance

**PV** Photovoltaic

PGS Peoples Gas System
RIM Rate Impact Measure Test

SGS Sebring Gas System

SJNG St. Joe Natural Gas

TECO Tampa Electric Company
TRC Total Resource Cost Test

#### **Executive Summary**

#### **Purpose**

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

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

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

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

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

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

#### **Municipal Electric Utilities**

- JEA
- Orlando Utilities Commission (OUC)

#### Investor-Owned Natural Gas Local Distribution Company (LDC)

Peoples Gas System (PGS)

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

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

#### Report Layout

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

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

#### 2019 Goalsetting Proceeding

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

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

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

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

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

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

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

#### 2022 Achievements and Related Program Costs

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

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

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

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

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

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

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

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

#### **Conclusion**

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

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

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

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

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

#### 1.1 FEECA History and Implementation

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

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

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

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

The statute also allows the Commission to provide appropriate financial rewards and penalties to the utilities over which it has rate-setting authority. The Commission also has the authority to allow an IOU to receive an additional return on equity of up to 50 basis points for exceeding 20 percent of its annual load growth through energy efficiency and conservation measures. To date, the Commission has not awarded financial rewards or assessed penalties for any of the IOUs through FEECA. The Commission does not have rate-setting authority over JEA and OUC and therefore cannot assess financial penalties or provide financial rewards under its authority.

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

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

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

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

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

In 2008, the Florida Legislature amended the FEECA statute, placing upon the Commission additional responsibilities when adopting conservation goals. These responsibilities included the consideration of the benefits and costs to program participants and ratepayers as a whole, as well as the need for energy efficiency incentives for customers and utilities. The Commission must also consider any costs imposed by state and federal regulations on greenhouse gas emissions.

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

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

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

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

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

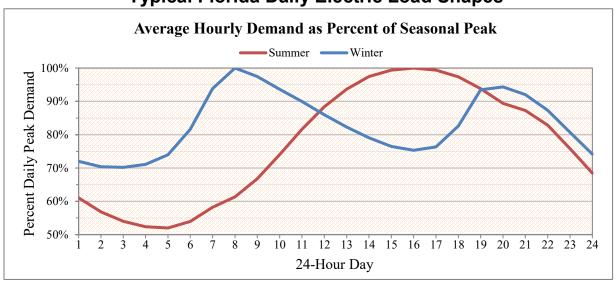
Table 2
Florida's Electric Customers by Class and Consumption (2022)

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

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

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

Figure 1
Typical Florida Daily Electric Load Shapes



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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### 1.3 Recovery of Conservation Expenditures

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

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

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

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

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

#### **Section 2. DSM Goalsetting**

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

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

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

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

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

Table 4
Summary of Electric Cost-Effectiveness Methodologies

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

#### **Participants Test**

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

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

#### Rate Impact Measure (RIM) Test

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

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

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

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

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

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

#### 2019 Electric DSM Goalsetting Proceeding

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

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

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

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

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

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

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

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

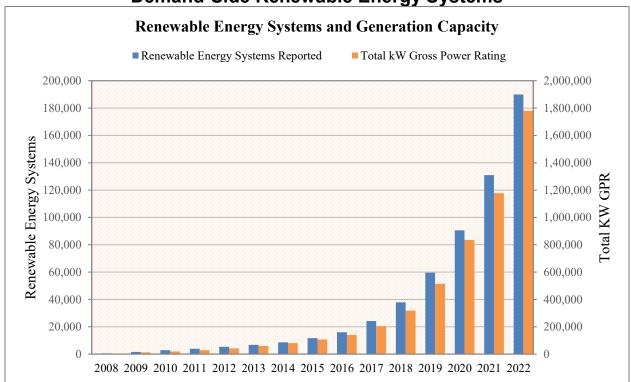
<sup>&</sup>lt;sup>16</sup>See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

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

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

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

Figure 2
Demand-Side Renewable Energy Systems



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

# 2.2 Summary of the 2019 Goalsetting Process for Peoples Gas

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

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

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

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

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

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

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

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

# 2.3 Impact of Outside Factors on FEECA Utility DSM Programs

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

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

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

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

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

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

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

# **State Building Code**

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

# **Federal Government Efficiency Standards**

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

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

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

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

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

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

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

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

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

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

# Section 3. FEECA Utilities' Goal Achievements

# 3.1 Assessing Goal Achievement

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

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

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

#### **FPL**

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

#### **DEF**

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

#### **TECO**

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

# **FPUC**

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

## **JEA**

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

# OUC

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

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

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

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

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

# **PGS**

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

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

Table 8
DSM Goals Compared to Annual Achievements (2022)

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

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

# 3.2 Information on Audit Programs

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

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

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

#### **Residential Audits**

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

Table 9
Residential Audits by Type (2022)

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

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

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

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

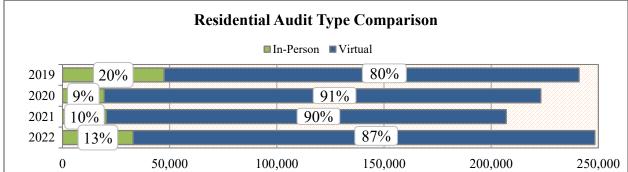
In 2019, before the onset of COVID-related program suspensions, approximately 80 percent of all residential audits were conducted virtually, and the balance were conducted in person. For 2020, when periods of suspensions were experienced, not only did the overall number of audits

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

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

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

Figure 3
Residential Audits Type Comparison (2019-2022)



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

# **Commercial / Industrial Audits**

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

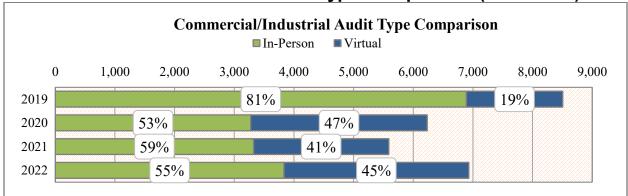
Table 10
Commercial / Industrial Audits by Type (2022)

	Commercial / madethal Addits by Type (2022)						
	In-Person	Vir					
Utility	Walk-Through, BERS, and Computer- Assisted	Online	Phone	Total			
FPL	2,574	536	2,559	5,669			
DEF	143	0	3	146			
TECO	766	0	0	766			
FPUC	0	0	0	0			
JEA	320	0	0	320			
OUC	30	0	0	30			
Total	3,833	536	2,562	6,931			

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

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

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



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

# 3.3 Low-Income Programs

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

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

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

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

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

# **FPL**

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

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

#### **DEF**

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

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

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

#### **TECO**

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

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

# **FPUC**

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

#### **JEA**

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

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

#### OUC

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

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

# 3.4 Investor-Owned Utility Research and Development Programs

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

# **FPL**

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

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

#### **DEF**

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

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

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

# **TECO**

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

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

# **FPUC**

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

# **Section 4. Conservation Cost Recovery**

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

# 4.1 Electric IOU Cost Recovery

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

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

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

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

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

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

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

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

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

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

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

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

Table 12
Residential Energy Conservation Cost Recovery Factors (2024)

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

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

# 4.2 Natural Gas Cost Recovery

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

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

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

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

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

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

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

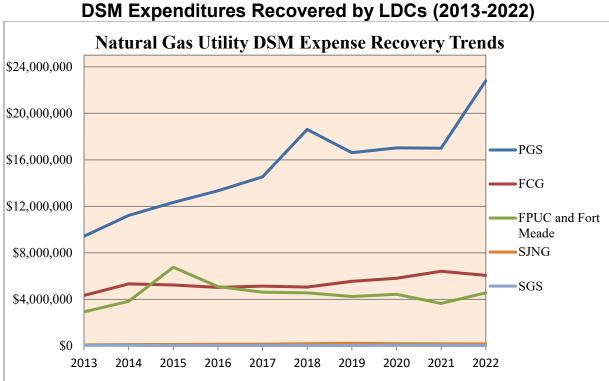


Figure 6
DSM Expenditures Recovered by LDCs (2013-2022)

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

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

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

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

Table 14
Residential Natural Gas Conservation Cost Recovery Factors in 2024

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

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

# Section 5. Educating Florida's Consumers on Conservation

# 5.1 Commission Consumer Education Outreach

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

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

# Triple E Award

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

# **Website Outreach Resources**

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

# **Newsletters**

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

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

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

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

#### **Older Americans Month**

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

# **Energy Awareness Month**

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

# **Community Events**

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

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

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

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

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

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

# **Hearings and Customer Meetings**

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

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

# **Library Outreach Campaign**

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

# **Media Outreach**

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

# Youth Education

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

# 5.2 Related Websites

# **State Agencies and Organizations**

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

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

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

# Florida's Utilities Subject to FEECA

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

# Florida's Investor-Owned Natural Gas Utilities

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

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

# **Electric IOUs**

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

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

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

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

# **Electric Municipal Utilities**

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

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

# **Natural Gas LDC**

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

# Appendix B. 2022 FEECA Utility Conservation Program Descriptions

# **Electric FEECA IOUs**

# A. Florida Power & Light Company

# **Residential Programs**

# • Residential Home Energy Survey

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

# • Residential Load Management (On Call)

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

# Residential Air Conditioning

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

# • Residential New Construction (BuildSmart®)

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

# • Residential Ceiling Insulation

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

#### • Residential Low-Income Weatherization

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

# **Commercial/Industrial Programs**

# • Business Energy Evaluation (BEE)

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

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

#### Business On Call<sup>®</sup>

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

# • Commercial/Industrial Demand Reduction (CDR)

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

# • Commercial/Industrial Load Control (CILC)

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

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

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

# Business Lighting

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

# • Business Custom Incentive (BCI)

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

#### Curtailable Load

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

# **Other Programs**

# • Conservation Research and Development (CRD) Project

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

# • Cogeneration & Small Power Production

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

# B. Duke Energy Florida, LLC

# **Residential Programs**

# • Home Energy Check

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

#### • Residential Incentive

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

# Neighborhood Energy Saver

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

# • Low-Income Weatherization Assistance Program

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

# • Residential Load Management

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

## **Commercial/Industrial Programs**

#### • Business Energy Check

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

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

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

#### • Commercial Energy Management

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

#### • Smart Saver Custom Incentive

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

#### • Interruptible Service

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

#### • Curtailable Service

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

#### • Standby Generation

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

## **Other Programs**

#### • Technology Development

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

# • Qualifying Facilities Program

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

# C. Tampa Electric Company

## **Residential Programs**

#### • Residential Energy Audit Programs

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

#### • Residential Ceiling Insulation

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

#### Residential Duct Repair

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

#### • Energy Education, Awareness, and Agency Outreach

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

#### • ENERGY STAR for New Multi-Family Residences

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

#### • ENERGY STAR for New Homes

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

#### • ENERGY STAR Pool Pumps

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

#### • ENERGY STAR Thermostats

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

#### Residential Heating and Cooling

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

## • Neighborhood Weatherization (Low-Income)

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

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

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

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

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

#### • Residential Window Replacement

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

#### **Commercial Programs**

## • Commercial/Industrial Energy Audit Programs

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

#### • Commercial Chiller

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

## • Cogeneration

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

#### • Conservation Value

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

#### • Commercial Cooling

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

#### • Demand Response

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

#### • Facility Energy Management System

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

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

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

#### • Street and Outdoor Lighting Conversion

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

#### • Lighting Conditioned Space

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

#### • Lighting Non-Conditioned Space

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

#### • Lighting Occupancy Sensors

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

#### • Commercial Load Management

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

#### Commercial Smart Thermostats

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

# • Standby Generator

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

#### • Variable Frequency Drive for Compressors

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

#### • Commercial Water Heating

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

## **Other Programs**

#### • Conservation Research and Development

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

#### • Integrated Renewable Energy System (Pilot Program)

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

#### • Renewable Energy

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

# D. Florida Public Utilities Company

#### **Residential Programs**

#### • Residential Energy Survey

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

# Residential Heating and Cooling Efficiency Upgrade

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

# **Commercial Programs**

#### • Commercial Energy Consultation

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

#### • Commercial Heating and Cooling Efficiency Upgrade

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

#### Commercial Reflective Roof

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

#### • Commercial Chiller Upgrade

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

#### **Other Programs**

#### Conservation Demonstration and Development

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

# • Low-Income Energy Outreach

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

# **Electric FEECA Municipal Utilities**

#### A. JEA

#### **Residential Programs**

#### • Residential Energy Audit

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

#### • Residential Solar Water Heating

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

#### • Neighborhood Efficiency (Low-Income)

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

#### • Residential Efficiency Upgrade

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

#### • Energy Efficient Products

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

#### • MyWay Prepaid Program

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

#### **Commercial Programs**

#### • Commercial Energy Audit

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

#### • Commercial Prescriptive Lighting Program

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

#### • Commercial Prescriptive

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

#### • Small Business Direct Install

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

#### Custom Commercial

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

#### **B. Orlando Utilities Commission**

#### **Residential Programs**

#### • Home Energy Survey

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

#### • Duct Repair Rebate

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

#### • Ceiling Insulation Rebate

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

#### • High-Performance Windows Rebate

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

#### • Efficient Electric Heat Pump Rebate

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

#### • New Home Rebate

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

#### • Heat Pump Water Heater Rebate

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

#### • Efficiency Delivered (Low-Income)

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

# **Commercial Programs**

#### • Energy Audit

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

#### • Efficient Electric Heat Pump Rebate

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

#### • Duct Repair Rebate

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

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

#### • Ceiling Insulation Rebate

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

#### • Cool/Reflective Roof Rebate

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

#### • Indoor Lighting Billed Solution Program

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

#### • Indoor Lighting Rebates Program

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

#### • Custom Incentive Program

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

# **Natural Gas FEECA Utility**

# A. Peoples Gas System

#### **Residential Programs**

#### • Residential Customer Assisted Energy Audit

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

#### Residential New Construction

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

#### • Residential Retrofit

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

#### • Residential Retention

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

#### **Commercial/Industrial Programs**

#### • Commercial Walk-Through Energy Audit

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

#### • Commercial New Construction

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

#### Commercial Retrofit

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

#### • Retrofit Combined Heat and Power (CHP)

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

#### • Commercial Electric Replacement

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

#### • Commercial Retention

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

# **Other Programs**

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

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

# Attachment B



# **FEECA**

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

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

DECEMBER 2022

# Florida Public Service Commission

# **Annual Report** on Activities Pursuant to

# The Florida Energy Efficiency and Conservation Act

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

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# **List of Acronyms**

C/I Commercial and Industrial (Customers)

Commission or FPSC Florida Public Service Commission

COVID-19 Coronavirus Disease of 2019
CUC Chesapeake Utilities Corporation

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

**ECCR** Energy Conservation Cost Recovery

**EV** Electric Vehicle

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

FCG Florida City Gas

**FEECA** Florida Energy Efficiency and Conservation Act

**FLBC** Florida Building Code

FPL Florida Power & Light Company
FPUC Florida Public Utilities Company

FRCC Florida Reliability Coordinating Council

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

GRIM Gas Rate Impact Measure Test

Gulf Power Company
GWh Gigawatt-Hour

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

IGC Indiantown Gas Company
IOU Investor-Owned Utility

**JEA** Formerly known as Jacksonville Electric Authority

**kWh** Kilowatt-Hour

LDC Natural Gas Local Distribution Company

MMBtu One Million British Thermal Units

MW Megawatt

MWh Megawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission
O&M Operations and Maintenance

PV Photovoltaic

PGS Peoples Gas System

RIM Rate Impact Measure Test

SGS Sebring Gas System
SJNG St. Joe Natural Gas

TECO Tampa Electric Company
TRC Total Resource Cost Test

# **Executive Summary**

# **Purpose**

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

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

The Commission is required by Section 366.82(10), F.S., to provide an annual report to the Florida Legislature and the Governor by March 1 summarizing the adopted goals and the progress made toward achieving those goals. Similarly, Section 377.703(2)(f), F.S., requires the Commission to file information on electricity and natural gas energy conservation programs with the Department of Agriculture and Consumer Services. This report reviews the 2021 annual goal results for each of the FEECA utilities and fulfills these statutory obligations.

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

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

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

#### **Municipal Electric Utilities**

- JEA
- Orlando Utilities Commission (OUC)

Investor-Owned Natural Gas Local Distribution Company (LDC)

• Peoples Gas System (PGS)

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

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

# Report Layout

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

- Section 1 provides a brief history of FEECA and a description of existing tools for increasing conservation throughout the State of Florida.
- Section 2 discusses the DSM goalsetting process and the most recent Commissionestablished goals set for the FEECA utilities.
- Section 3 reviews the utilities' goal achievements, program impacts of COVID-19, and information on audit, low-income, and research and development programs.
- Section 4 provides an overview of the associated 2021 DSM program costs recovered through the Energy Conservation Cost Recovery (ECCR) Clause (as applies to electric IOUs) and Natural Gas Conservation Cost Recovery (NGCCR) Clause (as applies to LDCs).
- Section 5 discusses methods the Commission has used to educate consumers about conservation during the prior period, including a list of related websites.
- Appendices A and B provide a list of the 2021 conservation programs offered by FEECA Utilities and a description of each program's purpose.

# 2019 Goalsetting Proceeding

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

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

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

<sup>&</sup>lt;sup>3</sup>See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

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

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

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

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

# 2021 Achievements and Related Program Costs

Florida utilities have been successful in reducing the growth rates of winter and summer peak electric demand and reducing annual energy consumption. On a cumulative basis through 2021, statewide totals reflect that summer peak demand has been reduced by 7,982 MW, winter peak demand has been reduced by 7,294 MW, and annual energy consumption has been reduced by 19,678 GWh. During 2021, the electric FEECA utilities offered 114 residential and commercial programs which focused on demand reduction and energy conservation (see Appendices A and B). In addition, FEECA electric utilities performed over 212,000 residential and commercial energy audits in 2021, as shown in Section 3.3. Each FEECA utility's achievements toward the 2021 Commission-approved goals are detailed in Section 3.1.

The Commission has authority, by statute, to allow investor-owned utilities to recover costs related to conservation. The Commission has implemented this authority for electric IOUs through the ECCR clause since 1980. For 2021, Florida's investor-owned electric utilities recovered approximately \$307 million in conservation program expenditures.

#### **Conclusion**

Conservation in Florida is prompted by customer actions to conserve energy, federal appliance efficiency standards, state building codes for new construction, and utility-sponsored DSM programs. Customers can save energy and reduce their bills through behavioral changes and by

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

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

<sup>&</sup>lt;sup>7</sup>Florida Reliability Coordinating Council (FRCC), 2022 Load & Resource Plan (S-3, S-4, S-5). The demand and energy savings from FEECA utility DSM programs are included in these statewide FRCC totals. <sup>8</sup>Section 366.05(1), F.S.

investing in energy efficient homes, appliances, and equipment. Federal appliance efficiency standards have become more stringent over time, thus increasing the baseline energy efficiency of new appliances and heating, ventilation, and air conditioning (HVAC) equipment available to Florida's consumers. Likewise, changes in the Florida Building Code (FLBC) have resulted in more energy efficient homes. Florida's electric and natural gas utilities also encourage conservation by offering energy audits, customer education, rebates on energy efficient equipment and building envelope improvements, and demand response programs.

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

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

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

# Section 1. Florida Energy Efficiency and Conservation Act

# 1.1 FEECA History and Implementation

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

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

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

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

The statute also allows the Commission to provide appropriate financial rewards and penalties to the utilities over which it has rate-setting authority. The Commission also has the authority to allow an IOU to receive an additional return on equity of up to 50 basis points for exceeding 20 percent of its annual load growth through energy efficiency and conservation measures. To date, the Commission has not awarded financial rewards or assessed penalties for any of the IOUs through FEECA. The Commission does not have rate-setting authority over JEA and OUC and therefore cannot assess financial penalties or provide financial rewards under its authority.

Table 1 lists the seven electric FEECA utilities and shows their 2021 retail electricity sales and the percentage of total statewide electricity sales by each utility. The table also includes the total energy sales for all non-FEECA utilities. Currently, the seven electric utilities that are subject to FEECA account for approximately 83.7 percent of all Florida energy sales.

Table 1
Energy Sales by Florida's Electric FEECA Utilities in 2021

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

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

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

In 2008, the Florida Legislature amended the FEECA statute, placing upon the Commission additional responsibilities when adopting conservation goals. These responsibilities included the consideration of the benefits and costs to program participants and ratepayers as a whole, as well as the need for energy efficiency incentives for customers and utilities. The Commission must also consider any costs imposed by state and federal regulations on greenhouse gas emissions.

# 1.2 FEECA's Influence on the Florida Energy Market

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

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

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

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

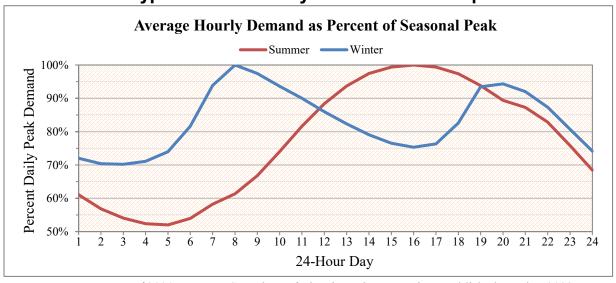
Table 2
Florida's Electric Customers by Class and Consumption in 2021

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

\*Street and highway lighting, sales to public authorities, and interdepartmental sales. Source: FPSC's *Statistics of the Florida Electric Utility Industry* (Tables 26 and 33) published October 2022.

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

Figure 1
Typical Florida Daily Electric Load Shapes



Source: FPSC's Review of 2021 Ten-Year Site Plans of Florida's Electric Utilities published October 2022.

<sup>&</sup>lt;sup>10</sup> National data as reported for 2021 by the U.S. Energy Information Administration in the annual *Electric Sales, Revenue, and Average Price (ESR)* report (Table 2): https://www.eia.gov/electricity/sales revenue price/

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

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

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

Since its enactment, implementation of FEECA has been successful in reducing the growth rate of weather-sensitive electric peak demands, and in conserving expensive resources. These savings have avoided or deferred the need for new generating capacity and offset the use of existing generating units, resulting in savings of fuel, as well as variable operations and maintenance (O&M) costs. During 2021, FEECA utility DSM programs continued contributing to the reduction of statewide energy needs and deferred the need for new generating capacity. Table 3 details statewide cumulative savings for summer peak demand, winter peak demand, and overall energy consumption through 2021, as reported in the Florida Reliability Coordinating Council's (FRCC) 2022 Regional Load & Resource Plan. In 2021, the FEECA DSM programs contributed annual energy savings of 147.1 GWh, which is enough electricity to power approximately 11,188 homes for a year.

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

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

<sup>&</sup>lt;sup>13</sup>This estimate is based on an average annual household energy use of 13,150 kWh for Florida in 2021 as reported by the U.S. Energy Information Administration in the annual *Electric Sales*, *Revenue*, and *Average Price (ESR)* report (Table 5.a): <a href="https://www.eia.gov/electricity/sales revenue price/">https://www.eia.gov/electricity/sales revenue price/</a>

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

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

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

In 2021, the electric FEECA utilities offered 114 programs for residential, commercial, and industrial customers (see Appendices A and B). Programs focus on either reducing energy use at a given moment, which shifts/reduces demand, or toward reducing overall energy consumption over a period of time. Utility-sponsored DSM programs are an important means of achieving demand and energy savings and these programs are designed to encourage customer conservation efforts.

Additionally, residential energy audits, required by Section 366.82(11), F.S., serve as an avenue to identify and evaluate conservation opportunities for customers, including their potential participation in utility-sponsored DSM and conservation programs. Energy audits also educate customers about behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs. During 2021, FEECA electric utilities performed 207,066 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 5,591 commercial energy audits in 2021. Additional information about these results is presented in Section 3.

# 1.3 Recovery of Conservation Expenditures

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

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

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

On an annual basis, the Commission conducts financial audits of DSM program expenses that are included in the electric IOUs' and LDCs' cost recovery requests. A full evidentiary hearing is held to determine the cost recovery factors to be applied to customer bills in the following year. The Commission-approved 2023 conservation cost recovery factors are discussed further in Section 4.

# **Section 2. DSM Goalsetting**

# 2.1 DSM Program Cost-Effectiveness and Energy Savings

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

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

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

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

Table 4
Summary of Electric Cost-Effectiveness Methodologies

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

# Participants Test

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

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

#### Rate Impact Measure (RIM) Test

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

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

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

## **Ensuring Cost-Effectiveness**

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

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

# 2019 Electric DSM Goalsetting Proceeding

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

By issuing Order No. PSC-2019-0509-FOF-EG <sup>15</sup> on November 26, 2019, the Commission rejected the goals proposed by the electric FEECA utilities and chose to continue with the 2020-2024 portion of the goals established in the 2014 goalsetting proceeding. While the goalsetting process produces annual goals, the cumulative goals for the entire 10-year period are shown in Table 5 for illustrative purposes. The Commission also expressed a desire to review the goalsetting process for potential revisions. In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C. Rule development workshops for this docket were conducted in January 2021, May 2021, and November 2022. <sup>16</sup>

Table 5
Cumulative Commission-Approved Electric DSM Goals, 2015-2024

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

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

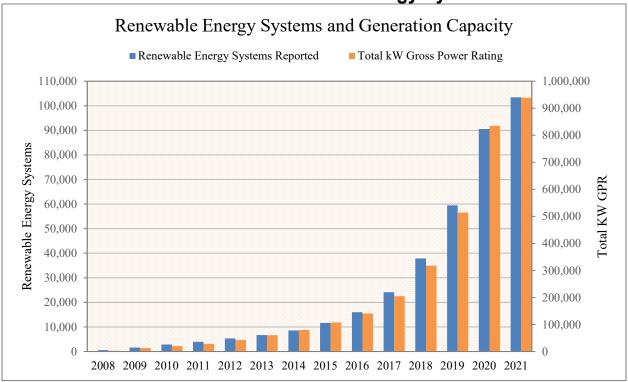
The goals established in 2014 were based upon estimated energy and demand savings from measures that passed both the RIM and Participants cost-effectiveness tests. Measures that pass the Participants test ensure that participating customers' benefits exceed the costs of the measure or program to the participants. Use of the RIM test minimizes subsidies between customers who participate in DSM programs and those who do not participate but pay for program expenditures. The RIM test also ensures rates would remain the same or lower than otherwise would occur.

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

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

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

Figure 2
Demand-Side Renewable Energy Systems



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

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

PGS is the only natural gas utility that meets the therm sales threshold for establishing conservation goals under FEECA. In October 2018, PGS filed a petition for approval of numeric therm reduction goals for the 2019-2028 period. PGS estimated its goals based upon its current Commission-approved DSM programs. Because PGS had existing programs already in place, there is expected to be no additional cost to its customers, aside from the costs of the new audit programs. PGS utilized the Participants and GRIM tests to calculate its goals.<sup>17</sup> The Commission approved the goals for PGS in Order No. PSC-2019-0361-PAA-GU, issued on August 26, 2019. Table 6 shows the 10-year therm-savings goals for PGS over the 2019-2028 period.

<sup>&</sup>lt;sup>17</sup>Rule 25-17.009, F.A.C., requires natural gas utilities that seek to recover costs for conservation programs to file the cost-effectiveness test results of the Participants test and the GRIM test.

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

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

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

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

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

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

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

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

<sup>&</sup>lt;sup>18</sup>See Docket No. 20190210-EG, Petition for approval of demand-side management plan, by Peoples Gas System. <sup>19</sup>Order No. PSC-2021-0242-PAA-EG, issued July 2, 2021, in Docket No. 20190210-EG, *In re: Petition for approval of demand-side management plan, by Peoples Gas System.* 

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

### **State Building Code**

At the state level, the FLBC is amended annually to incorporate interpretations and clarifications as well as to update efficiency standards. The Florida Building Commission updates the FLBC with relevant new standards every three years, most recently in 2020 when the 7<sup>th</sup> Edition (2020) was issued. The 7<sup>th</sup> Edition (2020) became effective in December 2020, although in August 2021, the FLBC issued the 2021 Supplement to the 7<sup>th</sup> Edition (2020). While there were several changes in both documents that pertain to construction standards, no changes were made to Chapter 11, Energy Efficiency. After review of these resources and the DSM programs that were current when these codes became effective, FEECA utilities reported that the code updates had no impact on the programs that had been established in the 2014 goalsetting process. None of the FEECA utilities made regulatory filings to modify DSM Plans or programs as a result of 2020 or the 2021 FLBC code updates.

### **Federal Government Efficiency Standards**

At the federal government level, the U.S. Department of Energy's (DOE) Building Technologies Office sets energy efficiency standards for more than 60 categories of appliances and other equipment, including HVAC equipment. Within the Building Technologies Office, the Appliances and Equipment Standards Program maintains a multi-year rulemaking schedule that establishes minimum energy efficiency standards and test procedures which are the basis for these standards. The products regulated by DOE standards represent about 90 percent of home, 60 percent of commercial building, and 30 percent of industrial energy use. <sup>21</sup> Some of the consumer products regulated by these Conservation Standards and Test Procedures include laundry appliances, dishwashers, microwave ovens, televisions, and several other common

<sup>&</sup>lt;sup>20</sup>The 2021 Supplement to the 7<sup>th</sup> Edition (2020) became effective August 18, 2021. Details of the Seventh Edition (2020) Florida Building Code and 2021 Supplement to the 7<sup>th</sup> Edition (2020), including legislative updates in the 2022 Supplement, can be found at <a href="https://www.floridabuilding.org/fbc/Links\_to\_Code\_Resources.html">https://www.floridabuilding.org/fbc/Links\_to\_Code\_Resources.html</a>. In addition, details are provided regarding the development of the 8<sup>th</sup> Edition, currently scheduled for 2023.

<sup>&</sup>lt;sup>21</sup>Federal Appliance and Equipment Standards Program: <a href="http://energy.gov/eere/buildings/appliance-and-equipment-standards-program">http://energy.gov/eere/buildings/appliance-and-equipment-standards-program</a>.

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

In January 2021, an executive order from the President of the United States was issued which included direction to address the overdue rule and test procedure reviews.<sup>23</sup> In the August 2021 Report To Congress, the DOE conveyed that since the last Report to Congress (July 2019), 123 rulemaking actions related to energy conservation standards and test procedures have been completed. Of this total, 71 of the actions were related to energy conservation standards rulemaking notices, with 15 being final actions. Examples of the equipment for which final actions were taken include ceiling fans, commercial air compressors, dishwashers, fluorescent light ballasts, and portable air conditioners. The full list, including information on the fifty two rulemaking notices that relate to test procedures, is accessible via the link identified in the footnote below.<sup>24</sup>

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

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<sup>&</sup>lt;sup>22</sup> Federal Conservation Standards and Test Procedures: <a href="http://energy.gov/eere/buildings/standards-and-test-procedures">http://energy.gov/eere/buildings/standards-and-test-procedures</a>

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

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

### Section 3. FEECA Utilities' Goal Achievements

### 3.1 Assessing Goal Achievement

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

Every FEECA utility must file an annual DSM report pursuant to Rule 25-17.0021, F.A.C., which summarizes demand savings, energy savings, and customer participation rates for each approved program. The report also includes the residential, C/I, and total energy efficiency achievements compared to the approved DSM goals. Each FEECA utility's current (2021) and archived annual DSM reports from prior years can be found on the Commission's website: <a href="http://www.psc.state.fl.us/">http://www.psc.state.fl.us/</a>.

Monitoring annual goal achievements enables the Commission to evaluate the effectiveness of each utility's programs. In addition to reviewing the FEECA utilities' annual DSM reports, staff issues discovery requests for additional information from the utilities on their demand and energy saving achievements. Staff's data requests also seek explanations of factors preventing the utilities from achieving projected participation levels. Each FEECA utility's DSM performance in 2021 is discussed below. The utility achievements have been compared to the annual goals established by the Commission in November 2014 and reapplied in November 2019. Table 7 provides a breakdown of each electric utility's goal achievements for the period.

### **FPL**

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

### **DEF**

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

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

#### **TECO**

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

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

#### Gulf

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

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

### **FPUC**

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

#### **JEA**

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

### OUC

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

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

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

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

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

### **PGS**

Table 8 provides a breakdown of the goal achievements for PGS for the period. Therm-savings goals for PGS were first approved in August 2019. PGS met its 2021 total energy reduction goal and its individual customer class goals.

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

TT4:134	Annual Energy Reduction (Therms)			
Utility	Goals	Achieved Reduction		
PGS				
Residential	355,569	425,798		
Small Commercial	227,968	292,210		
Total	583,537	718,008		

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

### 3.2 Program Impacts of COVID-19

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

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

### **FPL**

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

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

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

### **DEF**

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

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

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

### **TECO**

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

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

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

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

### Gulf

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

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

### **FPUC**

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

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

#### **JEA**

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

### OUC

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

### 3.3 Information on Audit Programs

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

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

As a part of its goalsetting process, PGS was granted a waiver which exempts the company from the requirement to offer Walk-Through Audits. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. In April 2020, PGS launched its Residential Customer Assisted Audit program as an online audit program for residential customers. In 2021, a total of 7,983 audits of this type were conducted. In addition, PGS announced plans to launch its Commercial Walk-Through Energy Audit program before the end of 2022.

#### **Residential Audits**

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

<sup>&</sup>lt;sup>25</sup>Walk-Through, BERS, and Computer-Assisted audits all require a utility auditor to physically inspect the customer's premises, and therefore are consolidated for the purposes of Figures 3 and 4.

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

Table 9
Residential Audits by Type in 2021

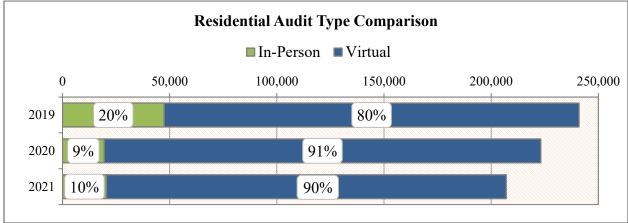
	In-Person		tual	
Utility	Walk-Through, BERS, and Computer-Assisted	Online Phone		Total
FPL	8,626	65,236	11,016	84,878
DEF	5,983	8,393	7,356	21,732
TECO	1,035	68,540	819	70,394
Gulf	251	10,929	554	11,734
FPUC	6	40	22	68
JEA	3,346	8,059	0	11,405
OUC	1,229	5,626	0	6,855
Total	20,476	166,823	19,767	207,066

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

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

In 2019, before the onset of COVID-related program suspensions, approximately 80 percent of all residential audits were conducted virtually, and the balance were conducted in person. For 2020, when periods of suspensions were experienced, not only did the overall number of audits decline, but a proportional shift was observed, with virtual audits growing from 80 percent of total audits to 91 percent, and in-person audits declining from 20 percent of total audits to 9 percent, as shown in Figure 3 below. For 2021, the proportional relationship remained similar to 2020, even though fewer total audits were conducted.

Figure 3
Residential Audits in 2019, 2020, and 2021



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

### **Commercial / Industrial Audits**

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

Table 10
Commercial / Industrial Audits by Type in 2021

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

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

Figure 4 below shows that a higher number of C/I audits were conducted in 2019, prior to all of the periods of suspensions that occurred at different times in 2020 and 2021. In 2019, about 81

percent of all commercial/industrial audits were conducted as on-premises (in-person) audits, with the balance conducted virtually. In 2020, a pronounced shift to this proportion was observed, such that on-premises audits in that year declined to 53 percent of total commercial/industrial audits. In 2021, that shift reversed slightly, when the on-premises audits as a percentage of total audits rose to 59 percent. The total number of commercial/industrial audits declined significantly in 2020, and a smaller decrease was noted in 2021.

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

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

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

### 3.4 Low-Income Programs

The 2014 DSM Goals Order<sup>26</sup> states, "When the FEECA utilities file their DSM implementation plans, each plan should address how the utilities will assist and educate their low-income customers, specifically with respect to the measures with a two-year or less payback."<sup>27</sup> In accordance with this Order, each electric FEECA utility has implemented programs within its DSM plan that address low-income conservation. Low-income customer participation in energy conservation programs furthers the intent of FEECA by encouraging potential demand and energy reduction in Florida. Customers that participate in these programs benefit through increased knowledge of conservation opportunities and through rebates on energy saving equipment, resulting in potential bill reduction.

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

<sup>&</sup>lt;sup>26</sup>The 2014 DSM Goals Order references electric utilities only.

<sup>&</sup>lt;sup>27</sup>Order No. PSC-14-0696-FOF-EU, issued December 16, 2014, in Docket Nos. 20130199-EI through 20130205-EI, *In re: Commission review of numeric conservation goals.* 

Since 2015, all of the electric FEECA utilities have submitted programs in their DSM plans tailored to offer assistance to qualifying customers. Each FEECA utility's conservation efforts with respect to low-income customers during 2021 are discussed below.

### **FPL**

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

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

### **DEF**

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

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

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

<sup>&</sup>lt;sup>28</sup>See Docket No. 20210121-EG, Petition for Approval of Modifications to Demand-side Management Program Plan and Participation Standards.

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

### **TECO**

In 2021, as in 2020, TECO continued its multi-pronged approach for communicating with customers of all income levels. TECO used paid advertising channels (television and radio), social media (Facebook and Twitter), as well as bill communications, direct mail, and website banners to promote its non-customer contact DSM programs. Social media outlets were used to publicize the company's Energy and Renewable Education, Awareness and Agency Outreach program, as well as to provide information about community energy education and awareness events. Historically, these efforts have proven to be effective at encouraging the participation of low-income customers. Through TECO's marketing efforts, participation in the Energy and Renewable Education, Awareness and Agency Outreach program improved in 2021, from historically low enrollment in 2020. <sup>30</sup> Customers, including low-income customers, who attended free community energy education events in 2021 received energy-saving tips and program information directly from company personnel. Eligible attendees also received free energy-saving kits. Social media was also used to announce the details for offering the company's Neighborhood Weatherization Program, which also rebounded from historically low participation in 2020.<sup>31</sup>

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

#### Gulf

In 2021, Gulf engaged in several initiatives to ensure low-income customers were aware of and had access to conservation programs. While overall participation was impacted by COVID-19 restrictions, Gulf specifically targeted lower income neighborhoods with its Residential Low Income (Community Energy Saver) program, a program where company representatives canvas specifically-identified neighborhoods to provide basic energy conservation recommendations as well as installation of conservation measures including energy efficient LED light bulbs and low-flow shower heads. Information promoting this program was featured in direct mail campaigns, and through outreach via community awareness events, yard signs, and by engaging community leaders. In 2021, these efforts resulted in Gulf more than doubling the number of customers participating in its Residential Low Income (Community Energy Saver) program, compared to 2020.<sup>32</sup>

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

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

<sup>&</sup>lt;sup>31</sup>In 2021, a total of 2,923 customers participated in TECO's Neighborhood Weatherization program. In 2020, only 1,760 did so.

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

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

### **FPUC**

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

### **JEA**

As in prior years, JEA provided a specific program for low-income customers called its Neighborhood Energy Efficiency Program. This program included free installation of conservation products and provides energy education packets that give customers energy-saving ideas and information about JEA's other DSM programs. In 2021, JEA formed a partnership with the Wealth Watchers Florida organization to provide energy efficiency kits to the group's Home Buyer Education program.

#### OUC

In 2021, OUC continued its Project Care and Efficiency Delivered programs to assist low-income customers in conserving energy and demand. Project Care assists customers in paying their energy bills and implementing energy efficiency measures. OUC donates \$2 for every \$1 donated to the program. In the income-based Efficiency Delivered program, OUC pays for 85 percent of the costs for energy and water efficiency upgrades up to a cap of \$2,500 per installation. Income qualified participants pay the remaining 15 percent over the first 24 months, interest free.

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

### 3.5 Investor-Owned Utility Research and Development Programs

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

### **FPL**

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

### **DEF**

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

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

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

#### **TECO**

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

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

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

### Gulf

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

### **FPUC**

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

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

### Section 4. Conservation Cost Recovery

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

### 4.1 Electric IOU Cost Recovery

From 2010 through 2014, annual electric utility expenditures to fund conservation programs grew due to additions and modifications of these programs. However, annual costs recovered from customers through the ECCR clause after 2014 have declined for most IOUs due to DSM program modifications. In addition, these utilities have reported that 2020 and 2021 COVID-related impacts have resulted in lower levels of customer participation in DSM programs, contributing to the more recent decline in DSM expenditures. Table 11 shows the annual DSM expenditures recovered by Florida's IOUs from 2012-2021.

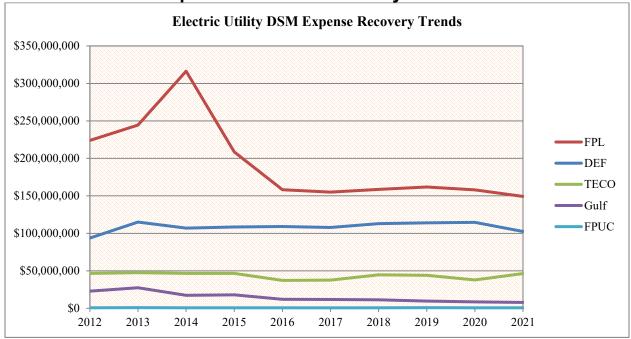
Table 11
DSM Expenditures Recovered by IOUs

	FPL	DEF	TECO	Gulf	FPUC	Total
2012	\$224,033,738	\$93,728,110	\$46,593,831	\$22,885,826	\$695,235	\$387,936,740
2013	\$244,443,534	\$115,035,455	\$47,502,652	\$27,431,962	\$806,698	\$435,220,301
2014	\$316,311,166	\$107,033,335	\$46,620,508	\$17,412,618	\$772,612	\$488,150,239
2015	\$208,643,788	\$108,455,141	\$46,516,401	\$17,961,885	\$718,616	\$382,295,831
2016	\$158,174,787	\$109,155,438	\$37,242,148	\$11,915,459	\$687,590	\$317,175,422
2017	\$154,916,595	\$107,890,962	\$37,585,598	\$11,854,558	\$640,996	\$312,888,709
2018	\$158,735,829	\$112,863,333	\$44,558,717	\$11,399,250	\$656,154	\$328,213,283
2019	\$161,738,898	\$114,084,224	\$43,988,528	\$9,607,262	\$865,843	\$330,284,755
2020	\$157,892,907	\$114,692,900	\$37,850,526	\$8,637,394	\$782,143	\$319,855,870
2021	\$149,275,934	\$102,542,901	\$46,328,538	\$7,852,934	\$751,683	\$306,751,990
Total						\$3,608,773,140

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

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

Figure 5
DSM Expenditures Recovered by Electric IOUs



Source: Docket Nos. 20130002-EG through 20220002-EG, Schedules CT-2 from the IOUs' May testimony. \*FPL's 2014 recovery included a one-time \$56.3 million payment to Solid Waste Authority of Palm Beach County.

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

In November 2022, the Commission set the ECCR factors for the 2023 billing cycle. Table 12 illustrates the approved ECCR factors and the monthly bill impact for a residential customer. For illustrative purposes, these factors are applied to a monthly residential bill based on 1,000 kilowatt-hours (kWh) per month energy usage.

Table 12
Residential Energy Conservation Cost Recovery Factors in 2023

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

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

### 4.2 Natural Gas Cost Recovery

Commission Rule 25-17.015, F.A.C., establishes a mechanism for recovery of reasonable costs attributed to natural gas conservation programs. While PGS is the only natural gas utility subject to FEECA, the other LDCs covered in this section offer Commission-approved DSM programs without a specific therm savings goal. As it does for the electric IOUs, the Commission also conducts financial audits of the LDCs' conservation expenditures on a yearly basis and adjusts the LDCs' cost recovery factors to allow for recovery of actual and projected program-related costs. Table 13 shows the amounts each LDC recovered in natural gas conservation program expenditures from 2012-2021.

Table 13
DSM Expenditures Recovered by LDCs

				ta. 00 1 100				
			FPUC C	Consolidated Co	ompanies			
	PGS	FCG	FPUC and Fort Meade	Chesapeake	Indiantown	SJNG	SGS	Total
2012	\$7,314,940	\$3,743,811	\$2,655,654	\$806,747	\$5,238	\$102,425	\$25,090	\$14,653,905
2013	\$9,432,551	\$4,342,603	\$2,935,140	\$742,412	\$10,222	\$96,575	\$53,967	\$17,613,470
2014	\$11,229,211	\$5,343,191	\$3,844,386			\$128,000	\$58,382	\$20,603,170
2015	\$12,335,245	\$5,240,383	\$6,768,175			\$123,400	\$33,563	\$24,500,766
2016	\$13,345,716	\$5,037,863	\$5,098,245			\$156,250	\$36,801	\$23,674,875
2017	\$14,543,555	\$5,149,573	\$4,617,501	*	*	\$144,900	\$42,237	\$24,497,766
2018	\$18,605,532	\$5,067,917	\$4,562,021			\$190,625	\$47,126	\$28,473,221
2019	\$16,619,336	\$5,564,237	\$4,252,769			\$231,600	\$46,184	\$26,714,126
2020	\$17,031,280	\$5,824,651	\$4,447,010			\$189,625	\$52,162	\$27,544,728
2021	\$16,999,771	\$6,421,893	\$3,653,829			\$179,450	\$40,411	\$27,295,354
Total								\$235,571,381

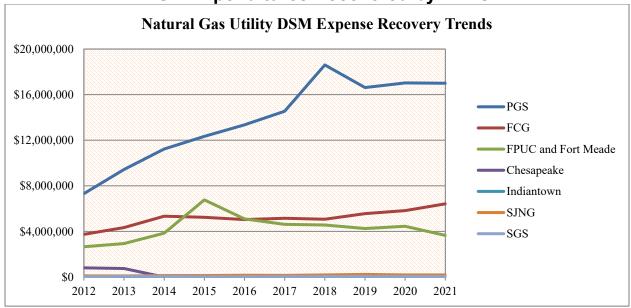
Source: Docket Nos. 20130004-GU through 20220004-GU, Schedules CT-2 from LDCs' May testimonies.

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

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

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

Figure 6
DSM Expenditures Recovered by LDCs



Source: Docket Nos. 20130004-EG through 20220004-EG, Schedules CT-2 from the LDCs' May testimony. \*Note that since 2014, DSM expenditures for CUC and IGC were consolidated with FPUC-Fort Meade, and reported as FPUC Consolidated Companies. The graph does not reveal that the amounts for SJNG and SGS are relatively low.

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

<sup>&</sup>lt;sup>33</sup>Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.* 

Table 14
Residential Natural Gas Conservation Cost Recovery Factors in 2023

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

Source: Order No. PSC-2022-0423-FOF-GU, Docket No. 20220004-GU.

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

### 5.1 Commission Consumer Education Outreach

While the Commission has statutory authority to require conservation efforts by regulated utilities, as part of the agency's outreach program, the Commission complements utility efforts with its own conservation-related activities. To effectively reach as many consumers as possible, the Commission's consumer education program uses a variety of platforms to share conservation information, including the Commission website, public events, brochures, press releases, E-Newsletters, YouTube, LinkedIn, and Twitter. Conservation information is also available through other governmental and utility websites. Section 5.2 lists related websites for state and federal agencies, investor-owned electric utilities, and local gas distribution companies to further assist consumers. Most of the data in this section covers October 2021 through August 2022.

### Triple E Award

Each quarter, the Commission recognizes a small business for implementing Commission approved, cost-effective conservation programs. Covering the state's five major geographic areas, the Commission presents its Triple E Award—for Energy Efficiency Efforts—to a local business that has accomplished superior energy efficiency by working with its local utility to help reduce its energy footprint. Triple E Award recipients receive an award plaque, are featured and archived under Hot Topics on the FPSC homepage—www.FloridaPSC.com—and are highlighted statewide via a press release and on Twitter (@floridapsc).

### **Website Outreach Resources**

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

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

### **Newsletters**

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

### **National Consumer Protection Week**

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

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

For NCPW 2022, the Commission made presentations to consumers at the Jefferson County Senior Citizens Center and the Senior Citizens Council of Madison County showing them how to save money through energy and water conservation and how to avoid scams. For more than a decade, the FPSC has joined government agencies, advocacy organizations, and private sector groups nationwide to highlight NCPW.

### **Older Americans Month**

Each May, the Commission participates in Older Americans Month, a national project to honor and recognize older Americans for their contributions to families, communities, and society. "Age My Way" was the theme for Older Americans Month 2022. The FPSC partnered with centers in Hamilton, Suwanee, Lafayette, and Leon Counties to meet with seniors in-person and discuss FPSC information. Virtual meetings were also held with senior centers in Sarasota, Charlotte, Putnam and DeSoto Counties.

### **Energy Awareness Month**

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

### **Community Events**

FPSC Commissioners are active in communities around the state and present energy conservation information to students at area schools, to seniors and low-income residents at local community centers, and to county and city businesses at meetings or other events. Through ongoing partnerships with governmental entities, consumer groups, and many other service organizations, the Commission regularly distributes energy and water conservation materials. The Commission also actively seeks new community events, venues, and opportunities where conservation materials can be distributed and discussed with consumers. Virtual and in-person outreach events resumed during the 2021-2022 reporting period, with more public meetings and events to be scheduled in the future. In-person events where conservation information was shared during October 2021 through August 2022 included:

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

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

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

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

### **Hearings and Customer Meetings**

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

### **Library Outreach Campaign**

Each August, the Commission provides educational packets, including FPSC conservation materials, to Florida public libraries across the state for consumer distribution. The Commission's Library Outreach Campaign reached 617 state public libraries and branches in 2022. To reduce mailing and production costs, the Commission's 2022 campaign was accomplished electronically. Following the Campaign, the FPSC filled many libraries' brochure order requests.

### **Media Outreach**

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

### Youth Education

The Commission emphasizes conservation education for Florida's young consumers. During 2021 and 2022, the Commission continued to distribute its student resource booklet, <u>Get Wise and Conserve Florida!</u>, to teach children about energy and water conservation. The booklet is promoted to all public libraries through the Library Outreach Programs, is available at all Commission outreach events, and continues to be a favorite during senior events.

### 5.2 Related Websites

### **State Agencies and Organizations**

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

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

- U.S. ENERGY STAR Program https://www.energystar.gov/
- U.S. Department of Energy Energy Efficiency and Renewable Energy Information <a href="http://www.eere.energy.gov/">http://www.eere.energy.gov/</a>
- National Energy Foundation https://nefl.org/

### Florida's Utilities Subject to FEECA

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

### Florida's Investor-Owned Natural Gas Utilities

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

# **Appendix A. 2021 FEECA Utility Conservation Programs**

## **Electric IOUs**

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

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

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

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

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

**Electric Municipal Utilities** 

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

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

## **Natural Gas LDC**

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

# Appendix B. 2021 FEECA Utility Conservation Program Descriptions

### **Electric FEECA IOUs**

### A. Florida Power & Light Company

### **Residential Programs**

### • Residential Home Energy Survey

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

### • Residential Ceiling Insulation

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

### • Residential Load Management (On Call)

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

### • Residential Air Conditioning

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

### • Residential New Construction (BuildSmart®)

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

#### Residential Low-Income Weatherization

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

#### **Commercial/Industrial Programs**

#### • Business On Call®

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

#### • Business Lighting

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

#### • Commercial/Industrial Load Control (CILC)

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

#### Commercial/Industrial Demand Reduction (CDR)

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

#### Business Energy Evaluation (BEE)

The Business Energy Evaluation Program educates customers on energy efficiency and encourages implementation of recommended practices and measures, even if these are not included in FPL's DSM programs. The Business Energy Evaluation is also used to identify potential candidates for other FPL DSM programs. FPL offers the Business Energy Evaluation in on-site or online formats.

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

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

#### • Business Custom Incentive (BCI)

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

#### **Other Programs**

#### • Conservation Research and Development (CRD) Project

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

#### Cogeneration & Small Power Production

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

## B. Duke Energy Florida, LLC

#### **Residential Programs**

#### • Home Energy Check

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

#### • Residential Incentive

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

#### • Low-Income Weatherization Assistance Program

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

#### Neighborhood Energy Saver

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

#### • Residential Load Management

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

#### **Commercial/Industrial Programs**

#### Business Energy Check

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

#### • Better Business

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

#### • Smart \$aver Custom Incentive

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

#### • Interruptible Service

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

#### • Curtailable Service

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

#### • Standby Generation

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

#### • Commercial Energy Management

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

#### **Other Programs**

#### • Technology Development

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

#### • Qualifying Facilities Program

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

## C. Tampa Electric Company

#### **Residential Programs**

#### • Residential Energy Audit Programs

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

#### • Residential Ceiling Insulation

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

#### • Residential Duct Repair

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

#### • Energy Education, Awareness, and Agency Outreach

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

#### • ENERGY STAR for New Multi-Family Residences

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

#### • ENERGY STAR for New Homes

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

#### ENERGY STAR Pool Pumps

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

#### ENERGY STAR Thermostats

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

#### Residential Heating and Cooling

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

#### • Neighborhood Weatherization (Low-Income)

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

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

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

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

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

#### • Residential Window Replacement

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

#### **Commercial Programs**

#### • Commercial/Industrial Energy Audit Programs

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

#### Commercial Chiller

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

#### Cogeneration

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

#### • Conservation Value

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

#### Cool Roof

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

#### Commercial Cooling

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

#### • Demand Response

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

#### • Facility Energy Management System

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

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

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

#### • Street and Outdoor Lighting Conversion

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

#### • Lighting Conditioned Space

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

#### • Lighting Non-Conditioned Space

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

#### • Lighting Occupancy Sensors

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

#### • Commercial Load Management

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

#### • Commercial Smart Thermostats

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

#### • Standby Generator

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

#### • Variable Frequency Drive for Compressors

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

#### • Commercial Water Heating

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

## **Other Programs**

#### • Conservation Research and Development

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

#### • Integrated Renewable Energy System (Pilot Program)

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

#### Renewable Energy (Sun to Go)

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

# D. Gulf Power Company

#### **Residential Programs**

#### • Residential Home Energy Survey

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

#### Energy Select

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

#### • Residential Low Income (Community Energy Saver Program)

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

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

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

#### • Residential Ceiling Insulation

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

#### • Residential High Efficiency Pool Pump

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

#### **Commercial Programs**

#### Business Energy Survey

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

#### Business HVAC

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

#### Curtailable Load Rider

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

#### • Business Custom Incentive

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

#### **Other Programs**

#### Conservation Demonstration and Development

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

# E. Florida Public Utilities Company

#### **Residential Programs**

#### Residential Energy Survey

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

#### Residential Heating and Cooling Efficiency Upgrade

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

#### **Commercial Programs**

#### • Commercial Energy Consultation

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

#### • Commercial Heating and Cooling Efficiency Upgrade

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

#### Commercial Reflective Roof

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

#### • Commercial Chiller Upgrade

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

#### **Other Programs**

#### • Conservation Demonstration and Development

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

#### • Low-Income Energy Outreach

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

# **Electric FEECA Municipal Utilities**

#### A. JEA

## **Residential Programs**

#### • Residential Energy Audit

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

#### • Residential Solar Water Heating

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

#### • Neighborhood Efficiency (Low-Income)

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

#### • Residential Efficiency Upgrade

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

#### • Energy Efficient Products

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

#### MyWay Prepaid Program

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

#### • Residential Distributed Generation and Battery Rebate Program

The Residential Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### **Commercial Programs**

#### • Commercial Energy Audit

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

#### • Commercial Prescriptive Lighting Program

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

#### • Commercial Prescriptive

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

#### • Small Business Direct Install

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

#### • Custom Commercial

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

#### • Commercial Distributed Generation and Battery Rebate Program

The Commercial Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### **B. Orlando Utilities Commission**

#### **Residential Programs**

#### • Home Energy Survey

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

#### • Duct Repair Rebate

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

#### • Ceiling Insulation Rebate

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

#### • High-Performance Windows Rebate

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

#### • Efficient Electric Heat Pump Rebate

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

#### • New Home Rebate

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

#### • Heat Pump Water Heater Rebate

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

#### • Efficiency Delivered (Low-Income)

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

## **Commercial Programs**

#### • Energy Audit

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

#### • Efficient Electric Heat Pump Rebate

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

#### • Duct Repair Rebate

This program for commercial customers provides a rebate to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system of within certain limits and ducts must be sealed with mastic and fabric tape or any other UL approved duct tape.

#### • Ceiling Insulation Rebate

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

#### • Cool/Reflective Roof Rebate

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

#### Indoor Lighting Billed Solution Program

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

#### • Indoor Lighting Rebates Program

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

#### • Custom Incentive Program

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

# **Natural Gas FEECA Utility**

# A. Peoples Gas System

#### **Residential Programs**

#### • Residential Customer Assisted Energy Audit

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

#### • Residential New Construction

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

#### Residential Retrofit

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

#### Residential Retention

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

#### • Oil Heat Replacement

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

#### **Commercial/Industrial Programs**

#### • Commercial Walk-Through Energy Audit

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

#### • Commercial New Construction

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

#### • Commercial Retrofit

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

#### • Retrofit Combined Heat and Power (CHP)

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

#### • Commercial Electric Replacement

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

#### • Commercial Retention

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

# **Other Programs**

# • Conservation Research and Development (R&D)

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

# Attachment C



# **FEECA**

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

As Required by Sections 366.82(10), 377.703(2)(f), and 553.975, Florida Statutes

NOVEMBER 2021

# 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), and 553.975, Florida Statutes

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# **List of Acronyms**

C/I Commercial and Industrial (Customers)

Commission or FPSC Florida Public Service Commission

COVID-19 Coronavirus Disease of 2019
CUC Chesapeake Utilities Corporation

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

**ECCR** Energy Conservation Cost Recovery

**EV** Electric Vehicle

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

FCG Florida City Gas

**FEECA** Florida Energy Efficiency and Conservation Act

**FLBC** Florida Building Code

FPL Florida Power & Light Company
FPUC Florida Public Utilities Company

FRCC Florida Reliability Coordinating Council

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

**GRIM** Gas Rate Impact Measure Test

Gulf Power Company
GWh Gigawatt-Hour

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

IGCIndiantown Gas CompanyIOUInvestor-Owned Utility

**JEA** Formerly known as Jacksonville Electric Authority

**kWh** Kilowatt-Hour

LDC Natural Gas Local Distribution Company

MMBtu One Million British Thermal Units

MW Megawatt

MWh Megawatt-Hour

NGCCR Natural Gas Conservation Cost Recovery

OUC Orlando Utilities Commission
O&M Operations and Maintenance

**PV** Photovoltaic

PGS Peoples Gas System

RIM Rate Impact Measure Test

SGS Sebring Gas System
SJNG St. Joe Natural Gas

TECO Tampa Electric Company
TRC Total Resource Cost Test

# **Executive Summary**

## **Purpose**

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

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

The Commission is required by Section 366.82(10), F.S., to provide an annual report to the Florida Legislature and the Governor 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, 2022. This report reviews the 2020 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 listed below in order of sales:

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

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

#### **Municipal Electric Utilities**

- JEA
- Orlando Utilities Commission (OUC)

## Investor-Owned Natural Gas Local Distribution Company (LDC)

• Peoples Gas System (PGS)

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

# Report Layout

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

- Section 1 provides a brief history of FEECA and a description of existing tools for increasing conservation throughout the State of Florida.
- Section 2 discusses the DSM goalsetting process and the most recent Commissionestablished goals set for the FEECA utilities.
- Section 3 reviews the utilities' goal achievements, program impacts of COVID-19, and information on audit, low-income, and research and development programs.
- Section 4 provides an overview of the associated 2020 DSM program costs recovered through the Energy Conservation Cost Recovery (ECCR) Clause (as applies to electric IOUs) and Natural Gas Conservation Cost Recovery (NGCCR) Clause (as applies to LDCs).
- Section 5 discusses methods the Commission has used to educate consumers about conservation during the prior period, including a list of related web sites.
- Appendices A and B provide a list of the 2020 conservation programs offered by FEECA Utilities and a description of each program's purpose.

# 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. Rule development workshops for this docket were conducted in January and May 2021.

In May and June 2020, the Commission approved the filed DSM plans municipal electric FEECA utilities submitted.<sup>3</sup> In August 2020, the Commission approved the DSM plans the investor-owned electric FEECA utilities submitted.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals*.

<sup>&</sup>lt;sup>2</sup>See Docket No. 20200181-EU, Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

<sup>&</sup>lt;sup>3</sup>Order No. PSC-2020-0140-PAA-EG, issued May 12, 2020, in Docket No. 20200058-EG, *In re: Petition for approval of 2020 demand-side management plan, by Orlando Utilities Commission*; Order No. PSC-2020-0200-PAA-EG, issued June 24, 2020, in Docket No. 20200057-EG, *In re: Petition for approval of 2020 demand-side management plan, by JEA*.

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. This was 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 at the time these goals were adopted, 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. The Commission recognized in its 2019 review, that Rule 25-6.065, F.A.C., Interconnection and Net Metering of Customer-Owned Renewable Generation, adopted in 2008, offered an effective means to encourage the development of demand-side renewable energy in the state. This rule allows 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 upon programs it found were cost-effective. <sup>6</sup> PGS also developed audit programs for its residential and commercial customers as part of the proceedings. The 2019 goalsetting processes for all FEECA utilities are further discussed in Section 2.

# 2020 Achievements and Related Program Costs

FEECA has been successful in reducing the growth rates of winter and summer peak electric demand and reducing annual energy consumption. On a cumulative basis through 2020, savings from FEECA utility DSM programs have contributed to the statewide totals which reflect that summer peak demand has been reduced by 8,171 MW, winter peak demand has been reduced by 7,276 MW, and annual energy consumption has been reduced by 14,935 GWh. During 2020, the Florida electric FEECA utilities offered 125 residential and commercial programs which focused on demand reduction and energy conservation (see Appendix B). In addition, FEECA electric utilities performed over 229,000 residential and commercial energy audits in 2020, as shown in Section 3.3. Each FEECA utility's achievements toward the 2020 Commission-approved goals are detailed in Section 3.1.

<sup>&</sup>lt;sup>4</sup>Order No. PSC-2020-0274-PAA-EG, issued August 3, 2020, in Docket Nos. 20200053-EG (TECO), 20200054-EG (DEF), 20200055-EG (FPL), 20200056-EG (Gulf), and 20200060-EG (FPUC), *In re: Petition for approval of 2020 demand-side management plans*.

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

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

<sup>&</sup>lt;sup>7</sup>Florida Reliability Coordinating Council (FRCC), 2021 Load & Resource Plan (S-3, S-4, S-5).

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 2020, Florida's investor-owned electric utilities recovered approximately \$320 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 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 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.

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

# 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-hours (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 amended statute: JEA and OUC. In addition to these two utilities, all five Florida investor-owned electric utilities must comply with FEECA regardless of sales levels. No rural electric cooperatives are 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 2020 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 2020

Florida's Electric FEECA Utilities	Energy Sales (GWh)	Percent of Total Energy Sales
Florida Power & Light Company	113,531	46.9%
Duke Energy Florida, LLC	39,230	16.2%
Tampa Electric Company	19,954	8.2%
JEA	12,319	5.1%
Gulf Power Company	10,764	4.4%
Orlando Utilities Commission	6,751	2.8%
Florida Public Utilities Company	646	0.3%
<b>Electric FEECA Utilities' Total</b>	203,195	83.9%
Non-FEECA Utilities' Total	39,128	16.1%
<b>Total Statewide Energy Sales</b>	242,323	100.0%

Source: FPSC's Statistics of the Florida Electric Utility Industry (Table 26) published in October 2021.

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, since the summer peak demand generally exceeds winter peak demand. On a typical summer day, the statewide demand for electricity can increase significantly over a span of hours. Additionally, 87.7 percent of Florida's electricity customers are residential and consume 55 percent of the electrical energy produced. In contrast, nationally,

<sup>&</sup>lt;sup>9</sup>FPSC's Review of the 2021 Ten-Year Site Plans of Florida's Electric Utilities (October 2021).

residential customers account for only 40 percent of total electric sales, while commercial customers represent 35 percent of electric consumption, and industrial customers represent 25 percent. <sup>10</sup> Table 2 shows the makeup of Florida's electric customers by class and consumption.

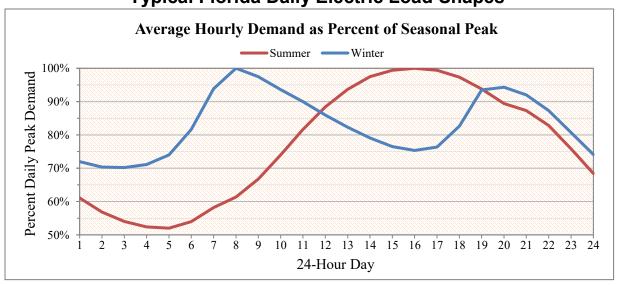
Table 2
Florida's Electric Customers by Class and Consumption in 2020

Customer Class	Number of Customers	Percent of Customers	Energy Sales (GWh)	Percent of Sales
Residential	9,737,740	87.7%	133,202	55.0%
Commercial	1,186,216	10.7%	83,101	34.3%
Industrial	24,396	0.2%	19,603	8.1%
Other*	155,948	1.4%	6,417	2.6%
Total	11,104,300	100.0%	242,323	100.0%

\*Street and highway lighting, sales to public authorities, and interdepartmental sales. Source: FPSC's *Statistics of the Florida Electric Utility Industry* (Tables 26 and 33) published October 2021.

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

Figure 1
Typical Florida Daily Electric Load Shapes



Source: FPSC's Review of 2021 Ten-Year Site Plans of Florida's Electric Utilities published October 2021.

<sup>&</sup>lt;sup>10</sup>National data as reported for 2020 by the U.S. Energy Information Administration in the annual *Electric Sales, Revenue, and Average Price (ESR)* report (Table 1): https://www.eia.gov/electricity/sales revenue price/

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 in order to follow the customer load patterns. Peaking generating units, are dispatched during high demand periods of the day, and are less fuel-efficient than baseload or intermediate generating units. Utility DSM programs play a role in reducing energy usage and shifting peak demand, thus reducing the need to dispatch fuel-inefficient generating units. <sup>11</sup> Over time, the need for additional generating capacity has increased in Florida, largely due to population growth. In addition to providing fuel savings at existing generating units, utility-sponsored DSM programs and individual consumer conservation efforts can avoid or defer the need for new electric generating capacity.

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

Since its enactment, FEECA has been successful in reducing the growth rate of weather-sensitive electric peak demands, and in conserving expensive resources. These savings have avoided or deferred the need for new generating capacity and offset the use of existing generating units, resulting in savings of fuel, as well as variable operations and maintenance (O&M) costs. During 2020, FEECA utility DSM programs continued contributing to the reduction of statewide energy needs and deferred the need for new generating capacity. Table 3 details cumulative savings for summer peak demand, winter peak demand, and overall energy consumption through 2020, as reported in the Florida Reliability Coordinating Council (FRCC)'s 2021 Regional Load & Resource Plan. In 2020, the FEECA DSM programs contributed annual energy savings of 187.1 GWh, which is enough electricity to power approximately 13,929 homes for a year.<sup>12</sup>

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

<sup>&</sup>lt;sup>12</sup>This estimate is based on an average annual household energy use of 13,704 kWh for Florida in 2020 as reported by the U.S. Energy Information Administration in the annual *Electric Sales, Revenue, and Average Price (ESR)* report (Table 5.a): <a href="https://www.eia.gov/electricity/sales\_revenue\_price/">https://www.eia.gov/electricity/sales\_revenue\_price/</a>

Table 3
Statewide Cumulative Demand and Energy Savings (Through 2020)

Туре	Achieved Reduction
Summer Peak Demand	8,171 MW
Winter Peak Demand	7,276 MW
Annual Energy Reduction	14,935 GWh

Source: Florida Reliability Coordinating Council's 2021 Regional Load & Resource Plan (S-3, S-4, S-5).

In 2020, the electric FEECA utilities provided 125 programs for residential, commercial, and industrial customers (see Appendix B). Programs focus on either reducing energy use at a given moment, which shifts/reduces demand, or toward reducing overall energy consumption over a period of time. Utility-sponsored DSM programs are an important means of achieving demand and energy savings and these programs are designed to encourage customer conservation efforts.

Additionally, residential energy audits, required by Section 366.82(11), F.S., serve as an avenue to identify and evaluate conservation opportunities for customers, including their potential participation in utility-sponsored DSM and conservation programs. Energy audits also educate customers about behavioral changes and energy efficiency investments they can make outside of utility-sponsored DSM programs. During 2020, FEECA electric utilities performed 223,146 residential audits. Though FEECA does not require commercial energy audits, FEECA electric utilities also performed 6,071 commercial energy audits in 2020. Additional information about these results is presented in Section 3.

# 1.3 Recovery of Conservation Expenditures

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

Commission Rule 25-17.015, F.A.C., also permits natural gas LDCs to seek recovery for costs related to Commission-approved conservation programs. While PGS is the only natural gas utility subject to FEECA, the other Florida LDCs offer Commission-approved DSM programs without a specific therm savings goal. Natural gas conservation programs have historically focused on providing rebates to residential customers that support the replacement of less efficient appliances with new, energy-efficient gas appliances. However, several LDCs have expanded their rebate programs to commercial customers.<sup>13</sup>

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

<sup>&</sup>lt;sup>13</sup>Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida*.

held to determine the cost recovery factors to be applied to customer bills in the following year. The Commission-approved 2022 conservation cost recovery factors are discussed further in Section 4.

# **Section 2. DSM Goalsetting**

# 2.1 DSM Program Cost-Effectiveness and Energy Savings

Section 366.81, F.S., 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 provide the results of the Participants test and Gas Rate Impact Measure Test (GRIM). The GRIM test is a modified version of the RIM test, specific to gas utilities. Natural gas LDCs are also required to provide the results of these tests when seeking to add a new program or modify an existing program.

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

Table 4
Summary of Electric Cost-Effectiveness Methodologies

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

#### **Participants Test**

The Participants test analyzes costs and benefits from a program participant's point of view, rather than the impact on the utility and other ratepayers not participating in the program. The Participants test includes the up-front costs customers pay for equipment and costs to maintain this equipment. Benefits considered in the test include the incentives paid by utilities to the customers and the reduction in customer bills. Failure to demonstrate cost-effectiveness under this test would infer that rational customers would not elect to participate in this program.

#### Rate Impact Measure (RIM) Test

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

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

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

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

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

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

#### 2019 Electric DSM Goalsetting Proceeding

Pursuant to Sections 366.82(2) and 366.82(6), F.S., the electric FEECA utilities filed proposed goals for the 2020-2029 period in April 2019. The utilities' proposed goals were lower overall than those established in the 2014 goalsetting proceeding, with some utilities proposing goals of zero or near-zero for the 10-year period. A technical hearing on the proposed goals was held on August 12 and 13, 2019. The Commission heard testimony on cost-effectiveness tests, whether a

goal of zero fulfilled statutory requirements, how to account for free ridership, and how to ensure low-income customers are able to effectively participate in DSM programs.

By issuing Order No. PSC-2019-0509-FOF-EG <sup>14</sup> on November 26, 2019, the Commission rejected the goals proposed by the electric FEECA utilities and chose to continue with the 2020-2024 portion of the goals established in the 2014 goalsetting proceeding. <sup>15</sup> While the goalsetting process produces annual goals, the cumulative goals for the entire 10-year period are shown in Table 5 for illustrative purposes. The Commission also expressed a desire to review the goalsetting process for potential revisions. In July 2020, a docket was established to consider proposed amendments to Rule 25-17.0021, F.A.C. Rule development workshops for this docket were conducted in January and May, 2021. <sup>16</sup>

Table 5
Cumulative Commission-Approved Electric DSM Goals, 2015-2024

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

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

The goals established in 2014 were based upon estimated energy and demand savings from measures that passed both the RIM and Participants cost-effectiveness tests. Measures that pass the Participants test ensure that participating customers' benefits exceed the costs of the measure or program to the participants. Use of the RIM test minimizes subsidies between customers who participate in DSM programs and those who do not participate but pay for program expenditures. The RIM test also ensures rates would remain the same or lower than otherwise would occur.

As part of its review of goals in 2019, the Commission recognized Rule 25-6.065, F.A.C., (Customer-Owned Renewable Generation Rule) as an effective means of encouraging the development of demand-side renewable energy systems. Figure 2 shows the growth in the

<sup>&</sup>lt;sup>14</sup> Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG through 20190021-EG, *In re: Commission review of numeric conservation goals*.

<sup>&</sup>lt;sup>15</sup>Within 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.

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

number of customer-owned renewable energy systems in Florida, as well as the growth in gross power ratings (i.e. generating capacity) since the Commission's approval of net-metering in 2008.

Renewable Energy Systems and Generation Capacity ■ Renewable Energy Systems Reported ■ Total kW Gross Power Rating 100,000 900,000 90,000 800,000 80,000 700,000 Renewable Energy Systems 70,000 600,000 60,000 500,000 50,000 400,000 40,000 300,000 30,000 200,000 20,000 100,000 10,000 2011 2012 2013 2014 2015 2016 2017

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, 2008-2020.

# 2.2 Summary of the 2019 Goalsetting Process for Peoples Gas

PGS is the only natural gas utility that meets the therm sales threshold for establishing conservation goals under FEECA. In October 2018, PGS filed a petition for approval of numeric therm reduction goals for the 2019-2028 period. PGS estimated its goals based upon its current Commission-approved DSM programs. Because PGS had existing programs already in place, there is expected to be no additional cost to its customers, aside from the costs of the new audit programs. PGS utilized the Participants and GRIM tests to calculate its goals. The Commission approved the goals for PGS in Order No. PSC-2019-0361-PAA-GU, issued on August 26, 2019. Table 6 shows the 10-year therm-savings goals for PGS over the 2019-2028 period.

<sup>&</sup>lt;sup>17</sup>Rule 25-17.009, F.A.C., requires natural gas utilities that seek to recover costs for conservation programs to file the cost-effectiveness test results of the Participants test and the GRIM test.

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

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

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

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

In November 2019, a docket was established to consider the petition from PGS for Approval of Demand-Side Management Plan and Standards together. <sup>18</sup> In June 2020, PGS informed the Commission of its intention to revise programs in an amended filing. In February 2021, an Amended Petition for Approval of Demand-Side Management Plan was filed. By Order No. PSC-2021-0242-PAA-EG, the revised filing was approved. <sup>19</sup>

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

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

Utilities design DSM programs to encourage conservation that exceeds levels set by current building codes and minimum efficiency standards. However, the cost-effectiveness of DSM measures has declined due to several factors outside of the FEECA utilities' control. More stringent state and federal efficiency standards, building codes, and customer actions to

<sup>&</sup>lt;sup>18</sup>See Docket No. 20190210-EG, Petition for approval of demand-side management plan, by Peoples Gas System. <sup>19</sup>Order No. PSC-2021-0242-PAA-EG, issued July 2, 2021, in Docket No. 20190210-EG, *In re: Petition for* 

approval of demand-side management plan, by Peoples Gas System.

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 rates tend to reduce customer energy efficiency investments, while increasing rates can have the opposite effect. This makes it crucial that the FEECA utilities frequently evaluate conservation programs to ensure that they remain cost-effective. Likewise, the FEECA utilities are also expected to evaluate the potential for new, cost-effective DSM program opportunities as energy-efficiency technologies develop.

#### **State Building Code**

At the state level, the FLBC is amended annually to incorporate interpretations and clarifications as well as to update efficiency standards. The Florida Building Commission updates the FLBC with relevant new standards every three years. In 2017, the FLBC was updated and became effective in December 2017. After review of the 2017 FLBC and the DSM programs that were current at that time, FEECA utilities reported that the code update had no impact on the programs that had been established during the 2014 goalsetting proceeding. In 2020, the FLBC was updated to the Seventh Edition, which became effective in December 2020. In August 2021, a supplement to the Seventh Edition was issued. While there were several changes in both documents that pertain to construction standards, no changes were made to Chapter 11, Energy Efficiency, and none of the FEECA utilities made regulatory filings to modify DSM Plans or programs as a result of FLBC code updates.<sup>20</sup>

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

At the federal government level, the U.S. Department of Energy's (DOE) Building Technologies Office sets energy efficiency standards for more than 60 categories of appliances and other equipment, including HVAC equipment. <sup>21</sup> Within the Building Technologies Office, the Appliances and Equipment Standards Program maintains a multi-year rulemaking schedule that establishes minimum energy efficiency standards and test procedures which are the basis for these standards. The products regulated by DOE standards represent about 90 percent of home,

<sup>&</sup>lt;sup>20</sup>Details of the Seventh Edition (2020) Florida Building Code and 2021 Supplement to the 7<sup>th</sup> Edition (2020) Florida Building Code can be found at <a href="https://www.floridabuilding.org/fbc/Links\_to\_Code\_Resources.html">https://www.floridabuilding.org/fbc/Links\_to\_Code\_Resources.html</a>.

<sup>&</sup>lt;sup>21</sup>Pursuant to Section 553.975, F.S., the Commission must report the effectiveness of state energy conservation standards established by Sections 553.951-553.973, F.S. Florida's appliance efficiency standards are mandatory efficiency improvements but have not been updated since 1993, and therefore have likely been superseded by more recent federal efficiency standards.

60 percent of commercial building, and 30 percent of industrial energy use. <sup>22</sup> Some of the consumer products regulated by these Conservation Standards and Test Procedures include laundry appliances, dishwashers, microwave ovens, televisions, and several other common household products. In addition to consumer products, there are categories for lighting, plumbing, and commercial/industrial products. <sup>23</sup> Deadlines for reviewing many of these standards were not met in 2020. However, in January 2021, an executive order from the President of the United States was issued which included direction to address the overdue rule and test procedure reviews. <sup>24</sup> In the August 2021 Report To Congress, DOE conveyed that since the last Report to Congress (July 2019), 123 rulemaking actions related to energy conservation standards and test procedures have been completed. Of this total, 71 of the actions were related to energy conservation standards rulemaking notices, with 15 being final actions. Examples of the equipment for which final actions were taken include ceiling fans, commercial air compressors, dishwashers, fluorescent light ballasts, and portable air conditioners. The full list, including information on the fifty two rulemaking notices that relate to test procedures, is accessible via the link identified in the footnote below. <sup>25</sup>

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

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<sup>&</sup>lt;sup>22</sup>Federal Appliance and Equipment Standards Program: <a href="http://energy.gov/eere/buildings/appliance-and-equipment-standards-program">http://energy.gov/eere/buildings/appliance-and-equipment-standards-program</a>.

<sup>&</sup>lt;sup>23</sup> Federal Conservation Standards and Test Procedures: <a href="http://energy.gov/eere/buildings/standards-and-test-procedures">http://energy.gov/eere/buildings/standards-and-test-procedures</a>.

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

<sup>&</sup>lt;sup>25</sup>U.S. Department of Energy, Semi-Annual Report to Congress on Appliance Energy Efficiency Rulemakings, Energy Conservation Standards Activities (August 2021): <a href="https://www.energy.gov/sites/default/files/2021-08/EXEC-2019-005022%20-%20Final%20Report%20ksb.pdf">https://www.energy.gov/sites/default/files/2021-08/EXEC-2019-005022%20-%20Final%20Report%20ksb.pdf</a>

## Section 3. FEECA Utilities' Goal Achievements

## 3.1 Assessing Goal Achievement

Commission rules require separate goals be set for electric residential and commercial/industrial (C/I) 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 demand and energy savings goals.

Every FEECA utility must file an annual DSM report pursuant to Rule 25-17.0021, F.A.C., which summarizes demand savings, energy savings, and customer participation rates for each approved program. The report also includes the residential, C/I, and total energy efficiency achievements compared to the approved DSM goals. Each FEECA utility's current (2020) and archived annual DSM reports from prior years can be found on the Commission's website: <a href="http://www.psc.state.fl.us/">http://www.psc.state.fl.us/</a>.

Monitoring annual goal achievements enables the Commission to evaluate the effectiveness of each utility's programs. In addition to reviewing the FEECA utilities' annual DSM reports, staff issues discovery requests for additional information from the utilities on their demand and energy saving achievements. Staff's data requests also seek explanations of factors preventing the utilities from achieving projected participation levels. Each FEECA utility's DSM performance in 2020 is discussed below. The utility achievements have been compared to the annual goals established by the Commission in November 2014 and reapplied in August 2021. Table 7 provides a breakdown of each electric utility's goal achievements for the period.

#### **FPL**

FPL met all of its goals for the C/I customer class, and also achieved its goals for total winter and summer demand reduction, but did not achieve its goal for total energy savings in 2020. FPL did not achieve any of its 2020 goals for the residential customer class. FPL stated that its performance in this sector was attributable to fewer in-home audits beginning in March, since those activities were suspended due to COVID-19 restrictions.

#### **DEF**

DEF met its 2020 total demand and energy savings goals and all C/I customer class goals. Although DEF suspended the installation of in-home measures for its customers in March in response to the COVID-19 pandemic, the company achieved its summer demand reduction and energy savings goals for the residential customer class in 2020, and it missed achieving its winter demand reduction goal by a very small margin.

#### **TECO**

TECO met its 2020 total demand and energy savings goals and all C/I customer class goals. For the residential customer class, TECO achieved its energy savings goals in 2020, although it missed achieving its winter and summer demand reduction goals. As a response to the COVID-19 pandemic, TECO suspended face-to-face in-home interactions for the safety of its customers, employees, and contractors. The company believes fewer interactions impacted its ability to achieve the demand reduction goals for the residential customer class.

#### Gulf

Gulf achieved its 2020 goal for winter demand reduction for the C/I customer class, but did not achieve any other goals in 2020. Gulf stated that the COVID-19 pandemic significantly impacted the delivery of many of Gulf's DSM programs. Gulf suspended traditional outreach activities that are ordinarily the primary driver of many DSM programs. By not participating in home shows and community events, Gulf had fewer opportunities to engage with residential and C/I customers. In addition, suspending employee visits in customers' homes and business locations beginning in March, suppressed its ability to offer programs to achieve its residential and some C/I customer class goals.

#### **FPUC**

FPUC met all of its 2020 total demand and energy savings and residential goals, stating that enhanced participation in its Residential Heating and Cooling Upgrade program as the principle reason. The company did not meet any of its 2020 goals for the C/I sector, although goal achievement improved in this customer class compared to 2019.

#### **JEA**

JEA met its 2020 total demand and energy savings goals and all individual customer class goals.

#### OUC

OUC met its 2020 total demand and energy savings goals and all individual customer class goals.

Table 7
Electric DSM Goals Compared to Annual (2020) Achievements

	Win	ter (MW)	Summer (MW)		Annual (GWh)	
Utility	Goals	Achieved Reduction	Goals	Achieved Reduction	Goals	Achieved Reduction
FPL*						
Residential	16.7	11.5	26.9	20.0	25.0	20.6
Commercial/Industrial	16.1	28.6	26.2	40.2	28.7	30.7
Total	32.8	40.1	53.1	60.2	53.7	51.3
DEF*						
Residential	32.0	31.0	16.0	18.0	9.0	35.0
Commercial/Industrial	5.0	24.0	8.0	46.0	6.0	40.0
Total	37.0	55.0	24.0	64.0	15.0	75.0
TECO*						
Residential	7.6	3.5	3.3	2.6	7.4	8.9
Commercial/Industrial	1.7	10.4	3.5	11.8	10.3	26.1
Total	9.3	13.9	6.8	14.4	17.7	35.0
Gulf*						
Residential	3.8	1.1	6.7	1.6	6.8	2.2
Commercial/Industrial	0.2	0.0	0.8	1.0	2.5	2.2
Total	4.0	1.1	7.5	2.6	9.3	4.4
FPUC*						
Residential	0.028	0.142	0.089	0.253	0.060	0.488
Commercial/Industrial	0.018	0.001	0.052	0.018	0.168	0.044
Total	0.046	0.143	0.141	0.271	0.228	0.532
JEA						
Residential	0.960	1.794	0.940	2.004	2.500	3.940
Commercial/Industrial	0.007	0.582	0.140	1.188	0.080	6.240
Total	0.967	2.376	1.080	3.192	2.580	10.180
OUC						
Residential	0.210	0.821	0.210	0.763	0.770	1.628
Commercial/Industrial	0.700	1.960	0.390	2.325	0.850	9.087
Total	0.910	2.782	0.600	3.087	1.620	10.715

<sup>\*</sup>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 2020 total energy reduction goal and its individual customer class goals.

Table 8
PGS DSM Goals Compared to Annual (2020) Achievements

TI4:1:4	Annual Energy Reduction (Therms)			
Utility	Goals	Achieved Reduction		
PGS				
Residential	347,108	416,915		
Commercial/Industrial	222,062	285,662		
Total	569,170	702,577		

Source: PGS' demand-side management annual report.

## 3.2 Program Impacts of COVID-19

The COVID-19 pandemic profoundly impacted DSM program implementation in 2020 for Florida's electric FEECA utilities. COVID-19 led each FEECA utility to restrict implementation of DSM programs requiring face-to-face or on-site contact with their customers in 2020. All FEECA utilities suspended offering conservation programs that involved employee visits to customers' homes beginning in March 2020. In a few instances, the duration of suspensions was brief. Many program suspensions were lifted in the 4<sup>th</sup> quarter of the year, although in a few limited cases, some programs remained suspended for the remainder of 2020 and into 2021.

The FEECA utilities responded to this challenge through enhanced communications with their customers using traditional channels (radio, television, bill messaging, and print mediums), as well as internet-based and social media (Facebook and Twitter) platforms. In addition, the FEECA utilities frequently updated information regarding the availability of their conservation programs on their corporate websites, and some entities developed webinars and other informative content for their customers. For the first time, the FEECA utilities also communicated with their customers using technology-based applications (FaceTime, Teams, and Zoom) in efforts to assist customers to learn about and engage in conservation programs and measures. Discussed below is a summary of the extraordinary practices the FEECA utilities implemented in response to COVID-19 impacts.

#### **FPL**

Many of FPL's residential and commercial conservation programs were suspended between March and October of 2020. Throughout 2020, FPL posted and updated its website messaging about the conservation programs that were suspended. The company also enhanced the training for call-center and customer-facing workforces in order to encourage customers to participate in telephonic and virtual audit programs, which were continuously offered through 2020. Although in-person audit programs were not offered for portions of 2020, all customers who requested an in-home survey were encouraged to complete the survey via phone or video, and customers who

preferred an onsite survey were put on a call-back list to be notified once field visits resumed. According to FPL, the success of advisor-led virtual phone surveys led the company to continue offering this service to their customers as it allows for flexible scheduling and is a less intrusive method for completing an energy survey.

During 2020, FPL also adjusted its Residential Ceiling Insulation program to allow insulation contractors to directly deliver the program to FPL customers without a pre-qualification that would normally result from an audit. To promote best practices and also its portfolio of conservation programs for customers in the business and commercial class, FPL produced and offered an energy efficiency-related webinar in 2020.

#### **DEF**

In 2020, COVID-19 impacted DEF's residential and commercial conservation programs for varying durations. The company's Non-Residential Demand Response program had the shortest suspension, lasting about two weeks, while other programs, such as Home Energy Check (DEF's in-home audit program), were suspended in mid-March 2020, restored in mid-June, and then suspended again in early November 2020 for the remainder of the calendar year.

Like FPL, DEF actively posted current information about conservation programs on its website, and also made use of video conferencing tools as an alternative to face-to-face communications. Prior to 2020, the Company sponsored in-person events to promote the Neighborhood Energy Saver program. COVID-related impacts in 2020, however, prompted DEF to develop plans to promote this program through a virtual event.

The company relied more heavily on its online and social media outlets (Facebook and Twitter) for messaging about the conservation programs, and increased its promotion of telephonic and online audits. For customers who initiated contact with the company about in-home audits or other suspended programs, DEF instituted waitlists during the period(s) when suspensions were in place. Although lower costs in some programs were recorded in 2020 due to suspensions throughout the year, higher expenses for incentives were incurred in the Interruptible Service Program, which contributed to the slight rise in overall costs for all programs. Despite suspending in-home audits for portions of 2020, DEF was the only FEECA electric utility to record an increase in overall audit participation in 2020.<sup>26</sup>

#### **TECO**

TECO suspended on-site appointments in March 2020 and followed protocols which deferred face-to-face interaction with customers. TECO pursued energy education for its customers through traditional and emerging communication channels. Through its website and other digital avenues, the company provided information about suspended conservation programs, while also actively promoting the non-suspended programs. According to TECO, the company placed an emphasis on promoting telephonic and online audits, and like DEF, created wait-lists to accommodate requests for in-home audits or other suspended programs. All customers awaiting an energy audit were offered an initial phone audit, as well as an evaluation of their ceiling

<sup>26</sup>Tables 9 and 10, which appear on Pages 26 and 28 in this report, provide additional information from all of the FEECA electric utilities on the number of residential and commercial/industrial audits conducted in 2020.

insulation and ductwork, if outside access was available. TECO's online customer portal featured popup messaging to promote Online Energy Audits, allowing instant access for information and sign-ups. TECO's Commercial Energy Management Team offered a virtual energy efficiency webinar to offer information on phone audits and energy efficiency assistance geared specifically to commercial/industrial customers.

TECO also implemented some process changes that allowed on-going participation in some of the company's COVID-impacted DSM programs. Working through its vendors, the company allowed photographs to document the installation of qualifying energy efficient equipment. TECO also implemented an electronic signature tool in order to enroll customers in load management and demand response programs. For the company's Weatherization program, TECO specialists ordinarily install all of the items in the energy efficiency kits that are offered with that program. However, during the period of COVID-related suspensions, the company mailed the kits and instructed the participating customers to self-install what they were comfortable with, leaving the remaining items for a specialist to install at a later date. For these participating customers, TECO plans to initiate contact when restrictions expire.

TECO developed and launched social media content focused on educating its customers on energy saving tips, while simultaneously promoting its conservation programs. In 2020, a team of TECO specialists created seven conservation-related videos for social media outlets, including one offered in Spanish. This content offered information on the benefits of participating in company-sponsored programs, along with topics that ranged from water heating to adjusting thermostat settings.

#### Gulf

Gulf, like DEF, began suspensions in March 2020 and ended them at various dates through the following year. Gulf suspended all on-site visits in March 2020 through the remainder of the year. Although two residential programs, Energy Select and the Low-Income Community Energy Saver, were only suspended between March and July of 2020, the programs operated in the latter part of 2020 under very limited capacities.

Like FPL, Gulf shifted its messaging to encourage customers to participate in telephonic and virtual audit programs, which were offered through 2020 in lieu of in-person audits. Gulf adjusted how it communicated with its customers through increased use of internet-based platforms and its social media (Facebook and Twitter) avenues to educate customers and also offer information about conservation programs.

Gulf introduced surveys via phone or video for their residential and commercial customers, which allowed customers to receive a personal consultation while maintaining its suspension of in-person visits to homes and businesses. Gulf stated that any customers who preferred an on-site energy audit were put on a call-back list for notification once field visits resumed.

Late in 2020, Gulf took steps designed to solidify its relationships with its preferred vendors in conjunction with three new residential programs (HVAC, Ceiling Insulation, and High Efficiency Pool Pump). By the second quarter of 2021, Gulf had resumed offering all of its residential and business conservation programs.

#### **FPUC**

FPUC's two audit programs that feature on-site visits, the Residential Energy Survey Program and the Commercial Energy Consultation Program, were suspended in March and remained suspended for the balance of 2020. To provide an alternative for customers requesting an on-site audit, the company offered an online energy survey, and helped customers with over the phone audits as well. In addition, the company updated its free online energy survey software and conservation calculator and included a bill insert to alert its customers about the availability of these tools.

The company states that it enhanced its efforts to promote online and telephonic audits in 2020. Like the larger IOUs, FPUC began its energy education efforts with changes to the company's website. Through website, social media, and email messaging, the company provided information about suspended conservation programs and offered energy-saving tips. FPUC also provided its customers with links to access their newly updated energy conservation tools, which included cost calculators for appliances and other equipment. In 2020, the company maintained its usual marketing efforts to promote its entire energy conservation portfolio through bill messaging and print advertising (including billboards and banners) in its service territories.

#### JEA and OUC

JEA and OUC suspended programs in March that involved utility personnel entering customer homes, and both entities used websites and social media accounts for communicating with customers about conservation programs.

While both utilities offered virtual audits, OUC offered on-site audits whereby conservation specialists remained outdoors during the audits, using video-conferencing tools to give guidance to its customers. OUC expressed that its modified audit program obviated the need to create waitlists that would have otherwise been necessary if the utility had fully suspended the program.

## 3.3 Information on Audit Programs

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

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

As a part of its goalsetting process, PGS was granted a waiver which exempts the company from the requirement to offer Walk-Through audits. The Commission allowed PGS to offer an electronic, online-only audit in lieu of on-site audits for residential customers. In April 2020, PGS launched its Residential Customer Assisted Audit program, as an online audit program for residential customers, and offered 4,878 audits to residential customers. In the third quarter of 2021, PGS updated staff on the delay in its plans to launch its Commercial Walk-Through Energy Audit program.

#### **Residential Audits**

The FEECA electric utilities performed a total of 223,146 residential audits in 2020, as shown in Table 9 below. <sup>27</sup> On various dates in 2020, the FEECA electric utilities suspended and later reinstated employee visits to customers' homes and businesses. As a result, during the suspension periods, the utilities were not able to offer Walk-Through, BERS, and Computer-Assisted audits since these types of audits require a utility auditor to physically inspect the customer's premises. The FEECA electric utilities responded to these suspensions by offering virtual energy audits via online or telephonic audit programs.

Table 9
Residential Audits by Type in 2020

	In-Person	Virt	tual	
Utility	Walk-Through, BERS, and Computer-Assisted	Online	Phone	Total
FPL	3,786	80,940	18,921	103,647
DEF	9,525	11,558	10,477	31,560
TECO	1,514	59,323	443	61,280
Gulf	135	11,764	106	12,005
FPUC	23	0	60	83
JEA	3,187	9,924	0	13,111
OUC	1,296	164	0	1,460
Total	19,446	173,673	30,027	223,146

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

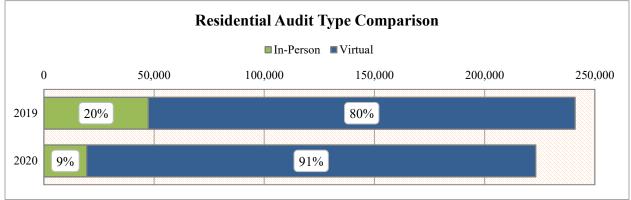
The 2020 total number of residential audits for all electric FEECA utilities, 223,146, was almost 18,000 fewer audits than the 241,025 audits conducted in 2019. In 2020, FPL, Gulf, TECO, FPUC, and the municipal utilities all reported that fewer audits overall were conducted, compared to 2019. However, overall participation for DEF increased by over 8 percent in 2020, when a total of 31,560 audits were conducted.<sup>28</sup>

<sup>27</sup>Walk-Through, BERS, and Computer-Assisted audits all require a utility auditor to physically inspect the customer's premises, and therefore are consolidated for the purposes of Figures 3 and 4.

<sup>&</sup>lt;sup>28</sup>In 2019, DEF reported a total of 29,133 audits, including 13,754 Walk-Through, BERS, and Computer Assisted audits, 5,596 Online audits, and 9,783 Phone audits. Despite fewer in-person audits in 2020, DEF more than doubled the number of Online audits that year.

In 2019, approximately 80 percent of all residential audits were conducted virtually, and the balance were conducted in person. For 2020, not only did the overall number of audits decline, but a proportional shift was observed as well. As Figure 3 below shows, a higher proportion of residential audits were conducted virtually in 2020 (91 percent), while far fewer in-person audits were conducted, as expected due to the suspension of onsite audits.

Figure 3
Residential Audits in 2019 and 2020



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

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

The FEECA electric utilities also performed 6,071 commercial energy audits in 2020, down from 8,506 in 2019. As with the residential audit programs, the suspension of on-site visits during 2020 contributed significantly to the lower overall numbers reported by all of the FEECA electric utilities. However, suspending on-site visits had a greater impact on the C/I sector than the residential sector, since some of the FEECA electric utilities only offered in-person audits to the C/I sector. In 2019, FPUC conducted 19 audits for the C/I sector, but conducted no audits in 2020. FPL and Gulf had previously offered other types of audits (e.g. online and/or telephonic audits) to this sector in 2019, and continued offering such audits in 2020. In 2020, DEF offered telephonic audits for the first time to the C/I sector. Table 10 shows a breakdown of the participation numbers in 2020.

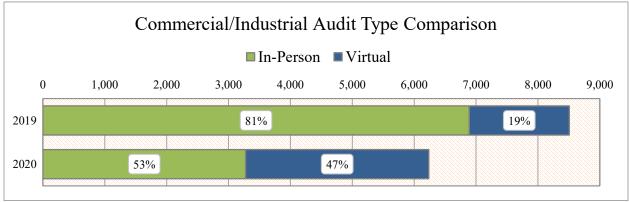
Table 10
Commercial / Industrial Audits by Type in 2020

	In-Person	Vir	tual	
Utility	Walk-Through, BERS, and Computer-Assisted	Online	Phone	Total
FPL	2,464	1,230	1,321	5,015
DEF	363	0	66	429
TECO	238	0	171	409
Gulf	17	6	0	23
FPUC	0	0	0	0
JEA	142	0	0	142
OUC	53	0	0	53
Total	3,277	1,236	1,558	6,071

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

Similar to the observations from the residential sector, the suspension of in-person audits for periods in 2020 resulted in a proportional shift between virtual and in-person audits. Figure 4 below shows a higher proportion of C/I audits were conducted virtually in 2020, while far fewer in-person audits were conducted.

Figure 4
Commercial / Industrial Audits in 2019 and 2020



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

## 3.4 Low-Income Programs

The 2014 DSM Goals Order <sup>29</sup> states, "When the FEECA utilities file their DSM implementation plans, each plan should address how the utilities will assist and educate their low-income customers, specifically with respect to the measures with a two-year or less payback." <sup>30</sup> 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.

Since 2015, all of the electric FEECA utilities have submitted programs in their DSM plans tailored to offer assistance to qualifying customers. Each FEECA utility's conservation efforts with respect to low-income customers during 2020 are discussed below.

#### **FPL**

In 2020, FPL provided assistance to low-income customers through the Low-Income DSM program, which provides direct installation of energy saving measures through government designated Weatherization Assistance Providers. A thorough home energy survey with customer specific recommendations for saving energy is also offered with this program. Although on-site, in-home energy surveys were suspended between March and October 2020 due to COVID-19, FPL offered participants the option of doing the home energy survey over the phone or online.

#### **DEF**

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

In 2020, DEF worked with local government social service agencies, including Pinellas County Urban League, Mid-Florida Community Services, Capitol Area Community Action Agency and other organizations to ensure these entities are aware of the benefits available to low-income customers. For much of 2020, COVID-19 related concerns prompted DEF to suspend offering in-home direct installations of measures in customers' homes. Safety related concerns also impacted the social service agencies DEF partnered with, although in 2021 these agencies have

<sup>&</sup>lt;sup>29</sup>The 2014 DSM Goals Order references electric utilities only.

<sup>&</sup>lt;sup>30</sup>Order No. PSC-14-0696-FOF-EU, issued December 16, 2014, in Docket Nos. 20130199-EI through 20130205-EI, *In re: Commission review of numeric conservation goals.* 

resumed activity and have submitted some applications for rebates through DEF's Weatherization Program.

In July 2021, DEF petitioned the Commission to request approval for several modifications to the company's DSM Plan and standards.<sup>31</sup> The modifications are intended to provide both short-term and long-term relief to low income customers. The Commission is scheduled to consider the DEF pleading in December 2021.

#### **TECO**

In 2020, TECO continued its multi-pronged approach for communicating with all customers, including low-income customers. TECO used social media (Facebook and Twitter) posts to announce details for offering its Neighborhood Weatherization Program.

Additionally, TECO recognized that work-from-home directives would impact an increased number of its residential customers, including low-income customers. The company responded by developing a series of seven energy conservation videos that were launched on social media outlets to offer energy savings tips. These videos feature topics that range from water heating to HVAC maintenance. Two specific videos promoted the benefits of weatherization kits and participating in a telephonic energy audit. Another video, "Energy Efficiency Tips for Summer," was offered for Spanish language viewers. The company's Communications office also issued several press releases in 2020 which offered tips and guidance on such topics as working from home, operating costs for common appliances, holiday lighting, and energy efficient cooking practices.

#### Gulf

In 2020, Gulf engaged in several initiatives to ensure low-income customers were aware of and had access to conservation programs. While overall participation was impacted by COVID-19 restrictions, Gulf specifically targeted lower income neighborhoods with its Community Energy Saver (CES) program, a program where company representatives canvas specifically-identified neighborhoods to provide basic energy conservation recommendations as well as installation of conservation measures including energy efficient LED light bulbs and low-flow shower heads.

In addition to the outreach through the CES program, Gulf emailed all customers whose energy usage had significantly increased from the prior year to offer energy saving tips and bill assistance. Gulf also ran an advertising campaign on local TV, digital channels and social media channels during some of the warmest summer months to encourage customers to identify more ways to save energy and money through the online energy checkup tool.

#### **FPUC**

In 2020, FPUC continued to serve its customers, including low-income customers, through its Energy Expert program, which provides energy-related tips, advice, articles, videos, blog content, and other downloadable materials. This energy conservation resource features an "Ask the Energy Expert" tool which allows customers to submit energy-related questions to the

<sup>&</sup>lt;sup>31</sup>See Docket No. 20210121-EG, Petition for Approval of Modifications to Demand-side Management Program Plan and Participation Standards.

company and receive a direct response from FPUC personnel. These questions and answers are also made available on the FPUC website so that other customers may benefit from the information. As part of the Energy Expert program, FPUC energy conservation professionals continuously interact with employees from other departments to provide basic energy efficiency and conservation training. This training helps customer service, sales, and other customer-facing employees address high-bill complaints and to effectively communicate with customers regarding their energy usage, and FPUC's energy conservation measures and programs.

#### **JEA**

As in prior years, JEA provided a specific program for low-income customers called its Neighborhood Energy Efficiency Program. This program included free installation of conservation products and provides energy education packets that give customers energy-saving ideas and information about JEA's other DSM programs. JEA also provided 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 held 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 2020, 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. In 2020, OUC added more measures and increased the cap for the Efficiency Delivered program, whereby OUC pays for 85 percent of the costs for energy and water efficiency upgrades up to a cap of \$2,500 per installation. Income qualified participants pay the remaining 15 percent over the first 24 months, interest free.

In addition, OUC partners with the City of Orlando to conduct neighborhood meetings in low-income communities. These meetings promote all low-income programs and offer information on energy conservation education and utility-sponsored audit programs.

## 3.5 Investor-Owned Utility Research and Development Programs

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

#### **FPL**

In 2020, FPL continued researching conservation-related topics with the engineering departments of several Florida universities, in addition to continuing its work with the Electric Power Research Institute (EPRI). Through these initiatives, FPL and its research partners

participated in larger research projects with other utilities, which is a cost-effective strategy to gain insights at a lower cost than performing similar research on a stand-alone basis. In 2020, FPL began a research initiative exploring the use of Smart Thermostats and related devices for potential application as demand response technologies. Observations are projected to continue through 2021 and into 2022. FPL did not produce any final reports in 2020.

#### **DEF**

DEF continued research projects with the University of South Florida and University of Central Florida to gain insights into energy storage. The company hopes to use the results of this research for design of a potential cost-effective demand response program. DEF also engaged in research to study electric vehicle charging, and continued its research on CTA-2045 Technology, a port that enables connected appliances to receive and execute commands. Like FPL, DEF also continued its work with EPRI and other national partners.

In 2020, DEF launched a pilot to develop software and equipment for a Smart Home Gateway. The Smart Home Gateway would use real-time energy usage data and communications technology to interface with appliance control or similar devices. DEF also launched a pilot aimed at precision temperature measurement and analysis. Under this pilot, data on the performance of HVAC systems, ducts, or the building envelope will be analyzed to assist inhome energy auditors to investigate leaks and other deficiencies that may be the root cause of high bill complaints.

#### **TECO**

In 2020, TECO continued several of its battery storage research initiatives with University of South Florida, including a project exploring the use of large commercial electric vehicle lithiumion batteries to export power to the company's grid during peak times. TECO also continued examining a Commercial Small to Mid-sized Business Online Energy Audit program and researching Home Energy Management Systems, including Heat Pump Water Heaters, in its Energy Planner Program.

In August 2020, the University of South Florida's Center for Urban Transportation Research published a final report (Benefits of Electric Vehicles to Tampa Electric Company) it prepared for TECO. This report is a significant resource to supplement the regulated entity's on-going conservation research and development efforts.

#### Gulf

Gulf previously reported on completed conservation and research projects, and did not initiate any new projects in 2020.

#### **FPUC**

In 2020, FPUC expanded the scope of its Battery Storage Conservation Research and Development (CRD) project by adding additional participants and technology providers. This research explores the impacts battery technology has on FPUC's electrical system, comparing data from stand-alone battery units to various configurations that combine solar and battery components. The research is intended to provide the company with data and insights for determining appropriate business model design and regulatory structure for a (future) DSM

program offering for residential customers. In addition to evaluating how the equipment performs, the project also monitors customer acceptance and experience with the technology.

FPUC expects to continue this study through 2021, with plans to provide a final report on this research in March 2022.

## Section 4. Conservation Cost Recovery

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

## 4.1 Electric IOU Cost Recovery

From 2010 through 2014, annual electric utility expenditures to fund conservation programs grew due to additions and modifications of these programs. However, annual costs recovered from customers through the ECCR clause after 2014 have declined for most IOUs, due to DSM program modifications designed to meet the Commission's 2014 goals. Table 11 shows the annual DSM expenditures recovered by Florida's IOUs from 2011-2020.

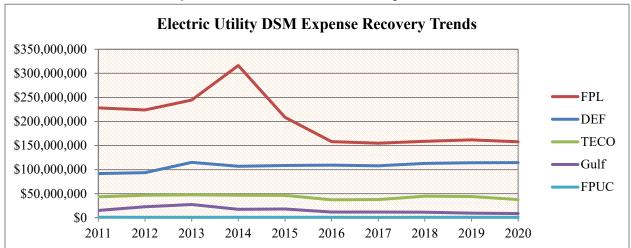
Table 11
DSM Expenditures Recovered by IOUs

	FPL	DEF	TECO	Gulf	FPUC	Total
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
2020	\$157,892,907	\$114,692,900	\$37,850,526	\$8,637,394	\$782,143	\$319,855,870
Total						\$3,717,351,379

Source: Docket Nos. 20120002-EG through 20210002-EG, Schedules CT-2 from the IOUs' May testimony.

Figure 5 shows trends in annual DSM expenditures for the five electric IOUs from 2011 to 2020.

Figure 5
DSM Expenditures Recovered by Electric IOUs



Source: Docket Nos. 20120002-EG through 20210002-EG, Schedules CT-2 from the IOUs' May testimony.

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 2021, the Commission set the ECCR factors for the 2022 billing cycle. Table 12 illustrates the approved ECCR factors and the monthly bill impact for a residential customer. For illustrative purposes, these factors are applied to a monthly residential bill based on 1,000 kilowatt-hour (kWh) per month energy usage.

Table 12
Residential Energy Conservation Cost Recovery Factors in 2022

Utility*	ECCR Factor (Cents per kWh)	Monthly Bill Impact (Based on usage of 1,000 kWh)
FPL/Gulf**	0.134	\$1.34
DEF	0.283	\$2.83
TECO	0.236	\$2.36
FPUC	0.134	\$1.34

Source: Order No. PSC-2021-0427-FOF-EG, Docket No. 20210002-EG.

<sup>\*</sup>FPL's 2014 recovery included a one-time \$56.3 million payment to Solid Waste Authority of Palm Beach County.

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

<sup>\*\*</sup>On January 1, 2021, Gulf legally merged with and into FPL, and FPL and Gulf will be operationally and functionally integrated in 2022. A consolidated ECCR factor for FPL/Gulf was approved by the Commission in Order No. PSC-2021-0427-FOF-EG.

## 4.2 Natural Gas Cost Recovery

Commission Rule 25-17.015, F.A.C., establishes a mechanism for recovery of reasonable costs attributed to natural gas conservation programs. While PGS is the only natural gas utility subject to FEECA, the other LDCs covered in this section offer Commission-approved DSM programs without a specific therm savings goal. As it does for the electric IOUs, the Commission also conducts financial audits of the LDCs' conservation expenditures on a yearly basis and adjusts the LDCs' cost recovery factors to allow for recovery of actual and projected program-related costs. Table 13 shows the amounts each LDC recovered in natural gas conservation program expenditures from 2011-2020.

Table 13
DSM Expenditures Recovered by LDCs

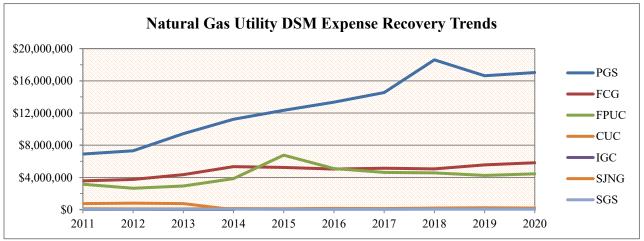
			FPUC C	onsolidated C	ompanies			
	PGS	FCG	Fort Meade	Chesapeake	Indiantown	SJNG	SGS	Total
2011	\$6,906,668	\$3,573,513	\$3,163,050	\$755,779	\$11,357	\$106,300	\$34,640	\$14,551,307
2012	\$7,314,940	\$3,743,811	\$2,655,654	\$806,747	\$5,238	\$102,425	\$25,090	\$14,653,905
2013	\$9,432,551	\$4,342,603	\$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
2020	\$17,031,280	\$5,824,651	\$4,447,010			\$189,625	\$52,162	\$27,544,728
Total	[otal					\$222,827,334		

Source: Docket Nos. 20120004-GU through 20210004-GU, Schedules CT-2 from LDCs' May testimony.

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

Figure 6 shows the trends in annual conservation expenditures for all LDCs from 2011 to 2020. In 2013, the Commission approved the LDCs' Commercial Conservation programs, resulting in additional overall conservation expenditures.<sup>32</sup>

Figure 6
DSM Expenditures Recovered by LDCs



Source: Docket Nos. 20120004-EG through 20210004-EG, Schedules CT-2 from the LDCs' May testimony. \*Note that since 2014, DSM expenditures for CUC and IGC were consolidated with FPUC-Fort Meade, and reported as FPUC Consolidated Companies. The graph does not reveal that the amounts for SJNG and SGS are relatively low.

In November 2021, the Commission set the natural gas LDC conservation cost recovery factors for the 2022 billing cycle. Table 14 provides the LDCs' residential cost recovery factors for 2022 and the impact on a residential customer bill using 20 therms of natural gas per month.

<sup>&</sup>lt;sup>32</sup>Order No. PSC-14-0039-PAA-EG, issued January 14, 2014, in Docket No. 130167-EG, *In re: Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida*.

Table 14
Residential Natural Gas Conservation Cost Recovery Factors in 2022

Utility	Cost Recovery Factor (Cents per Therm)	Monthly Bill Impact (Based on usage of 20 Therms)
PGS	13.116	\$2.62
FCG	27.057	\$5.41
FPUC – Fort Meade	8.627	\$1.73
Chesapeake	14.627	\$2.93
Indiantown	8.395	\$1.68
SJNG	34.498	\$6.90
SGS	20.867	\$4.17

Source: Order No. PSC-2021-0422-FOF-GU, Docket No. 20210004-GU.

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

### 5.1 Commission Consumer Education Outreach

While the Commission has statutory authority to require conservation efforts by regulated utilities, as part of the agency's outreach program, the Commission complements utility efforts with its own conservation-related activities. To effectively reach as many consumers as possible, the Commission's consumer education program uses a variety of platforms to share conservation information, including the Commission website, public events, brochures, press releases, E-Newsletters, and Twitter. Conservation information is also available through other governmental and utility websites. Section 5.2 lists related websites for state and federal agencies, investor owned electric utilities, and local gas distribution companies to further assist consumers. Most of the data in this section covers October 2020 through August 2021.

## Triple E Award

Each quarter, the Commission recognizes a small business for implementing Commission approved, cost-effective conservation programs. Covering the state's five major geographic areas, the Commission presents its Triple E Award—for Energy Efficiency Efforts—to a local business that has accomplished superior energy efficiency by working with its local utility to help reduce its energy footprint. Triple E Award recipients receive an award plaque, are featured and archived under Hot Topics on the FPSC homepage—www.FloridaPSC.com—and are highlighted statewide via a press release and on Twitter (@floridapsc).

#### **Website Outreach Resources**

The PSC invites consumers to visit its website to find an assortment of information to help save energy. According to Google Analytics, website page views for October 1, 2020 through August 27, 2021 totaled over 1.1 million. *Find Your Utility* and *Lifeline Assistance* pages were among the most popular FPSC Consumer Assistance pages.

The Commission offers several energy conservation brochures and other helpful free resources. Brochures may be viewed and printed directly from the website, <u>FloridaPSC.com/publications</u>, ordered online, or requested by mail or phone. From October 2020 through August 12, 2021, the FPSC received more than 18,548 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 consumer message for National Consumer Protection Week, Hurricane Preparedness, and Conservation Strategies while Sheltering at Home. The Consumer Connection E-Newsletter is available under Consumer Corner on the Commission's homepage and distributed to consumers via Twitter (@floridapsc) and by subscribing to the free <u>newsletter</u> online.

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

National Consumer Protection Week (NCPW), highlighting consumer protection and education efforts, was instrumental to the Commission's 2021 conservation education efforts. Chairman

Gary Clark recognized the 23<sup>rd</sup> Annual NCPW (February 23-March 6, 2021) with a consumer message on the importance of education and awareness about utility services and about avoiding scams targeting utility customers.

Even during the pandemic, the PSC strives to keep consumers engaged. Many of the senior and community centers the PSC regularly visit remain temporarily closed, with in-person events cancelled. For NCPW 2021, the PSC partnered with coordinators at the Tallahassee Senior Center and Foundation to deliver and distribute information to seniors and answer questions via their "Learn and Wave" events. For 14 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. "Communities of Strength" was the theme for Older Americans Month 2021. Due to pandemic restrictions, instead of in-person events, the PSC partnered with staff coordinators at five senior centers in Broward, Palm Beach and Washington Counties to deliver and distribute information to area seniors.

## **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 2020, as consumers spent more time at home, average home electricity usage increased. The Commission encouraged consumers to use *Conservation at Home*, using our <u>Conservation House</u> and other PSC information to provide energy saving tips during the month.

Also during the month of October, the PSC recognized the annual "Imagine a Day Without Water," a national Value of Water Campaign on October 21. Produced a few years ago, PSC Commissioners and Executive Director participated in a "Water Walk" video with each imaging how a day without water would affect a typical neighborhood. The video's message is still relevant and was highlighted and distributed in a press release.

## **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. Although outreach events were suspended during the 2020-2021 reporting period, Commissioners are looking forward to public events resuming in the future.

## **Hearings and Customer Meetings**

As an ongoing outreach initiative, the Commission supplies conservation brochures to consumers at Commission service hearings and customer meetings across the state. From October 2020 through August 2021, the FPSC's service hearings and customer meetings were held virtually. While educational opportunities with consumers were limited, those participating in virtual customer meetings received an FPSC Rate Case Overview that explains their energy or water utility's bill change request. Customers' questions were answered by Commission outreach staff, who also helped them find useful information on the FPSC website.

## **Library Outreach Campaign**

Each August, the Commission provides educational packets, including conservation materials, to Florida public libraries across the state for consumer distribution. The Commission's Library Outreach Campaign reached 615 state public libraries and branches in 2021. To reduce mailing and production costs, the Commission's 2021 campaign included a cover letter, book marks, and a 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 energy conservation during annual recognitions, such as Energy Awareness Month and NCPW. Water conservation was highlighted in March with a release on the federal government's Fix a Leak Week, offering easy repairs to save valuable water and money. 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 2020 and 2021, 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 Programs, is available at all Commission outreach events, and continues to be a favorite during senior events.

#### 5.2 Related Websites

#### **State Agencies and Organizations**

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

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

The Office of Energy – <a href="https://www.fdacs.gov/Divisions-Offices/Energy">https://www.fdacs.gov/Divisions-Offices/Energy</a>

Florida Solar Energy Center – https://energyresearch.ucf.edu/

Florida Weatherization Assistance – <a href="https://www.benefits.gov/benefit/1847">https://www.benefits.gov/benefit/1847</a>

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

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

U.S. ENERGY STAR Program – <a href="https://www.energystar.gov/">https://www.energystar.gov/</a>
U.S. Department of Energy – Energy Efficiency and Renewable Energy Information <a href="http://www.eere.energy.gov/">http://www.eere.energy.gov/</a>
National Energy Foundation – <a href="https://nef1.org/">https://nef1.org/</a>

#### Florida's Utilities Subject to FEECA

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

#### Florida's Investor-Owned Natural Gas Utilities

Florida City Gas – <a href="http://www.floridacitygas.com/">http://www.floridacitygas.com/</a>

Florida Division of Chesapeake Utilities – <a href="http://www.chpk.com/companies/chesapeake-utilities/">http://www.chpk.com/companies/chesapeake-utilities/</a>

Florida Public Utilities Company – <a href="http://www.fpuc.com/">http://www.fpuc.com/</a>

Florida Public Utilities Company – Ft. Meade Div. – http://www.fpuc.com/fortmeade/

Florida Public Utilities Company – Indiantown Div. – http://www.fpuc.com/about/fpufamily

Peoples Gas System – <a href="http://www.peoplesgas.com/">http://www.peoplesgas.com/</a>

Sebring Gas System – <a href="http://www.sebringgas.com/">http://www.sebringgas.com/</a>

St. Joe Natural Gas Company – <a href="http://www.stjoenaturalgas.com/">http://www.stjoenaturalgas.com/</a>

## **Appendix A. 2020 FEECA Utility Conservation Programs**

## **Electric IOUs**

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

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

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

Gulf Power Company		
Residential Programs	Residential Energy Audit and Education Community Energy Saver (Low-Income) Residential Custom Incentive HVAC Efficiency Residential Building Efficiency Energy Select Residential HVAC Residential Ceiling Insulation Residential High Efficiency Pool Pump Residential Time of Use Rate Pilot	
Commercial/Industrial Programs	Commercial/Industrial Energy Analysis Commercial HVAC Retrocommissioning Commercial Building Efficiency Commercial/Industrial Custom Incentive Business HVAC Critical Peak Option Curtailable Load	
Other	Conservation Demonstration and Development	

Florida Public Utilities Company	
Desidential Programs	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
	Conservation Demonstration and Development

## **Electric Municipal Utilities**

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

Orlando Utilities Commission		
Residential Programs	Residential Home Energy Survey Residential Duct Repair/Replacement Rebate Residential Ceiling Insulation Upgrade Rebate Residential Window Film/Solar Screen Rebate Residential High-Performance Windows Rebate Residential Efficient Electric Heat Pump Rebate Residential New Home Rebate Residential Efficiency Delivered (Low-Income)	
Commercial/Industrial Programs	Commercial Energy Survey Commercial Efficient Electric Heat Pump Rebate Commercial Duct Repair Rebate Commercial Window Film/Solar Screen Rebate Commercial High-Performance Windows Rebate Commercial Ceiling Insulation Rebate Commercial Cool/Reflective Roof Rebate	

## **Natural Gas LDC**

Peoples Gas System		
Residential Programs	Residential Customer Assisted Energy Audit Residential New Construction Residential Appliance Retention Residential Appliance Replacement Oil Heat Replacement	
Commercial/Industrial Programs	Commercial Walk-Through Energy Audit Commercial Electric Replacement Commercial New Construction Commercial Retention Commercial Replacement Commercial Gas Space Conditioning Small Package Cogeneration	
Other	Monitoring and Research Conservation Demonstration and Development	

# Appendix B. 2020 FEECA Utility Conservation Program Descriptions

## **Electric FEECA IOUs**

## A. Florida Power & Light Company

## **Residential Programs**

## • Residential Home Energy Survey

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

## • Residential Ceiling Insulation

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

#### • Residential Load Management (On Call)

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

#### • Residential Air Conditioning

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

## • Residential New Construction (BuildSmart®)

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

#### Residential Low-Income Weatherization

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

## **Commercial/Industrial Programs**

#### • Business On Call®

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

#### • Business Lighting

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

#### • Commercial/Industrial Load Control (CILC)

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

#### • Commercial/Industrial Demand Reduction (CDR)

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

#### • Business Energy Evaluation (BEE)

The Business Energy Evaluation Program educates customers on energy efficiency and encourages implementation of recommended practices and measures, even if these are not included in FPL's DSM programs. The Business Energy Evaluation is also used to identify potential candidates for other FPL DSM programs. FPL offers the Business Energy Evaluation in on-site or online formats.

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

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

#### • Business Custom Incentive (BCI)

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

## **Other Programs**

#### • Conservation Research and Development (CRD) Project

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

#### • Cogeneration & Small Power Production

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

## B. Duke Energy Florida, LLC

## **Residential Programs**

### • Home Energy Check

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

#### • Residential Incentive

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

#### • Low-Income Weatherization Assistance Program

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

#### Neighborhood Energy Saver

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

#### • Residential Energy Management

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

#### **Commercial/Industrial Programs**

#### • Business Energy Check

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

#### Better Business

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

#### • Commercial Custom Incentive Program

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

#### • Interruptible Service

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

#### • Curtailable Service

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

#### • Standby Generation

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

#### • Commercial Energy Management

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

# **Other Programs**

#### • Technology Development

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

# • Qualifying Facilities Program

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

# C. Tampa Electric Company

# **Residential Programs**

#### • Residential Energy 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.

### • ENERGY STAR Pool Pumps

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

#### ENERGY STAR Thermostats

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

# Residential Heating and Cooling

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

# • Neighborhood Weatherization (Low-Income)

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

# • Residential Price Responsive Load Management (Energy Planner)

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

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

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

#### • 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 free energy audits or more 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.

# • Facility Energy Management System

The Facility Energy Management System Program offers customer rebates for installing a facility energy management system that provides real time operational, production and

energy consumption information which enables the customer to reduce their energy consumption and demand and reducing TECO's peak demand.

# • Industrial Load Management (GSLM 2&3)

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

#### • LED Street and Outdoor Lighting Conversion

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

### • Lighting Conditioned Space

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

# • Lighting Non-Conditioned Space

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

# • Lighting Occupancy Sensors

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

#### • Commercial Load Management

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

#### • Refrigeration Anti-Condensate Control

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

#### • Commercial Smart Thermostats

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

#### • Standby Generator

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

# • Variable Frequency Drive for Compressors

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

### Commercial Water Heating

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

# **Other Programs**

#### • Conservation Research and Development (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.

# • Integrated Renewable Energy System

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

# • Renewable Energy (Sun to Go)

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

# **D. Gulf Power Company**

# **Residential Programs**

#### • Residential 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, reflective roofing, and Energy Star Window A/Cs. 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 HVAC

The Residential HVAC Program enables customers to increase energy efficiency and improve HVAC cooling and heating system performance for both new and existing single-family homes by offering an incentive for the installation of a high-efficiency electric heat pump.

#### • Residential Ceiling Insulation

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

### Residential High Efficiency Pool Pump

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

#### • 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 is a process of identifying suboptimal performance in a facility's systems and replacing outdated equipment at a reduced cost for qualifying installations.

# • 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, 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.

#### Business HVAC

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

# • 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.

#### • Curtailable Load

The Curtailable Load (CL) Program is available to customers taking service under rate schedules LP, LPT, PX, or PXT and who also execute a Curtailable Load Service agreement. The program provides capacity payments for electric load which can be curtailed during certain conditions, and customers must commit a minimum of 4,000 Kw of non-firm load.

# **Other Programs**

# Conservation Demonstration and Development

The Conservation Demonstration and Development Program is an umbrella program for the identification, research, development, and evaluation of new or emerging end-use energy efficient technologies.

# E. Florida Public Utilities Company

# **Residential Programs**

### • Residential Energy Survey

In the Residential Energy Survey Program, FPUC offers in-home and online audits which provides the customer with specific whole-house energy efficiency recommendations, a list of blower-door test contractors who can check for duct leakage, and a conservation kit.

#### • Residential Heating and Cooling Efficiency Upgrade

The Residential Heating and Cooling Upgrade Program incentivizes customers operating inefficient heat pumps and air conditioners to replace them with more efficient units.

# **Commercial Programs**

#### • Commercial Energy Consultation

In the Commercial Energy Consultation Program, FPUC energy conservation representatives conduct commercial site visits to assess the potential for applicable DSM programs, educate customers about FPUC's commercial DSM programs, conduct a bill review, offer energy savings suggestions, and inform customers about commercial online resources and tools.

#### • Commercial Heating and Cooling Efficiency Upgrade

The Commercial Heating and Cooling Upgrade Program provides rebates to small commercial customers (customers with a maximum of 5-ton units) if the customers install a high-efficiency central air conditioner or heat pump with a minimum 15 SEER.

#### • Commercial Reflective Roof

The Commercial Reflective Roof Program provides rebates to non-residential customers and contractors who convert or install a new cool roof on existing facilities or on new building construction. The roofing material must be Energy Star Certified.

#### • Commercial Chiller Upgrade

The Commercial Chiller Upgrade Program offers commercial customers who replace existing chillers with a more efficient system, an incentive of up to \$100 per kW of additional savings above the minimum efficiency levels.

# **Other Programs**

#### • Conservation Demonstration and Development

The Conservation Demonstration and Development Program researches energy efficiency and conservation projects to identify, develop, demonstrate, and evaluate promising end-use energy efficient technologies across a wide variety of applications. In 2019, FPUC installed two battery storage systems to improve customer electric system reliability and resiliency, and has extended this study with completion expected in 2021.

# • Low-Income Energy Outreach

The Low-Income Energy Outreach Program partners with Department of Economic Opportunity approved Low-Income Weatherization Program operators to offer Residential Energy Surveys, host energy conservation events, and distribute conservation materials.

# **Electric FEECA Municipal Utilities**

#### A. JEA

# **Residential Programs**

# • Residential Energy Audit

In the Residential Energy Audit Program, utility auditors examine homes, educate customers, and makes recommendations on low-cost or no-cost energy-saving practices and measures.

# • Residential Solar Water Heating

The Residential Solar Water Heating Program pays a financial incentive to customers to encourage the use of solar water heating technology.

#### 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 on the efficient use of energy and water as well as the direct installation of an array of energy and water efficiency measures at no cost to income qualified customers.

#### • Residential Efficiency Upgrade

The Residential Efficiency Upgrade Program provides incentives to encourage the use of high efficiency HVAC and water heating. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Energy Efficient Products

The Energy Efficient Products Program provides incentives to encourage the use of high efficiency lighting and efficient appliances. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### 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 program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • MyWay Prepaid Program

The MyWay Prepaid Program offers an option for all customers, especially those who prefer to prepay for services versus being billed monthly. It is consumer-focused experience for environmentally conscious consumers who like to keep their consumption in mind. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Residential Distributed Generation and Battery Rebate Program

The Residential Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

### **Commercial Programs**

# • Commercial Energy Audit

In the Commercial Energy Audit Program, JEA examines businesses, educates customers, and makes recommendations on low-cost or no-cost energy-saving practices.

# • Commercial Prescriptive Lighting Program

Commercial Prescriptive Lighting Program pays a financial incentive to customers to encourage the use of high efficiency lighting technology.

#### • Commercial Prescriptive

The Commercial Prescriptive Program provides incentives to encourage the use of high efficiency HVAC, lighting, cooking, and water heating products. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Small Business Direct Install

The Small Business Direct Install Program promotes the use of high efficiency HVAC, lighting, water heating, and appliances in the small business sector. This program has not

been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Custom Commercial

The Custom Commercial Program promotes the use of custom efficiency measures based on specific applications for each customer. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

#### • Commercial Distributed Generation and Battery Rebate Program

The Commercial Distributed Generation and Battery Rebate Program pays a financial incentive to encourage the use of battery storage when purchasing new solar voltaic systems. This program has not been approved by the Commission and is not part of JEA's FEECA goalsetting process. Nevertheless, JEA maintains that this program creates demand and energy savings.

## **B. Orlando Utilities Commission**

# **Residential Programs**

# • Residential Home Energy Survey

The home energy walk-through surveys were designed to provide residential customers with recommended energy efficiency measures and practices customers can implement, and to encourage participation in various OUC rebate programs. OUC provides participating customers specific tips on conservation and details on customer rebate programs.

#### • Residential Duct Repair Rebate

The program is designed to encourage residential customers to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system, within certain limits and ducts must be sealed with mastic and fabric tape or any other Underwriters Laboratory (UL) approved duct tape.

#### • 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 High-Performance Windows Rebate

The Residential High Performance Windows Rebate Program encourages customers to improve energy efficiency in their homes by purchasing ENERGY STAR® rated energy efficient windows.

# • 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.

#### • Heat Pump Water Heater Rebate

The program provides rebates for the heat pumps commonly known as hybrid electric heat pump water heaters for qualifying installations

#### • Residential Efficiency Delivered (Low-Income)

The Residential Efficiency Delivered Program is income based and provides up to \$2,500 of energy and water efficiency upgrades based on the needs of the residential customer's home. An OUC Conservation Specialist visits the home, performs a home survey, and recommends which home improvements have the most potential of lowering utility bills.

# **Commercial Programs**

#### • Commercial Energy Audit

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. The customer receives a written report detailing cost-effective recommendations to make the facility more energy and water efficient.

#### • 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 commercial customers to repair leaking ducts on existing systems. Qualifying customers must have an existing central air conditioning system of within certain limits and ducts must be sealed with mastic and fabric tape or any other UL approved duct tape.

#### 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 building resistance to heat loss and gain. Customers receive a rebate for upgrading their attic insulation up to R-30.

#### Commercial Cool/Reflective Roof Rebate

The Commercial Cool/Reflective Roof Rebate Program aims to lower roof surface temperature while increasing the lifespan of the roof. OUC provides rebates for ENERGY STAR cool/reflective roofing that has an initial solar reflectance greater than or equal to 0.70.

### • Indoor Lighting Billed Solution Program

The Indoor Lighting Billed Solution Program assists commercial customers with investments in new lighting technologies. The program is a cash-flow neutral billed solution where the savings pay for the project's cost over the pay-back period or term.

# • Indoor Lighting Rebates Program

The Indoor Lighting Rebates Program offers commercial customers that upgrade the efficiency of their indoor lighting a rebate if they meet certain requirements. Participation is open to facilities located within OUC's service area that receive electric service under an OUC commercial rate.

#### • Custom Incentive Program

Through the Custom Incentive Program, commercial customers receive incentives based on the reduction in peak demand their projects achieve plus the first-year energy savings.

# **Natural Gas FEECA Utility**

# A. Peoples Gas System

#### **Residential Programs**

#### • Residential Customer Assisted Energy Audit

The Residential Customer Assisted Audit is designed to save energy by increasing residential customer awareness of natural gas use in personal residences. Recommendations provided to the customer include an estimated range of energy savings including insightful advice on how to manage their overall energy usage. This audit is only available in an online format.

#### • Residential New Construction

The Residential New Construction Program is designed to save energy for new homeowners by offering incentives to builders and developers who construct new single family and multifamily homes with the installation of energy efficient natural gas appliances.

# • Residential 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.

# **Other Programs**

# • 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.

# Attachment D



William P. Cox Senior Counsel Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 304-5662 (561) 691-7135 (Facsimile) E-mail: Will.Cox@fpl.com

April 25, 2023

#### -VIA ELECTRONIC FILING-

Adam Teitzman Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

**RE: Docket 20230000-OT** 

Florida Power & Light Company 2022 Demand Side Management Annual Report

Dear Mr. Teitzman:

On March 1, 2023, in accordance with Rule 25-17.0021(5), Florida Administrative Code, Florida Power & Light Company ("FPL") filed its 2022 Demand Side Management ("DSM") Annual Report. FPL is amending the DSM Annual Report to correct data on pages 1 and 9. For FPL's Low-Income Program (page 9), a formula error and missing/incorrect savings factors caused incorrect amounts to be presented for the Per Installation savings and Program Total savings. The updated Low-Income savings are also reflected on (page 1) Comparison of Achieved MW and GWh Savings v Commission Goals Established November 26, 2019. Please find attached the corrected pages 1 and 9 in redline format (Attachment 1), as well as a clean copy of FPL's Amended DSM Annual Report (Attachment 2).

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

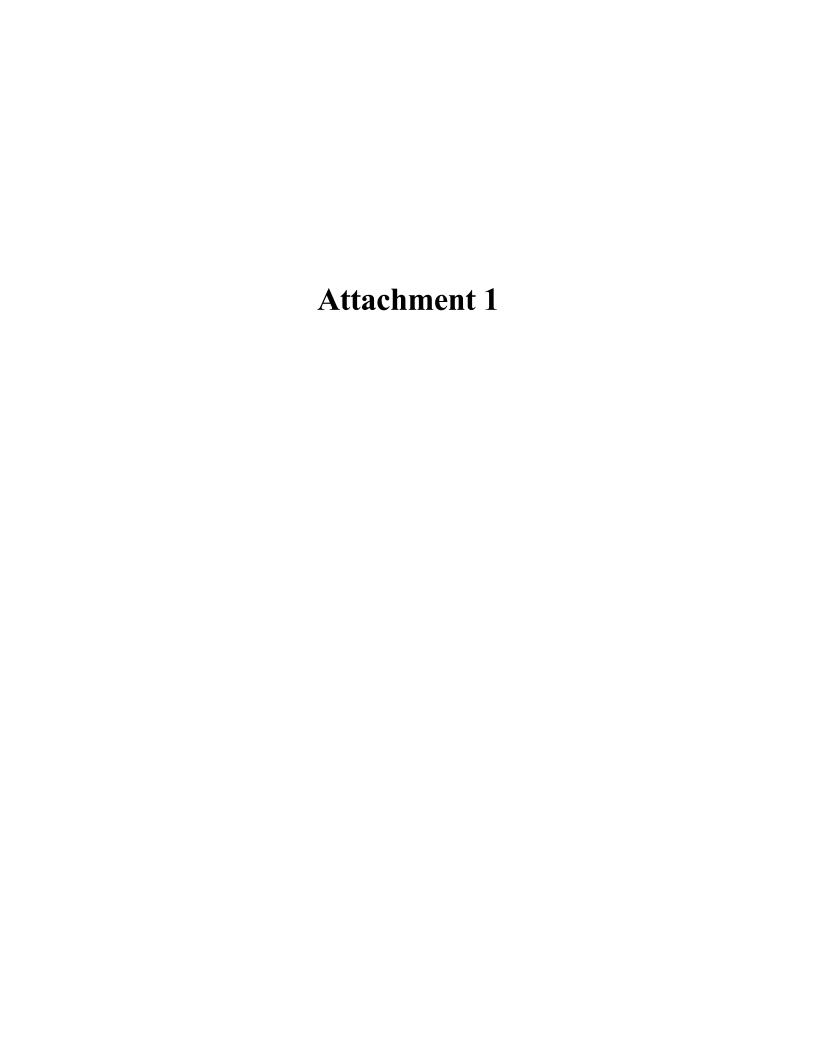
Sincerely,

/s/ William P. Cox William P. Cox Fla. Bar No. 0093531

Enclosure

cc: Michael C. Barrett, Economic Supervisor, mbarrett@psc.state.fl.us

Florida Power & Light Company



Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019

Reporting Period: 2022

	Residential and Business Combined (@ Generator)*												
	Sun	nmer Peak MW Savir	ngs	Wi	nter Peak MW Savin	gs	GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	62.75	60.60	4%	41.22	36.80	12%	55.62	63.00	-12%				
2021	57.36	62.30	-8%	35.01	37.90	-8%	43.60	66.10	-34%				
2022	49.7 <u>4</u> 0	63.70	-22%	29. <u>94</u> 35	39.00	-2 <u>3</u> 5%	5 <u>3.32</u> <del>2.82</del>	69.40	-2 <u>3</u> 4%				
2023		65.30			40.10			72.60					
2024		66.90			41.10			75.90					

	Residential (@ Generator)*												
	Sun	nmer Peak MW Savir	ngs	Wi	nter Peak MW Savin	gs	GWh Energy Savings						
	Total	Commission		Total	Total Commission			Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	21.63	33.60	-36%	12.60	20.50	-39%	22.79	31.80	-28%				
2021	19.36	34.80	-44%	12.53	21.20	-41%	25.76	33.30	-23%				
2022	24.1 <u>7</u> 4	35.70	-32%	<u>16.44</u> 5.85	21.80	-2 <u>5</u> 7%	3 <u>6.46</u> 5.95	34.80	<u>5</u> 3%				
2023		36.80			22.50			36.30					
2024		37.80			23.10			37.80					

	Business (@ Generator)*												
	Sun	mer Peak MW Savir	ngs	Wi	inter Peak MW Savin	gs	GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	41.12	27.00	52%	28.62	16.30	76%	32.83	31.20	5%				
2021	37.99	27.50	38%	22.49	16.70	35%	17.84	32.80	-46%				
2022	25.56	28.00	-9%	13.50	17.20	-22%	16.87	34.60	-51%				
2023		28.50			17.60			36.30					
2024		29.10			18.00			38.10					

 $<sup>\</sup>ensuremath{^{\star}}$  Combined preconsolidated FPL and Gulf Power goals and results through 2021

Utility: Florida Power & Light Company
Program Name: Residential Low Income

Program Start Date: March 2005

Reporting Period: 2022

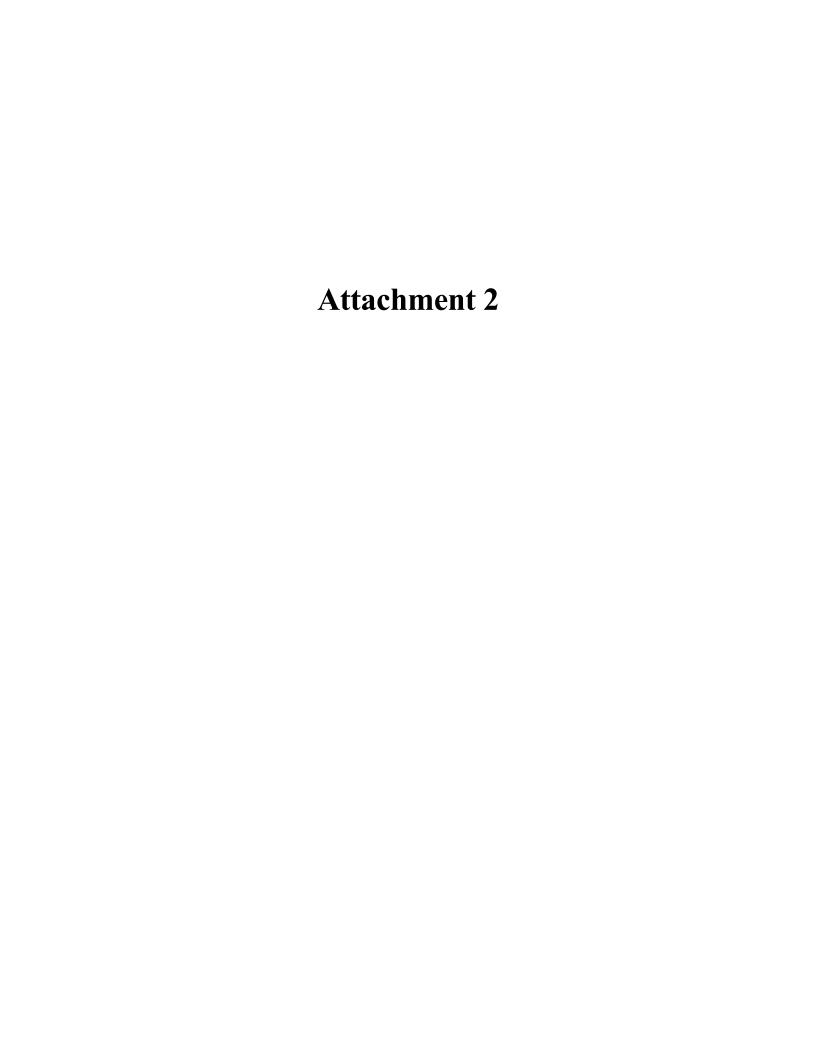
			Proje	ected		A	ctual	(8 )
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	886,993	5,250	1%	3,137	3,137	0%	(2,113)
2021	4,574,840	892,237	11,000	1%	8,502	11,639	1%	639
2022	5,050,726	1,039,019	20,550	2%	11,054	22,693	2%	2,143
2023	5,108,019	1,041,396	31,250	3%				
2024	5,165,418	1,048,638	43,550	4%				

	Per Insta	allation	Progra	m Total
2022	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.42	0.4 <u>5</u> 4	4, <u>625</u> <del>595</del>	4,9 <u>42</u> 10
Winter kW Savings	0. <u>12</u> <del>07</del>	0. <u>13</u> <del>08</del>	<u>1,347</u> <del>793</del>	<u>1,440</u> 847
kWh Savings	<u>1,012969</u> 1,0 <u>662</u>		11,190,738	11,786,085
			<del>10.708.298</del>	11.277.979

2022	
Utility Cost per Installation	\$184
Total Utility Program Cost (\$000)	\$2,031
Net Benefits (\$000)	(\$2,140)

<sup>(1)</sup> Cumulative participants before 2020 =

17,482



# FLORIDA POWER & LIGHT COMPANY 2022 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

March 1, 2023

# FLORIDA POWER & LIGHT COMPANY 2022 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

Comparison of Achieved MW and GWh Savings v. Goals	<u>Page</u> 1
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FPL Business Portfolio  Business Energy Evaluation  Business On Call®  Commercial/Industrial Demand Reduction  Business Heating, Ventilating & Air Conditioning  Business Lighting  Business Custom Incentive	10
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Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019

Reporting Period: 2022

	Residential and Business Combined (@ Generator)*												
	Sun	mer Peak MW Savir	ngs	Winter Peak MW Savings			GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	62.75	60.60	4%	41.22	36.80	12%	55.62	63.00	-12%				
2021	57.36	62.30	-8%	35.01	37.90	-8%	43.60	66.10	-34%				
2022	49.74	63.70	-22%	29.94	39.00	-23%	53.32	69.40	-23%				
2023		65.30			40.10			72.60					
2024		66.90			41.10			75.90					

	Residential (@ Generator)*													
	Sun	nmer Peak MW Savir	ngs	Wi	inter Peak MW Savin	gs	(	GWh Energy Savings						
	Total	Commission		Total	Total Commission			Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance					
2020	21.63	33.60	-36%	12.60	20.50	-39%	22.79	31.80	-28%					
2021	19.36	34.80	-44%	12.53	21.20	-41%	25.76	33.30	-23%					
2022	24.17	35.70	-32%	16.44	21.80	-25%	36.46	34.80	5%					
2023		36.80			22.50			36.30						
2024		37.80			23.10			37.80						

	Business (@ Generator)*												
	Sun	mer Peak MW Savir	ngs	Wi	nter Peak MW Savin	gs	GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	41.12	27.00	52%	28.62	16.30	76%	32.83	31.20	5%				
2021	37.99	27.50	38%	22.49	16.70	35%	17.84	32.80	-46%				
2022	25.56	28.00	-9%	13.50	17.20	-22%	16.87	34.60	-51%				
2023		28.50			17.60			36.30					
2024		29.10			18.00			38.10					

 $<sup>\</sup>ensuremath{^{\star}}$  Combined preconsolidated FPL and Gulf Power goals and results through 2021

# FLORIDA POWER & LIGHT COMPANY PRE-CONSOLIDATED

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2022

	Residential and Business Combined (@ Generator)												
	Sum	mer Peak MW Savir	ngs	Wi	nter Peak MW Savin	gs	GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	60.16	53.10	13%	40.08	32.80	22%	51.29	53.70	-4%				
2021	55.99	53.90	4%	33.87	33.40	1%	39.58	55.80	-29%				
2022		54.70			34.10			58.10					
2023		55.50			34.80			60.50					
2024		56.50			35.50			63.00					

	Residential (@ Generator)												
	Sun	nmer Peak MW Savir	ngs	Wi	nter Peak MW Savin	gs	(	GWh Energy Savings	1				
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	19.99	26.90	-26%	11.46	16.70	-31%	20.62	25.00	-18%				
2021	18.04	27.30	-34%	11.41	16.90	-32%	21.87	25.70	-15%				
2022		27.60			17.20			26.50					
2023		28.00			17.50			27.40					
2024		28.50			17.80			28.30					

	Business (@ Generator)											
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings					
	Total	Commission		Total	Commission		Total	Commission				
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance			
2020	40.16	26.20	53%	28.62	16.10	78%	30.67	28.70	7%			
2021	37.96	26.60	43%	22.45	16.50	36%	17.71	30.10	-41%			
2022		27.10			16.90			31.60				
2023		27.50			17.30			33.10				
2024		28.00			17.70			34.70				

GULF POWER COMPANY PRE-CONSOLIDATED Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2022

	Residential and Business Combined (@ Generator)											
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings					
	Total	Commission		Total	Total Commission		Total	Commission				
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance			
2020	2.59	7.50	-65%	1.14	4.00	-71%	4.33	9.30	-53%			
2021	1.36	8.40	-84%	1.15	4.50	-75%	4.01	10.30	-61%			
2022		9.00			4.90			11.30				
2023		9.80			5.30			12.10				
2024		10.40			5.60			12.90				

	Residential (@ Generator)										
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings				
	Total	Commission		Total	Commission		Total	Commission			
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance		
2020	1.64	6.70	-76%	1.14	3.80	-70%	2.17	6.80	-68%		
2021	1.33	7.50	-82%	1.11	4.30	-74%	3.89	7.60	-49%		
2022		8.10			4.60			8.30			
2023		8.80			5.00			8.90			
2024		9.30			5.30			9.50			

	Business (@ Generator)											
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings					
	Total	Commission		Total	Commission		Total	Commission				
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance			
2020	0.95	0.80	19%	0.00	0.20	-100%	2.16	2.50	-14%			
2021	0.04	0.90	-96%	0.04	0.20	-82%	0.13	2.70	-95%			
2022		0.90			0.30			3.00				
2023		1.00			0.30			3.20				
2024		1.10			0.30			3.40				

Utility: Florida Power & Light Company
Program Name: Residential Home Energy Survey

Program Start Date: January 1981

Reporting Period: 2022

			Proj	ected		A	ctual	(8')
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	4,522,372	100,000	2%	103,647	103,647	2%	3,647
2021	4,574,840	4,574,840	200,000	4%	84,878	188,525	4%	(11,475)
2022	5,050,726	5,050,726	310,000	6%	82,631	271,156	5%	(38,844)
2023	5,108,019	5,108,019	420,000	8%	·			
2024	5,165,418	5,165,418	530,000	10%				

Channel	2020	2021	2022	2023	2024
Online	80,940	65,236	53,446		
Phone	18,921	11,016	15,361		
In-Home	3,786	8,626	13,824		
Total	103,647	84,878	82,631		

2022	
Utility Cost per Installation	\$177
Total Utility Program Cost (\$000)	\$14,658
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

4,098,353

<sup>(1)</sup> Cumulative participants before 2020 =

Program Name: Residential Load Management (On Call®)

Program Start Date: July 1986 Reporting Period: 2022

			Proj	ected		A	ctual	
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	3,818,771	5,950	0%	4,674	4,674	0%	(1,276)
2021	4,574,840	3,871,239	11,925	0%	3,002	7,676	0%	(4,249)
2022	5,050,726	3,925,757	20,050	1%	3,300	10,976	0%	(9,074)
2023	5,108,019							
2024	5,165,418	4,025,866	36,925	1%	·			

	Per Insta	ıllation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	2.41	2.57	7,940	8,486	
Winter kW Savings	2.91	3.11	9,613	10,274	
kWh Savings	1.07	1.13	3,539	3,728	

2022	
Utility Cost per Installation (2)	\$54
Total Utility Program Cost (\$000) (3)	\$36,805
Net Benefits (\$000)	(\$150)

<sup>(1)</sup> Cumulative participants before 2020 =

<sup>703,601</sup> 

<sup>(2)</sup> Based on cumulative active participants at year-end = 677,825

<sup>(3)</sup> Includes depreciation, return & incentives paid in 2022 to active participants who signed up in 2022 & prior years

Utility: Florida Power & Light Company
Program Name: Residential Air Conditioning

Program Start Date: October 1990

Reporting Period: 2022

			Proje	ected		A	ctual	(6 0)
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	1,183,454		2%			2%	•
2021	4,574,840	, ,		3%		· · · · · · · · · · · · · · · · · · ·		
2022	5,050,726	1,765,181	72,350	4%	23,885	62,761	4%	
2023	5,108,019	1,859,084	100,950	5%				
2024	5,165,418	1,952,865	130,225	7%				

	Per Insta	allation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.30	0.33	7,283	7,783	
Winter kW Savings	0.05	0.05	1,217	1,301	
kWh Savings	644	678	15,382,433	16,200,778	

2022	
Utility Cost per Installation	\$180
Total Utility Program Cost (\$000)	\$4,311
Net Benefits (\$000)	(\$1,894)

<sup>(1)</sup> Cumulative participants before 2020 = 1,970,212

7

Utility: Florida Power & Light Company

Program Name: Residential New Construction (BuildSmart®)

February 1996 2022 Program Start Date:

Reporting Period:

i (g-d) b d f h (g/c) c e g (d/c)

			Proje	Projected Actual				
	Total	Total Number	Cumulative Number of	Cumulative	Annual Number	Cumulative Number of	Cumulative	Cumulative Participation Over
	Number of	of Eligible		Penetration Level		Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	41,778	3,500	8%	3,686	3,686	9%	186
2021	4,574,840	44,010	7,025	8%	4,036	7,722	9%	697
2022	5,050,726	49,545	11,575	9%	5,231	12,953	10%	1,378
2023	5,108,019	50,383	16,150	9%				
2024	5,165,418	51,142	20,750	9%				

	Per Insta	ıllation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.32	0.34	1,653	1,766	
Winter kW Savings	0.11	0.12	591	631	
kWh Savings	926	975	4,843,166	5,100,822	

2022	
Utility Cost per Installation	\$86
Total Utility Program Cost (\$000)	\$451
Net Benefits (\$000)	(\$579)

<sup>(1)</sup> Cumulative participants before 2020 = 51,026

Utility: Florida Power & Light Company Program Name: Residential Ceiling Insulation

Program Start Date: October 1981

Reporting Period: 2022

			Proje	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	1,235,964	3,850	0%	1,444	1,444	0%	(2,406)
2021	4,574,840	1,232,114	8,000	1%	1,503	2,947	0%	(5,053)
2022	5,050,726	1,646,944	13,150	1%	1,687	4,634	0%	(8,516)
2023	5,108,019	1,644,918	18,300	1%				
2024	5,165,418	1,642,677	23,450	1%				

	Per Insta	allation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.66	0.71	1,118	1,194	
Winter kW Savings	1.55	1.66	2,615	2,795	
kWh Savings	1,895	1,996	3,196,952	3,367,030	

2022	
Utility Cost per Installation	\$361
Total Utility Program Cost (\$000)	\$608
Net Benefits (\$000)	(\$191)

<sup>(1)</sup> Cumulative participants before 2020 = 582,758

Page

9

Utility: Florida Power & Light Company
Program Name: Residential Low Income

Program Start Date: March 2005

Reporting Period: 2022

			Proje	ected	ctual			
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	U	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	886,993	5,250	1%	3,137	3,137	0%	(2,113)
2021	4,574,840	892,237	11,000	1%	8,502	11,639	1%	639
2022	5,050,726	1,039,019	20,550	2%	11,054	22,693	2%	2,143
2023	5,108,019	1,041,396	31,250	3%			·	
2024	5,165,418	1,048,638	43,550	4%				

	Per Insta	ıllation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.42	0.45	4,625	4,942	
Winter kW Savings	0.12	0.13	1,347	1,440	
kWh Savings	1,012	1,066	11,190,738	11,786,085	

17,482

2022	
Utility Cost per Installation	\$184
Total Utility Program Cost (\$000)	\$2,031
Net Benefits (\$000)	(\$2,140)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Florida Power & Light Company
Program Name: Business Energy Evaluation

Program Start Date: October 1990

Reporting Period: 2022

			Projec	cted		A	ctual	
				(d/c)			(g/c)	(g-d)
a	ь	c	d	e	f	g	h	i

			Proj	ected		Actual				
			Cumulative			Cumulative		Cumulative		
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over		
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected		
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants		
2020	591,470	591,470	12,000	2%	5,015	5,015	1%	(6,985)		
2021	599,138	599,138	24,000	4%	4,751	9,766	2%	(14,234)		
2022	665,256	665,256	36,300	5%	5,669	15,435	2%	(20,865)		
2023	673,193	673,193		·						
2024	681,003	681,003	60,900	9%						

Channel	2020	2021	2022	2023	2024
Online	1,230	400	536		
Phone	1,321	1,649	2,559		
On Site	2,464	2,702	2,574		
Total	5,015	4,751	5,669		

2022	
Utility Cost per Installation	\$1,022
Total Utility Program Cost (\$000)	\$5,793
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

<sup>(1)</sup> Cumulative participants before 2020 =

Program Name: Business On Call

Program Start Date: June 1995 Reporting Period: 2022

			Proj	ected		A	ctual	(8 )
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	510,164	1,100	0%	525	525	0%	(575)
2021	8,733,000	513,890	2,000	0%	282	806	0%	(1,194)
2022	9,542,169	517,390	2,750	1%	990	1,796	0%	(954)
2023	9,615,355	520,719	3,250	1%	·			·
2024	9,688,055	524,267	3,650	1%				

	Per Insta	allation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.07	990	1,058	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	1.01	1.06	1,000	1,053	

2022	
Utility Cost per Installation (2)	\$47
Total Utility Program Cost (\$000) <sup>(3)</sup>	\$3,060
Net Benefits (\$000)	(\$40)

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

<sup>76.4</sup> 

<sup>(2)</sup> Based on cumulative active participants (MW) at year-end =

<sup>64.8</sup> 

<sup>(3)</sup> Includes depreciation, return & incentives paid in 2022 to active participants who signed up in 2022 & prior years Note: One Customer, Participant or Installation equals one Summer kW

Program Name: Commercial/Industrial Demand Reduction

Program Start Date: May 2000 Reporting Period: 2022

			Projected			A	ctual	
	m . 1	m - 137 - 1	Cumulative	G 1.:	1 1 1 1	Cumulative Number of	G 1.:	Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number		Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	8,651,163	4,919,014	9,150	0%	24,294	24,294	0%	15,144
2021	8,733,000	4,956,396	18,550	0%	26,012	50,306	1%	31,756
2022	9,542,169	5,712,114	28,250	0%	12,476	62,782	1%	34,532
2023	9,615,355	5,744,642	37,850	1%	·			
2024	9,688,055	5,776,784	47,450	1%				

	Per Insta	allation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.07	12,476	13,333	
Winter kW Savings	0.64	0.69	8,023	8,574	
kWh Savings	10.90	11.48	136,000	143,235	

2022	
Utility Cost per Installation (2)	\$86
Total Utility Program Cost (\$000) <sup>(3)</sup>	\$31,119
Net Benefits (\$000)	(\$314)

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

<sup>327.4</sup> 

<sup>(2)</sup> Based on cumulative active participants (MW) at year-end =

<sup>363.5</sup> 

<sup>(3)</sup> Includes incentives paid in 2022 to active participants who signed up in 2022 & prior years Note: One Customer, Participant or Installation equals one Summer kW

Program Name: Business Heating, Ventilating & Air Conditioning

Program Start Date: February 1990

Reporting Period: 2022

			Proje	ected		A	ctual	(8)
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	Annual Number of Program	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	8,651,163	1,354,483	10,670	1%	9,272	9,272	1%	(1,398)
2021	8,733,000	1,356,626	21,430	2%	7,271	16,542	1%	(4,888)
2022	9,542,169	2,091,034	32,800	2%	8,444	24,986	1%	(7,814)
2023	9,615,355	2,093,996	44,700	2%	·			·
2024	9,688,055	2,096,178	56,920	3%				

	Per Insta	ıllation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.07	8,444	9,024	
Winter kW Savings	0.39	0.42	3,323	3,552	
kWh Savings	692	729	5,846,352	6,157,378	

2022	
Utility Cost per Installation	\$582
Total Utility Program Cost (\$000)	\$4,917
Net Benefits (\$000)	(\$1,627)

<sup>(1)</sup> Cumulative participants (MW) before 2020 = 426.1 Note: One Customer, Participant or Installation equals one Summer kW

Florida Power & Light Company **Business Lighting** Utility:

Program Name:

Program Start Date: June 1984 Reporting Period: 2022

> b d f h e c g (d/c) (g/c)(g-d)

			Proj	ected	Actual				
			Cumulative			Cumulative		Cumulative	
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over	
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	8,651,163	632,148	3,750	1%	3,729	3,729	1%	(21)	
2021	8,733,000	634,378	7,750	1%	2,102	5,832	1%	(1,918)	
2022	9,542,169	635,810	12,290	2%	2,012	7,843	1%	(4,447)	
2023	9,615,355	636,573	17,075	3%	·				
2024	9,688,055	637,021	22,160	3%	·				

	Per Insta	ıllation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.07	2,012	2,150	
Winter kW Savings	0.64	0.68	1,283	1,372	
kWh Savings	4,986	5,251	10,030,297	10,563,909	

2022	
Utility Cost per Installation	\$158
Total Utility Program Cost (\$000)	\$318
Net Benefits (\$000)	(\$714)

<sup>&</sup>lt;sup>(1)</sup> Cumulative participants (MW) before 2020 = 310.6 Note: One Customer, Participant or Installation equals one Summer kW

15

Utility: Florida Power & Light Company Program Name: **Business Custom Incentive** 

Program Start Date: April 1993 Reporting Period: 2022

> b d f h c e g (d/c) (g/c)(g-d)

			Proj	ected	Actual				
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	Annual Number of Program	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	8,651,163	414,312	100	0%	60	60	0%	(40)	
2021	8,733,000	418,131	200	0%	0	60	0%	(140)	
2022	9,542,169	1,156,003	300	0%	0	60	0%	(240)	
2023	9,615,355	1,162,972	400	0%					
2024	9,688,055	1,169,866	500	0%					

	Per Insta	allation	Program Total		
2022	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.0	0.0	0.0	0.0	
Winter kW Savings	0.0	0.0	0.0	0.0	
kWh Savings	0.0	0.0	0.0	0.0	

2022	
Utility Cost per Installation	\$0
Total Utility Program Cost (\$000)	\$0
Net Benefits (\$000)	N/A

<sup>-</sup> No 2022 program participation

<sup>(1)</sup> Cumulative participants (MW) before 2020 = 54.8 Note: One Customer, Participant or Installation equals one Summer kW

16

Page

Utility:

Gulf Power Company (Pre-Consolidated)
Residential Home Energy Survey (Discontinued) Program Name:

Program Start Date: January 1981

Reporting Period: 2022

> d e h c g (d/c) (g/c) (g-d)

			Proje	ected	Actual				
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	C	Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	415,321	415,321	10,000	2%	12,005	12,005	3%	2,005	
2021	419,169	419,169	20,000	5%	11,734	23,739	6%	3,739	
2022									
2023									
2024									

Channel	2020	2021	2022	2023	2024
Online	11,764	10,929			
Phone	106	554			
In-Home	135	251			
Total	12,005	11,734			

<sup>(1)</sup> Cumulative participants before 2020 =

17

Utility: Gulf Power Company (Pre-Consolidated)

Program Name: Energy Select (Discontinued)

Program Start Date: 1995 Reporting Period: 2022

(d/c)   (g/c)   (g-d)	a	b	c	d	e	f	g	h	i
					(d/c)				

	Projected			ected	Actual				
			Cumulative			Cumulative		Cumulative	
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over	
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	415,321	379,234	2,033	1%	648	648	0%	(1,385)	
2021	419,169	382,039	4,291	1%	397	1,045	0%	(3,246)	
2022									
2023									
2024									

<sup>(1)</sup> Cumulative participants before 2020 =

h

18

Utility: Gulf Power Company (Pre-Consolidated)

c

Program Name: Residential Low Income (Community Energy Saver Program) (Discontinued)

d

Program Start Date: March 2010

b

Reporting Period: 2022

a

2024

g (d/c) (g/c) (g-d) Projected Actual Cumulative Cumulative Cumulative Number of Annual Number Total Total Number Number of Cumulative Cumulative Participation Over Program of Eligible Penetration Level of Program (Under) Projected Program Number of Penetration Participants<sup>(1)</sup> Customers Customers Participants % Participants Level % Participants Year 2020 415,321 144,733 3,750 3% 1,436 1,436 1% (2,314)5,231 4% 2021 419,169 142,330 7,500 5% 3,795 (2,269)2022 2023

e

f

<sup>(1)</sup> Cumulative participants before 2020 =

19

Utility: Gulf Power Company (Pre-Consolidated)
Program Name: Residential HVAC (Discontinued)

Program Start Date: November 2020

Reporting Period: 2022

a	b	c	d	e	$\mathbf{f}$	g	h	i
				(d/c)			(g/c)	(g-d)
			Proj	ected		A	ctual	
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	413,524	1,200	0%	0	0	0%	(1,200)
2021	419,169	416,172	2,550	1%	349	349	0%	(2,201)
2022								
2023								
2024								

<sup>(1)</sup> Cumulative participants before 2020 =

20

Utility: Gulf Power Company (Pre-Consolidated)
Program Name: Residential Ceiling Insulation (Discontinued)

Program Start Date: November 2020

Reporting Period: 2022

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)
			Proj	ected		A	ctual	
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	413,524	800	0%	0	0	0%	(800)
2021	419,169	416,572	1,700	0%	33	33	0%	(1,667)
2022								
2023								
2024								

<sup>(1)</sup> Cumulative participants before 2020 =

21

Utility: Gulf Power Company (Pre-Consolidated)

Program Name: Residential High Efficiency Pool Pump (Discontinued)

Program Start Date: November 2020

Reporting Period: 2022

a	b	c	d	e (d/c)	f	g	h (g/c)	i (g-d)
			Proj	ected		A	ctual	(g-u)
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	415,321	78,570	1,150	1%	0	0	0%	(1,150)
2021	419,169	78,151	2,475	3%	129	129	0%	(2,346)
2022								
2023								
2024								

<sup>(1)</sup> Cumulative participants before 2020 =

22

Utility: Gulf Power Company (Pre-Consolidated)
Program Name: Business Energy Survey (Discontinued)

Program Start Date: 1981 Reporting Period: 2022

			Proje	ected		A	ctual	(6)
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	8	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	57,696	57,696	300	1%	23	23	0%	(277)
2021	58,060	58,060	600	1%	144	167	0%	(433)
2022								
2023								
2024								

Channel	2020	2021	2022	2023	2024
Online	6	67			
Phone	N/A	22			
On Site	17	55			
Total	23	144			

<sup>(1)</sup> Cumulative participants before 2020 =

23

Gulf Power Company (Pre-Consolidated) Utility: Program Name: **Business HVAC (Discontinued)** 

Program Start Date: November 2020

Reporting Period: 2022

> d h c e g (d/c) (g/c)(g-d)

			~ .	( 5 )		(8 4)		
			Proj	ected		A	ctual	
	Total	Total Number	Cumulative Number of	Cumulative	Annual Number	Cumulative Number of	Cumulative	Cumulative Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	725,802	725,802	400	0.1%	0	0	0%	(400)
2021	730,375	729,975	840	0.1%	34	34	0%	(806)
2022								
2023								
2024								

(1) Cumulative participants (MW) before 2020 = 0 Note: One Customer, Participant or Installation equals one Summer KW

Utility: Gulf Power Company (Pre-Consolidated) Curtailable Load Rider (Discontinued) Program Name:

Program Start Date: 2018 Reporting Period: 2022

> b d f h i c e g (d/c) (g/c) (g-d)

			Proje	ected	A	Actual				
			Cumulative			Cumulative		Cumulative		
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over		
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected		
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants		
2020	725,802	715,902	864	0.1%	0	0	0%	(864)		
2021	730,375	719,611	1,813	0.3%	0	0	0%	(1,813)		
2022										
2023										
2024										

(1) Cumulative participants (MW) before 2020 = 9.9

Note: One Customer, Participant or Installation equals one Summer KW

Gulf Power Company (Pre-Consolidated) **Business Custom Incentive (Discontinued)** Utility: Program Name:

Program Start Date: 2000 Reporting Period: 2022

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected	Actual					
	Total Number of	Total Number of Eligible	8	Cumulative Penetration Level	Annual Number of Program	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected		
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants		
2020	725,802	725,802	0	0%	0	0	0%	0		
2021	730,375	730,375	0	0%	0	0	0%	0		
2022										
2023										
2024										

(1) Cumulative participants (MW) before 2020 = 1.15 Note: One Customer, Participant or Installation equals one Summer KW

#### **OTHER CONSERVATION ACTIVITIES**

#### FPL Conservation Research & Development ("CRD")

CRD is an umbrella program under which FPL researches a wide variety of new technologies and market strategies to evaluate their potential for reductions in peak demand and energy consumption as well as customer bill savings. Florida's climatic conditions are unique so the studies must reflect the effects of the hot and humid environment while considering the possibility of an extreme weather event. Favorable research results can lead to incorporation into FPL's DSM programs. Examples of technologies that have been included are: Energy Recovery Ventilators; Demand Control Ventilation; and Residential Air Conditioning Duct Plenum Seal.

FPL participates in relevant co-funded projects such as Electric Power Research Institute ("EPRI"). This co-funding enables FPL to gain the learnings from larger research projects at a fraction of the total cost. In 2022, FPL continued its access to gather learnings from EPRI's ongoing readiness assessment of multiple technologies in various stages of development which enables comparisons among these technologies.

FPL continues evaluation of smart panel and smart breaker technologies as potential future DSM offerings. FPL has initiated a customer smart panel pilot as part of the Stipulation and Settlement agreement in Docket 20210015-EI. This pilot will further evaluate the customer's acceptance of this technology and the capabilities to monitor and manage large appliance loads. FPL is also remaining abreast of evolving capabilities and technology solutions for automated load management and will conduct additional research as warranted.

#### FPL Cogeneration & Small Power Production

FPL facilitates delivery of capacity and energy from qualifying cogeneration facilities. In 2022, there were purchases from 15 facilities which produced summer capacity of 264 MW, winter capacity of 263 MW and 1,064 GWh.

#### **2022 Goals Results Summary and Variance Explanations**

#### Residential Goals:

Summer MW- did not meet Winter MW- did not meet Annual GWh- met

#### Variance Explanation:

Enrollment in all of FPL's residential DSM programs exceeded 2021 participation levels. FPL also increased participation in the Low Income program beyond plan targets. These results contributed to FPL achieving the annual GWh savings goal for the Residential sector. However, enrollment in the Residential On Call program did not gain the number of participants necessary to achieve the Summer and Winter KW goals. FPL implemented a new web-based customer enrollment tool during 2022 that is expected to increase the successful installation rates going forward.

#### Commercial/Industrial Goals:

Summer MW- did not meet Winter MW- did not meet Annual GWh- did not meet

#### Variance Explanation:

Enrollment in FPL's Commercial/Industrial energy efficiency programs increased in total as compared to 2021. However, enrollment in the Commercial/Industrial Demand Response (CDR), Business Lighting and Business HVAC programs fell short of the annual targets needed to achieve the Commission-approved goals. The Summer and Winter KW results were primarily impacted by anticipated CDR enrollments not sufficient to overcome shortfalls from the Business Lighting and Business HVAC programs. The Annual GWh results were impacted primarily by continued supply-chain challenges for qualifying lighting and HVAC measures. FPL expects the supply-chain for qualifying lighting and HVAC components to gradually improve in 2023. Additionally, FPL has a good pipeline of new CDR enrollments for 2023.

### Attachment E



William P. Cox Senior Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 304-5662 (561) 691-7135 (Facsimile) E-mail: Will.Cox@fpl.com

April 29, 2022

#### -VIA ELECTRONIC FILING-

Adam Teitzman Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

**RE: Docket 20220000-OT** 

Florida Power & Light Company and Gulf Power Company 2021 Demand Side Management Annual Report

Dear Mr. Teitzman:

On March 1, 2022, in accordance with Rule 25-17.0021(5), Florida Administrative Code, Florida Power & Light Company ("FPL") filed its 2021 Demand Side Management ("DSM") Annual Report for FPL and Gulf Power Company ("Gulf"). FPL is amending the DSM Annual Report to correct data on pages 11 and 12. For FPL's Business On Call program (page 11), incorrect cell references within the Excel data tables caused incorrect amounts to be presented for the Utility Cost Per Installation and Cumulative Active Participants (MW) at year end. For FPL's Commercial/Industrial Demand Reduction Program (page 12), incorrect cell references within the Excel data tables caused incorrect amounts to be presented for the Utility Cost Per Installation, Total Utility Program Cost, and Cumulative Active Participants (MW) at year end. The amended pages 11 and 12 replace the same pages filed on March 1, 2022. Please find attached FPL's Amended DSM Annual Report with the corrected pages.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

/s/ William P. Cox William P. Cox Fla. Bar No. 0093531

WPC:ec Enclosures

cc: Michael Barrett, Economic Supervisor, <a href="mbarrett@psc.state.fl.us">mbarrett@psc.state.fl.us</a>

# FLORIDA POWER & LIGHT COMPANY & GULF POWER COMPANY 2021 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

March 1, 2022

## FLORIDA POWER & LIGHT COMPANY & GULF POWER COMPANY 2021 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

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Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2021

	Residential and Business Combined (@ Generator)													
	Sun	nmer Peak MW Savin	ıgs	Winter Peak MW Savings			GWh Energy Savings							
	Total	Commission		Total	Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance					
2020	62.75	60.60	4%	41.22	36.80	12%	55.62	63.00	-12%					
2021	57.36	62.30	-8%	35.01	37.90	-8%	43.60	66.10	-34%					
2022		63.70			39.00			69.40						
2023		65.30			40.10			72.60						
2024		66.90			41.10			75.90						

	Residential (@ Generator)													
	Sun	nmer Peak MW Savin	ıgs	W	inter Peak MW Saving	gs		GWh Energy Savings						
	Total	Commission		Total	Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance					
2020	21.63	33.60	-36%	12.60	20.50	-39%	22.79	31.80	-28%					
2021	19.36	34.80	-44%	12.53	21.20	-41%	25.76	33.30	-23%					
2022		35.70			21.80			34.80						
2023		36.80			22.50			36.30						
2024		37.80			23.10			37.80						

	Business (@ Generator)													
	Sun	nmer Peak MW Savin	gs	Wi	inter Peak MW Saving	gs	GWh Energy Savings							
	Total	Commission		Total	Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance					
2020	41.12	27.00	52%	28.62	16.30	76%	32.83	31.20	5%					
2021	37.99	27.50	38%	22.49	16.70	35%	17.84	32.80	-46%					
2022		28.00			17.20			34.60						
2023		28.50			17.60			36.30						
2024		29.10			18.00			38.10						

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2021

	Residential and Business Combined (@ Generator)													
	Sun	nmer Peak MW Savin	gs	Wi	inter Peak MW Saving	gs	GWh Energy Savings							
	Total	Commission		Total	Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance					
2020	60.16	53.10	13%	40.08	32.80	22%	51.29	53.70	-4%					
2021	55.99	53.90	4%	33.87	33.40	1%	39.58	55.80	-29%					
2022		54.70			34.10			58.10						
2023		55.50			34.80			60.50						
2024		56.50			35.50			63.00						

	Residential (@ Generator)											
	Summer Peak MW Savings				Winter Peak MW Savings			GWh Energy Savings				
	Total	Commission		Total	Total Commission		Total	Commission				
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance			
2020	19.99	26.90	-26%	11.46	16.70	-31%	20.62	25.00	-18%			
2021	18.04	27.30	-34%	11.41	16.90	-32%	21.87	25.70	-15%			
2022		27.60			17.20			26.50				
2023		28.00			17.50			27.40				
2024		28.50			17.80			28.30				

	Business (@ Generator)												
	Summer Peak MW Savings				Winter Peak MW Savings			GWh Energy Savings					
	Total	Commission		Total Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	40.16	26.20	53%	28.62	16.10	78%	30.67	28.70	7%				
2021	37.96	26.60	43%	22.45	16.50	36%	17.71	30.10	-41%				
2022		27.10			16.90			31.60					
2023		27.50			17.30			33.10					
2024		28.00			17.70			34.70					

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2021

	Residential and Business Combined (@ Generator)												
	Summer Peak MW Savings			Wi	nter Peak MW Saving	gs		GWh Energy Savings					
	Total	Commission		Total	Commission		Total	Commission					
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	2.59	7.50	-65%	1.14	4.00	-71%	4.33	9.30	-53%				
2021	1.36	8.40	-84%	1.15	4.50	-75%	4.01	10.30	-61%				
2022		9.00			4.90			11.30					
2023		9.80			5.30			12.10					
2024		10.40			5.60			12.90					

	Residential (@ Generator)											
	Summer Peak MW Savings				nter Peak MW Saving	gs		GWh Energy Savings				
	Total	Commission		Total	Total Commission		Total	Commission				
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance			
2020	1.64	6.70	-76%	1.14	3.80	-70%	2.17	6.80	-68%			
2021	1.33	7.50	-82%	1.11	4.30	-74%	3.89	7.60	-49%			
2022		8.10			4.60			8.30				
2023		8.80			5.00			8.90				
2024		9.30			5.30			9.50				

	Business (@ Generator)												
	Summer Peak MW Savings			Winter Peak MW Savings				GWh Energy Savings					
	Total	Commission		Total Commission		Total	Commission						
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance				
2020	0.95	0.80	19%	0.00	0.20	-100%	2.16	2.50	-14%				
2021	0.04	0.90	-96%	0.04	0.20	-82%	0.13	2.70	-95%				
2022		0.90			0.30			3.00					
2023		1.00			0.30			3.20					
2024		1.10			0.30			3.40					

Utility: Florida Power & Light Company
Program Name: Residential Home Energy Survey

Program Start Date: January 1981

Reporting Period: 2021

				Proje	ected	Actual				
Ye	ar	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
202	20	4,522,372	4,522,372	100,000	2%	103,647	103,647	2%	3,647	
202	21	4,574,840	4,574,840	200,000	4%	84,878	188,525	4%	(11,475)	
202	22	4,628,249	4,628,249	300,000	6%					
202	23	4,682,418	4,682,418	400,000	9%					
202	24	4,736,733	4,736,733	500,000	11%					

Channel	2020	2021	2022	2023	2024
Online	80,940	65,236			
Phone	18,921	11,016			
In-Home	3,786	8,626			
Total	103,647	84,878			

2021	7
Utility Cost per Installation	\$160
Total Utility Program Cost (\$000)	\$13,619
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

<sup>(1)</sup> Cumulative participants before 2020 = 4,098,353

Utility: Florida Power & Light Company

Program Name: Residential Load Management (On Call®)

Program Start Date: July 1986 Reporting Period: 2021

			Proje	ected	Actual				
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
2020	4,522,372	3,818,771	5,950	0%	4,674	4,674	0%	(1,276)	
2021	4,574,840	3,871,239	11,925	0%	3,002	7,676	0%	(4,249)	
2022	4,628,249	3,924,648	17,865	0%					
2023	4,682,418	3,978,817	23,790	1%					
2024	4,736,733	4,033,132	29,740	1%		_			

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	2.53	2.70	7,610	8,098	
Winter kW Savings	2.94	3.12	8,814	9,380	
kWh Savings	1	1	3,220	3,379	

2021	
Utility Cost per Installation (2)	\$55
Total Utility Program Cost (\$000) (3)	\$37,671
Net Benefits (\$000)	\$327

<sup>(1)</sup> Cumulative participants before 2020 = 703,601

<sup>(2)</sup> Based on cumulative active participants at year-end = 690,587

<sup>(3)</sup> Includes depreciation, return & incentives paid in 2021 to active participants who signed up in 2021 & prior years

Utility: Florida Power & Light Company Program Name: Program Start Date: **Residential Air Conditioning** 

October 1990

Reporting Period: 2021

> a b c d e f g h i (g/c) (d/c) (g-d)

			Proje	ected		Actual				
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants		
2020	4,522,372	1,183,454	22,000	2%	20,399	20,399	2%	(1,601)		
2021	4,574,840	1,273,527	44,100	3%	18,477	38,876	3%	(5,224)		
2022	4,628,249	1,364,037	67,100	5%		_				
2023	4,682,418					_				
2024	4,736,733	1,545,832	114,875	7%						

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.30	0.32	5,630	5,991	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	613	643	11,318,477	11,878,741	

2021	
Utility Cost per Installation	\$161
Total Utility Program Cost (\$000)	\$3,286
Net Benefits (\$000)	(\$774)

<sup>(1)</sup> Cumulative participants before 2020 = 1,970,212

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Utility: Florida Power & Light Company

Program Name: Residential New Construction (BuildSmart®)

Program Start Date: February 1996

Reporting Period: 2021

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	41,778	3,500	8%	3,686	3,686	9%	186
2021	4,574,840	44,010	7,025	8%	4,036	7,722	9%	697
2022	4,628,249	45,041	10,575	8%		_		
2023	4,682,418	45,802	14,150	8%				
2024	4,736,733	46,492	17,750	8%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.33	0.35	1,335	1,420	
Winter kW Savings	0.12	0.13	477	507	
kWh Savings	974	1,022	3,929,924	4,124,455	

51,026

2021	
Utility Cost per Installation	\$137
Total Utility Program Cost (\$000)	\$553
Net Benefits (\$000)	(\$284)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Florida Power & Light Company Program Name: Program Start Date: **Residential Ceiling Insulation** 

October 1981

Reporting Period: 2021

> a b d e f h c g (g-d) (d/c) (g/c)

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	1,235,964	3,850	0%	1,444	1,444	0%	(2,406)
2021	4,574,840	1,232,114	8,000	1%	1,503	2,947	0%	(5,053)
2022	4,628,249	1,227,964	12,150	1%	·			
2023	4,682,418	1,223,814	16,300	1%				
2024	4,736,733	1,219,664	20,450	2%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.29	0.30	429	457	
Winter kW Savings	0.67	0.71	1,010	1,075	
kWh Savings	751	788	1,128,765	1,184,639	

2021	
Utility Cost per Installation	\$317
Total Utility Program Cost (\$000)	\$477
Net Benefits (\$000)	(\$62)

<sup>(1)</sup> Cumulative participants before 2020 = 582,758

Utility: Florida Power & Light Company
Program Name: Residential Low Income

Program Name: Residential Low Program Start Date: March 2005

Reporting Period: 2021

			Proje	ected	Actual			
	Total Number of	Total Number of Eligible	Cumulative Number of Program	Cumulative Penetration Level	Annual Number of Program	Cumulative Number of Program	Cumulative Penetration	Cumulative Participation Over (Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	4,522,372	886,993	5,250	1%	3,137	3,137	0%	(2,113)
2021	4,574,840	892,237	11,000	1%	8,502	11,639	1%	639
2022	4,628,249	902,419	17,025	2%		_		
2023	4,682,418	912,978	23,775	3%				
2024	4,736,733	923,116	31,275	3%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.23	0.24	1,945	2,069	
Winter kW Savings	0.05	0.05	425	452	
kWh Savings	525	551	4,462,093	4,682,967	

2021	
Utility Cost per Installation	\$79
Total Utility Program Cost (\$000)	\$670
Net Benefits (\$000)	(\$818)

<sup>(1)</sup> Cumulative participants before 2020 = 17,482

10

Utility: Florida Power & Light Company Program Name: Program Start Date: Business Energy Evaluation October 1990

Reporting Period: 2021

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)
			Proje	ected		A	ctual	

				Proje	Projected		Actual			
Y	'ear	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
20	020	591,470	591,470	12,000	2%	5,015	5,015	1%	(6,985)	
20	021	599,138	599,138	24,000	4%	4,751	9,766	2%	(14,234)	
20	022	606,879	606,879	36,000	6%					
20	023	614,519	614,519	48,000	8%					
20	024	622,036	622,036	60,000	10%					

Channel	2020	2021	2022	2023	2024
Online	1,230	400			
Phone	1,321	1,649			
On Site	2,464	2,702			
Total	5,015	4,751			

2021	
Utility Cost per Installation	\$1,294
Total Utility Program Cost (\$000)	\$6,147
Net Benefits (\$000)	N/A

<sup>-</sup> No kW or kWh savings attributed to this program

254,164

<sup>&</sup>lt;sup>(1)</sup> Cumulative participants before 2020 =

Utility: Florida Power & Light Company

Program Name: Business On Call

Program Start Date: June 1995 Reporting Period: 2021

			Proje	Projected		Actual			
	Total	Total Number	Cumulative Number of	Cumulative	Annual Number	Cumulative Number of	Cumulative	Cumulative Participation Over	
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	8,651,163	510,164	1,100	0%	525	525	0%	(575)	
2021	8,733,000	513,890	2,000	0%	282	806	0%	(1,194)	
2022	8,807,778	517,390	2,750	1%					
2023	8,877,218	520,719	3,250	1%					
2024	8,946,227	524,267	3,650	1%					

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	282	300	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	1	1	284	299	

2021	
Utility Cost per Installation (2)	\$43
Total Utility Program Cost (\$000) (3)	\$3,089
Net Benefits (\$000)	\$4

<sup>&</sup>lt;sup>(1)</sup> Cumulative participants (MW) before 2020 =

<sup>76.4</sup> 

<sup>(2)</sup> Based on cumulative active participants (MW) at year-end =

<sup>71.2</sup> 

<sup>(3)</sup> Includes depreciation, return & incentives paid in 2021 to active participants who signed up in 2021 & prior years Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company

Program Name: **Commercial/Industrial Demand Reduction** 

Program Start Date: May 2000 Reporting Period: 2021

> a b c d f e g h (g/c) (g-d) (d/c)

			Proje	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	4,919,014	9,150	0%	24,294	24,294	0%	15,144
2021	8,733,000	4,956,396	18,550	0%	26,012	50,306	1%	31,756
2022	8,807,778	4,989,436	28,050	1%				
2023	8,877,218	5,019,272	37,450	1%				
2024	8,946,227	5,048,891	46,850	1%				

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	26,012	27,682	
Winter kW Savings	0.64	0.68	16,728	17,802	
kWh Savings	11	11	284,571	298,657	

2021	
Utility Cost per Installation (2)	\$82
Total Utility Program Cost (\$000) (3)	\$29,526
Net Benefits (\$000)	(\$56)

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

<sup>327.4</sup> 

<sup>(2)</sup> Based on cumulative active participants (MW) at year-end =

<sup>361.3</sup> 

<sup>(3)</sup> Includes incentives paid in 2021 to active participants who signed up in 2021 & prior years Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company

Program Name: **Business Heating, Ventilating & Air Conditioning** 

Program Start Date: February 1990

Reporting Period: 2021

> b d f h i a c e g (d/c) (g/c) (g-d)

			Proje	ected		Ac	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	1,354,483	10,670	1%	9,272	9,272	1%	(1,398)
2021	8,733,000	1,356,626	21,430	2%	7,271	16,542	1%	(4,888)
2022	8,807,778	1,357,482	32,430	2%				
2023	8,877,218	1,357,184	43,960	3%				
2024	8,946,227	1,356,205	55,810	4%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	7,271	7,737	
Winter kW Savings	0.42	0.44	3,028	3,222	
kWh Savings	840	881	6,106,752	6,409,036	

2021	
Utility Cost per Installation	\$529
Total Utility Program Cost (\$000)	\$3,847
Net Benefits (\$000)	(\$563)

<sup>&</sup>lt;sup>(1)</sup> Cumulative participants (MW) before 2020 = 426.1 Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company

Program Name: **Business Lighting** 

Program Start Date: June 1984 Reporting Period: 2021

> a b d f h i c e g (d/c) (g/c) (g-d)

			Proje	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	632,148	3,750	1%	3,729	3,729	1%	(21)
2021	8,733,000	634,378	7,750	1%	2,102	5,832	1%	(1,918)
2022	8,807,778	635,810	12,000	2%				
2023	8,877,218	636,573	16,450	3%		_		
2024	8,946,227	637,071	21,160	3%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	2,102	2,237	
Winter kW Savings	0.64	0.68	1,341	1,427	
kWh Savings	4,986	5,233	10,482,641	11,001,532	

2021	
Utility Cost per Installation	\$146
Total Utility Program Cost (\$000)	\$307
Net Benefits (\$000)	(\$502)

<sup>&</sup>lt;sup>(1)</sup> Cumulative participants (MW) before 2020 = 310.6 Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company
Program Name: Business Custom Incentive

Program Start Date: April 1993 Reporting Period: 2021

			Proje	Projected Actual			(6 )	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	414,312	100	0%	60	60	0%	(40)
2021	8,733,000	418,131	200	0%	0	60	0%	(140)
2022	8,807,778	421,612	300	0%				
2023	8,877,218			0%				
2024	8,946,227	428,038	500	0%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.0	0.0	0.0	0.0	
Winter kW Savings	0.0	0.0	0.0	0.0	
kWh Savings	0.0	0.0	0.0	0.0	

2021		_
Utility Cost per Installation	0	
Total Utility Program Cost (\$000)	\$1	
Net Benefits (\$000)	N/A	- No 2021 program participation

<sup>(1)</sup> Cumulative participants (MW) before 2020 = 54.8 Note: One Customer, Participant or Installation equals one Summer kW

Utility: Gulf Power Company

Program Name: Program Start Date: **Residential Home Energy Survey** 

January 1981

Reporting Period: 2021

				- (4, 5)			(8'-)	(8 4)
				(d/c)			(g/c)	(g-d)
a	b	c	d	e	f	g	h	i

			Proje	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	415,321	415,321	10,000	2%	12,005	12,005	3%	2,005
2021	419,169	419,169	20,000	5%	11,734	23,739	6%	3,739
2022	422,477	422,477	30,000	7%				
2023	425,601	425,601	,					
2024	428,685	428,685	50,000	12%				

Channel	2020	2021	2022	2023	2024
Online	11,764	10,929			
Phone	106	554			
In-Home	135	251			
Total	12,005	11,734			

2021	
Utility Cost per Installation	\$86
Total Utility Program Cost (\$000)	\$1,008
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

269,488

<sup>(1)</sup> Cumulative participants before 2020 =

Gulf Power Company Energy Select 1995 Utility:

Program Name: Program Start Date: Reporting Period: 2021

> i a b c d e f g h (d/c) (g/c) (g-d)

			Proje	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	379,234	2,033	1%	648	648	0%	(1,385)
2021	419,169	382,039	4,291	1%	397	1,045	0%	(3,246)
2022	422,477	383,988	6,709	2%				
2023	425,601	385,511						
2024	428,685	386,747	11,964	3%			·	

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.80	1.90	715	753	
Winter kW Savings	1.07	1.13	425	448	
kWh Savings	735	775	291,795	307,494	

20,098

2021	
Utility Cost per Installation	\$1,422
Total Utility Program Cost (\$000)	\$565
Net Benefits (\$000)	(\$8)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company

Program Name: Residential Low Income (Community Energy Saver Program)

Program Start Date: March 2010

Reporting Period: 2021

			Proje	ected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
2020	415,321	144,733	3,750	3%	1,436	1,436	1%	(2,314)	
2021	419,169	142,330	7,500	5%	3,795	5,231	4%	(2,269)	
2022	422,477	139,738	11,250	8%					
2023	425,601	137,081	15,000	11%					
2024	428,685	134,411	18,750	14%					

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.06	0.06	231	243	
Winter kW Savings	0.13	0.13	479	505	
kWh Savings	676	713	2,566,255	2,704,319	

2021	
Utility Cost per Installation	\$331
Total Utility Program Cost (\$000)	\$1,255
Net Benefits (\$000)	(\$438)

<sup>(1)</sup> Cumulative participants before 2020 = 23,274

Utility: Gulf Power Company
Program Name: Residential HVAC
Program Start Date: November 2020

Reporting Period: 2021

			Projected		Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	413,524	1,200	0%	0	0	0%	(1,200)
2021	419,169	416,172	2,550	1%	349	349	0%	(2,201)
2022	422,477	418,130	4,050	1%				
2023	425,601	419,754				_		_
2024	428,685	421,188	7,500	2%		_		

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.32	0.34	112	118	
Winter kW Savings	0.34	0.36	119	125	
kWh Savings	1,211	1,276	422,639	445,377	

2021	
Utility Cost per Installation	\$702
Total Utility Program Cost (\$000)	\$245
Net Benefits (\$000)	(\$33)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company

Program Name: Program Start Date: **Residential Ceiling Insulation** 

November 2020

Reporting Period: 2021

> a b c d e f h i g (d/c) (g/c) (g-d)

			Proje	ected		Actual			
			Cumulative			Cumulative		Cumulative	
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over	
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	415,321	413,524	800	0%	0	0	0%	(800)	
2021	419,169	416,572	1,700	0%	33	33	0%	(1,667)	
2022	422,477	418,980	2,700	1%					
2023	425,601	421,104	3,875	1%					
2024	428,685	423,013	5,175	1%					

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.55	0.58	18	19	
Winter kW Savings	0.97	1.02	32	34	
kWh Savings	2,086	2,198	68,830	72,533	

2021	
Utility Cost per Installation	\$3,655
Total Utility Program Cost (\$000)	\$121
Net Benefits (\$000)	(\$3)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company

Residential High Efficiency Pool Pump November 2020 Program Name:

Program Start Date:

Reporting Period: 2021

> b e f c g (d/c) (g/c) (g-d)

			Proje	ected		Actual			
			Cumulative			Cumulative		Cumulative	
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over	
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected	
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants	
2020	415,321	78,570	1,150	1%	0	0	0%	(1,150)	
2021	419,169	78,151	2,475	3%	129	129	0%	(2,346)	
2022	422,477	77,454	3,925	5%					
2023	425,601	76,598	5,525	7%		_			
2024	428,685	75,584	7,275	10%		_			

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.43	1.51	185	195	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	2,635	2,777	339,898	358,185	

2021	
Utility Cost per Installation	\$1,102
Total Utility Program Cost (\$000)	\$142
Net Benefits (\$000)	(\$26)

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company Program Name: Program Start Date: **Business Energy Survey** 

1981 Reporting Period: 2021

> b d e f h i c g (d/c) (g/c) (g-d)

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	57,696	57,696	300	1%	23	23	0%	(277)
2021	58,060	58,060	600	1%	144	167	0%	(433)
2022	58,377	58,377	900	2%				
2023	58,674			2%				
2024	58,967	58,967	1,500	3%				

Channel	2020	2021	2022	2023	2024
Online	6	67			
Phone	N/A	22			
On Site	17	55			
Total	23	144			

2021	
Utility Cost per Installation	\$1,724
Total Utility Program Cost (\$000)	\$248
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

23,411

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company Program Name: **Business HVAC** Program Start Date: November 2020

Reporting Period: 2021

> a b e f c g (d/c) (g/c) (g-d)

		Projected			Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	725,802	725,802	400	0.1%	0	0	0%	(400)
2021	730,375	729,975	840	0.1%	34	34	0%	(806)
2022	734,392	733,552	1,325	0.2%				
2023	738,137	736,812	1,855	0.3%				
2024	741,828	739,973	2,425	0.3%				

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.05	34	36	
Winter kW Savings	1.01	1.06	34	36	
kWh Savings	3,491	3,679	119,199	125,612	

2021	
Utility Cost per Installation	\$5,361
Total Utility Program Cost (\$000)	\$183
Net Benefits (\$000)	(\$3)

(1) Cumulative participants (MW) before 2020 = 0
Note: One Customer, Participant or Installation equals one Summer KW

24

Utility: Gulf Power Company Curtailable Load Rider Program Name:

Program Start Date: 2018 Reporting Period: 2021

> a b c d f h i e g (d/c) (g/c) (g-d)

			Projected		Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	725,802	715,902	864	0.1%	0	0	0%	(864)
2021	730,375	719,611	1,813	0.3%	0	0	0%	(1,813)
2022	734,392	722,679	2,867	0.4%				
2023	738,137							
2024	741,828	727,893	5,326	0.7%		_	_	

	Per Insta	ıllation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.05	0	0	
Winter kW Savings	0.76	0.80	0	0	
kWh Savings	1.00	1.05	0	0	

N/A	- No 2021 program participation
\$0	
N/A	- No 2021 program participation
	\$0

(1) Cumulative participants (MW) before 2020 = 9.9

Note: One Customer, Participant or Installation equals one Summer KW

Utility: Gulf Power Company **Business Custom Incentive** Program Name:

Program Start Date: 2000 Reporting Period: 2021

> a b e f h i c g (d/c) (g/c) (g-d)

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	725,802	725,802	0	0%	0	0	0%	0
2021	730,375	730,375	0	0%	0	0	0%	0
2022	734,392	734,392	0	0%				
2023	738,137	738,137	0	0%	·			
2024	741,828	741,828	0	0%				

	Per Insta	allation	Program Total		
2021	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.00	0.00	0.0	0.0	
Winter kW Savings	0.00	0.00	0.0	0.0	
kWh Savings	0.00	0.00	0.0	0.0	

2021		_
Utility Cost per Installation	N/A	- No 2021 program participation
Total Utility Program Cost (\$000)	\$24	
Net Benefits (\$000)	N/A	- No 2021 program participation

(1) Cumulative participants (MW) before 2020 = 1.15

Note: One Customer, Participant or Installation equals one Summer KW

#### **OTHER CONSERVATION ACTIVITIES**

### FPL Conservation Research & Development ("CRD") & Gulf Conservation Demonstration and Development ("CDD")

CRD and CDD are umbrella programs under which FPL and Gulf research a wide variety of new technologies to evaluate their potential for reductions in peak load and energy as well as customer bill savings. Florida's climate conditions are unique so the studies must reflect the effects of the hot and humid environment. Favorable evaluation results can lead to incorporation in DSM programs. Examples of technologies that have been included are: Energy Recovery Ventilators; Demand Control Ventilation; Residential Air Conditioning Duct Plenum Seal; and Geothermal Heat Pump.

In view of the extreme weather events witnessed in Texas in 2021, FPL re-visited the demand response capability of the FPL programs under extreme winter conditions. Quantum Energy Analytics (Quantum) was engaged to assist FPL with extrapolating existing control strategies and participating customer appliance mix to project the magnitude of demand response on the coldest day on record in Florida. The project estimated the full megawatt reduction available to the system and individual geographic regions within the service territory as a cold front moves down the state.

FPL and Gulf have participated in relevant co-funded projects with Electric Power Research Institute ("EPRI"). Such co-funding has enabled FPL and Gulf to gain the learnings from larger research projects at a fraction of the total cost. In 2021, FPL continued its access to gather learnings from EPRI's on-going readiness assessment of multiple technologies in various stages of development which enables comparisons among these technologies. FPL also began evaluation of smart electrical load centers, circuit breakers and relays. Gulf continued its participation in the EPRI SHINES project.

#### **FPL Cogeneration & Small Power Production**

The objective of this program is to facilitate cogeneration and small power production facilities. In 2021, there were purchases from 15 facilities which produced summer capacity of 264 MW, winter capacity of 263 MW and 1,142 GWh.

#### **Goals Results Summary and Variance Explanations**

#### FPL Goals:

Summer MW- exceeded Winter MW- exceeded Annual GWh- did not meet

#### Variance Explanation:

FPL experienced less than projected participation in residential and business programs due to ongoing impacts of the COVID-19 pandemic. Supply chain challenges for LED lighting fixtures and commercial HVAC equipment affected the number of participants in the business lighting and HVAC programs. In the residential sector, the economic impact of COVID-19 resulted in customers opting to install baseline efficiency air conditioners in lieu of higher efficiency models associated with FPL's Air Conditioning program.

#### Gulf Goals:

Summer MW- did not meet Winter MW- did not meet Annual GWh- did not meet

#### Variance Explanation:

Gulf experienced less than projected participation in all residential and business programs due to program ramp-up challenges compounded with ongoing impacts of the COVID-19 pandemic. Gulf's 2020 DSM Plan contained many new programs that were launched in November 2020 during the height of COVID-19 concerns. These programs required development of a new network of participating independent contractors which has been more challenging and taken longer than expected during the pandemic. Additionally, to keep employees and the public safe, Gulf did not resume in-home residential and on-site business energy surveys until May 2021, further limiting the opportunities to create customer demand for DSM programs and contractor participation. In the business sector, HVAC program interest was at times met with supply chain challenges for qualifying equipment which resulted in HVAC installations that did not meet program participation standards.

## Attachment F



William P. Cox
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Florida Power & Light Company
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Juno Beach, FL 33408-0420
(561) 304-5662
(561) 691-7135 (Facsimile)
E-mail: Will.Cox@fpl.com

March 1, 2021

#### -VIA ELECTRONIC FILING-

Adam Teitzman Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

**RE: Docket 20210000-OT** 

Florida Power & Light Company and Gulf Power Company 2020 DSM Annual

Report

Dear Mr. Teitzman:

In accordance with Rule 25-17.0021(5), Florida Administrative Code, Florida Power & Light Company ("FPL") and Gulf Power Company ("Gulf") submit their 2020 DSM Annual Report. FPL and Gulf are submitting this report jointly as a result of the legal merger of the two companies that occurred on January 1, 2021. The report includes the results of FPL and Gulf's DSM Plans as approved by Order No. PSC-2020-0274-PAA-EG (consummated by Order No. PSC-2020-0291-CO-EG). In the enclosed report, FPL and Gulf's performance is compared to the demand and energy goals established by Order No. PSC-2019-0509-FOF-EG, issued November 26, 2019, in Docket Nos. 20190015-EG and 20190016-EG.

The results for FPL and Gulf are summarized on a joint and individual basis on pages one through three. In 2020, FPL and Gulf's joint business sector savings exceeded all goals. The joint residential sector savings were below all goals due the effects of COVID-19 pandemic, which required FPL and Gulf to suspend employee visits to customers' homes for much of the year beginning in March 2020. On a combined residential and business basis, FPL and Gulf jointly exceeded the Summer and Winter MW goals, but were below for GWh (though by less than the Commission's 15% threshold). The value of demand and energy savings for FPL and Gulf's general body of customers is unrelated to whether the

Florida Power & Light Company

savings occur in the residential or business sector. FPL and Gulf intend to submit an integrated DSM Plan for Commission approval later this year to achieve the Companies' combined goals for 2022-2024.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

/s/ William P. Cox William P. Cox Fla. Bar No. 0093531

Enclosure

# FLORIDA POWER & LIGHT COMPANY & GULF POWER COMPANY 2020 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

March 1, 2021

# FLORIDA POWER & LIGHT COMPANY & GULF POWER COMPANY 2020 DEMAND-SIDE MANAGEMENT ANNUAL REPORT

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Gulf Residential Portfolio Residential Home Energy Survey Energy Select Residential Low Income (Community Energy Saver) Residential HVAC Residential Ceiling Insulation Residential High Efficiency Pool Pump Residential HVAC Efficiency Improvement – HVAC Maintenance Residential HVAC Efficiency Improvement – Quality Installation Residential HVAC Efficiency Improvement – Duct Repair Residential Building Efficiency – High Performance Window Residential Building Efficiency – Reflective Roof Residential Building Efficiency – Energy Star Window A/C Residential Custom Incentive	16
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#### FLORIDA POWER & LIGHT COMPANY & GULF POWER COMPANY

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2020

			Resident	tial and Busin	ess Combined (@	Generator)			
	Sun	nmer Peak MW Savin	ıgs	Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	62.7	60.6	4%	41.2	36.8	12%	55.6	63.0	-12%
2021		62.3			37.9			66.1	
2022		63.7			39.0			69.4	
2023		65.3			40.1			72.6	
2024		66.9			41.1			75.9	

				Residenti	al (@ Generator)				
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	21.6	33.6	-36%	12.6	20.5	-39%	22.8	31.8	-28%
2021		34.8			21.2			33.3	
2022		35.7			21.8			34.8	
2023		36.8			22.5			36.3	
2024		37.8			23.1			37.8	

				Business	s (@ Generator)					
	Sun	nmer Peak MW Savir	ngs	Winter Peak MW Savings			(	GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission		
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	
2020	41.1	27.0	52%	28.6	16.3	76%	32.8	31.2	5%	
2021		27.5			16.7			32.8		
2022		28.0			17.2			34.6		
2023		28.5			17.6			36.3		
2024		29.1			18.0			38.1		

#### FLORIDA POWER & LIGHT COMPANY

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2020

			Residen	tial and Busin	ness Combined (@	Generator)			
	Sun	nmer Peak MW Savin	igs	Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	60.2	53.1	13%	40.1	32.8	22%	51.3	53.7	-4%
2021		53.9			33.4			55.8	
2022		54.7			34.1			58.1	
2023		55.5			34.8			60.5	
2024		56.5			35.5			63.0	

				Residentia	al (@ Generator)					
	Sun	nmer Peak MW Savir	ngs	Winter Peak MW Savings			(	GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission		
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	
2020	20.0	26.9	-26%	11.5	16.7	-31%	20.6	25.0	-18%	
2021		27.3			16.9			25.7		
2022		27.6			17.2			26.5		
2023		28.0			17.5			27.4		
2024		28.5			17.8			28.3		

				Business	s (@ Generator)				
	Sun	nmer Peak MW Savir	ngs	Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	40.2	26.2	53%	28.6	16.1	78%	30.7	28.7	7%
2021		26.6			16.5			30.1	
2022		27.1			16.9			31.6	
2023		27.5			17.3			33.1	
2024		28.0			17.7			34.7	

Comparison of Achieved MW and GWh Savings v. Commission Goals Established November 26, 2019 Reporting Period: 2020

			Resident	tial and Busin	ess Combined (@	Generator)			
	Sun	nmer Peak MW Savin	igs	Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	2.6	7.5	-65%	1.1	4.0	-71%	4.3	9.3	-53%
2021		8.4			4.5			10.3	
2022		9.0			4.9			11.3	
2023		9.8			5.3			12.1	
2024		10.4			5.6			12.9	

				Residentia	al (@ Generator)				
	Summer Peak MW Savings			Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total	Commission		Total	Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	1.6	6.7	-76%	1.1	3.8	-70%	2.2	6.8	-68%
2021		7.5			4.3			7.6	
2022		8.1			4.6			8.3	
2023		8.8			5.0			8.9	
2024		9.3			5.3			9.5	

				Business	(@ Generator)				
	Sun	nmer Peak MW Savin	igs	Winter Peak MW Savings			GWh Energy Savings		
	Total Commission			Total Commission		Total	Commission		
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2020	1.0	0.8	19%	0.0	0.2	-100%	2.2	2.5	-14%
2021		0.9			0.2			2.7	
2022		0.9			0.3			3.0	
2023		1.0			0.3			3.2	
2024		1.1			0.3			3.4	

4

Utility: Florida Power & Light Company
Program Name: Residential Home Energy Survey

c

Program Start Date: January 1981

b

Reporting Period: 2020

				(d/c)			(g/c)	(g-d)	
			Proj	ected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
2020	4,522,372	4,522,372	100,000	2%	103,647	103,647	2%	3,647	
2021	4,574,840	4,574,840	200,000	4%					
2022	4,628,249	4,628,249	300,000	6%					
2023	4,682,418	4,682,418	400,000	9%					
2024	4 736 733	4 736 733	500,000	11%		·			

e f g

Channel	2020	2021	2022	2023	2024
Online	80,940				
Phone	18,921				
In-Home	3,786				
Total	103,647				

2020	
Utility Cost per Installation	\$115
Total Utility Program Cost (\$000)	\$11,969
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

4,098,353

<sup>(1)</sup> Cumulative participants before 2020 =

5

Utility: Florida Power & Light Company

Program Name: Residential Load Management (On Call®)

Program Start Date: July 1986 Reporting Period: 2020

			Projected			Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants	
2020	4,522,372	3,818,771	5,950	0%	4,674	4,674	0%	(1,276)	
2021	4,574,840	3,871,239	11,925	0%					
2022	4,628,249	3,924,648	17,865	0%					
2023	4,682,418		,						
2024	4,736,733	4,033,132	29,740	1%					

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	2.17	2.30	10,141	10,753	
Winter kW Savings	1.96	2.08	9,156	,	
kWh Savings	1	1	5,013	5,249	

2020	
Utility Cost per Installation (2)	\$62
Total Utility Program Cost (\$000) <sup>(3)</sup>	\$43,037
Net Benefits (\$000)	\$510

<sup>(1)</sup> Cumulative participants before 2020 =

<sup>703,601</sup> 

<sup>(2)</sup> Based on cumulative active participants at year-end = 696,517

<sup>(3)</sup> Includes depreciation, return & incentives paid in 2020 to active participants who signed up in 2020 & prior years

Florida Power & Light Company Utility: Program Name: **Residential Air Conditioning** 

Program Start Date: October 1990

Reporting Period: 2020

a	b	c	d	e (d/c)	f	g	h (g/c)	i (g-d)
			Proje	ected		Ac	ctual	(8 -)
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	1,183,454	22,000	2%	20,399	20,399	2%	(1,601)
2021	4,574,840	1,273,527	44,100	3%				
2022	4,628,249	1,364,037	67,100	5%				
2023	4,682,418	1,454,900	90,700	6%				
2024	4,736,733	1,545,832	114,875	7%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Meter @ Generator		@ Generator	
Summer kW Savings	0.31	0.32	6,225	6,600	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	613	642	12,505,851	13,093,626	

2020	
Utility Cost per Installation	\$172
Total Utility Program Cost (\$000)	\$3,507
Net Benefits (\$000)	(\$855)

<sup>(1)</sup> Cumulative participants before 2020 = 1,970,212

Utility: Florida Power & Light Company

Residential New Construction (BuildSmart®) Program Name:

February 1996

Program Start Date: Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	41,778	3,500	8%	3,686	3,686	9%	186
2021	4,574,840	44,010	7,025	8%				
2022	4,628,249	45,041	10,575	8%				
2023	4,682,418	45,802	14,150	8%				
2024	4,736,733	46,492	17,750	8%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.34	0.36	1,248	1,323	
Winter kW Savings	0.12	0.13	446	473	
kWh Savings	1,006	1,053	3,707,230	3,881,470	

2020	
Utility Cost per Installation	\$135
Total Utility Program Cost (\$000)	\$498
Net Benefits (\$000)	(\$260)

<sup>(1)</sup> Cumulative participants before 2020 =

51,026

Florida Power & Light Company Utility: Program Name: **Residential Ceiling Insulation** 

1,227,964

1,223,814 1,219,664

Program Start Date: October 1981

4,628,249

4,682,418

4,736,733

Reporting Period: 2020

2022

2023

2024

a	b	c	d	e (d/c)	f	g	h (g/c)	i (g-d)
			Projected			A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	1,235,964	3,850	0%	1,444	1,444	0%	(2,406)
2021	4,574,840	1,232,114	8,000	1%				

1%

1%

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.28	0.30	411	436	
Winter kW Savings	0.67	0.71	968	1,027	
kWh Savings	749	784	1,081,906	1,132,756	

12,150

16,300

20,450

2020	
Utility Cost per Installation	\$269
Total Utility Program Cost (\$000)	\$389
Net Benefits (\$000)	(\$60)

<sup>(1)</sup> Cumulative participants before 2020 = 582,758

Utility: Florida Power & Light Company

Program Name:
Program Start Date: **Residential Low Income** 

March 2005

Reporting Period: 2020

(d/c)   (g/c)   (g-d)				Projected			A	ctual	,
	a	Ь	c	d	e (d/c)	f	g	h	i

			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	4,522,372	886,993	5,250	1%	3,137	3,137	0%	(2,113)
2021	4,574,840	892,237	11,000	1%				
2022	4,628,249	902,419	17,025	2%				
2023	4,682,418	,	,					
2024	4,736,733	923,116	31,275	3%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.27	0.28	832	882	
Winter kW Savings	0.08	0.08	235	249	
kWh Savings	763	799	2,392,966	2,505,435	

2020	
Utility Cost per Installation	\$243
Total Utility Program Cost (\$000)	\$761
Net Benefits (\$000)	(\$302)

<sup>(1)</sup> Cumulative participants before 2020 = 17,482

Utility: Florida Power & Light Company
Program Name: Business Energy Evaluation

c

Program Start Date: October 1990

b

Reporting Period: 2020

				(d/c)			(g/c)	(g-d)
			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	591,470	591,470	12,000	2%	5,015	5,015	1%	(6,985)
2021	599,138	599,138	24,000	4%				
2022	606,879	606,879	36,000	6%				
2023	614,519	,	,	8%				
2024	622,036	622,036	60,000	10%				

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Channel	2020	2021	2022	2023	2024
Online	1,230				
Phone	1,321				
On Site	2,464				
Total	5,015				

2020	
Utility Cost per Installation	\$1,534
Total Utility Program Cost (\$000)	\$7,693
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

254,164

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Florida Power & Light Company

Program Name: Business On Call

Program Start Date: June 1995 Reporting Period: 2020

			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	510,164	1,100	0%	525	525	0%	(575)
2021	8,733,000	513,890	2,000	0%				
2022	8,807,778	517,390	2,750	1%				
2023	8,877,218	520,719	3,250	1%				
2024	8,946,227	524,267	3,650	1%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	525	556	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	1	1	530	555	

2020	
Utility Cost per Installation (2)	\$44
Total Utility Program Cost (\$000) (3)	\$3,242
Net Benefits (\$000)	\$7

<sup>(1)</sup> Cumulative participants (MW) before 2020 = 76.4

<sup>(2)</sup> Based on cumulative active participants at year-end = 73.0

<sup>&</sup>lt;sup>(3)</sup> Includes depreciation, return & incentives paid in 2020 to active participants who signed up in 2020 & prior years Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company

Program Name: Commercial/Industrial Demand Reduction

Program Start Date: May 2000 Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	4,919,014	9,150	0%	24,294	24,294	0%	15,144
2021	8,733,000	4,956,396	18,550	0%				
2022	8,807,778	4,989,436	28,050	1%				
2023	8,877,218	5,019,272	,					
2024	8,946,227	5,048,891	46,850	1%				

	Per Installation		Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	24,294	25,759	
Winter kW Savings	0.64	0.68	15,624	16,566	
kWh Savings	11	11	265,780	278,271	

2020	
Utility Cost per Installation (2)	\$82
Total Utility Program Cost (\$000) (3)	\$28,592
Net Benefits (\$000)	(\$52)

<sup>(1)</sup> Cumulative participants (MW) before 2020 = 327.4

Note: One Customer, Participant or Installation equals one Summer kW

<sup>(2)</sup> Based on cumulative active participants at year-end = 350.3

<sup>(3)</sup> Includes incentives paid in 2020 to active participants who signed up in 2020 & prior years

Utility: Florida Power & Light Company

Program Name: Business Heating, Ventilating & Air Conditioning

Program Start Date: February 1990

Reporting Period: 2020

			Proje	cted		A	ctual	
				(d/c)			(g/c)	(g-d)
a	b	c	d	e	f	g	h	i

			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	1,354,483	10,670	1%	9,272	9,272	1%	(1,398)
2021	8,733,000	1,356,626	21,430	2%				
2022	8,807,778	1,357,482	32,430	2%				
2023	8,877,218	1,357,184	43,960	3%				
2024	8,946,227	1,356,205	55,810	4%				

	Per Installation		Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	9,272	9,831	
Winter kW Savings	0.96	1.02	8,932	9,471	
kWh Savings	1,107	1,159	10,261,989	10,744,302	

2020	
Utility Cost per Installation	\$722
Total Utility Program Cost (\$000)	\$6,698
Net Benefits (\$000)	(\$718)

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

Note: One Customer, Participant or Installation equals one Summer kW

<sup>426,088</sup> 

Florida Power & Light Company Utility:

Program Name: **Business Lighting** 

Program Start Date: June 1984 Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	632,148	3,750	1%	3,729	3,729	1%	(21)
2021	8,733,000	634,378	7,750	1%				
2022	8,807,778	635,810	12,000	2%				
2023	8,877,218	,	,					
2024	8,946,227	637,071	21,160	3%				

	Per Installation		Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	3,729	3,954	
Winter kW Savings	0.64	0.68	2,379	2,523	
kWh Savings	4,986	5,220	18,593,782	19,467,689	

2020	
Utility Cost per Installation	\$112
Total Utility Program Cost (\$000)	\$417
Net Benefits (\$000)	(\$891)

(1) Cumulative participants (MW) before 2020 = 310,631 Note: One Customer, Participant or Installation equals one Summer kW

Utility: Florida Power & Light Company
Program Name: Business Custom Incentive

Program Start Date: April 1993 Reporting Period: 2020

			Proje	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	8,651,163	414,312	100	0%	60	60	0%	(40)
2021	8,733,000	418,131	200	0%				
2022	8,807,778	421,612	300	0%				
2023	8,877,218							
2024	8,946,227	428,038	500	0%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.06	60	64	
Winter kW Savings	1.00	1.06	60	64	
kWh Savings	2,881	3,016	173,697	181,861	

2020	
Utility Cost per Installation	\$405
Total Utility Program Cost (\$000)	\$24
Net Benefits (\$000)	N/A

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

54,802

Note: One Customer, Participant or Installation equals one Summer kW

Utility: Gulf Power Company

Program Name: Residential Home Energy Survey (Renamed)

c

Program Start Date: January 1981

b

Reporting Period: 2020

a

				(d/c)			(g/c)	(g-d)
			Proje	ected		A	ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	415,321	415,321	10,000	2%	12,005	12,005	3%	2,005
2021	419,169	419,169	20,000	5%				
2022	422,477	422,477	,					
2023	425,601							
2024	428,685	428,685	50,000	12%				

e f g h

Channel	2020	2021	2022	2023	2024
Online	11,764				
Phone	106				
In-Home	135				
Total	12,005				

2020	
Utility Cost per Installation	\$78
Total Utility Program Cost (\$000)	\$934
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

269,488

<sup>(1)</sup> Cumulative participants before 2020 =

Gulf Power Company Energy Select 1995 Utility:

Program Name:
Program Start Date:
Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proj	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	379,234	2,033	1%	648	648	0%	(1,385)
2021	419,169	382,039	4,291	1%				
2022	422,477	383,988	6,709	2%				
2023	425,601	,	,	2%				
2024	428,685	386,747	11,964	3%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.80	1.90	1,166	1,229	
Winter kW Savings	1.07	1.13	693	730	
kWh Savings	735	775	476,280	501,904	

2020	
Utility Cost per Installation	\$874
Total Utility Program Cost (\$000)	\$566
Net Benefits (\$000)	(\$12)

<sup>(1)</sup> Participants as of December 2019 = 20,098

Utility: Gulf Power Company

Program Name: Residential Low Income (Community Energy Saver Program)

Program Start Date: March 2010

Reporting Period: 2020

			Proj	ected		A	Actual	
				(d/c)			(g/c)	(g-d)
a	b	c	d	e	f	g	h	i

			Proj	ected	Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	415,321	144,733	3,750	3%	1,436	1,436	1%	(2,314)
2021	419,169	142,330	7,500	5%				
2022	422,477	139,738	11,250	8%				
2023	425,601	137,081	15,000	11%				
2024	428,685	134,411	18,750	14%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.06	0.06	87	92	
Winter kW Savings	0.13	0.13	181	191	
kWh Savings	676	713	971,052	1,023,295	

2020	
Utility Cost per Installation	\$383
Total Utility Program Cost (\$000)	\$549
Net Benefits (\$000)	(\$166)

<sup>(1)</sup> Cumulative participants before 2020 = 23,274

Utility: Gulf Power Company Program Name:
Program Start Date:
Reporting Period: Residential HVAC (New)

November 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected		A	ctual	
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	413,524	1,200	0%	0	0	0%	(1,200)
2021	419,169	416,172	2,550	1%				
2022	422,477	418,130	4,050	1%				
2023	425,601	,						
2024	428,685	421,188	7,500	2%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.32	0.34	0	0	
Winter kW Savings	0.34	0.36	0	0	
kWh Savings	1,211	1,276	0	0	

2020		_
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$34	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company

Program Name:
Program Start Date:
Reporting Period: Residential Ceiling Insulation (New)

November 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)
			Proje	ctad		,	Cetual	

			Proj	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	413,524	800	0%	0	0	0%	(800)
2021	419,169	416,572	1,700	0%				
2022	422,477	418,980	2,700	1%				
2023	425,601	421,104	3,875	1%				
2024	428,685	423,013	5,175	1%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.55	0.58	0	0	
Winter kW Savings	0.97	1.02	0	0	
kWh Savings	2,086	2,198	0	0	

2020		_
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$26	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants before 2020 =

Gulf Power Company Utility:

Program Name:
Program Start Date:
Reporting Period: Residential High Efficiency Pool Pump (New)

November 2020

			Proje	cted		A	ctual	
				(d/c)			(g/c)	(g-d)
a	b	c	d	e	f	g	h	i

			Proje	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	415,321	78,570	1,150	1%	0	0	0%	(1,150)
2021	419,169	78,151	2,475	3%				
2022	422,477	77,454	3,925	5%				
2023	425,601	76,598	,					
2024	428,685	75,584	7,275	10%				

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	1.43	1.51	0	0
Winter kW Savings	0.00	0.00	0	0
kWh Savings	2,635	2,777	0	0

2020		_
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$26	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants before 2020 =

22

Utility: Gulf Power Company

Program Name: Residential HVAC Efficiency Improvement Program - DISCONTINUED

Measure Name: Residential HVAC Maintenance

Program Start Date: September 2015

Reporting Period: 2020

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.24	0.29	79	96
Winter kW Savings	0.07	0.08	23	26
kWh Savings	607	639	200,917	211,509

Annual Number of Program Participants	331
Utility Cost per Installation	\$726
Total Utility Program Cost (\$000)	\$240

<sup>(1)</sup> Cumulative participants before 2020 = 39,123

Program Name: Residential HVAC Efficiency Improvement Program - DISCONTINUED

Measure Name: Residential HVAC Quality Installation

Program Start Date: September 2015

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.18	0.22	69	84
Winter kW Savings	0.08	0.10	31	38
kWh Savings	451	475	172,733	181,925

2,552

Annual Number of Program Participants	383
Utility Cost per Installation	\$128
Total Utility Program Cost (\$000)	\$49

<sup>(1)</sup> Cumulative participants before 2020 =

Program Name: Residential HVAC Efficiency Improvement Program - DISCONTINUED

Measure Name: Residential Duct Repair

Program Start Date: September 2015

Reporting Period: 2020

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.15	0.18	8	10
Winter kW Savings	1.11	1.37	62	77
kWh Savings	303	319	16,968	17,881

Annual Number of Program Participants	56
Utility Cost per Installation	\$2,011
Total Utility Program Cost (\$000)	\$113

<sup>(1)</sup> Cumulative participants before 2020 = 22,133

Program Name: Residential Building Efficiency Program - DISCONTINUED

Measure Name: Residential High Performance Window

Program Start Date: September 2015

	Per Insta	allation	Progra	m Total
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.21	0.26	54	67
Winter kW Savings	0.24	0.30	62	77
kWh Savings	391	412	100,487	105,884

5,956

Annual Number of Program Participants	257
Utility Cost per Installation	\$191
Total Utility Program Cost (\$000)	\$49

<sup>(1)</sup> Cumulative participants before 2020 =

Program Name: Residential Building Efficiency Program - DISCONTINUED

Measure Name: Residential Reflective Roof

Program Start Date: September 2015

Reporting Period: 2020

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.41	0.50	48	59
Winter kW Savings	0.00	0.00	0	0
kWh Savings	1,029	1,084	121,422	127,912

Annual Number of Program Participants	118
Utility Cost per Installation	\$555
Total Utility Program Cost (\$000)	\$66

<sup>(1)</sup> Cumulative participants before 2020 = 2,074

Program Name: Residential Building Efficiency Program - DISCONTINUED

Measure Name: Residential Energy Star Window A/C

Program Start Date: September 2015

	Per Installation		Program Total	
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.04	0.05	0	0
Winter kW Savings	0.00	0.00	0	0
kWh Savings	82	86	82	86

Annual Number of Program Participants	1
Utility Cost per Installation	\$701
Total Utility Program Cost (\$000)	\$1

<sup>(1)</sup> Cumulative participants before 2020 =

Program Name: Residential Custom Incentive - DISCONTINUED

Program Start Date: September 2015

Reporting Period: 2020

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	0.00	0.00	0	0	
Winter kW Savings	0.00	0.00	0	0	
kWh Savings	0	0	0	0	

Annual Number of Program Participants	0
Utility Cost per Installation	N/A
Total Utility Program Cost (\$000)	\$36

- No 2020 program participation

<sup>(1)</sup> Cumulative participants before 2020 =

Utility: Gulf Power Company
Program Name: Business Energy Survey

Program Name: Busin
Program Start Date: 1981
Reporting Period: 2020

a	ь	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	57,696	57,696	300	1%	23	23	0%	(277)
2021	58,060	58,060	600	1%				
2022	58,377	58,377	900	2%				
2023	58,674	,	,	2%				
2024	58,967	58,967	1,500	3%				

Channel	2020	2021	2022	2023	2024
Online	6				
Phone	N/A				
On Site	17				
Total	23				

2020	
Utility Cost per Installation	\$16,505
Total Utility Program Cost (\$000)	\$380
Net Benefits (\$000)	N/A

- No kW or kWh savings attributed to this program

<sup>(1)</sup> Cumulative participants before 2020 =

c

h i

Utility: Gulf Power Company
Program Name: Business HVAC
Program Start Date: November 2020

Reporting Period: 2020

2024

b

741,828

				(d/c)			(g/c)	(g-d)
		Projected Actual					ctual	
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	725,802	725,802	400	0.1%	0	0	0%	(400)
2021	730,375	729,975	840	0.1%				
2022	734,392	733,552	1,325	0.2%				
2023	738,137	736,812	1,855	0.3%				

0.3%

d e f g

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.05	0	0	
Winter kW Savings	1.56	1.65	0	0	
kWh Savings	3,952	4,165	0	0	

2,425

2020		_
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$41	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

0

Note: One Customer, Participant or Installation equals one Summer KW

739,973

Utility: Gulf Power Company
Program Name: Curtailable Load Rider

Program Start Date: 2018 Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Proje	ected	Actual			
			Cumulative			Cumulative		Cumulative
	Total	Total Number	Number of	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Number of	of Eligible	Program	Penetration Level	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants	%	Participants	Participants <sup>(1)</sup>	Level %	Participants
2020	725,802	715,902	864	0.1%	0	0	0%	(864)
2021	730,375	719,611	1,813	0.3%				
2022	734,392	722,679	2,867	0.4%				
2023	738,137		,					
2024	741,828	727,893	5,326	0.7%				

	Per Insta	allation	Program Total		
2020	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Savings	1.00	1.05	0	0	
Winter kW Savings	0.76	0.80	0	0	
kWh Savings	1.00	1.05	0	0	

2020		
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$0	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

9.9

Note: One Customer, Participant or Installation equals one Summer KW

Program Name: Business Custom Incentive

Program Start Date: 2000 Reporting Period: 2020

a	b	c	d	e	f	g	h	i
				(d/c)			(g/c)	(g-d)

			Projected		Actual			
Year	Total Number of Customers	Total Number of Eligible Customers	Cumulative Number of Program Participants	Cumulative Penetration Level %	Annual Number of Program Participants	Cumulative Number of Program Participants <sup>(1)</sup>	Cumulative Penetration Level %	Cumulative Participation Over (Under) Projected Participants
2020	725,802	725,802	0	0%	0	0	0%	0
2021	730,375	730,375	0	0%				
2022	734,392	734,392	0	0%				
2023	738,137			0%				
2024	741,828	741,828	0	0%				

	Per Installation		Progra	m Total
2020	@ Meter @ Generator		@ Meter	@ Generator
Summer kW Savings	0.00	0.00	0.0	0.0
Winter kW Savings	0.00	0.00	0.0	0.0
kWh Savings	0.00	0.00	0.0	0.0

2020		_
Utility Cost per Installation	N/A	- No 2020 program participation
Total Utility Program Cost (\$000)	\$32	
Net Benefits (\$000)	N/A	- No 2020 program participation

<sup>(1)</sup> Cumulative participants (MW) before 2020 =

1.15

Note: One Customer, Participant or Installation equals one Summer KW

Program Name: Commercial HVAC Retrocommissioning - DISCONTINUED

Program Start Date: September 2015

Reporting Period: 2020

	Per Installation		Progra	ım Total
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.30	0.37	1	1
Winter kW Savings	0.00	0.00	0	0
kWh Savings	965	1,016	1,930	2,032

Annual Number of Program Participants	2
Utility Cost per Installation	\$34,253
Total Utility Program Cost (\$000)	\$69

(1) Cumulative participants before 2020 =

1,311

Program Name: Commercial Building Efficiency Program - DISCONTINUED

Measure Name: Commercial Geothermal Heat Pump

Program Start Date: September 2015

	Per Installation		Progra	m Total
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.29	0.36	0	0
Winter kW Savings	0.27	0.33	0	0
kWh Savings	685	721	0	0

Annual Number of Program Participants	0
Utility Cost per Installation	N/A
Total Utility Program Cost (\$000)	\$80

- No 2020 program participation

649

Note: One Customer, Participant or Installation equals one ton of installed HVAC

<sup>(1)</sup> Cumulative participants before 2020 =

31

Utility: Gulf Power Company

Program Name: Commercial Building Efficiency Program - DISCONTINUED

Measure Name: Commercial Ceiling/Roof Insulation

Program Start Date: September 2015

Reporting Period: 2020

	Per Installation		Progra	m Total
2020	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Savings	0.00046	0.00057	0	0
Winter kW Savings	0.00012	0.00015	0	0
kWh Savings	0.748	0.800	0	0

Annual Number of Program Participants	0
Utility Cost per Installation	N/A
Total Utility Program Cost (\$000)	\$31

- No 2020 program participation

474,300

Note: One Customer, Participant or Installation equals one Sq Ft

Program Name: Commercial Building Efficiency Program - DISCONTINUED

Measure Name: Commercial Reflective Roof

Program Start Date: September 2015

	Per Insta	ıllation	Progra	m Total
2020	@ Meter @ Generator		@ Meter	@ Generator
Summer kW Savings	0.00067	0.00080	797	952
Winter kW Savings	0.00	0.00	0	0
kWh Savings	1.72	1.81	2,046,686	2,153,781

Annual Number of Program Participants	1,189,934
Utility Cost per Installation	\$0.12
Total Utility Program Cost (\$000)	\$143

<sup>(1)</sup> Cumulative participants (Sq Ft) before 2020 =

4,097,164

Note: One Customer, Participant or Installation equals one Sq Ft

<sup>(1)</sup> Cumulative participants (Sq Ft) before 2020 =

#### **OTHER CONSERVATION ACTIVITIES**

#### FPL Conservation Research & Development ("CRD") & Gulf Conservation Demonstration and Development ("CDD")

CRD and CDD are umbrella programs under which FPL and Gulf research a wide variety of new technologies to evaluate their potential for reductions in peak load and energy as well as customer bill savings. Florida's climate conditions are unique so the studies must reflect the effects of the hot and humid environment. Favorable evaluation results can lead to incorporation in DSM programs. Examples of technologies that have been included are: Energy Recovery Ventilators; Demand Control Ventilation; Residential Air Conditioning Duct Plenum Seal; and Geothermal Heat Pump.

FPL and Gulf have participated in relevant co-funded projects with Electric Power Research Institute ("EPRI"). Such co-funding has enabled FPL and Gulf to gain the learnings from larger research projects at a fraction of the total cost. In 2020, FPL continued its access to gather learnings from EPRI's on-going readiness assessment of multiple technologies in various stages of development which enables comparisons among these technologies. FPL also began evaluation of smart electrical load centers, circuit breakers and relays. Gulf continued its participation in EPRI's Sustainable and Holistic Integration of Energy Storage and Solar PV ("SHINES") project which is focused on design, development and demonstration of end-to-end grid integration of energy storage and load management with PV generation.

#### FPL Cogeneration & Small Power Production

The objective of this program is to facilitate cogeneration and small power production facilities. In 2020, there were purchases from 16 facilities which produced summer demand of 594 MW, winter demand of 593 MW and 1,239 GWh.

# Attachment G

Utility Characteristics			Rapo	rting Year Incremental Annu	ual Savings	k Damand Savinas (MW)			Enerry Savino	(MAN)	cremental Life Cycle	lavings Des	k Demand Stations (MW)		Customer Inventor	Reporting 1	ear Incremental Cost	All Other Create (Thouse	and Dollary)	-	Contoner	or entires (Thousand Dollars)	Incremental Lis	e Cycle Costs	All Other Costs /T	numeral Dollarsi		Weighte	rted Average Life
Usity Utility Name Number 160 Alian Electric Coop Inc 160 PowerSouth Energy Cooperative	State BA Cod SC SC AL SOCO	de Residential Commerci 200 1,858	il Industrial Transportation	n Total Residentia 0 200 0 1,859 1	al Commercial	il Industrial Transportation	on Total R	Residential Co 2,048 22,310	nmercial Industria	Transportation	Total Reside 2,049 22,310	ntial Commercia	i Industrial Transport	tation Total Resides	tial Commercial Indu	trial Transportation Total	Residential Cor 0 29 500 440	mmercial Industrial	Transportation 0	Total   29   443	Residential Commercial	Industrial Transportation	n Total	Residential Com	mercial Indust	al Transportation	n Total 0 29 443	Residential Commerci 10,000 12,000	cial Industrial
195 Alabama Power Co 207 Alameda Municipal Power 295 City of Alexandria - (MN) 556 City of Armes - (IA) 566 City of Armes - (IA) 566 City of Armes - (IA)	AL SOCO CA CISO MN MISO	7,668 2 103 7 254 1,5	66 0 60 2,598	7,955 18 861 0 4,815 0	83 0: 04 0: 06 0:	11 0.0 13 0.4	18.9 0.4 0.8	63,290 1,480 4,513 1,000	1,431 10,921 24,921 33,	0 .	64,721 12,403 62,470 2,400	18.5 0 0.4 0 0.5 0	11 0.0 11 0.0 13 0.4	18.9 0.5 0.8	1,186 0 193 115 20 76 120 38	6 100	100 1,00 210 310 201 20 150 20	407 377 6 78 103		1,474 695 201	1,186 ( 103 11 20 7)	0 100	1,100 210 201	1,063 318 20 20	407 277 78	6 103	1,474 695 201	8.255 5.0 14.585 13.5 17.774 12.1	5.000 1.573 0.000 2.716 12.716
SSE City of Arabain - (CA) 69° City of Arabain - (CA) 723 Appalachian Power Co	MN MISO A MISO CA CISO MN MISO VA PJM	2,140 1,5 180 2,6 40,316 7,1	60 035 00 0 10 430	4,923 0 0 3,00 0 0 47,86 11	0.4 0.1 0.0 0.1	5 02 4 00 0	1.1 00 0.5 00 13.0	24,821 1,167 286,975	22,274 9) 89,214 58,352 3;	0 0 580 0	56,086 90,381 648,91	0.4 0 0.6 0 11.6 1	5 03 4 0.0 9 0.1	1.1 0.0 0.5 0.6 13.0	1,426 751 6 190 0 855	323 S 0 0 52 0	1,495 300 198 90 907 13,279	267 115 23 6 756 46		762 115 14,001	1,421 75 6 19 0 65	305 6 50	2,496 0 198 0 907	300 90 13,275	267 23 756	115 6 0 46 0	763 0 115 0 14,001	11.574 11.4 12.000 14.0 9.600 8.3	1.433 10.795 1.000 0.000 1.200 8.200
733 Apparachian Power Co	AZ AZPS AR MISO	2,161 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	0 0 6 0 9 86,89	0 2,882 2 0 267,93 76 290,04 25	2.0 0.1 0.3 27/ 5.4 11.1	.0 0.0 0 .4 0.0 0	0.0 2.0 0.0 123.7 53.5	27,673 1,110,663 2,031,653	1,969,325 497,076 817, 44,675 9	0 0 0 0 845 .	27,671 3,079,982 3,346,576	26 6 763 27 254 11	0 0.0 4 0.0 9 16.2	0.6 2.0 0.6 903.7 1 53.5	1,490 0 5,820 9,800 9,630 8,024	0 0 2 7,26 3	.400 1,575 1,620 11,220 1,924 6,950	0 0 10,575 6 3,390 4,665	1	1,575 21,790 15,010	1,490 16,821 9,80 19,830 8,02	7,261	0 1,493 0 26,623 . 34,924	1,575 11,225 6,953	0 10,570 3,398	0 0 4,060	0 1,575 0 21,790 15,010	9.600 0.0 9.700 12.0 18.000 14.1	0.000 0.000 2.900 0.000 8.700 12.500
Biol (Worldow Public Service Los 104) Association Extention Coses Inc 104 Association Extention Coses Inc 104 Association Extension Cos 1040 Chapt of Association (AMI) 1040 Chapt of Association (AMI) 1041 Chapter Coses 105 Callerine Coses Inches Coses 105 Callerine Coses	NJ PJM MN MISO TX EROO	37,732 11, 186 3,5 27,486 72,5	94 01 01 24,00	48,921 5 3,766 0 123,756 13	5.1 1.1 0.1 0.1 3.6 25.	5 4 2 0.4	7.5 0.8 40.7	351,904 1,857 522,295	172,683 35,803 1,155,223 365,	074	524,784 27,651 2,062,59	5.1 1 0.1 6 13.6 25	9 8 2 84	7.5 0.8 46.7	2,680 2,484 53 139 9,323 2,645	66' 1	102 4,240 100 80 1,844 4,754	4,600 79 21 1,840 611		8,653 183 7,245	2,680 2,48 53 12 9,320 2,64	881	5,160 190 12,844	4,260 80 4,784	4,600 79 1,840	21 615	8,852 183 7,245	9.300 15.4 10.000 10.0 19.000 16.0	100 1000 100 1000
1055 City of Azusa 116: Baltimore Gas & Electric Co 125: Barron Electric Coop 127: Bartist Electric Coop Inc.	MD P.M MI MISO	181 2,5 232,11 144,1 354	20 66 21 0 5 0	2,840 0 0 376,130 50 0 358 0 0 258 0	0.1 1.2 0.0 21.3 0.0 0.1	3 0.0 3 0.0 0 0 0.0 0	. 13 00 713 00 00	1,505 730,405 5,277	38,383 5; 1,724,290 88	0 0	40,943 2,462,805 5,365	0.1 1 50.0 21 0.0 0	3 0.0 2 0.0 3 0.0	1.4 00 71.3 3 00 00	50 401 1,722 35,261 57 1	30 0 0 6 0 0	490 6 1,990 19,704 58 73	150 4 13,525 6 1 6		170 33,229 73	59 40 34,725 35,26 57	30 6	0 69,990 0 58	19,70- 72	150 13,525	4 0 0 0 0	170 0 33,229 0 73	11.416 54.0 2.189 11.1 14.900 17.4	1.000 15.000 1.97: 0.000 7.66: 0.000
136 City of Bay City - (MI) 152 Beltrami Electric Coop, Inc 157 PUD No 1 of Benton County	MI MISO MN MISO MA SPAT	1,090 2,0 4,301 8 1,056 7	9 0 0 0 70 1,19	0 3,78 0 0 5,24 0 3,030 0	0.1 0.1 0.1 0.1	3 0.0 0 2 0.1	0.0 0.4	4,775 65,187 18,024	17,00 11,640 9,326 6;	0 0	21,80 76,836 34,25	0.1 0 0.1 0	0.0 12 11 0.1	0.0 0.2 0.8 0.3	173 227 258 47 411 112	0 0	410 81 308 156 778 228	112 6 2 123 62		193 161 413	173 23 250 4 480 16	308	0 410 300 950	81 156 221	112 2 115	6 6	0 193 161 595	9.745 16.2 14.570 12.1 19.800 12.1	5 221 0.000 2.770 2.800 8.100
1615 Blerkeley Electric Coop Inc 1725 Big Blend Electric Coop, Inc 1889 Blue Ridge Electric Coop, Inc	SC SC WA SPAT MC DUK	216 3 110 1	0 1,375	970 0 0 1,670 0 154 1	0.0 0.1 0.0 0.1	0.4 0	0.7	1,944 1,971 1,160	7,540 2,311 12,	584 0	9,454 16,604 1,183	0.0 0 0.0 0	1 03	0.7 0.0 1.0	79 10 64 29 27	300 0	97 50 394 22 27 0	9 90		50 123	79 1 64 2 117	200	0 394 117	22	1	90 0	0 123	11.000 10.0 17.890 12.0 7.000	2.000 9.160
1723 Big Bend Blochic Coop, Inc 1988 Blass Robps Black Member Corp - (NC) 2008 City of Boulder City - (NV) 2008 Blazmin Light & Power Company 2015 City of Brookings - (SD) 2444 City of Bryan - (TX)	CT ISNE SD WACM TX ERCO	51 160 3 340 1,0	64 0 32 300 61	0 115 0 0 700 0 1,950 0	0.0 0.1 0.1 0.1	0.0 0.0 0	0.0 0.0	534 2,900 3,451	866 2,840 3, 16,13	0 0	1,524 9,501 19,583	0.0 0 0.0 0	.0 0.0 .0 0.1	0.0 0.0 0.0 0.1	185 18 11 12 100 160	0 0 10 0	200 17 38 11 266 61	22 0 12 16		39 39 90	185 S 11 S 100 16	9	0 200 0 39	17 11 61	22 12 36	10 0	6 29 6 29 96	12.500 13.0 17.824 12.1 10.000 10.0	0.000 2.222 12.223 1.000
201 Oby of Brookings (ED) 244 Oby of Brookings (ED) 244 Oby of Brookings (ED) 255 Oby of Brahami Wales and Droser 255 Oby of Brahami Wales and Droser 255 Oby of Brahami Wales and Droser 255 Oby of Brahami Wales and Drose 255 Obs Energy Programs - INC) 255 Obs Energy Programs - INC) 257 Obs Energy Programs - INC) 258 Obs Energy Programs - INC) 259 Obs Energy Programs - INC) 250 Obs Energy Programs - INC) 251 Obs Energy Programs - INC) 252 Obs Energy Programs - INC) 253 Obs Energy Programs - INC) 254 Obs Energy Programs - INC) 255 Obs Energy Programs - INC) 257 Obs Energy Programs - I	VT ISNE NC CPLE	5: 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	66 6 26 6 74	7,32 6 6 4,20 6 256,335 51	0.3 1. 0.1 0.1 1.4 14.	.5 0.0 .5 0.0 0	1.7 0.0 0.5 65.0	6,150 12,344 2,195,72	100,449 49,090 1,064,588	0 0	114,594 62,234 3,260,304	0.1 1 0.1 0 51.4 14	\$ 0.0 5 0.0	1.7 0.0 0.5 0.5	790 498 253 960 4,450 10,193	0 0 3	(29) 44 (21) 37) (64) 12,04	572 C 572 C		681 940 17,133	790 49 253 90 24,453 10,19	0	1,290 0 1,213 34,643	44 373 12,04	637 572 5,065	0 0	681 6 946 17,135	13.205 16.4 14.000 15.6 7.900 13.5	5.411 0.000 5.000 0.000 1.500
3091 Carterel-Craven El Member Corp 3001 Carder Falls Utilizes 3201 Carder Falls Utilizes 3201 Carder-Knox Public Power Dist	NC OPLE A MISO NE SWPP	1,036 123 1,036 3 548 6 68 5	42 11 42 21 70	2,18 0 1,57 0 673 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	10 Q.1	0.0 0.0 0.0	1,886 9,385 900	5,830 7,510 4, 5,813	250	7,72 21,160 7,373	0.3 C	10 11 0.1	0.0 0.0 0.0	1 0 155 42 22 19	20 7	1 15 236 252 48 2	905 22 3 31 4		2,735 180 280 37	150 4 22 1	30 7	230	15 22 2	165 22 31		2,734 190 290 37	1,036 17.6 17.136 12.8 12.86 11.6	7.00 3.835 14.855 1.000 7.936
324 Central Electric Coop Inc - (OR) 324 Central Florida Elec Coop, Inc 324 Central Hudson Gas & Elec Corp	DR BPAT FL SEC NY NYIS	1,035 1,3 111 46,57 31,3	34 291 58 0	3,36 0 175 0 77,914 2	0.0 0.0 0.0 0.0 2.0 5.	0.0 0.0 0.0	0.4 0.0 7.6	31,851 1,702 623,16	14,55 2, 725 374,274	6 0	49,20 2,43 997,40	0.0 C 0.0 C 2.1 S	1.0 0.0 1.0 0.0	0.0 0.0 7.6	1,195 165 0 0 2,496 4,501	0 0	0 52 0 1,243	44 465		99 1,648	1,198 16 0 5,910 10,70	0	1,450 0 0 16,623	52 2,941	44 959	0 0	0 99 3,899	17.36 11.1 14.90 12.1 13.38 11.1	1.820 9.890 2.36 0.000 1.94
Section 2 (Section 2) (Section	OR BPAT TX ERCO NM SWPP	2,123 S 2,614 1,3 27,911 42,3	52 112 91 971 9 6	3,184 C 4,874 C 0 70,194 3 0 108 C	0.1 0. 0.1 0. 7.5 40.	10 04 11 0.1	0.3 0.8 48.0	32,664 45,916 327,60 114	16,800 1, 17,785 9, 562,23 46	746 189	51,238 72,898 889,914	0.1 C 7.5 40	10 00 11 01	0.0 0.0 40.0	423 28 921 171 1,683 5,511	14 90 1	460 150 1,18 60 1,19 944 5 96	50 2 30 22 778 0		210 110 1,723	423 2 921 17 6,683 5,51	54 90	1,183 12,194	15 66 96	50 20 778 0	22	210 112 1,723	15.400 17.1 17.562 13.2 11.700 13.2 1.200 3.6	7.65 15.63 3.77 9.46 3.30 0.00
3250 City of Centralia - (WA) 3401 City of Chaska - (MN) 3411 PUD No 1 of Chelan County	NA BPAT NN MSO NA CHPD	510 1 517 6 1,790 7,	0 6 5 4,64 4 6,60	0 255 C 5,814 C 15,834 C	0.0 0.1 0.1 0.1	10 00 0 11 00 16 13	0.0 0.0 1.0 2.0	2,150 5,101 33,544	1,39 6,535 46, 85,44 83,	6 0 451 801	3,54 58,159 202,729	0.0 C 0.1 C 0.0 1	0.0 0.1 0.4 0.1	0.0 0.0 1.0 2.0	73 24 91 240 1,131 2,18	0 20 2,23	536 6 536 10 556 466	0 0 13 95 517 45		0 110 1,000	7) 2 91 24 1,121 2,18	201 2,201	0 97 539 5,54	10 464	0 13 517	0 90 45	0 116 1,000	15.000 12: 10.000 10:1 18.736 11:1	2.750 0.000 0.000 10.000 1.964 12.130
349 Chayenne Light Foal & Power 347 City of Chicopse - (MA) 350 Chectawhatche Elec Coop, Inc 364 PUD No 1 of Clallam County 366 PUD No 1 of Clark County - (WA)	MA ISNE FL SOCO	20 1) 151 5 40	21 92 394 6 6	2,014 C 1,132 C 0 40 C	0.0 0.1 0.0 0.1	14 12 04 16 04 0	0.5 0.0 0.0	4,453 1,513 641	25,015 8,046 5,	946 6 0	30,276 16,296 641	0.0 0	12 04	0.0	31 261 110 70 14 0	5	291 110 246 60 14 6	43 30 0 0		408 156 0	31 26 110 7 14 1	50 6	291 240 0 14	110 83 6	43 6	30	408 156 0 0	15000 151 10,000 151 15,000 01	5.000 15.000 3.000 0.000 5.000 0.000
3753 Cleveland Electric Burn Co	INA SIPAT OH PJM MI MISO	23,14 11, 3,79 895 5	6 6,729 6 6	43,079 5 0 3,79 0 0 1,290 0	5.4 2: 0.5 0: 0.1 0:	2.0 10 0.0 0 11 0.0 0	10.0 0.0 0.0 0.0	92,593 37,109 7,424	123,255 95, 6,296	0 0 0 0	311,83 37,10 13,720	5.4 2 0.5 0 0.1 0	10 20 10 00	00 05 00 03	2,845 1,706 3,035 0 180 46	1,775 6 0 6 0	1,03 1,46 1,03 16 234 327	85 6 0 0 168 0		1,577 109 495	2,845 1,70 3,005 188 4	1,775	6,324 0 3,030 0 234	1,40- 166 327	0 168	6 0 6 0	1,577 0 169 0 495	4.000 11.0 9.778 0.0 10.680 11.0	1.000 11.000 0.000 0.000 1.000 0.000
384 Coast Electric Power Assn 3915 Coldwater Board of Public USI 3941 City of College Station - (TX)	MS SOCO MI MISO TX ERCO	3,736 665 1,3 667 2	27 40 2,401 50	3,762 0 4,409 0 946 0	0.0 0.1 0.0 0.1	2 0.6	0.0	19,053 665 8,629	13,240 24, 3,360	100	19,455 37,915 11,995	0.0 0 0.4 0	3 06	0.8 0.9 0.5	270 6 28 77 216 7	7	276 3 186 19 223 86	0 54 50 22		120 110	270 5 26 7 256	79	. 281 184 . 223	3 19 20	0 54 22	55	128 119	5.100 15.0 1.000 10.0 13.000 13.0	5.000 92.000 1.000 92.000
800f Sloverland Sischic Co-op 334 Floares Electric Power Asan 331 Coldwaler Souri of Public URI 3345 City of College Sasion - (TX) 3345 City of Colorado Springe - (CO) 4000 City of Colorado Springe - (CO) 4000 City of Colorado Springe - (CO) 404 Colorados Sario (CA) 404 Colorados Rarri Sine Asan, Inc 4040 City of Colorados - (MC) 4111 Commonwealth Calson Co	MA.   ESSEC	554 14,4 506 1,4 681 878 2,1	22 608 57 54 86	2,628 0 774 0 3,092 0	0.1 0.1 0.1 0.1	3 0.1 0 0.0	0.5 0.1 0.9	7,618 7,630 10,430	3,200 6, 422 32,820	130	95,950 8,762 51,250	0.1 0 0.1 0 0.4 0	3 0.1 .0 0.0	0.5 0.1 0.9	87 127 123 3 237 124	40 10	250 127 145 461 175	40 102 115		279 279	87 12 123 237 12	40 10	1,586 254 145 461	120	40	102	279 290	12.685 3.1 11.510 11.5 21.000 15.0	0.000 0.153 9.820 0.510 9.010 0.000
4176 Connecticut Light & Power Co	CT ISME NY NYIS	1,034,44 928,1 60,452 179,1 417,554 180,1 166,136 364,2	53,544	1,962,48 120 290,25 9 578,00 53	0.0 152 9.8 20 2.1 29 5.8	17 8.6 18 17	272.0 47.1 81.7	10,684,219 587,485 3,386,889	13.035.06 1,409.42 420, 1,751.26 4,307,34 1,360,		20,719,281 2,417,891 5,130,174 6,721,71	120.0 152 9.8 26 41.5 25	10 17 0.6	272.0 0 47.1 1 71.1	2,991 180,221 3,775 44,191 9,650 46,621	13,200 13 64,27	1,215 46,575 1,175 18,036 1,285 7,640	55,722 2,676 4,223 13,208 26,536 8,38		102,301 24,941 20,848	92,99 160,22 73,775 44,19 27,23 59,83	13,200	253,218 131,170 87,063	46,570 18,030 10,361	55,722 2,676 16,365 26,530	(227	102,301 24,941 26,746	10.285 10.7 9.725 7.8 8.115 10.5 6.77	1.790 7.860 7.860 7.860
4221 Consolidated Edison Co-NY Inc 4254 Consumers Energy Co 4311 Coon-Curry Electric Coop, Inc 4301 Corn Balt Power Coop 4401 Cotton Electric Coop, Inc	OR SIMPP OK SWPP	210 1 1,150 1,4	55 115,188 24 32 2,892 0 0	330 0 5,482 0 0 140 0	0.0 0.1 0.0 0.1 0.0 0.1	2 0.6 0 0.0 0	0.0 2.0 0.0	4,040 4,040 20,667 1,968	4,307,346 1,360, 1,507 1,507 8,866 43,		5,550 72,933 1,950	0.0 0 0.0 0 0.0 0	2 0.6 0.0	0.0 2.0 0.0	90 23 183 91 30 0	80 0	22,004 123 363 44 36 7	22 21 0 0		50,674 87 7	30,764 46,77 99 2 183 9 26	86	92,330 123 363 0 39	22300 44 7	22	21 4 0	56,474 87 0 7	19.000 12.4 17.054 6.1 14.000	2.430 3.190 15.000
440 Foston Electric Coop, Inc. 4402 Convert Erystein El Marshard Corp. 4445 PUD Not of Consilte County 4445 PUD Not of Consilte County 4405 City of Clayshoga Falls – (DR) 479- Cloy of Clayshoga Falls – (DR) 570- Cloy of Clayshoga Falls – (TX) 570- Cloy of Clayshoga – (TX)	SA SOCO MA SPAT OH PJM	1,800 1,700 2,6	24 42 9,29 10 53	1,031 2 0 13,654 0 144	2.1 0.1 0.3 0.4 0.1	4 1.1 0 0 0.0	. 2.3 0.0 1.7 0.0	18,067	244 21,662 96, 1,383	983 C	18,311 154,934 2,158	2.1 0 0.3 0	4 1.1 0 0.0	0.0 1.7 0.0	60 6 1,047 420 15	5,900 C	68 263 (636 325 23	16 151 102		279 578	52 1,047 42 5	5,560	0 2,630 0 2,630	263 325	16 151	900 0	279 0 578	10.000 10.0 15.300 11.1	1.000 1.901 92.431 5.000 15.000
47M City of Listviss - (VA) 491 Dawson Power District 502 Delmanus Power 502 Delmanus Power	NE SWPP CE P.M ND P.M	1,026 1,026 22,470 21,202 314	10 105 50 774 0 0	0 1,85 0 0 29,47 8 0 52,63 3	0.0 0.1 0.1 0.1 0.0 4.1	0 00 0 0 00 0 0 00 0	0.0 0.3 0.0 0.0	18,600 273,861 89,131	571 7, 6 374,823	565 0 0 0	26,750 273,60 463,954	0.1 0 8.1 0	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.3 0.0 0.8 0.0 0.0	40 45 300 3 785 0 1048 9.15	18 0 0 0 0 0	304 68 765 1,803	1 28 0 0 5 121 0		98 1,807 9,034	785 404 9.11	10 0	0 324 0 785 0 13.10	66 1,80 3,91	1 0 5-121	0 0	0 90 0 1,807 0 9,034	58.132 11.0 6.900 0.0 4.200 11.1	1.00 9.777 0.000 0.000 1.900 0.000
506 City of Denion - (TX) 5070 Delizeane Electric Cooperative 5106 DTE Electric Company 5170 DTE Stactric Power Assn	DE PAN MI MISO	458 658 2 268,489 538, 2,790	17 0	458 0 0 873 23 807,26 53	0.3 3.0 0.1 3.5 117.	0 00 0	0.0 23.0 171.3	8,245 2,715 1,594,733	1,454	ė ė	8,240 4,160 8,260,090	0.3 12.0 0 41.4 134	0.0	0.0 12.0 145.8	129 281 964	0 0	126 46 246 28 87,07	107 87,618		40 135 174,685	129 281 90	6	0 1,240	40 29 87,07	107 87,618		40 0 135 174,686	15.000 7.800 13.0 5.000 10.1	100
5170 Date Electric Power Assen 5200 Date Electric Coop 5419 Date Energy Carolinas, LLC 5416 Date Energy Carolinas, LLC	AL SOCO	2,790 22 403,19 155, 142,12 54, 386 9 15,88 44,8	21	2,792 6 22 558,414 71	10 32		103.0	9,040	2,157,445 760,522		9,045 218 4,150,553	71.0 32		10.1	7 8 7,765 20,431		7 612 8 1,200 13,69	9,031		22,725	7 8 17,765 20,43		38,200	13,69-	9,031		22,725	3.245 10.005 5.000 13.1	1900
540 Duqueene Light Co	MI MISO PA PJM	388 S 15,00 44,0		1,36 6 84,82 2	00 01 20 7:	5 40	0.1 13.5		12,751 428,282 248,	345	19,050 769,062	0.0 0 2.0 7	5 40	0.1 13.5	54 26 1,974 8,025	1,09 1	80 17 1,096 3,683	4,910 1,74		18 10,340	54 2 1,974 8,02	1,096	11,090	3,682	4,910	1,742	18 10,340	16.345 13.0 5.811 9.1	3.024 3.712 9.993
5550 East River Elec Per Coop, Inc 5581 East Rehucky Power Coop, Inc 5600 Eastern Iowa Light & Power Coop 5704 El Pana Electric Co	KY PJM A MISO NM EPE	5,786 440 6,861 3.3	15	5,786 1 460 0 0 10,226 2	1.0 1.0 0.0 0.0 0.0	0 00 0	1.6	98,741 8,933 123,833	148		90,741 9,075 171,665	1.6 0.0 0 2.5 0	0 00	1.6 0.0	811 111 2 1525 360		31 504 811 142 113 26 918 503	9 490 0		145 145 35	811 111 1525 39		. 811 . 113	140 26 500	9	2	545 545 0 1,095	17.100 19.490 10.0 18.000 14.0	100
55M East Kentucky Power Coop, Inc 550C Eastern Iowa Light 8 Power Coop 570 (E) Pass Electic Co 570 (E) Pass Electic Co 570 (E) Pass Electic Co 570 (E) Control Dark Hold Markoga 577 (C) by of Six Roser 578 (Election Rosal Public Part Dat 578 (Election Rosal Public Part Dat 531 (Election Rosal Public Part Dat 532 (Election Rosal Public Part Dat 533 (Election Rosal Public Part Dat 534 (Election Rosal Public Part Dat 535 (Election Rosal Public Part Dat 536 (Election Rosal Public Part Dat 537 (Election Rosal Publi	TX EPE AZ AZPS WN WISO	7,264 14,3 200 E	6 0 6 1,781	2,850	24 3:	5 0.0 0	0.0 6.1	91,098	219,275 12,822 20	644	310,373	2.6 3	5 00	0.0 6.1	60 34	75	,810 2,401 175 150	1,101 6 24 63		3,500 37 240	66 3	75	0 1,810	2,401	1,101	6 0 37 63	0 3,500 37 242	13.000 15.0	5000 4900 12.710
578 Elikhom Rural Public Part Dist 583 Elmhumt Mutual Power & Light Co 580 Empire District Electric Co 580 Empire Electric Assn. Inc 580 Empire Electric Assn. Inc	KY PJM A MISO NM EPE TX EPE AZ AZDS UN MISO NE SWEP NA BPAT MO SWEP CO WARDM NY KYES	73 1 490 1 761 4,5 350 4	92 96 08 64	500 0 500 0 5,02 0	0.1 0.1 0.1 0.1 0.1 0.1	9	0.0 0.1 1.1	7,810 7,810 10,193 5,123	2,140 1,405 51,46 4,996	571	9,215 61,661 10,122	0.1 0 0.1 0	9	0.0 0.1 1.1	20 10 100 12 207 550 217 265	10	43 3 110 040 460 401 3	221		26 855	20 1 100 1; 207 55 217 20	10	. 43 118 56 461	462	12 291	11	26 855	15.160 11.0 15.880 12.1 13.400 12.0 14.910 12.0	7.412 2.830 2.070
523 Vitage of Fairport - (NY) 602 City of Eugene - (OR) 619 Farmers Electric Coop, Inc - (NM) 637 Fischburg Gas & Elec Light Co	NY NYIS OR BPAT NM SWPP	2,445 2,074 9,6 114 2,038 1,4 686 2,2 34,13 15,10 45,102 2,8 207 20 10,132 5,5	0 12 3,341	0 2,524 24 0 15,034 0 114 0	94.4 0.1 0.1 1.1	8 0.0 0 3 0.2 0	0.0 25.0 0.0 2.3 0.0	10,720 34,490 114	4,051 166,434 50,	0 0	22,781 251,005 114	21.5 1 0.8 1 0.3	5 0.0 2 0.3	0.0 23.4 0.0 2.3 0.3	561 30 1,230 1,046 0	0 0 236 0	501 67 (611 0 0 0	4 6		71 0 0	561 3 1,233 1,04 0	336	0 591 0 2,611 0	67	4 0	0 0	0 71 0 0 0	10.000 12.0 16.620 17.3 1.000	2.000 0.000 7.301 15.000
6395 Flathead Electric Coop Inc 6453 Florida Power & Light Co	MA ISME MT BPAT FL FPL	2,036 1,4 686 2,5 34,131 15,1	73 440 54 1,200 71	3,96 0 4,93 50,00 14	48 10:	0.1	251	9,856 13,365 487,956 538,866	12,342 3; 27,393 12; 343,304 36,664	530	25,887 53,290 831,298 575,533	14.0 10	5 0.1	25.1	504 508 369 263 5,501 4,486	170 230 9	(160 377 860 1,06 2,664	603 180 1,104 1,045		1,160 3,788 6,343	504 50 5,501 4,40 7,017 40	170	1,160	2,684 6,404	1,104	190	3,786 0,942	11.370 8.3 20.000 12.0 14.290 21.0 11.000 12.0	1.778 7.423 2.000 12.000 1.020
6459 Dules Energy Florida, LLC 6451 Florida Public Utilities Co 6604 City of Fort Collins - (CO) 6516 Fort Pierce Utilities Authority 6545 Fort County Elec Member Corp 6216 PUD No 1 of Frankin County	FL JEA CO PSCO FL	287 10,375 5,6 136	0 0 0 5,88	0 287 6 22,15 6 136 0	03 03 03 03 04	0 0.0 0	0.0 0.3 2.5 0.0	2,870 41,543 2,034	64,581 84,	0 0	2,870 210,700 2,004	03 0 03 0	0.0 8 0.8	0.0 0.3 2.5 0.0	81 0 1,206 1,386 29	1,30	81 51 1,963 652 29 4	16 G 310 310		67 1,275 4	01 1,206 1,30 29	1,380	0 81 3,963	51 652 4	18 310	4 0 310	0 67 1,275 4	10.000 90.0 4.100 7.2 15.670	0.000 7.200 7.200
664 Four County Elec Member Corp 6716 PUD No 1 of Frankin County 676 Freeborn Mower Electric Cooperative 676 French Broad Elec Member Corp	NA SPAT WA SPAT WN MISO	28,501 235 2,1 2,651 3,6	40 2,365 61 85	28,505 1 4,745 0 0 6,29 0	1.3 0.0 0.1 0.3 0.1	2 03	0.5 0.0 0.0	285,050 10,000 38,885	25,900 88, 53,232 1,	040 . 211 0	285,058 124,758 93,328	1.1 00 0 02 0	2 03	0.5 0.5 0.6	40 1 0 317 148	5 6	40 271 1 471 264	54 0		271	40 1 317 14	ŝ	40 1 0 471	204	54		0 238	10.000 4.267 12.6 14.668 14.5	2.000 3.824 4.560 14.245
600 Gainesville Regional Utilities 700 Buckeye Power, Inc 7140 Georgia Power Co 7264 Glades Electric Coop, Inc	FL GVL OH PJM SA SOCO	436 1,786 9,0 102,356 336,3	51	438 6 10,846 1 428,655 13	0.1 1.0 2.1 3.2 40.1	.0 .5	0.1 3.0 61.7	6,546 26,689 841,574	71,504 4,850,234		6,540 96,193 5,699,818	10 2 10 2 11.0 02	0 2	0.1 3.0 90.1	513 512 255 1,965 15,136	2	513 763 0 1,934 7,680	0 11,504		19,185	513 513 25 219,875 316,96		513 767 536,844	144,32	210,700		0 355,023	15.000 18.000 7.0 6.990 11.3	7.000
7294 City of Glendale - (CA)	CA LDWP	8,497 2,6 19	4 0	11,210 0 19 0	0.0		15	905 29,590 907	45 34,640		650 64,230 907	0.1	4	15	0 0 1,225 1,613	0	0 29 (855 141 0 8	1 0		40 311 8	0 0 1,235 1,61	0	2,852	39 141 40	170	0	40 311 40	12.000 12.0 6.531 11.0 5.000	2.000 0.000
7546 FUD No 1 of Grays Harbor County 7540 Grand Valley Power 7570 Great River Energy	WA BPAT CO PSCO WN MISO	1,208 1,0 10 37,275 33,1	11 2,000	4,310 0 50 0 70,431 9	0.1 0. 0.6 9.6 46.	02	0.5 0.0 55.7	24,163 931 414,863	11,193 20,	065	56,223 101 904,211	0.1 0 0.0 9.0 46	1 02	0.5 0.0 55.7	856 153 6 1,729 1,850	á	(211 240 0 2 (586 6,776	13 2		257 2 11,536	850 15 4,729 1,85	zii	1,211	240 2 6,775	13	1	257 2 11,536	20.000 12.0 10.000 11.130 15.3	2.000 10.000
PSC Golden Valley Disc Asses Inc. PSC Clay of Carsel Valent - JMD 7546 PSC No 1 of Grave Valence - JMD 7546 PSC No 1 of Grave Valence 7557 Cland Valley Power 7557 Cland Fluer Energy NSS Clay of Gresserials - (TX) 7716 Clark Dept of Utilities - (CT) 7716 Clark Classes (Copp, Inc. 8319 Hardfand Power Coop 8319 Hardfand Power Coop	TX ERCO CT SME FL SCCC	3 125 3 107		0 400 0 100 1	0.0 0.0 1.0	0 00 0	0.0 0.1 1.0	1,438 1,058	2,660	0 0	30 4,118 1,000	0.0 0 1.0	0.0	0.0 0.0 0.1	0 478 253 32	0 0	0 0 731 80 32 0	204 6		0 293 0	476 25 22	0	0 731	6 89 0	204		0 0 293	12.000 11.500 9.4 10.000	0.000
8330 Haywood Electric Member Corp 8440 Henderson City Utility Comm 8570 Highline Electric Assn	NC DUK NY MISO CO WADM	2 2 2	4 54 221	0 279 0 479 0	0.0 0.0	0 0.0 0	10 0.0	2,290 83 1,428	27,062 2, 4.300	216	2,280 29,351 6,062	23 04 6	0.0 0.0	2.3 0.0	6 12 60 4	37	49 0	4		ò	3 3 70 60 4	37 12	746	ő	154	i i	154	10.000 10.000 15.490 15.490	0.000 10.000
857 Highline Electric Assn 852 HECO Electric Cooperative, Inc. 859 Inland Power & Light Company 859 Inland Power & Light Company	TX ERCO D SPAT	465 115	0 8	. 130 0 460 0 111 0	0.0 0.1 0.0	0.1	0.1 0.1 0.0	465 1,500	550 1,	222	1,986 465 1,596	0.0 0.1 0.0	0.0	0.1 0.1 0.0	1 1 46 27	9	16 46 27	0		0	46	14	16 46 41				1	15.320 12.0 1.000 7.775	2.000 19.200
8722 City of Holland	MI MISO CO PSCO MA SNE	3,944 1,1 3,475 6,6 2,225 3,5 118 1	76 8,360 50 0	5,970 0 18,511 0 5,771 4 280 0	0.3 0.1 4.0 1,0	9 14 4 0.0	2.6 5.3	23,956 17,390 35,931 2,950	100,136 120, 41,841 4,050	329 0	227,863 77,772 7,000	0.3 0 4.6 1 0.1 0	9 14 4 0.0	0.4 2.6 5.3 0.1	450 412 531 183 141 0	764 0	,636 146 714 305 141 305	148 148 101 0 243		464 407 639	902 12 460 41 561 18 141 6	764 0	954 1,636 744	148 305 305	148 101 243	140	444 407 639	5.000 15.0 20.144 9.0 25.000 25.0	5.000 14.000 0.000 0.000 5.000 25.000
8774 City of Holydes - (MA) 890 Center Point Energy 916 City of Idaho Falls - (ID) 919 Idaho Power Co 919 Idaho Power Co	D PACE D PACE D POD OR POD	134,221 93,1 112 5 41,22 61,0	81 C 10 528 81 64,05	0 228,01 33 0 1,546 0 166,521 4	0.3 193 0.6 0. 4.3 7.1	0.0 0.0 0 11 0.1 0 0 7.3	10 53.6 10 03 19.0	1,807,875 2,678 206,963	1,394,91 10,925 6, 733,016 896,	0 0 017 0 009	3,202,76 19,910 1,836,084	33.7 19 0.6 0 4.7 7	9 0.0 11 0.1 0 7.3	00 53.6 1 00 03 19.0	7,425 10,925 86 144 885 6,406	6 6 2 45 6 8,53 5	1,36 1,25 277 0 1,824 7,235	1,230 0 0 0 4,820 4,083	8	2,481 0 16,140	17,425 10,92 88 14 885 6,40	6 45 8,52	0 28,365 0 277 15,820	1,251 0 7,235	1,220 0 4,820	4,000 4,000	0 2,481 0 0 16,140	13.466 14.6 23.820 12.3 5.000 12.0	1.874 0.000 2.345 95.210 2.005 14.000
9216 Imperial Irrigation Diatrict	MO SWED	454	21 1,385 00 548	15,350 5 15,350 5 484 0 559 0	5.5 G1 0.5	9 01	6.4 0.5	4,/20 109,100 4,214	119,777	740	228,87 4,254 2,795	61 1	0 01	7.1 0.3	00 40 0,217 476 65 133	2	209 210 1,090 3,251 198 49 21	1,090		4345 49	2,217 47 65 12	20	2,690 196	3,25 49	1,090	156	4,349 49	13.676 18.6 15.733 5.000	186
920 Hoosier Energy R E C, Inc 927 Indianapolis Power & Light Co 9286 Bhois Municipal Elec Agency	N MISO N MISO IL MISO	2,944 3,5 61,422 100,1 246		6,930 6 0 162,28 11 4,170 0	54 01 14 15- 0.1	.4 0.0 C	7.1 0.0 26.7 0.8	52,756 369,766 865	45,786 1,306,24 15,	845	98,503 1,676,003 16,680	6.4 0 11.4 15 0.1	.6 .4 .0.7	7.1 26.7 0.8	1,351 178 1,938 11,894 86	52	,527 (82) 14,754 681 2	5,798		20,551 28	1,351 17/ 3,938 11,89 86	580	1,523 15,833 . 661	14,754	5,790	26	20,551 28	17.900 11.4 6.000 12.0 4.000	1.467 2.950 4.00
632 City of Independence - (MC) 932 Mans Manipal Power Agency 933 Mans Manipal Power Co 934 Mans Manipal Power Co 944 Chemist Manipal Power Co 945 Mans Manipal Power Co 945 Mans Manipal Power Co 947 Mans Manipal Power Co 947 Mans Mans Power Mans Manipal Power Co 948 Mans Mans Mans Mans Mans Mans Mans Mans	N PJM MI PJM A MISO N MISO	11 2.94 3.9 61.42 100.0 21 105.50 48.1 12.160 18.2 23.100 22.0 404 3 1.844 8 13,077 9,6	0 9 829 8 27,230	0 65,16 3 0 31,36 6 68,42 3 1,20 4	24 51 66 2: 23 41 12 61	0.0 0 7 0.1 0 9 62	0.0 0.0 0.0 0.0 14.0	72,200 228,494 4,040	588,37 109,132 266,83 255, 7,960	0 0 128 0 26	778,604 182,163 750,59 12,000	34 5 68 2 32 4 12 6	0.0 7 0.1 9 6.2	04 8.8 14.8 1.7	601 3,113 625 914 1,566 2,666 161 31	76 6 2,622	(47) 901 (47) 920 (47) 6,980 190 115	2,549 63 994 63 1,789 1,410	1	1,971 1,971 10,190 122	661 3,11 625 95 1,566 2,66 161 3	76 3,622	0 3,776 0 1,613 7,673	920 6,988 115	2,549 994 1,789 17	60 0 1,418	0 3,540 0 1,978 10,190 12**	5.900 5.6 5.900 5.6 5.943 12.0 10.000 40.4	2.100 0.000 5.677 1.000 2.081 9.374 1.000
960 Jackson Electric Member Corp - (GA) 951 JEA 966 Jefferson Electric Member Corp	SA SOCO FL SEA SA SOCO	1,046 8 19,076 9,6 3,363 5	64 179 60	2,89 0 28,73 1 3,92	02 0: 14 2:	2 0.0	43	16,123 144,123 24,415	7,466 1, 142,11 5,952	155	25,240 296,230 30,374	12 1	2 0.0	1.1 2.9	729 1 731 571	3	,760 0 ,300 1,590 35	0 0 469 10		0 2,009 45	1,786 731 57	2	1,7%	1,590 704	0 469 47	4	2,039 751	7.560 14.7 8.000 19.0	1.000 8.00 1.710 2.000
989 Jernez Mountaine Elec Coop, Inc. 9721 Jerney Central Power & L1 Co. 9751 Jo Carrol Energy, Inc. 9771 Johnson County Burel E. M. C.	NU PJM L MISO	13 172,51 32,3 388	G 3,041 90 3,041 90 28	60 6 0 200,32 14 0 500 0	0.0 0.1 0.0 0.1	2 04 0 0 00 0	0.0 20.6 0.0 0.0	175 2,314,372 6,540 1,001	558 436,985 44, 1,352	020 0 611 0	730 2,795,377 8,301	0.0 0 14.3 5 0.0 0	06 00	0.0 0.0 0.0 0.0 0.0	4 7 7,266 6,553 64 3	648 0 2 0 0	15 0 1,46 0,452 67 10	0 2,545 25 6 6		11,249 22	8 17,200 6,55 64	648 0	0 24,465 0 67	8,45 90	2,545 6	252 0	0 11,246 0 22	12.765 12.6 13.416 13.2 16.850 14.6	2.000 1.324 54.28 4.672 54.66
9755 Jo-Carvol Energy, Inc 9775 Johnson County Rural E M C 9996 City of Kansas City - (KS) 1000 Evergy Matro 1000 Evergy Matro	KS SWPP KS SWPP MO SWPP	40 35 49,45 29,5	0 0	0 40 6 25 6 78,551 10	0.1 0.1 0.0 0.0 5.1	0 00 0	0.0	420 340 359,493	312,073	9 0	425 346 671,563	0.1 0 0.0 10.0 5	9 00	0.0 0.0 15.5	25 0 62 2,713 3,115	0 0	35 0 63 63 ,833 2,854	0 0 13 2,456		0 74 6,312	26 60 2,710 3,11		0 35 62 5,832	0 63 2,854	0 13 3,450		0 0 74 6,312	7.000 0.0 10.000 10.0 7.300 10.1	0.000 0.00 0.000 0.000
1000 K C Electric Association 1007 Kausi Island Utility Cooperative 1017 Kerbucky Utilities Co 1017 Kerbucky Utilities Co	E NA KY LGEE	62 2 837 3 2,110 19,6	26 74 79 31	200 0 0 1,20 0 21,74 0	0.0 0.1 0.4 0.1 0.0 4.7	4 01 0	0.1 0.0 1.1 6.1	925 54,381 42,204	3,130 5,090 1, 392,761		4,001 20,551 434,970 8,503	0.0 0 0.0 4	6 0.1	0.1 0.1 1.3 4.1	34 21 229 100	22 0	56 363 58	26 6		90	34 2 229 10	22	0 363	58 4 000	26	4 0	0 90	15.870 17.4 13.040 11.2 20.000 20.0	7.630 1.270 2.370 1.000
103/4 Kasammae Usaly Aumony 1038: PUD No 1 of Kicklat County 1045: Kootenai Electric Cooperative 1053/La Plata Electric Assa. Inc.	D AVA	413 1 104 2,222 766 8	43 574 51 32 60 0	32° 0 2,30° 0 0 1,64° 0	01 01	0 00 0	0.0 0.1 0.0 0.5	1,921 38,090 11,280	549 610 10,67	264 C	2,45 29,500 21,900	0.1 0	0.0	0.0 0.1 0.0 0.5	91 9 569 7 492 54	26 3 6 6 6	128 579 65 546 300	2 1		67 325	91 569 492 5	28 3	128 0 579 0 546	45 30	2 20	1 0	0 67 0 325	10.46 12.1 17.40 12.1 15.510 13	2.85 5.660 2.000 12.000 3.190 0.000
1062 Dity of Lakeland - (FL) 1062 Lakeview Light & Power 10704 Dity of Lansing - (MI)	FL FMPP MA BPAT MI MISO	1,860 4 10 4 5,377 16,8	60° 13 829° 41 1,154	2,360 1 1,251 0 0 23,173 1	1.1 0.1 0.0 0.1 1.0 2.1	0 0.1 0 0.2 0	0.1 0.1 0.0 3.1	21,103 236 56,993	2,801 4,954 8, 216,335 15,	846 000 0	23,90 14,03 200,33	1.5 0 0.0 0 1.6 2	6 0.1 5 0.2	0.1 0.1 0.0 3.8	406 27 6 51 717 1,054	196 64 G	433 254 833 468	868 27		1,363	406 2 4 5 717 1,05	198 61	433 254 0 1,835	40	868	27 0	0 1,363	13.770 13.7 22.540 12.0 10.000 13.0	1770 2000 10.68 1000 11.00
1902   Oby of Lakeland - (FL)   1902   Lakeland - (FL)   1902   Lakeland - (FL)   1903   Oby of Laveland - (Min)   1905   Oby of Laveland - (Min)   1905   Oby of Laveland - (Min)   1906   Oby of Leveland - (FL)   1906   Oby of Leveland - (FL)   1907   Lakeland - (FL)   1908   Oby of Leveland - (Compression   1908   Oby of Leveland - (Compression   1908   Oby of Leveland - (Compression   1909   Oby of	FL FPL FL FPC UT PACE WA SPAT	6,600 17 53 1,190 41	01 500	6,631 0 17 0 50 0 2,04 4	0.0	4 02 4	0.0	52,819 251 440 28,230	15.84 7	10	53,06 251 440 51,180	00 0	4 02	0.0	5 0 15 4 799 294	84 0	15 15 4 18 18 18	97 31		121	65 4 790 %	9	0 15 4	120	9	21 /	121	8.000 7.0 15.000 4.040 20.000 12	2.900 12.00
1101 Lincoln Electric System 11124 City of Lodi - (CA)	NE SWPP	200 768 1,3 389 1,1	74 0 22 4,51 74 647	6 366 6 6,614 6 2,210 0	0.1 0.1 0.1 0.1	0.0 0.0 0 4 1.1	0.0 0.1 2.3 0.3	4,424 9,190 4,016	014 15,998 54, 15,131 90,	0 0	5,231 79,392 30,290	0.1 0 0.1 0	0.0 4 1.1	0.1 2.3 0.3	90 4 720 129 229 177	0 41. 97	97 22 271 98 504 89	3 G 98 98		20 200 200	90 725 12 229 17	0 413 97	0 97 1,271	32 56 89	3 98	0 98	0 35 295 98	15.120 11.0 12.000 12.0 14.400 11.0	1.054 0.00 2.000 12.00 1.000 15.00
1112 City of Logan - (UT) 1117 Long Island Power Authority	NY NYIS	258,353 70,3 1,374 6,1	41 0 7.	241 0 228,725 18 7,750 0	0.0 0.0 0.0 0.0 0.0	0.0	0.1 21.0 1.2	3,522,55 9,300	680 1,125,968 83,34	0	710 4,640,525 92,643	0.0 0 18.0 13 0.3 0	2 0.0	0.3 31.0 2 1.2	2 15 9,671 20,670 223 1,060	6	17 1 (364 20,685 (388 265	5 0 10,731 . 284 .		21,410 549	2 6 23,675 20,67 323 1,06		44,364 1,366	20,685 265	6 10,731 204		31,410 549	16.300 10.0 13.630 16.0 6.770 13.5	0.000 0.000 0.500
64200 or America Dr		37,713 116,0	3 4	134,324 22	60 31	.0.0	9.8	424,670 584,710	1,230,004 296,696	1	1,070,409 981,416	60 3	4 0.0	41.7 9.8	1,729 2,450	10	18,150	1,880	-	4,129	38,064 64,90 3,725 2,45	9	6,101	2,240	1,000	-	4,129	10.375 11.5 10.760 13.6	0.000
1120 Los Angeles Department of Water & Powe 1124 Entergy Louisiana LLC 1124 Entergy Louisiana LLC 1125 Louis River Public Power Dat	KY LGEE NE SWPO	25,431 29,4 2,660 32,1 892 6	45 O	0 35,605 0 1,427 0	00 61	2 0.0 0	0.0	53,234 11.436	650,865	125	10,173	0.0 6	2 0.0	0.0 6.2	0 1 261 32	0 0	1 5	2 0		121	251 7	2	0 1	5 80	37	0 0	0 6	20.000 20.0 12.014 91.0	1.190 10 10
1100 Los Angles Department of Water & Pow 1120 Los Angles Department of Water & Pow 1124 Codering Loss & Bactic Co 1125 Loss (Biver Public Power Dist 1126 Clay of Novel Public Power Dist 1126 Clay of Lowelland - (CO) 1120 Loston Power Dist District Coop 1121 Loston Power District Coop 1121 Loston Power District Coop 1121 Loston Power District Coop Int	MI	25.431 23.4 2,660 22.5 892 5 2,741 4,6 4,736	4 0 54 41 58	0 35.801 0 1,427 0 . 8,437 0 4,746 13 0	02 6: 02 0: 08 11	2 0.0 0 11 0.0	0.0 0.3 1.6 0.0	53,234 11,436 8,130 5,923 1,651	6,312 63,055 544	0 0	712,000 10,177 71,100 6,460 1,651	00 6 02 6 06 1	2 0.0 1 0.0	04 62 03 16	0 1 261 32 274 1,153	0 0	295 62 431 372 2 3 4	2 6 37 1 270 0	o o	6 121 644 3	251 X 274 1,15	3	0 1 295 1,431 2 67	82 82 373 3	2 37 270 0	0 0	0 4 121 644 3	20,000 20,0 12,814 11,1 2,174 13,4 1,300 15,0 8,390	0.000 1.195 10.52 1.426 5.000

ost Velity Utility Name ost Number 1172 City of Marshall - (MN)				ting Year Incremental Annu	al Savings						enental Life Cycle Sa	vings				Reporting Yea	Incremental Cost						Incremental Life C	cia Costs			We	eighted Average Life
	State BA Code MN MISO MA SNE	Residential Commercia 112 29	nergy Savings (MWh)  I Industrial Transportation  200 0	Total Residentia	Peak I Commercial	Demand Savings (MW) I Industrial Transportation 1 0.0 0.1	Total Resid	ontial Comme	Energy Savings (M rolal Industrial 1 4,921 2,218	Wh) Transportation	Total Resident	Peak ial Commercial 0.1 0:	Demand Savings (MW) Industrial Transportation 0.0	Total Residential	Customer Incentives (Th Commercial Industrial 20	Transportation Total  0 7	Residential Commercia	er Costs (Thousand al Industrial Tra 12 3	Dollars) snsportation To 0	otal Residen	Customer is stial Commercial 39 26	Industrial Transportation	Total Re	All f sidential Comme 24	ther Costs (Thousand Dollars cial Industrial Transport 12 3	ation Total	Residential Comm	(Years) mercial Industrial 16.710 0.570
222 11911 Town of Massena - (NY)	NY NYIS ND SWPP	96,082 132,25 97 16	E 62,258	290,631 15	5.7 18.1	6 85	0.0	1,25 271	0,18 608,558		1,773	15.7 18.1	4.5	42.2 135 0.0 0	53	15	12	26 5		79	135 53 4 25 1	9	197 29 1	25	26 S		4.130 2.790	9.780 9.780 14.520
1202   1208TMcKenzie Electric Coop Inc   1202   1218TChy of McMinnville - (DR)   1222   1219EMcritans-Dakota Utilities Co   1224TMcKenzel Irigation Electric   1224TMcKenzel Irigation Electric	MT SIMPP CA CISO	1,884 63 \$ 50 \$ 25	13 13 C	2,510 0 560 0 990	26 0	1 0.0 01	0.1	50 6	7,691 250 730		7,740 990	0.0	0.0 0.0	0.1 0 13	39 17 5	4		1/		6/	0 29 13 17	5)	40 81		1/		10.000 1,000	1,000 1,000 1,000 1,000
1234 MidAmerican Energy Co 1232 1239 Metropolitan Edison Co	L MISO PA PJM	8,002 5,00 29,58 13,00	2 15/3 2 3/42 2 24/80 0	17,020 2 17,020 2 77,550 6	2.6 1. 2.6 1.	0 23 1 05 2 34 01	42 0 11.0	18,990 8 122,680 17	4,753 221,56 1,273 50,060 2,060 356,960		150,331 951,735	0.0 1: 6.1 2:	0.4 3.4 0.0	2.4 561 11.8 7,06	841 54 1,531 90	10,10 1,94 0 9,40	1,32 1,1 227 2 3,328 1,3	28 90 113 1,188		548 5,831	501 841 7,061 1,531	544 900 0	1,946 9,494	1,36 227 3,325	228 90 (312 1,185	5,4 54 0 5,83	2.360 10.670	14.640 14.640 13.144 14.340
222 1230 Menand Electric Coop 222 1245 Midland Power Coop 222 1246 Mid-Carolina Electric Coop Inc	A WISO	8.602 5.503 3.9.59 12.00 10.		160 0 560 0 267	3.1 0.1	0.0 0.0	0.1	11,834	125 0 2,870		11,950 2,870	13 01	0.0 0.0	1.3 151	10	4 15	67	1 4		68	151 1	0 0	152	e	1 4	0 0	16.000	15.000 0.000
1253   1253   1254   1255	MN MISO MS MISO	18,321 51,56 30,971 19,85		69,914 2 50,833 4	2.3 5.3	2 .	7.5 8.0	164,891 68 161,250 24 102,700 12			2,810 952,445 604,480 235,414 9,790	12 2		5.0 1,900 8.0 6,250	2,670 4,330	4,51 10,50	1,892 3,1 3,111 2,5	165		5,058 5,611	1,900 2,676 6,250 4,335		4,570 10,585	1,893	1,165	5,01 5,01	14.456	13.22
1202 1200 Missoula Electric Coop, Inc 1202 1200 Evergy Missouri West 122 12744 Modern Electric Water Company	MT SPAT	26 10 57,991 27,51		152 0 95,51 11	13 11.	0.0	0.1	5,864			9,795 881,163	0.0 0.1	0.0	0.0 21 22.8 3,459	25 3,710	5 7,56	90 4,00 2,4	40 7		130 7,539	963 46 3,459 3,710	1	214 7,168	200 4,084	64 8	21 7,51	26.000 7.500	12.000 15.000 11.900
222 12745 Modesto Irrigation District	CA BANC MT NAME	570 1,50 20,620 53,74	E 166 C	74,371 0 74,371 0	0.1 0.1 0.1	1 0.0 0.1	0.1	7,174 2 193,281 77	1,861 2,184 1,064	0	31,220 1,064,330	0.1 0	0.0 0.0	0.1 116 0.3 495 0.4 1,245	172 1 3,557	0 66 4,00	307 5 3,894 4,5	20 20 40 141	•	8,825	495 175 1,247 3,557	10 0	603 4,004	207 3,890	50 50 40 (940	0 00	94.100 14.220	12.00 12.01 14.25 14.25
1202 1209 City of Moothead - (MN) 1222 1209 City of Moothead - (MN) 1222 1305 Mountain Parks Electric, Inc 1222 1305 Mountain View Elec Asse, Inc	CO WACM	120 45 497 24	2 1,491	2,933 0 586 0 737 0	0.00	1 .	0.2	1,066 6,079	4,931 TR/98 5,425 2,876		7,363 9,756	00 0	02	0.2 67 0.3 122	46 6 25 10	11	30 0 13	60 61 0 6		0 19	67 25 120 10	62	137 92 143	0 13	40 61 0 6 .		17.000 14.000 9 15.454	12.00 12.00 12.00
1310 Board of Water Electric & Communications     1329 City of Naparallia - (L.)     1329 City of Naparallia - (L.)     1321 The Narraganset Electric Co     1333 Nabrasias Public Power District	E PJM RI ISME	497 24 167 71 110 49,502 55 0* 632 4,01 54,865 120,9 1,565 3,33	1 24,14	110 2 128,65 6	23	9 35	27	3,166 3,190 154,241 44	4,575 195,10		3,195 893,91	27	3.5	2.7 2 17.9 27,93	20,384 0,94	57,31	5 11,60 5,3	166 2,353		19,600 2	189 17,932 20,384	0,945	189 57,20	10	1366 2,368	19,6	20.000 5.140	8.000 8.000
	SE SWPP SV NEVP SM SME	632 4,01 14,840 120,9- 1,560 3,33		125,789 4 4,894 0	0.1 0.1 4.6 24.1 0.2 0.1	6 0.0 0.1 8 .	0 0.8 29.4 0.2	8,971 4 124,344 1,21 22,961 4	4,552 50 H,348 0,128	0	53,573 1,408,692 63,093	0.1 0.1 48 24.1 0.2 0.1	0.0 0.0	0.8 191 29.4 2,745 0.2 1,951	177 5,540 700	0 36 8,25 2,66	12 2 7,500 5,5 480 2	157 0 160 143 .	•	270 13,460 722	191 177 2,747 5,549 1,958 707		0,295 2,666	12 7,501 400	257 0 1,960 243	0 21 13,41 72	94.100 8.400 9 14.730	10.900 7.893 10.600 12.000
22 Det How Steepher Ext. Com be: 23 Det How Steepher Ext. Com be: 24 Det District Steepher Ext. Com be: 25 Det District Steepher Ext. Com Com 25 Det District Steepher Ext. Com Com 25 Det District Steepher Ext. Com Com 25 Det District Steepher Ext. Com 25 Det District Steepher Ext. Com 25 Det District Steepher Steepher Ext. 25 Det Steepher Ext. Com 25 Det Steepher Ext.	NY NECO- NY NECO- NY NECO- NY N	26,546 40,61 68,371 41,61	500	67,986 6 110,023 10	66 7.1 0.2 7.1	8 03 0	54.6 57.5	195,949 50 101,290 33	7,200 6,210 3,390		800,467 1,174,694	66 71	0.2	14.6 4,15 17.1 15,20	4,618 S 10,523	8,82 25,72	3,120 4,4 4,110 1,5	121 55 578		7,600 5,600 1	4,153 4,618 5,203 10,520	SI	8,825 25,726	3,129 4,119	1,421 55 1,579	7,60	10.600 15.000	12.483 12.485 15.000
22 13519 City of Newark - (DE) .02 1357 Negara Mohaek Power Corp. .02 13630 North Carolina Mun Power Agny #1	NY NYIS NO DUK	100 60 230,40 120,30 710 77	73,753 5 90	730 424,494 13 1,844 0	3.5 25.1 0.1 0.1	6 15.7 5 0.4	55.2 1, 1.0	245 130,825 1,46 6,751	3,040 8,236 899,88 7,556 4,566		3,285 4,198,948 18,875	13.5 25.1	157	55.2 22,98 0.9 84	20,201 12,30 112 4	55,54 24	5,810 2,7 126	1,654 50 35		10,277 2	70 666 2,982 20,201 84 112	12,381	729 55,564 246	5,816	1,684 50 35	10,2	7.900 9.390	3.000 12.200 12.200 9.780 12.950
22 1366 North Public Power District 22 1367 North Arkansas Elec Coop, Inc. 22 1366 North Carolina Eastern M P A	AR MISO NO OPLE	831 66 173 347 5	8 0 0 8 100	1,516 0 177 0 501 0	0.1 0.1 0.1 0.1	2 0.5	0.2	13,733 3,136 2,976	7,536 0 160 300	0	21,271 3,136 3,431	03 0	0.0 0.0	0.3 264 0.2 5 0.5 10	35 0	0 25	765 125	38 0 40 10	•	104 789 170	264 35 10 0	0 0	296	67 6,743 120	28 0 40 10	6,74 6,74	10.000 0 8.570	11.010 0.000
22 1372 City of North Platte 22 1375 Northern Indiana Pub Serv Co 22 1378 Northern States Power Co	NE SMPP N MISO MI MISO	57 21 39,924 63,21 1,043 94	6 0	271 0 103,13 37 1,990 0	0.0 7.1 9.1 0.1 0.1	0.0	0.0 46.2 0.1	804 187,064 80 9,267 1	2,350 0 6,820 2,000		3,150 993,880 21,360	0.0 0.1 4.1 5.0 0.1 0.	0.0	9.7 2,99 0.1 90	5,010 6,010	9,00 16	3,3E 2,5	10 0 540 .		12 5,920 171	19 7 2,990 6,010 96 68		9,005 163	3,36	10 0 2,540 76	5,00 17	14.190 4.600 1 0.051	11.000 0.000 12.762 12.743
22 1378 Northern States Power Co 22 1378 Northern States Power Co - Minnesota 22 1378 Northern States Power Co - Minnesota	WI MISO WN MISO SD MISO	277,81 255,41 3,282 4,96	67,626	600,914 51 8.252 1	12 41	3 10.4	106.1 4,	339,525 4,11 40,343 E	6,613 1,169,569 5,724		9,625,700	51/4 44:	10.4	106.1 17,87 2.4 61	467 28,000 5,50 467	1,00 51,41 50	136 6 14,41 17,4	160 10,989		776 42,847 1 37	535 467 (7,87) 28,000 61 467	5,59	1,001 51,472 528	136 14,413 1	540 7,440 10,989	77 42,6	15.620	15.113 17.290 17.250
02 1378 Northern Wasco County PUID 122 1379 Northwest Iowa Power Coop 100 1999 Ob of Normond - MAD	OR BPAT IA SWPP	398 1,57 2,754 4,91		1,961 0 7,611 0	0.1 0.1 0.2 0.1	9 00	1.1	7,960 3 56,674 7	1,403 5,373 5,641 1,000		39,361 132,05 269,74	0.1 0.1		0.4 771 0.4 1,024	223 260	96 1,20	161 48	16 4		177 54	773 222 1,024 200 548 158		900 1,294	161 48	16 6	- 1	20,000 4 15,000	20 000 15 000 10 000
22 1393 Oakdale Slectric Coop 22 1399 Ohio Edison Co	MA	551 2,828	0 49	1,540 0 2,820 0	0.0	0 00 0	0.0	7,733	0 7,122	6	14,800 28,619 754,549	0.0 0.0	10 0.0	0.0 21 0.4 2.50	0 0	0 2,50	- 6 - 10	0 0	-	52 587 3.600	23 0 2,586 0	0 0	25 2,580	100	5 1 6 6	0 1	14.54	0.000 14.35
22 1406 Oktober Los	OK SWPP OR SPAT	63,68 53,60 190 31	53,63	170,95 12 601 0	2.1 9.4 0.3 0.1	4 94 01 2 0.0	0 30.8 1,	128,19 22 296,44 53 4,204	3,994 960	Š	2,105,61 9,150	9.7 7.1 0.3 0.1	7.5 0.0 0.0	24.6 12.23 0.5 92	4,50 4,51 45 1	0 21,90 15	573 4,0	078 4,078 17 60	=	13,920 1	2,232 4,860 92 45	4,86 0	21,965 156	5733	1,078 4,078 17 60	0 13,8	13.00 13.00 19.170	12.000 12.000 12.530 10.530
22 1412 Ornaha Public Power Dishict 22 1415 Orange & Rockland Utils Inc 22 1422 Otter Tail Power Co	NY NYIS MN MISO	2,516 12,45 43,52 29,14 18,85 31,70	3.35	76,001 4 50,555 16	44 41 63 63	8 0.7 2 0.0 0.1	9.9 0 22.5	29,420 16 565,830 36 218,410 45	0,20 30,20	0	992,40 671,506	4.4 4.1 16.1 6.1	0.0	9.9 1,90 22.5 1,56	3,475 36 3,20	5,77 0 4,70	1,01 7 1,444 1,4	193 91 180 0		1,860 2,930	1,909 3,470 1,569 3,200	266 0 0	5,776 4,766	1,011	790 91 (480 0	1,81 0 2,92	11.26 11.00 11.58	13.300 11.400 14.290 0.000
102 1423 Otter Tail Power Co 102 1424 City of Owalisma - (MN) 102 1432 Pacific Gas & Electric Co.	MN MISO CA CISO	5,510 4,90 486 5,51 962,900 800,17	1 1,51 0 7 45,090 0	6,000 0 3,100 0 1,000,300 163	0.1 0.1 1.0 1.32	2 0.0 0.1 0 8.0 0.1	0.8 0 0.6 0 3030 9,	19,354 7 4,863 1 344,179 9,40	1,10 15,119 (7,46 234,331	0	93,421 31,084 18,785,97 1	0.1 0.1 50.0 120.1	0.0 0.0 0.0 0.0 0.0 0.0	0.6 95 278.0 5,725	345 144 21 5,944 9,04	0 46 0 53 0 20,71	37 78 114,93 82,6	23 35 116 25,886	6	136 224,641	95 144 5,725 5,944	0 0 28 0 9,00 0	460 525 20,711	21 78 114,928 8	23 35 0,010 20,000	6 1: 0 224,6	17.295 6 10.000 9.400	10.00 10.00 11.00 7.30
22 14354 PacifiCosp 22 14354 PacifiCosp 22 14354 PacifiCosp	D PACE UT PACE	116 1,32 7,327 4,16 126,151 109,33	0 2,490 1 32,25	2,100 0 14,000 1 267,731 18	14 01 02 151	2 0.1 8 0.5 8 4.7	0.4 2.7 30.7	1,650 1 34,351 5 134,305 1,33	1,002 6,640 4,620 23,500 11,660 377,795		21,298 122,495 2,543,76	0.0 0.1 1.4 0.1 18.3 15.1	0.1 0.5 4.2	0.4 475 2.7 354 30.7 13,050	573 29 16,20 3,03	1,21 1,22 1,23	158 3 858 1,2 9,72 10,6	190 789 117 4,012		707 2,935 24,551 1	475 240 354 573 3,050 16,200	108 296 3,034	823 1,217 32,293	156 856 9,723 1	301 186 1,290 789 1,817 4,012	70 2,90 24,52	14.213 5 4.689 6.614	9.800 10.06 13.09 13.424 12.18 11.71
22 14354 PacifiCosp 22 14354 PacifiCosp 22 14401 City of Palo Alto - (CA)	WA PACE WY PACE GA CISO	9,034 21,25 11,662 7,65 66 65	9 5,34 8 21,976 11 175	35,636 5 41,533 5 1,138 0	12 21 15 11 26 0:	6 07 0 28 1 00	4.9 5.4 0.2	89,876 23 49,510 10 1,015 1	3,924 53,235 3,831 216,945 5,751 1,967		377,049 370,293 18,736	12 21 13 10 00 0:	0.7 2.8 0.0	4.9 2,330 5.4 437 0.3 20	4,343 94 1,654 1,42 94 1	7,61 3,51 13	2,932 3,6 1,284 1,6 198 4	967 159 2,255 161 61		6,912 4,500 750	2,330 4,343 437 1,656 20 94	940 1,422 19	7,613 3,517 133	2,933 1,284 198	(,013 967 (,059 2,255 401 81	6,9: 4,51 75	9 9.948 9 4.237 8 15.300	11.000 9.950 13.150 9.872 17.700 11.000
22 14458 People's Cooperative Services 22 14534 City of Passdens - (CA) 222 14531 Pascoag Utility District	MN MISO GA CISO RI ISME	2,077 97 6,425 4,74 68 1	0 0	3,050 0 11,210 0 81 0	2.5 0.1 2.5 0.1	0.0 0.1 8	0.0 1.0 0.0	29,210 1 10,744 2 777	2,366 0 7,824 143	6	42,576 38,560 910	0.1 0.1 0.2 0.1	0.0 0.0	0.2 156 1.0 1,03 0.0 102	12 1,29 54	0 16 2,33 15	156 676 2	14 0 50 17	0	160 960 48	156 12 1,028 1,296 122 54	6 0	168 2,327 156	158 670 31	14 0 200 17	90	14.064 6 8.035 8 11.400	13.66 0.000 6.130 11.000
222 1455 Pearl River Valley El Per Atan 222 1460 Peace River Electric Coop, Inc 222 1461 Orlando Utilities Comm	MS MISO FL SEC FL FMPP	355 183 9 15,035 4.64	6	358 0 279 0 19,679 0	20 01 20 11	0	0.0 0.0 2.5	6,267 2,666 37,060 7	1,004		6,267 3,750 107,830	0.0 0.1 0.0 1.1		0.0 65 0.0 6 2.5 710	0 254	90	74 145 1 1,99 2	156		74 260 2,210	69 0 0 710 264		69 0 974	74 146 1,991	114 220	20 22	17.686 12.370 1 2.470	12.370 15.240
22 14624 PUD No 2 of Grant County 22 14668 Peninsula Light Company 32 1471 Pennsylvania Slectric Co	WA GCPD WA EPAT PA PJM	274 3,75 2,85 66 35,43 22,85	2 36,21 5 7,54 C	40,28 0 3,729 2 66,320 4	10 0/ 29 01 48 5/	4 21 5 4 13 61	2.5 3.8 0 11.4	5,337 6 54,239 1 46,698 30	1,555 543,258 2,588 3,07 86,633	0	610,150 66,380 735,605	00 0/ 29 01 48 5/	13 66	2.3 61 3.8 91 11.4 6.114	176 32 150 2,633 45	56 1,00 0 9.20	58 16 2,69 15	96 129 26 61 853		200 187 5,473	61 176 912 150 6,114 2,633	327 . 458 0	563 1,963 9,203	58 161 2,660	96 129 28 361 853	0 54	29.190 7 19.000 9.517	13.490 15.000 14.000 13.201 12.213
22 14715 PPL Electric Utilities Corp	PA P.M	62,951 145,38	00 81,981 0	290,29	1.1 24	7 13.7 01	0 46.5	2,01	5,034 1,147,729	0	3,749,32	9.4 18.	22.2 0.0	50.2 8,200	12,380 3,96	0 24,51	11,531 7,5	2,636		22,070	8,208 12,380	3,927 0	24,585	11,531	1,900 2,630	0 22,0	9.000	14.000 14.000
22 HAY SAVE LIKENEY CHIRAL CUSP 23 HAY SAVE LIKENEY CHIRAL CUSP 24 HAY SAVE LIKENEY CHIRAL CUSP 25 HAY SAVE LIKENEY CHIRAL CUSP 26 HAY SAVE LIKENEY CHIRAL CUSP 27 HAY SAVE SAVE LIKENEY CHIRAL CUSP 27 HAY SAVE SAVE LIKENEY CHIRAL CUSP 28 HAY SAVE SAVE LIKENEY CHIRAL CUSP 28 HAY SAVE LIKENEY CHIRAL CUSP 29 HAY SAVE LIKENEY CHIRAL CUSP 29 HAY SAVE LIKENEY CHIRAL CUSP 20 HAY SAVE LIKENEY CHIRAL CUSP 21 HAY SAVE LIKENEY CHIRAL CUSP 21 HAY SAVE LIKENEY CHIRAL CUSP 22 HAY SAVE LIKENEY CHIRAL CUSP 23 HAY SAVE LIKENEY CHIRAL CUSP 24 HAY SAVE LIKENEY CHIRAL CUSP 25 HAY SAVE LIKENEY CHIRAL CUSP 26 HAY SAVE LIKENEY CHIRAL CUSP 26 HAY SAVE LIKENEY CHIRAL CUSP 27 HAY SAVE LIKENEY CHIRAL CUSP 27 HAY SAVE LIKENEY CHIRAL CUSP 28 HAY SAVE LIKENEY CHIRAL CUSP 29 HAY SAVE LIKENEY CHIRAL CUSP 29 HAY SAVE LIKENEY CHIRAL CUSP 20 HAY SAVE LIKENEY CHIRAL CUSP 21 HAY SAVE LIK	PA PJM NO OPLE PA PJM	12,55 4,54 25 53,86 75,51	0,000 0	25,993 2 25 5 129,399 13	24 01 56 3.1 15.	a 1.1 01	5.0 20.2 1,	123,764 5 443 254,85 63	9,95 128,113 5,30	6	311,030 643 1,090,108	26 01 58 13.1 15.	1.1 00	4.0 2,12 5.0 13 28.2 7,45	753 56 12,503	0 2,41	1,00 S	4		1,950	2,124 753 17 15,015 32,420	566 0	3,436 17 67,426	1,001	501 370	0 1,90	9.855 18.000 4 12.000	12.000
22 1502: Pledmont Electric Member Corp 22 1522 City of Port Angeles - (WA) 22 1525: Poudre Valley REA, Inc.	\$2 \$PLE \$ \$A \$\text{PLE}\$ \$\text{VE}\$ \$\te	1,170 11 547 31 717 64	0	1,293 1 863 0 1,398 0	1.0 1.1 3.3 0.1	0 2 0.0	2.0 0.5 0.4	1,670 5,470 10.102	1,200 3,184 0 7,778		2,883 8,654 17,960	1.0 1.1 0.3 0.1	0.0	2.0 36 0.5 214 0.4 440	113	4 30 42	- 11			11	36 2 214 113 445 28	0	41 327 473	11			1 1.540 10.000 15.100	17.000 10.000 0.000 12.000
22 1526 The Potomac Edison Company 22 1527 Potomac Electric Power Co 1539 Mary York Dream Authority	MD PJM MD PJM MY MYIS	87,675 22,00 88,126 99,90 90,27	5 17,959 C	137,689 13 188,064 16	3.0 5.1 6.0 15.1	5 23 01 0 0	0 20.8 30.9	101,432 45 165,862 1,32	5,504 255,200 12,644	2.085	1,212,136 1,688,506	13.0 51 16.0 15.0	2.3 0.1	20.8 9,868 20.9 17,89	0,704 4,94 24,201	0 23,50 42,15	6,110 2,6 7,854 13,5	154 2,058 528 43	0	11,020 21,300 43	9,068 0,704 (7,097 24,261	4,941 0	23,593 42,154	6,110 7,854 1	1,654 2,058 1,526 43	0 11,00	5.719 4.200	54.211 54.211 13.200
22 1536 Presque lele Elec & Gast Coop 22 1536 Posk-Burnett Electric Coop 22 1546 POsk-Burnett Electric Coop	MI MISO MI MISO MA BOAT	611 1 514 2 718 90	0 0	630 0 535 0	21 01	0.0 0.0	0.1	6,814 8,490 12,054	290 290 0 2 880 2 90	0	7,503 8,783 17,835	0.1 0.1	0.0 0.0	0.1 140 0.1 134 1.0 230		0 19	130	0 0 0 0		214 0	160 2 124 1	0 0	143 195	130	0 0 104 97	21	11.151 16.524	15.810 13.804 0.000 12.004 12.000
22 1549 Public Service Co of Colorado 22 1547 Duke Energy Indiana, LLC	N MISO	710 26 209,840 250,9 103,264 72,3	68,183	500,950 47 175,503 10	7.6 47. 63 13.1	8 127	108.1 2, 29.2	140,492 4,19 169,841 90	17,24° 472,860 8,040		5,810,598 1,407,897	47.6 47.1 16.2 13.1	12.7	108.1 18,22 29.2 2,21	26,86 6,31 9,523	51,41 11,74	10,274 14,3 7,675 4,6	121 2,074		26,666 1 12,304	0,292 26,867 2,216 9,526	6,210	51,47: 11,74	10,274 1 7,675	1,321 2,074 1,625	26,64 12,34	7.930 4.500	16.721 6.930 13.000
222 1547 Public Service Co of NM 222 1547 Public Service Co of Oklahoma 222 1547 Public Service Elec & Gas Co	SM PNM CK SWPP	58,600 25,96 58,898 61,4	900 C	95,510 9 120,311 14	98 43 43 12	5 0.5 0.1	0 54.6 27.0	181,520 36 190,740 95	1,454 9,893 4,103	0	1,272,86 1,544,84	10.0 4.1 14.3 12.	0.5 0.0	15.0 7,26 27.0 10,22	5,080 12 6,350	0 12,43	5,90 4,2 5,224 4,5	129 931 511	d	10,298	7,268 5,066 0,225 6,355	121 0	12,475 16,57	5,961 5,326	(,229 101 (,511	0 10,21 9,81	10.000 10.000	10.600 10.600
1547 Public Service s arc a List Co   1550 Puget Sound Energy Inc   1557 Randolph Electric Member Corp   1570 Rayle Electric Membership Corp	MA PSEI NC CPLE	105,173 124,00	13,783	242,992 22 3	3.4 12.1	1 14	37.6	711,313 5,44 775,630 1,35	3,501 150,390 36		2,479,537	23.4 12	1.4	37.6 27,83	43,530 4,83	76,11	14,61 12,4	XU 0		20,467 2	7,800 43,530	4,02	75,181	14,611 1	1,470 1,380	20,4	2.525	10.460 4.300 15.000
122 15/00 Flayer Eachir: Membership Colp 122 15/16 Town of Reading - (MA) 122 15/16 Town of Reading - (CA)	MA ISNE	280 10		360 0	2.1 0.1		0.1	2,846	1,000		3,846	0.1 01		0.1 27				1		4	27 4		31		1		10.040	10.000
1597 Cty of Richland - (WA) 1597 Cty of Richland - (WA) 1022 1606 Riverland Energy Cooperative	WA SPAT WI MISO	719 1,15 528 55	8 1,000	2,940 G	0.1 0.	1 0.1 2 0.0	0.0	13,300 1	4,860 11,622 6,175 1,100		29.784 15.574	0.1 0.	0.1	0.3 390 0.3 70	299 d 30	77		-			292 299 79 30	80	771	-	1		10.500	12.430 11.200 11.000 13.250
202 16006 (Neverland Freign) 202 16006 (Perverland Freign) 202 16008 (City of Riverside - (CA) 202 16008 (City of Riverside - (CA) 202 16008 (Rouncide Discrict Member Corp 202 16018 (Rouchaster Public Utilities 202 1618 (Rouchaster Public Utilities 202 1618 (Rouncide Corp	MA SME  OA  IRA SPAT  MI MISO  OA CISO  NC P.M.  MI MISO  NY NYES  CA BANG  CA BANG  OR BAY  AZ SSP  CO WINCH  DO SE BOO  SC SC	5,143 7,52 70 2,852 8,45 47,081 15,11	2 6,69 0	12,663 0 70 0 17,998 0	08 03 00 13	3 0.7 0.1	. 15 . 0.0 0 2.5	1,050 36,650 12	2,732 7,666 66,265	6	212,608 1,050 232,798	0.0 0.1 0.0 1.1	0.7 0.0	1.5 1,58 0.0 6 2.5 292	796 27	0 1,34	30 300 2	110 53		30 500	1,581 653 6 282 796	271 0	2,234 0 1,346	30 300	210 53	0 50	23.310 15.000 10.000	10.000 10.000
102 1618 Rochester Gas & Electric Corp 102 16213 Rockland Electric Co 102 16295 City of Roseville - (CA)	NY NYIS NJ PJM CA BANC	47,080 95,10 5,120 5,21 15,80 3,71	A 413	63,270 S 10,383 G 18,933 G	83 3: 03 1: 03 1:	2 0.1	12.3 1.5 1.6	61,559 6 51,971 4	9,724 1,355 4,175 8,754		122,876 104,913	93 3: 03 1:	0.1	12.3 5,43 1.5 390 1.7 901	3,600 1,971 740 S	9,01 2,36 1,70	1,910 7 414 5 860 5	167 126 111		2,696 981 1,500	5,431 3,600 395 1,971 961 746	90	9,037 2,366 1,797	1,910 414 860	780 567 526 111	2,6 91 1,5	15.000 1 14.840 0 8.130	15.000 11.000 11.23 20.000
1653   Sacramento Municipal Util Dist   1022   1655   Salem Electic - (OR)   1022   1657   Salem Electic - (OR)   1022   1657   Sale Risser Project   1022   1660   San Luis Valley R E C, Inc	CA BANC OR BPAT AZ SRP	69,655 26,31 683 66 454,666 171,13	2	96,051 7 1,343 5 625,80 117	7.1 3.1 5.5 4.1 7.6 36.1	0 .	9.6 153.0 2	015,014 35 17,113 717,948 2,78	11,065 0,765 17,609		1,335,879 25,881 5,505,551 1	73 33 55 4: 176 36		9.6 303 153.0 14,88	4,492 94 11,353	19,73 36 26,24	14,353 5,5 157 0,255 7,0	43 43 29		20,270 1 200 15,284 1	5,311 4,460 302 94 4,887 11,353		19,773 200 26,243	14,352 157 8,255	1,918 43 1,029	20,2 20 15,2	15 54.763 0 12.190 4 5.980	13.376 13.710 16.290
1022 16600 San Luis Valley R E C, Inc 1022 16600 City of San Antonio - (TX) 1022 16600 Santee Electric Coco, Inc	TX BROD	17 46,64 106,11	91	135 0 152,83 11	1.1 24.1	6 0.0	35.7	230 104,594 1,12 2,979	1,421		1,650 1,725,888 2,975	11.1 24.1	0.0	0.0 11 35.7 17,98	12,90	30,81	1,04 3	162		1,400 1	7,983 12,907	16	27 30,89	1,643	362	1,40	17.840 54.870 12.000	10.560
1800 San Diego Gas & Electric Co 1922 160 San Diego Gas & Electric Co 1922 160 City & County of San Francisco 1922 San Miguel Power Assr., Inc	CA CISO CA CISO CO WACM	325,013 207,74 8,81 137 12	21,869 0	554,644 50 8,811 264 0	1/	5 3.8 0.1 4	0 92.0 3, 1.4 0.1	142,450 2,70 13	0,116 355,366 2,170 1,514	•	6,265,943 132,179 3,590	29.8 22.1 1.0 0.1 0.1	2.2 0.1	54.0 4,000 1.4 0.1 45	4,414 13 1,373	0 8,51 1,37	13,043 14,3	294 430	0	3,375	4,027 4,414 1,372 45 1	130 0	8,574 1,375 46	13,043 1	1,294 430	0 27,71	9.000	13.324 16.250 15.000 12.000
122 1665 City of Santa Clara - (CA) 122 1667 Sadila Rural Elec Member Corporation 123 1674 Scenic Rivers Energy Corp.	GA CISO GA SOCO MI MISO	19 23,12 11 900 4	2 0	23,13 0 11 0 974 0	20 1/	0 00 0	0.1	129 33 1,126 12,896	3,521 0 209 875		323,650 1,120 13,964	0.0 1.1 0.1 0.1	0.0	1.1 5 0.1 1 0.1 61	2,228	2,27	130 2,3 4 50	1 3		2,447 4 59	5 2,220 37 .	0	2,231 37 64	130 47 55	1 3	2,4	9.861 7 10.000 9 14.321	14.580 0.000 14.927 54.000
1892 Sawnee Electric Membership Corporation 122 1686 City of Seattle - (WA) 122 1687 Shakopee Public Utilities Comm		1,030 4 16,534 32,73 14,79	0 0 0 2 2,311 7 5,400	1,08 1 51,580 2 6,951	10 11J	8 0.0 0.0 0 0.4 0 1.3	0 12.0 9.4	11,074 127,711 36 12,753	163 0 0,630 25,786 215 41.6**		11,237 547,130 56,651	16 11. 2.1 4.1	0.0 0.0 0.4	12.8 61 7.5 3,672 2.2	5,504 46	9,72	91 4,382 11,3	1 0 163 246		90 15,994	01 1 3,672 5,504	6 0 466 370	9,725 9,725	91 4,385 1	1 0 1,363 246 74	15,91	7.170 7.724 8 8 8 8	15.00 0.00 12.02 11.12 8.00 8
22 1710 Sierra Pacific Power Co 22 1725 Singing River Siec Cooperative 22 1725 Singing River Siec Cooperative	MN MISO NV MEVP MS MISO MN SMEO			37,501 3 567 0	33 31	4	7.1	21,625 30 9,560 9,560	0,000		342,500 9,500 3,425	32 31		7.1 747 0.3 100	1,475	2,22	2,234 1.7 198	50		3,900 190	747 1,479 108		2,220	2,230 199	750	3,90	6 1,800 9 16,900	12.500
1736 Sioux Valley SW Elec Coop	SD SWPP WA SPAT	119 5 1,001 34 7,910 14,91 33,301 65,15	26,00	1,405 0 48,890 1	01 02 02 03	5 57	0.0 10.8	23,090 93,472 16	6,770 0,00 261,842		29,871 515,363	02 01 1.1 22	3.9	0.2 221 7.1 4,74	1) 3,76 3,21	22 11,80	1,441 1,1	149 995		3,585	746 13 4,741 3,764	3,27	758 11,803	5,440	149 995	3,51	15.000 15.000 5 12.250	22.000 11.132 10.413
122 1753 Daminion Energy South Carolina, Inc. 122 1754 South Carolina Public Service Authority 122 1759 South Rever Elec Member Corp. 123 1759 Southeastern Indiana R E M C 122 17500 Southern California Edean Co.	SC SC SC SC NC CPLE	23,304 65.15 5,771 5,15 600	9 8,554 C	107,075 8 10,895 0 600 0	14. 23 12 23	8 15 01 2	253 2.0 0.3	53,640 5 54,551	1,87, 111,25	-	1,246,753 119,113 14,551	0.0 1.1 0.3	0.7 01	13.7 10.40 2.0 741 0.3 77	5,860 77 550	4 17,00 1,20 7	1702 4.7 452 5	624 21	6	970	740 5,883 740 550	773 6	17,050 1,290 140	3,765 458	524 521	9,54	10.600 9 19.313 16.500	12.000 13.000
122 17612 Sear Valley Electric Service	SC SC NC CPLE N MISO CA CISO CA CISO N MISO	35! 1 127,92 51,11	5,33	366 0 104,36 28 9 0	26 61 26	6 1.6	0.6 35.0	10,267 168,736 30 149	4,414 8,692 29,041		12,681 626,469 149	03 61 04 61	1.0	0.5 25 35.0 11,37 0.0 25	8,065 11	19,52 2	20 18,85 75,5 10	578 4,101		98,525 1 16	979 30 1,371 8,066 25	113	1,000 19,55 25	237 18,853 7 18	5,578 4,101	98,53 98,53	15.590 5 2.100 13.000	5.450 5.450 5.450
1761   Shear Valley Electric Service     1761   Shear Valley Electric Service   17613   Southern Indiana Gas & Elec Co   17613   Southern Maryland Elec Coop Inc   1764   Southern Public Power District     1764   Southern Public Power District	IN MISO MD PAM NE SWPP MS MISO AR SWPP TX SWPP NM SWPP TX SWPP TX SWPP	14,275 11,36 57,346 16,36 446 31	5,640 C	31,922 3 74,336 26 925 0	3.8 2.1 6.2 2.1 3.1 0.	5 1.0 0.0 1 0.0 0.1	29.0 0 0.2	7,412	1,74 80,819 7,53 3,411 1,616		430,104 518,394 12,431	4.4 2: 06:1 2: 0.1 0:	0.0 0.0	7.5 1,29 29.0 10,30 0.2 130	1,389 65 5,391 17 1	0 3,36 15,60 0 15	2,94 8 7,000 2,5 26	12 9	0	4,210 9,547 1 47	1,298 1,385 0,305 5,391 130 17	10 0	3,341 15,095 157	2,941 37,800 3 26	803 406 2,090 12 9	0 4,2 69,81 0 4	11.200 0 5.400 7 16.703	12.600 12.600 10.864 9.311
1764 Southern Pine Electric Cooperative 1769 Southwestern Electric Power Co 1769 Southwestern Electric Power Co	AR SWPP	459 17,600 22,80 7,510 7,12	0 0 2	458 0 40,50 3 14,638 2	33 10. 22 21	0.0 0.0 7	54.6 4.6	8,117 128,225 31 134,695 10	5,100 5,223	6	8,117 543,329 229,923	0.0 0.1 3.9 10. 2.7 2.1	ů.	0.3 80 14.6 3,460 4.6 1,960	0 2,386 1,032	0 8 5,83 2,96	2,140 2,1 540 2	0 0 158		0 4,299 754	60 0 3,466 2,365 1,960 1,032	6 0	80 5,856 2,990	0 2,145 540	0 6 1,154 212	0 4,21 75	17.736 9 13.000 4 17.900	13.83
22 1769 Southwestern Electric Power Co 22 1771 Southwestern Public Service Co 22 1771 Southwestern Public Service Co	TX SMPP NM SMPP TX SMPP	4,546 9,84 28,792 4,67 12,594 6,29	41,97 2	14,393 2 75,445 4 18,873 3	20 73 43 17 39 13	2 22	9.9 8.1 5.2	87,721 14 168,941 7 158,400 8	4,999 9,401 659,529 4,243		232,711 1,207,879 242,651	23 73 43 17 35 13	2.7	9.9 1,825 8.1 2,800 5.2 1,900	1,412 632 2,91 1,128	3,24 6,40 3,10	325 2 2,33 1,5 275 1	100 170 4,450 140		595 8,358 414	1,825 1,415 2,800 633 1,990 1,128	2,973	3,244 6,406 3,121	329 2,330 272	266 1570 4,450 140	8,31 8,31 41	19.300 16.203 4 12.503	14.700 16.971 15.714 13.383
22 17826 City of Springfield - (IL) 22 17832 Snapping Shoels El Member Corp	GA SOCO	494 1,35 10,454 2,70	2,185	1,840 0 21,400 4	2.4 0.4 6.5 0.1	8 08	0.8 5.4	6,060 127,555 3	5,671		11,731 223,014	38 0	0.6	0.7 90 5.1 40	2	1	90 81	3 1		144 65	90 2 2,820 13	9	92 2,840	3,591	52 226 165	3,90	12.463	15.000 25.000 25.000
22 17895 City I Hilliam of Sovingfield - (****	MO SWP	1300		1000		7 00	0 10	940	4 544		4) 171	0.1		0.0	130						40		90				2000	10.000
22 1783 Cby Utilities of Springfield - (MO) 22 1783 Cby of Springfield - (CR) 22 1825 Cby of Sturgis 22 1820 Sulphur Springs Valley E C Inc. 23 1830 Surphur Springs Valley E C Inc.	OR SPAT	1,88 2,46 907 2,31 431 1,47		3,95 0 3,218 0 1,90 0	0.0 0.0 0.0 0.0	4 00 01	0.7	15,000 3 1,340	0,100		45,185 9,715	03 0	UL 60	0.3 451 0.7 454 0.1 52	126 185 27	64 56	100 2 20	150 50		350 95	454 189 58 27		643 85	100 26	252 58	25	13.000 16.540 2.130	13.00
-susepoupour opengs Valley E. C. Inc. 22 1830 Sunter Electric Coop, Inc. 22 1833 Suny-Yadkin Elec Member Coop.	AL MALC FL SEC NC DUK	15 16	2,321 0	2,465 2 15 0 167 2	01	220 61	25.5 0.0 2.5	308 44,103	0 23,266	6	24,000 308 44,103	0.0 0.0 2.5	10.9 0.0	0.0 2.5 19		9 2		144		1 0	194	0 0	194	921	544	93	10.000 20.000 17.200	3.000 10.000
2 1832 Surry-Yadkin Flac Member Corp 12 1836 Suwannes Valley Blac Coop Inc 2 1842 Clyof Tacons - (MA) 22 1844 Clyof Talahasase - (FL) 21 1844 Flaguis Flectic Coop, Inc 2 1845 Tampa Electic Coop	RL SEC WA TPWR RL TAL	255 3,062 7,90 8,745 2	3 19,01 0	255 29,975 0 8,786 5	10 01	0.0 0.0	0 00	2,153 46,235 9 125,15	1,580 38,327 700 0	6	3,153 176,243 125,851	0.0 0.1 1.2 0.1	0.0 0.0	0.0 1,140 1.2 1,22	960 2,21 50	0 4,30 0 1,21	111 777 3 5,15	154 723 68 9	0	111 1,824 2 1,219	1,700 11,301 1,220 50	17,635 0 0 0	49,724 1,274	111 14,06 1,151	1,760 5,839 68 0	0 23,62 0 1,21	1 12.367 18.093 14.313	11.92 7.971 17.974 0.000
12 1846 Talquin Electric Coop, Inc 12 1845 Tampa Electric Co 12 1846 City of Taunion	FL SEC FL TEC MA ISME	28.425 44.54 221	4,56	77,913 7 321 0	55 7.7 10.1	12	9.0 19.7 0.2	4,566 365,300 37 321	2,500 41,400		4,560 979,200 321	0.0 6.0 4.1 0.2	0.5	0.0 12.0 2,640 0.2 131	28,50 2,50	34,5	3,87 4,6	511 512		8,998 0	2,645 28,502 131	3,60	34,554	3,875	513	4,90	6.700 20.000 1.000	20.000 20.000
22 1849 Taylor County Rural E C C 22 1864 Tennesses Valley Authority 22 1864 Tennesses Valley Authority	AL TVA GA TVA	800 1,12 300 A	2 32 0	8 0 2,325 0 456 0	2.4 2.1 0.1	1 0.1 0.0	0.4 0 0.3 0 0.0	190 13,340 1 5,958	0,402 4,750 1,200 A	0	190 34,500 7,230	0.4 0.1 0.0	0.1 0.0	0.4 1 0.3 0 0.0 d	412 1	0 40	1,374 5 566	90 38 5	-	2,029	0 415 0 0	90 0 0 A	425 0	1,376 586	560 90 38 5	0 2,00 0 A1	22.800 15.000 2 16.000	15.000 15.000 15.000 0 000
2 1846 Tarpa Backst Co 2 1846 Tarpa Backst Co 2 1848 (Spir Tarpa) 2 1848 (Spir Tarpa) 2 1848 (Spir Alban) 3 1848 (Spir Alban)	MS TVA	371 8 385 2,13	6 0 0 1 660 0	459 0 3,163 0	0.4 0.1 0.4 0.1	0 00 01 2 02 01 0 00 0	0 0.1 0 0.5 0 0.0	5,250 5,513 3 1,423	1,29 0	0	6,541 45,463 1,423	0.1 0.1	0.0 0.0 0.2 0.0	0.1 0 0.5 0	6 639 2	0 66	757 5,09 7	38 5 30 174		800 2,054 96	0 0	6 0 29 0	660	757 5,091	38 5 789 174 0 0	0 80	14.00 4 14.00 16.00	15.000 0.000 15.000 15.000 0.000 0.000
22 1854 Ternessee Valley Authority 22 1854 Ternessee Valley Authority 22 1854 Ternessee Valley Authority	IN IVA	8,210 11,44 12 2	11,50	31,15 2	2.1 1. 0.0 0.1	1 13 01 6 0.0 01	0 44	120,517 10	5,863 170,863 407 0	0	457,263 558	2.1 1.	12 00 00 00	44 1	2,19 34	0 2,40	19,93 2,6	583 1,508 3 2	9	24,127	1 2,116 0 1	340 0 0 0	2,454	19,900	1,560 1,506 3 2	0 24,12	15.00 15.00 13.00	14.00 15.00 14.00 0.00
12 1895 Tri-County Elec Member Corp (GA) 12 1899 The Tolerin Erleyn Co.	GA SOCO OH PJM	525 53 41 1,506	0 0 0	1,214 0 41 0 1,924 0	0.1 0.1	10 0.0 0.1 10 0.0 0.1	0 01	41 9,016	0 0	0	41 9,610	0.0	0.0 0.0	0.1 0 0.1 0 0.2 1,25	12/ 3 0 0	0 0 1,21	80	0 0	9	83	3 0 1,254 0	0 0 0 0	3 1,254	83	6 6 6 6	0 0	5.000 5.000 0.673	0.000 0.000 0.000 0.000
222 1912 City of Traverse City - (Mf) 222 1913 MEnergy Cooperative 222 1915 MEnergy Cooperative 222 1916 Tri-County Electric Coop, Inc. (FL)	A MISO MN MISO	453 1,46 1,766 20 3,973 45	S 40 S 96	2,010 0 4,511 0	0.1 0.2 0.4 0.1	3 0.0 6 0.0	0.5 1.1	25,400 57,000	2,850 550 6,425 1,240		28,815 64,740	0.0	0.0	0.5 140 1.1 321	10) 6 58	15 15 20	15 23	1 8		11 20	143 6 221 14	9	146 150 337	10 20	1 0		10.16 14.36 14.36	14.174 13.861 14.174 13.861
22 1918 Tri-County Electric Coop, Inc (FL) 22 1918 Trico Electric Cooperative Inc	AZ WALC	47 277 1,074 1,01	0 0 0 0 3,165 0	277 0 5,279 0	0.0 0.0 0.0	0.0 0.0	0.0	720 1,264 14,400 1	6,231 50,914	- 6	725 1,264 81,550	0.0	0.0 0.0	0.0 0.3 50 1.0 54	317 36	0 121	22 6 168 1	66 222		23 6 543	50 . 544 317	24 6	50 1,213	22 6 168	150 220	0 5	15.373 4.570 16.153	0.000 0.000 14.990 15.000
22 1929 Turlock Irrigation District	PIG BOAT	274 4,00	8 0,100 0	12,560 0	3.4 61	0.0 0.0	0 0.1	2,664 3 21,721	0,492 49,100 1,632 3,475	0	90,540 26,833	0.1 01	0.0 0.0	0.1 01	311 11	0 51	30 1	54 109	0	167	61 311 247 14	119 0	510 204	4 304	54 109 117 179	0 50	10.513	13.12 6.00 14.00 14.00
122 1928 Turtock Impation District 122 1922 Umasilia Electric Coop Assn 22 1929 USS USSes, Inc. 22 1929 Th-County Electric Coop (MI)	PA PJM MI MISO	1,553 11	541	822 0	2.1	0.0	0.1	2.790						0.2 84		40	190	. 83		279	01	26	107	190	. 82			
22	PA PJM MI MISO NC DUK MO MISO NY DIM	1,553 11 291 3,075 65,865 125,14 6291 4,27	541 64 15,661	800 0 3,870 206,670 38 10,504	1.1 1.1 1.1	1 28	0.1 04.3	2,796 15,537 15,536 1,60 57,004 5	7,686 2,806 233,209 5.419		10,482 15,533 2,912,363 112,503	19.5 31.1	2.1	0.3 81 457 53.3 21,721	14,077 1,00 667	10 46 38,41	190 0 15,905 12,1	62 648 1,521 67		279 0 30,577 2 1,637	81 467 11,725 14,877	1,86	107 467 38,454 1,300	190 0 16,900 1 1,190	87 1,521 447	20,5	12.590 16.000 12.394 9.404	14.8G 14.8G

USBy Characteristics			Reporting Y	Year Incremental Annual	al Savinos					incremental Life	le Cycle Savings					Report	ling Year Incremental C	Cost					Incremental Life Cyc	Se Costs			Weighted Average Lift	.fo
		Energy Savings	(MWh)		Peak I	Demand Savings (MW)			ergy Savings (MWh)			Peak Demand Savin			Customer Incentives	Thousand Dollars)		All Othe	Costs (Thousand Dollars)			er Incentives (Thousand Dollar	1)	All Other Costs (Tho			(Years)	
Usility   Usility   Usility Name   Year   Manther   Usility Name   1504   Stock Hills Power, Inc.   1502   Stock Hills Power (nr.   1507   Usper Peninsula Power Company   2022   15078 (Use Stack)c, Inc   15078 (Verendrys Stack)c Coop Inc   2022	State BA Code Residential	Commercial Industrial	Transportation 7		Commercial	Industrial Transportation	Total		Industrial Transportation	Total	Residential Comm	orcial Industrial	Transportation	Total R	Residential Commercial Indust	al Transportation 1	Total Residential	Commercial	Industrial Transportation	Total	Residential Comme	cial Industrial Transportati	ion Total Resid	dential Commercial Industrial	Transportation	Total	Residential Commercial Industria	ral Transportation
2022 19540 Black Hills Power, Inc.	SD WACM 5	2,336		2,386 0.0	6 0.4		. 0.4	598 34,29		34,891	0.0	0.4		0.4	19 113		130	1 42		43	19	113	122	1 42		46	11.970 14.660	
2022 19578 Upper Peninsula Power Company	MI WISO 5,6	67 4,190 1,10	9	11,240 0.4	4 22	0.60	0 33	39,900 37,12	93,539 6	87,560	0.4	22 01	6 04	3.2	251 279	79 0	609 1,11	10 601	195 0	1,990	251	279 79	0 600	1,110 606 1	20	1,99		0.000
2022 19728 UNS Electric, Inc.	AZ 15PC 29,0	90 605 5,16		34,875 6.1	9 0.1	0.6	. 6.0	442,004 2,00 364 1,00	81,541	526,990	6.1	0.1 0.1	6	6.0	1,240 187	154	1,583 99	94 81	64	5,543	1,240	187 158	1,500	994 81	64	1,14	15.210 4.720 15 10.000 10.000 0.	.780
2022 TWY Verendrye second Coop Inc	CA CISO	4 479	9 9	1475	9 95	0.0	0.0	201 1,00	200	2,540	0.1	03 01	0 00	0.0	10 24	77	22 1	70 21	9 9	23	10	24 0	9 33	70 24	0	2	10.000 10.000 0.	2000
2022 1990 Victoria Electric Copp. Inc	TY ERCO	1 1,00	1 -	1 0.0			0.0	54	4,000	14	0.0			0.0	4	1 1	0	0		á	-	780			-1			
2022 1980 Victoria Electric Coop, Inc 2022 1987 Veginia Electric & Power Co	NC PJM 3,21	00 1,934	0 0	5,540 0.3	3 0.4	0.0	0.7	50,142 20,23	0 0	70,372	0.3	0.4 0.1	0.0	0.7	370 197	0 0	567 41	19 25	0 0	769	370	197 0	0 567	419 350	0	0 760	15.600 10.500 0.	J.000 0.000
2022 1887 Wegins Blactric & Power Co. 2022 1887 Wegins Blactric & Power Co. 2022 1990 West Blactric Membanship Corp. 2022 2003 Town of Wallingford - (CT). 2022 2015 Avaita Corp. 2022 2016 Avaita Corp.	VA PJM 220,0 NC CPLE 121	64,050	0 0	284,098 17.8	A 16.3	0.0	0 23.0	2,736,722 746,71		3,413,41	17.6	163 03	9	23.0	20,300 9,531	0 0	37,863 16,43	25 8,73		25,165	28,300	(53)	0 37,860	10,432 0,730	0	0 25,16	12.400 11.700 0.	0.000
2022 1998 Wake Electric Membership Corp		08		1,200 1.0	4		. 1.0	1,222		1,222	1.6			1.0	9	_					- 0					_	1,010	
2022 2039 John of Wasington - (C1)	OT SNE 21	1/ 1,700 58 59 9.25 7.00		2,500 0.1	9920	123.4 0	0 3511	3,304 11,90 60,461 253.00	51112 0	19,304	26.1	162.0 123.	4 00	355	600 400 620 2,004	200	4.439 50	20 40	10	1 224	400	1004 1004	0 4.434	20 40	10	123	15.470 13.000 13	4 174 0 000
2022 2016 Aveta Corp	WA AVA 7,20	62 18.559 2.34		20,163 127/	4 225.9	41.1 0	0 494.0	212,404 75,79	0.703	296.90	127.6	325.9 41.	9.0	494.0	1,659 4,009	500 0	6,172 1,26	93 1.41	179 0	2,853	1.658	000 500	0 6.173	1200 1415	79	2.85	22.753 11.606 13	3 383 0.000
2022   2016  Anistic Corp     2022   2016  Anistic Corp     2022   2016  Hiller/Stank Ministigat Utilities     2022   2023  Blass Flow Desire Company     2022   2023  Blass Flow Desire Company     2022   2024  Blass Flow Desire Company     2022   2026  ASP Tasks Narth Company     2022   2026  Corp of Westerless (2011)     2022   2025  Corp of Westerless (2011)     2022   2025  Stank Flow Desire (2011)     2022   2025  Westerline Desire Corp. In:     2022   2027  Westerline Manifester Utilities     2022   2027  Westerline Manifester Utilities     2022   2027  Westerline Manifester Utilities     2022   2024  Philippessa (2022)     2024  Philippessa (2022)     2025  Philippessa (2022)     2026  Philippessa (2022)     2026  Philippessa (2022)     2027  Westerline Manifester (2022)     2027  Westerline Manifester (2022)     2027  Westerline Manifester (2022)     2028  Philippessa (2022)     2028  Philippessa (2022)     2028  Philippessa (2022)     2029  Philippe		72 389 51		1,076 0.0	0.1	0.1	0.3	3.044 4.93	6,527	14,494	a a	0.1 0.	1	0.3	22 24	22	79 2	22 2	30	79	22	24 22	79	20 24	30	- 21		2.660
2022 2038 West Penn Power Company	PA PJM 40,11 SD SWPP	50 19,854 17,24	10 0	77,253 6.1	1 3.4	23 0	0 11.7	495,735 252,25		902,061	6.1	3.4 2.2	2 0.0	11.7	6,971 2,837	967 0	10,782 3,50	01 1,63	902 0	6,035	6,971	(887	0 10,783	3,501 1,632 9	102	6,03	10.373 12.703 13 15.000 14.000	J 510 0.000
2022 2040 West River Electric Assn Inc	50 SWPP TX 6800 371	0 384		200 0.1	0.1		. 63	24.034 115.21		5,420	0.1	0.1		0.3	9 1		2.004			470	4 500	9	. 13	202	+		15.000 14.000 19.500 12.900	
2022 2047 City of Washerstle - (OH)		200		200	0.1	1 - 1	0.1			1.69		0.1		0.1	1,000		10	2		21	1,000	10		21	+		10,000	_
2022 2048 City of Westfield - (MA)	MA SAE S	57 610 27		940 0.0	0.2	0.1	0.3	1,40 640 0.70	412	13,500	9.0	0.2 0.	1	0.3	17 120	20	179 1	10 00	24	557	17	120 30	129	10 83	24	110	11.240 14.410 15	5.000
2022 2052 Wheeling Power Co	WV PJM 15	50 0	0 0	150 0.1	1 0.0	0.0	0.1	1,458	9 0	1,450	0.1	0.0	0.00	0.1	79 0	0 0	79 8	80 0	0 0	83	79	0 0	0 79	80 0	0	0 80	9.500	
2022 20635 Wild Rice Electric Coop, Inc	MN MISO 80	00 1,309		2,173 0.3	0.0	1	0.3	10,511 4,62	4	23,130	0.2	0.1		0.3	150 50		215 12	22 3		153	1,519	380	1,000	1,221 340	_	1,73	17/020 13:380 16:513 12:433 12	
2022 2073 Wilmar Municipal Utilities	WN MISO II	10 553 73	9	1,369 0.0	0.1	0.1	0.3	1,370 6,87	9,100	17,350	0.0	0.1 0.	1	0.3	22 22	29	74 2	22 23	29	74	22	22 29	74	23 22	29	7-	16.510 12.432 12 10.000	.423
2022 2080 Waconsin Power & Light Co	M MISO	1	1		1 :					/66			_	9.7			-1-	1		- 1			- 49	_	-	<del></del> '		
2022 2088 Whiscooches River Elec Coop	FL SEC 35	50 200 1	0 0	564 01	0.0	0.0 0	0.0	4,400 2,57	0 0	6,970	0.0	0.0	0 00	0.0	0 0	0 0	0 4	40 13	0 0	171	0	0 0	0 0	40 131	0	0 17	12.370 12.370 0.	1000
2022 2084 Wingrass Electric Coop, Inc. 2022 2085 Wisconsis Power & Light Co. 2022 2085 Wildersonches River Elec Coop. 2022 2085 Windrasconches River Elec Coop. 2022 2095 Windrastine Valley Electric Coop. 2022 2095 Windrastine Valley Electric Coop.	AR MISO					4.7	. 43					4.	7	4.7					20	20					20	. 21	1	
2022 2099 Vellowstone Valley Elec Co-op 2022 21002 Vork Electric Coop Inc	ME WALIN 35	2		355 11	4		1.6	355		366	1.6			1.0	20		20 3	33		33	15		15	40		-	1.000	
21022 21002 YOR silectric Coop Inc	SC DUK	0 433	9	433	0.1		0.1	0 4,33	9 9	4,330		9.1	_	0.1				9 1	-	14			1	U 14	3	1 1	0.000 10.000 0.	.000
2622 2165 City of Workington - (MN) 2622 2166 Hyparchist Managed Serv Comm 2622 2167 4 Feb Educk Ann Inc. 2622 217 Presented Public Power Chin 2622 217 Presented Public Power Chin 2622 2175 City of Sentand - (M) 2622 2175 City of Sentand - (M) 2622 2175 Managed Energy Agency of NE 2622 2175 Managed Energy Agency of NE	MI MISO 6	O 20 20	-	900 01	0.1	0.1	0.2	1,212 2,60	3,530	7,410	0.0	0.1	1 -	0.2	20 20	24	(C) 2	0 2		89		20 34	89	29 28	24		16.895 12.370 12 5.000 15.295	.2/4
2022 2107 Y-W Electric Assn Inc	CO WACM	0 1	1	1 0	0.1		0.1	0 1	-	12,112	00	0.3	_	0.1	9 45		61	-		- 64	10	45	11/	- 4	-	-	13.650 17.970	
2022 2111 Perennial Public Power Dist		67 82 15	0 0	360 0.0	0.1	0.0 0	0 0.1	1,720 4,72	1,42	7,070	0.0	0.1 0.1	0.0	0.1	30 13	9 0	50	0 0	0 0	0	63	19 13	0 96	0 0	0	0 0	20.000 20.000 20	0.000
2022 21156 City of Zeeland - (MI)	UI MISO 40 CO MACM	53 2,400		2,861 0.1	0.3		. 0.4	1,273 11,53		12,840	62	4.2		4.4	65 131		190 4	45 10		140	65	131	190	45 504		. 14	3.260 12.780 10.000 10.000	
2022 2135 Municipal Energy Agency of NE	CO WACM	B 45		53 0.1	0.1		0.1	80 50		580	0.0	0.2		0.2	3 90		13	0 0		0	3	40	51	0 0				
2022 21352Municipal Energy Agency of NE	A MISO NE SWPP 3	1 90		99 0.1	0.1		0.1	10 72		730	0.0	0.3		0.3	1 3		3	9 9		9	- 1	20	29	9 9	+	-	10.000 10.000	
2022 2135 Municipal Energy Agency of NE 2022 2135 Municipal Energy Agency of NE	WY NACM	20		20	0.0		. 00	200 200		104		0.5		0.4	7 7		-1	4		- 1		26	20	7 2	+	1 - 3	50.000	_
2022 2153 Mohaus Electric Cooperative, Inc. 2022 2103 Energy United Elect Member Corp 2022 2205 Kentacky Power Co 2022 2205 Centacky Power Assn	AZ WALC 9	14 2		917 0.4	0.1		. 0.4	7,636		7,643	0.3	0.0		0.3	200 5		200 19	90		195	200	5	200	190 3		19	8.350 3.000	
2022 21633 EnergyUnited Elec Member Corp	NC DUK	6 211		217 81	£ 12.9		. 214	122 33		451	4.1	12.7		20.8	7 1		-				17	16	20				19.000 7.000	
2022 2205 Kentucky Power Co	KY PJM 28 MS MISO 40	65 0 1	0 0	265 0.	0.0	0.0 0	.0 0.1	4,399	9 0	4,222	0.1	0.0	0 00	0.1	0 0	0 0	0 20	01 0	0 0	201	0	0 0	0 0	201 0	0	0 28	16.600	
2022 2281 Data Lacing Flower Allen	95 WSO 45	93 13.303 25.10		436 0.		2.0	. 0.1	2.240.546 150.94	225.04	0.717.63	9.1			0.1	0 000	***	200 274	24		24	0.000	200	0.00	276	er.	300	19.200 11.300 13	100
2022 2443 High Manifold Dower Agency		01 13 041	1 -	26.734 11	4 00			165.611 340.0	20,017	506.543	11	0.0		11	51	in.	11 23	10 00		410	11	201 165	11	220 69	***	40	25.000 20.000	1000
2022 2811 Data sector Power Atten 2022 2421 Tucano Elicific Power Co 2022 2421 Utah Manicipal Power Agency 2022 2459 Utah Sanicipal Power Agency 2022 2459 Utah Energy Systems	NH ISNE 4,0	90 5,500 1,37		10,971 0.1	0.7	0.2	. 14	19,000 80,00	27,462	126,590	0.0	0.7 0.1		1.4	1,040 1,540	367	2,979 65	51 61	153	1,414	1,040	,540 300	2,979	651 610 1	153	1,45	9.310 11.370 11	1370
2022 2494 Cass County Elec Coop Inc 2022 26510 Liberty Utilities (Granite State Electri		50		60 0.			. 01	274		374	0.7			0.3	17		17	2		3	57		17	3			12.000	
2022 2051) Liberty Utilities (Grande State Electri	9H SNE 2,5	25 4,689 2,87	9 0	10,091 0.3	3 05	0.3 0	0 1.1	13,270 44,83	27,481 0	45,59-	1.5	5.6 3.	4 00	10.8	2,180 2,170	22 0	4,714 53	36 52	8 8	1,151	2,160	1,170 254	0 4,754	536 529	ac	0 1,15	7.180 13.670 14	.019 0.000
2022 2759 Carroli-White REMC 2022 2054 Clatakanie Peoples Util Dist	IN MISO 77 OR SPAT 59	79		2001 0			. 23	7,780	45.00	7,783	1.2			1.3	204	466	59			-	200	40 460	200		22		12.98 12.26 12	2004
2022 2000 Kerrylle Public Utility Board	TX ERCO S	54	1 1	554 0.			0.1	0.211	12,000	0.311	0.1	0.0	1	0.1	53	100	22 6	61		61	20		55	ê e	-	6	15.000	
2022 2009 Consideration Program Control 2022 2000 Kern/life Public Utility Board 2022 3005 Electrical Diet Nod Pleast County 2022 3005 Great Lakes Energy Coop 2022 4005 Tease-New Masco Power Co																			16	16					16	- 11		
2022 3000 Great Lakes Energy Coop	UI UISO 1,7			4,890 0.	.1 0.4		. 0.5	24,271 37,60		61,900	0.1	0.4		0.5	094 139		830 23	36 38		625	654	139	830	236 386		. 62	12.000 12.000	
2022 4005f Texas-New Mexico Power Co 2022 4021f Wabash Valley Power Assn, Inc.	TX ERCO 6,0	00 9,780 30 1,620 52		17,786 3.4	2.9		6.3	129,383 115,90 5,511 23,63		255,36 36,31	24	2.9		6.3	2,393 1,540		3,933 50	00 20		708	2,390	,56	3,937	508 200		70	17.400 11.86 23.490 14.520 13	
2022 4021 Wabash Valley Power Asin, Inc. 2022 4021 Wabash Valley Power Asin, Inc.	N PJM 2	30 1,629 52		2,381 01	0.1	0.1	. 0.5	5,511 23,64	7,13	36,310		0.1 0.		0.2	27 129	30	18/		GE CE	143	27	125 38	189	E 66	GE .	14.		4 004
2022 4021 Wabash Valley Proset Asin, Inc. 2022 4021 Wabash Valley Proset Asin, Inc.		77 308 1,39	_	21545 01	1 10	0.2	24	9,530 5,15 24,383 199,98		293.41	0.0	19 0.	1	2.6	101 00	471	1521 3	3	40	490	107	20 124	1 524	9 21	43	42	23.634 13.121 13	3.09
2022 40211 Wabash Valley Power Assn. Inc.	N MISO 1,0 MO MISO 2	30 720 120	-	21,545 0.1 2,100 0.1	0.1	0.2	0.3	5.583 9.89		32,173	0.0	0.1 0.	2	0.3	40 80	60	190	4 2	36	77	40	80 65	190	4 36	20	7.	23.492 13.631 13	2.004
2002 4021 Walhash Valley Power Assn, No. 2002 4001 Walhash Valley Power Assn, No. 2002 4001 Walhash Valley Power Assn, No. 2002 4001 Columbia River Peoples USD Dat 2002 4001 Columbia River Peoples USD at 2002 4001 Walhash Associated Man Power Sys	OR PACW 80	30 1,074 1,10		3,013 0.3	0.2	0.2	0.0	13,500 12,80	9,412	35,790	0.3	0.2 0.3	0.0	0.0	561 228	160 0	953 16	60 20	212 0	570	521	228 163	0 950	160 200	112	571	16.200 12.000 11	1.000 0.000
2022 40434 Columbia River Peoples Ut Dist		50 1,363 1	1 0	1,620 0.	0.1	0.0 0	0.2	5,101 16,30	132 0	21,583	0.1	0.1 0.1	0.0	0.2	127 140	25 0	294	4 4	9 9	53	127	140 25	0 294	8 44	c	9 5	19.962 12.000 12	/.000 0.000
2022 400/305th Associated Mun Power Sys	UT WALC 1: TX ERCO 202,6	38 O		138 0.1 301.905 67.	0.0		0.0	1,151		1,151	0.0	0.0		0.0	27 202 11 27		30 20	400		4.011	32	0	32	200	+	400	0.014	_
2022 4437 Oncor Electric Delivery Company LLC 2022 5491 NSTAR Electric Company	MA ISNE 22,7	4 236,52		259,27 4.1	J 27.5		32.3	101.241 2.078.0	+ + -	2,179,94	44	27.5	_	32.0	101.634 88.974		190,010 20,44	49 27.41		65,890		1970	190,010	2049 27.410	-	65.00	3.420 12.290	
2022 5578 City of Moreno Valley - (CA)	CA CISO BI	58 1,42 1 32 32,17		2.285 0.	0.2	0.0 0	0.0	9,440 14,20	9 0	23,712	0.1	0.2 0.1	0.0	0.3	439 85	0 0	524	1	0 0	2	429	85 0	0 524	1 1	c	9 3		0.000
2022 SGTB City of Moreno Valley - (CA) 2022 SSB3 Enterpy Texas Inc. 2022 SSB4 Black Hills Colorado Electric, LLC		32 32,171			7.3		12.7	251,949 362,47		014.41	5.4	7.3		12.7	2,727 2,579		6,300 49	91 23		727	3,723	(\$7)	6,300	491 236		. 72	17.45 11.26	
2022 56144 Black Hills Colorado Electric, LLC	00 PS00 4,3	21 8,064		12,335 1.2	2 1.7		. 24	29,650 154,74	1	194,29	12	1.7	_	2.0	240 1,894		2,134 2,14	44 1,55		3,660	240	,854	2,134	2,143 1,558	+	3,69	9.180 19.310	
2022 56693Marin Clean Energy	CA CISO 30	20 4,753 11		5,202 0.	0.2	0.0	0 03	4,523 27,58	690 0	32,803	0.1	0.2	0.0	0.3	315 566	2 0	900 59	95 1.89	350 0	2,837	315	586 2	0 900	595 1,890	150	2.03	14.350 11.315 5.	5.909 0.000
2022 5669 Ameren Binois Company	L 6650 153,8	0 216,70		370,514 23.	27.1			1,497,23 2,914,9		4,402,15	23.3	27.1		50.3	26,919 29,123		56,041 18,14	4 15,66		23,810	25,910	1123		18,14 15,666		23,81	10.981 13.839	
2022 55602 Marin Clean Energy 2022 55602 Answern Binols Company 2022 5715 NYSSRDA 2022 5724 Cleangy Trust of Oregon 2022 5724 Officiency Marine Trust	NY NYIS 34,4 OR PGE 82.9	42 253,729 65,50 00 133,147 169,80	5	253,72 0.3	4.7	2.9	7.5	592,822 3,635,3	980,06	5,208,25 5,015,011	0.7	4.7 2.1		7.9	95,003 29,415	L070	142,579 20,30 61,150 14,25	10,91	2,340	23,550 55,120	95,003	1,415 0,075	142,570	20,303 10,910 2, 14,299 27,014 13,1	140	33,55	17.200 14.300 14 13.000 13.000 13	1.953
2022 5720 Energy Trust of Oregon	OR PGE 82.9			365,92 20	210	265 0					16.0	19.0 21	0.0	56.0								17,564			110	55,12		4.000 0.000
2022 5734 Vermont Energy Insertment Companies	VE ISNE 128,1 VT ISNE 22,6	22 44,82		172,949 9/ 91,461 6.1	6.6			1,706,434 595,24 406,004 763,90		2,301,68	7.1	7.0	_	10.1	26,326 10,964 10,182 11,273		37,299 6,97 21,455 7,83	73 3,14		10,110	26,226	221		6,973 3,146 7,824 11,000	-	10,11	13.319 13.279	
		64 62,01 56 191,435 160,60		613,853 327	29.4	20.0	02.		2,389,850	7,995,07	32.6	29.4 20.		02.7	25,892 15,632	34	21,455 7,82 53,366 14,64	41 9,54		34,670	25,890	633 11.844		14,641 9,541 10,	194	34,67	10.240 15.110 14	4.075
2022 5748 Liberty Utilities	CA CISO 11	1,107		1,296 0.0	0 2.1		2.1	1,166 16,72		17,903	0.0	2.1		2.1	100 61		100 20	60 121		392	100	Gt	100	263 129		290	9.760 14.100	
2022   27-97 Volum VII Immery   2022   27-98   Empty Utilizes   2022   2540 City of Winter Park - (FL)   2022   2540 City of Light Compact   2022   2540 City City City City   2022   2540 City City City City City City City City	FL FPC	4						83		83		-						2		2				2				0.000 10.000
2022 5812FCape Light Compact	MA GNE 7,50	7,050		14,559 0.1	6 0.0		12	110,170 59,37		169,540	0.6	0.8		1.5	29,876 6,057		35,933 13,03 9,203 4,35	3,14 59 5.46		13,172	29,876	(057	35,923	12,024 3,148 A 350 5 A33		13,17	14.670 8.420	
2022 Serveroc Sustainable Energy Utility		97 35,591		50,900 4.0	4.4		8.4	366,582 416,92 115,524 114,00		783,503	4.0	4.4	1	8.4	4,894 4,303 9,474 2,465		9,203 4,35	5,48		9,842	4,894	1,303	9,203	4,334 5,483	_	9,84		
2022 5885 Delaware Sustainable Energy Utility 2022 5885 Hawaii Energy Difficiency Program		00 6,340 50 50,421		95,190 7.5	7.0		4	115,524 114,23 466,653 702,61		1 150 341	7.5	7.0	1	14.7	9,471 2,469 7,273 11,821		11,940	2 500		9.494	7 223	824	11,949	442 5000	+	9.49	10.400 13.900	
2022 S9012 PUD No 1 of Jefferson County					3 69		11	13.850 9.91		23.799	0.0	0.0		0.1	431 102			1 300			421	107	530		1	1	16.140 11.520	_
2022 S9119 NJ Clean Energy Program 2022 S9119 NJ Clean Energy Program	NJ PJM 54,3	58 861 00 159,781		174,063 4.2	2 36.0		40.2	242,214 2,337,2		23,769	42	36.0		40.2	40,953 56,026		105,771 12,00	61 10,02		22,109	40,953	1,020	105,770	12,001 10,000		22,10	16,940 14,630	
2022 60868 Redwood Coast Energy Authority	CA CISO 1	15 114 1	0 0	125 0.0	0.0	0.0	0.0	172 1,33	9 0	1,512	0.0	0.0 0.1	90	0.0	34 100	0 0	256	5 400	9	400	109	435 0	0 544	258 1,090	0	1,35	11.160 11.760 0.	.000
2022 6089 Redwood Coast Energy Authority 2022 61856 San Jose Clean Energy NN - Usts is Not Heatings.	CA CISO 1	14	1	10 0.0	4 .		. 0.0	62		62	0.0			0.0	22		22 19	90		197	22		. 22	190		197	3.410	

# Attachment H

Utility Characteristics Reporting Year Energy Savings (WWh)	ncremental Annual Savings Peak Demand Savings (MW)	Incremental Life Cycle Savings Energy Savings (MWh) Peak Demand Savings (MW)	Reporting Year Incremental Cost Customer Incentives (Thousand Dollars) All Other Costs (Thou	Incremental Life ( sand Dollars) Customer Incentives (Thousand Dollars)	Cycle Costs Weighted Average Life All Other Costs (Thousand Dollars) (Years)
Obsta         ABBillip         USBy Name         State         BA Code         Residential         Commercial         Industrial         Transportation           2021         16C Alana District Copy Inc.         SC         SC         202         30         0         0           2021         16C Alana District Copy Inc.         AL         SCO         1,844         3         0         0	Residential Commercial Industrial Transportation Tot	tal         Residential         Commercial         Industrial         Transportation         Total         Residential         Commercial         Industrial         Transportation         T           0.0         2.06         34         0         0         2.00         0.0	al Residential Commercial Industrial Transportation Total Residential Commercial Industrial	Transportation Total Residential Commercial Industrial Transportation Total R	tesidential Commercial Industrial Transportation Total Residential Commercial Industrial Transportation 48 0 0 0 0 48 10.00 10.00
	1,965 2.3 5,709 5.4 0.1	23 23,35 23 23,55 23 54 24,65 54 0.1	2.3 781 781 454 5.4 9.3 0 93 1,000 209	456 781 781 781 1,279 33 5 6	456 12.00 1,000 200 1,070 14.70 5.00
2021 207 Alameda Municipal Power CA DISO 216 1,28 0 2021 20 City of Alexandria - (MN) MN MSO 198 675 2,380	1,460 0.6 0.1 0.4	08 2,734 16,12 0 11,805 0.6 0.2 0.0 0.0 0.6 0.2 0.0 0.1 0.4 0.2 0.2 0.0 0.1 0.4 0.2 0.2 0.0 0.1 0.4 0.2 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.8 248 268 0 559 231 278 0.6 38 24 85 146 19 12	0 509 218 288 0 514 0 75 38 24 85 148	21 276 6 50 13.00 12.00 0.00 10 10 40 70 16.10 13.10 13.10
2021 SSG City of Anahaim - (CA) CA CISC 2.570 3.664 1.560 2.021 60 City of Anahaim - (CA) CA CISC 2.570 3.664 1.560 2.021 60 City of Anahaim - (CA) CISC 2.570 3.664 1.560 2.021 6.0	7,776 0.7 0.9 0.4 2,501 0.3 0.4	2.0 20,451 41,532 16,642 88,254 0.7 0.9 0.4 0.7 1,462 16,655 18,233 0.3 0.4 0.7 1,462 16,655 18,233 0.3 0.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	2.0 1,74 69 29 2,73 324 29 0.7 13 10 10 28 10 29 10 20	65 1,74 66 29 2,73 563 13 17 13	24 28 9 65 11.57 11.43 10.79 116 28 143 12.00 14.00
10	0.00 0.0 0.0 0.0		0.3 1,800 0 0 0 1,800 1,210 0 0.0 12,541 01,331 22,041 0,412 0,000	0 0 1,211 1,801 0 0 0 0 1,000	1210 0 0 0 1210 9,000 0,
2021 B14 Cristopy Arkanssas LLC AR MISO 126.79 94.30 86,844 3 2021 924 Associated Electric Coop, Inc. MIO SWPP 3,573 3,824 281 0	7,94 251 13.9 12.2 7,874 0.5 0.9 0.1 0.0	0.3 43,464 0 0 0 443,465 0.3 0.5 0.0 0.6 0.3 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	51.5 17,30 11,31 5,30 34,00 6,034 4,30 4,3 16 2,00 20 50 0 2,33 07 3	2 15,500 17,30 11,310 5,30 34,000 0 0 0 0 2,000 200 50 0 2,33	0.834 4.301 4.302 15.505 18.000 14.703 12.500 87 3 6 0 90 18.000 13.000 13.000 0.000
2001 96 Atlantic City Electric Co NU PJM 7,865 865	900 0.1 0.3 0.0	3.7 18,500 12,600 31,20 3.6 0.1 0.0 0.4 2,640 44,100 1,920 48,750 0.1 0.3 0.0	5.7 9 254 260 2,00 2,00 0.4 46 150 10 210 138 14	4,236 9 25 260 1 153 40 150 10 211	2,99 2,000 4,200 2,400 14,200 10,0000
2021 1015 Austin Energy TX ERCO 27,365 79,055 26,351 15 2021 1055 City of Asses CA DSO 679 5,465 28	2,769 12.9 30.6 99.2 2,392 0.0 0.6 0.0	53.8 519.96 1,364.85 421,611 2,305.40 12.9 30.6 10.3 0.6 9.52 14.28 413 24,19 0.0 0.6 0.6	53.6 8,955 2,56 714 11,815 3,453 1,848 6 0.6 6.0 1,115 26 1,125 52 77	6 5,917 8,955 2,545 714 11,845 2 131 63 5,155 26 5,125	3,450 1,840 646 5,917 12,005 16,009 16,009 52 77 2 131 14,274 12,665 15,009
201 116 Baltimore Gas & Electric Co MD PJM 241,69 132,879 3 2021 125 Barron Electric Coop MI MISO 368 32 0 0	4,507 52.7 21.4 308 0.0 0.0 0.0 0.0	74.7 (80.94 1,575,0) 2,356,54 55.7 21.8 0.0 0.0 0.0 0.0 0.0	743 20.51 34.53 63.65 10.74 13.00 0.0 48 3 0 0 5 74 3	31,842 29,35 34,53 63,85 0 6 75 48 3 0 0 5	18,74* 13,00 31,84* 2,81* 11,85* 74 3 6 6 75 14,38* 14,66* 0,00 0,00
2017 1.59 (1899) 1807 (1999) 901 4950 386 27 0 0 2011 1977 (Barrier Steric Copy) 1807 (TRO) 15 3 0 0 2011 1976 (Barrier Steric Copy) 1807 (TRO) 1976 (1997) 1976 (	2,86 0.1 0.2	0.3 6,72 21,85 28,57 0.1 0.1	0.3 141 131 270 112 79	197 142 137 277	112 75 197 7.71 13.63
2001 1524 Bartist Secret Code, Inc. ON MISSO 2,115 35.6 8,162 2021 1579 PUD No 1 of Berton County MA BPAT 1,046 3,516 8,162 2021 1571 Bartisty Stacktic Code Inc. SC 202 264 855 3	275 02 0.4 1.2 1,09 0.4 0.3	2.0 21.9E 42.16 98.30 162.45 0.2 0.6 1.3 0.8 2.19 4.25 6.37 0.6 0.3	2.0 729 648 536 1,908 0.0 0.0 0.0 0.0 13	724 648 536 5,903 568 88 13 10	21,000 12,000 12,000 55 1 56 11,000 5,000
2011   161   Detailing Statistic Coop Inc   CC   SC   244   85	3,15 0.0 0.0 1.0 0.0 540 1.0	1.0 2.39 1.24 28,438 0 32.00 0.0 0.0 0.9 0.0 1.0 000 90 1.0	1.0 53 13 365 0 454 22 3 1.0 21 2 2 0	0 111 53 13 365 0 45 0 90 90	20 3 88 6 111 21.64 13.12 9.65 0.00 7.000
	58 0.0 0.0 0.0	0.0 1,77 0 0 0 1,77 0.0 0.0 0.0 0.0 0.0 260 460 764 0.0 0.0	0.0 28 0 0 0 28 0 0.0 100 20 120 7 12	19 10 21 12	10 0 0 0 10 15,000 7 12 19 14,400 13,100
200   200	510 0.0 0.0 0.1	0.3 1.3.0 1.2.3 4.1.30 0 0.4 0.5 0.0 0.1 0.0 1.3 2.60 51,70 55,40 0.1 1.8	0.3 1.3 10 30 0 50 0 5 1.3 E3 153 240 51 22	82 83 125 246	6 3 16 0 30 17.84 12.75 12.15 0.000 51 32 83 10.600 16.600
2001 250 City of Burlington Electric - (VT) VT (5NE 772 1,915 0 0	2,66 0.1 0.3 0.0 0.0	13 5071 51,00 0 0 56,00 0. 1.1 0.0 0.0 0.3 11,90 27,70 0 0 29,73 0.1 0.3	13 23 46 0 0 0 66 21 1,119 0.3 454 0.72 1,323 337 532	9 1,331 222 464 0 0 665 860 457 877 1,322	294 1,175 0 0 1,333 17/49 1162 0.00 0.00 337 532 866 15:500 14:50
2021 304 Outo Energy Progress - (NC) SC CPLE 36,02 13,76 - 2021 2021 2021 2021 2021 2021 2021 20	978 10.3 2.3 2.43 0.1 0.0	122 200,44 170,179 467,02 10.2 2.3 0.1 2.22 6.344 0.56 0.1 0.0	12.2 3.56 1,67 5,22 1,945 984 0.1 2 6 2 301 396	2,000 3,500 1,673 5,200 667 3 0 5,20	1,945 984 2,925 8,007 13,027 321 334 667 1,085 17,005
2001 300 Cedar Falls Utilities A MISO 5,42 305 587 201 201 201 201 201 201 201 201 201 201	1,92 0.4 0.1 0.0 244 0.0 0.0 0.0	08 1778 4.570 1.807 24.25 0.4 0.1 0.0 0.0 1.25 1.06 514 2.83 0.0 0.0 0.0	0.6 234 56 22 314 254 16 0.6 20 6 7 22 4 5	3 273 234 54 25 314 4 53 20 6 7 32	254 06 3 273 13.250 16.000 13.600 4 5 4 13 15.703 11.014 7.300
2001   336 Central Electric Coop Inc (CR)   OR   BPAT   915   82   511   0     2001   336 Central Florida Elec Coop, Inc.   FL   SEC   165   59	225 0.1 0.1 0.1 0.0 227 0.0 0.0	0.0 136,40 66,580 36,000 0 229,29 0.1 0.1 0.1 0.0 0.0 2,630 710 3,350 0.0 0.0	0.0 480 570 560 0 820 7 0 0.0 0 0 0 664 43	0 0 7 2,88 82 500 0 4,200 112 0 0 0	31 0 0 0 0 31 22.35 13.56 8.86 0.00 66 40 113 15.72 12.36 0.00 0.00
2021 334 Central Georgia El Member Corp GA SCCO 468 2021 334 Central Hudson Gas & Elec Corp NY NYIS 51,76 22,64	440 0.1 4,400 4.3 4.1	0.1 5.22 5.22 0.1 8.5 262,60 81,50 474,37 4.3 4.1	61 34 54 36 85 1,173 7,725 8,86 111 625	36 36 3 3 3 3 4 3 4 4 4 4 4 4 4 4 4 4 4	36 32 11.50 111 625 736 7.59 3.00
2001 3254 Central Ideal Poper Cooperative A 650 3,65 15,58 416 201 3254 Central Lincoln Reppire Ltd Dt DR BPAT 1,79 1,79 1,79 200 0	1,81 0.5 0.1 0.0	08 3549 24,04 3,134 0 63,47 0.5 0.1 0.0 0.0	04 B1 46 G 0 134 53 51	46 125 20 0 131 6 0 19 60 60 0 136	305 06 24 46 17.93 15.79 15.00 0.03 53 51 5 6 114 12.83 14.37 10.50 0.03
2021 228 Central Valley Size Coop, Inc: NM 5WPP 90 4 0 0 2021 2025 City of Centrals - (NW) INA IRPAT 38 152 2,844	60 0.0 0.0 0.0 0.0 1,044 0.0 0.0 0.2	0.0 115 16 0 0 127 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 1 1 0 0 2 100 0 0.3 11 32 21 0 25 0	0 0 100 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	108 6 6 6 108 1.23 4.00 0.00 0.00 6 6 6 6 6 15.00 13.22 22.70 0.00
2021 340 City of Chasks - (MV) MN MSO 41 427 2,015 2021 341 PUD No 1 of Chelan County NA CHPD 3,08 8,00 6,098	6.70 0.2 0.8 0.1 7,10 1.4 1.0 1.2	51 4.11 42.77 20.55 67.01 0.3 0.8 0.5 4.4 91.47 150.45 170,69 427,61 1.4 1.8 1.3	51 9 31 9 50 4 85 44 60 5,69 49 3,25 332 38	5 133 9 31 9 50 1 719 608 1,839 49 3,255	8 8: 40 123 10.00 10.00 10.00 235 381 1 711 29.64 19.55 29.47
2021 346 Cheyenne Light Fuel & Power WY WACM 477 4,25 2021 347 City of Chicapse - (MA) MA SNE 154 55 53 547	4,724 0.3 0.6 1,225 0.6 0.1 0.1	5.1 7,170 63,765 70,025 0.3 0.8 0.3 1,522 7,89 8,198 17,619 0.0 0.1 0.1	5.1 26 26 319 962 228 0.3 86 88 40 25 67 45	40 20 20 20 21 0 128 88 88 40 21	955 228 404 15:00 15:00 67 43 20 125 10:00 15:00 15:00
2021   204 LineGraymanne Sine Coop, Inc   FL   8000   40   0   0   0	40 40. 0.0 0.0 0.0 25 0.0 0.0	48. 667 6 6 6 602 46 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	45 14 6 6 00 43 6 6	1 4 4 4	9 6 6 6 1500 0.00 0.00 0.00 0 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Columb   C	0,02 62 24 12 0.0 1,07 04 0.0 0.0 0.0	162 (63,56) 63,66 64,62 32,61 62 22 13 63 64 33,65 63 63 64 62 3 30,65 62 24 73 63	102 3,02 1,01 992 0 5,00 1,70 130 0.4 1,773 0 0 0 1,772 199 4	3 0 1,69 1,00 1,81 00 0 5,00 0 170 1,77 0 0 0 0 1,97	1,700 139 2 1 1200 12000 0.000 1,700 130 2 1 1,800 40,00 12,000 10,000 0.000 170 0 0 0 170 0.000 0.000 0.000
2021 382 Cloverland Stachic Co-op MI MSD 1,925 5,44 0 0 0 2021 384 Coast Stachic Power Assn MS 50CD 5,877 60 0	7,38 0.3 0.7 0.0 0.0 5,500 1.0 0.0 0.0 0.0	0.0 24,56 50,07 0 0 74,55 10 0.0 0.4 0.0	220 170 0 0 360 333 370 1.0 353 90 0 0 360 44 4	0 0 758 228 175 0 0 5 598 0 0 46 355 0 0 0 4 500	333 378 0 0 700 12.59 9.20 0.00 0.00 45 0 0 0 45 7.00 15.00 0.00
2021 3915 Coldwater Seard of Public USI MI MSD 66 1,15 81 0 2021 3945 City of College Station - (TX) TX ERCO 858 157	(30 00 03 00 0.0 (,01 03 0.0	0.3 460 11.53 810 0 12.80 0.0 0.3 0.0 0.0 0.7 11.12 2.04 12.16 0.7 0.6	0.3 19 119 5 0 145 14 65 0.7 272 4 277 54 28	4 0 900 19 115 5 0 140 120 277 4 277	14 60 4 0 100 7.00 10.00 10.00 0.000 94 26 120 120 1200 1200 1200 1200 1200 120
2021 2985 City of Colorado Springs - (CO) CO PSCO 964 8,133 0 0 0 2021 400 City of Colora (CA) CA CISO 580 3,492 522	209 0.7 1.3 0.0 0.0 1,599 0.4 0.5 0.1	20 12,12 82,99 0 0 95,11 0.7 1.3 0.0 0.0 1.0 6,190 15,39 7,830 29,42 0.4 0.5 0.1	2.6 36 1,45 0 0 1,49 207 65 1.6 77 97 38 215 76 24	6 0 202 36 1,450 0 0 1,492 5 120 77 67 38 2-1	207 65 6 0 222 1257 9221 0.00 0.000 70 24 45 120 1121 17.20 15.000
10	900 0.0 0.0 0.0 2,465 0.4 0.7	0.1 2,810 227 3,167 7,36 0.0 0.0 0.0 11 11,00 43,73 55,22 0.4 0.7	1.1 22 7 95 228 1.1 327 173 457 952 932	124 7 52 226 270 323 175 469	13.85 13.00 9.00 105 920 21.00 15.00
201   411 Connectional Editor Co. L. PAII 1,006.27 1,119.28   22   201   417 Connectional Editor Co. L. PAII 1,006.27 1,119.28   22   201   417 Connectional Light & Power Co. CT   DAS   32,85 137,66 41,722   2   201   42   Connectional Editor Co-NY INT   NY INT   564,42 176,84   2   2   2   2   2   2   2   2   2	7,131 196.0 175.0 9,660 111.3 22.4 6.7	40.1 558,30 1,558,64 465,57 2,582,52 11.3 22.4 6.7	271 A272 146,011 220,229 27,280 54,760 40.2 67,622 43,823 13,000 524,55 14,260 4,664 4,7 20,427 58,649 27,633 13,000 11,700	20,750 74,751 160,019 220,23 22,750 67,620 43,830 13,000 124,430 34,920 27,530 22,131 13,000	37,355 54,765 54
10   10   10   10   10   10   10   10	2.345 14.8 55.5 19.5 5.435 0.0 0.1	988 1,014.20 4,690.60 1,644.50 7,399.00 14.8 55.5 19.5 0.2 5,520 17,672 23,200 0.0 0.1	93 23,36 42,34 15,29 81,95 21,65 22,36 7,6 03 132 46 57	51,92 23,36 43,34 15,29 81,95 13 66 57	21,654 22,393 7,871 51,922 6,333 12,403 12,4
2021 436 Com Bet Power Coop A SWPP 1,56 1,59 459 2021 440 Cotton Electric Coop, Inc DK SWPP 213	1.19 0.2 0.5 0.1 213 0.6	0.8 21,37 14,69 5,971 41,95 0.2 0.5 0.1 0.0 2,93 2,93 0.0	0.8 185 105 16 20 46 27 0.0 64 64 16 .	4 78 185 105 16 200 16 64 64	46 27 4 78 18.702 9.16 13.01 16 14.95
2021 443 Coueta-Fayette El Member Corp GA SOCO 1,60 26 2021 444 PUD No 1 of Cowitz County NA SPAT SSS 1,815 25,40 2	1,516 1.8 0.2 7,376 0.1 0.2 2.9	1.9 14,925 225 15,16 1.8 0.2 3.3 18,34 13,56 255,160 287,00 0.1 0.3 2.9	1.9 55 5 60 246 15 2.3 533 265 2,51 4,110 459 167 1	9 700 537 200 3,317 4,150	266 15 260 10,00
2021 468 City of Crysthoga Falls - (CH) CH PJM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	80 0.1 0.3 0.1	00 0 5 0 0 5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 191 50 20 10 100	0 0 0 0 0 0 0 0000 15.00 0.00 175 5 3 187 14.00 14.00 14.00
2021 491 Usesco Fourier Lister: No. 2009 600 211 1,679 0 2021 502 Delmany Pourier DE PJM 55,680 0 0 0 2021 5021 Delmany Pourier MD 2 MD 20,000 0 0 0	2554 6.1 0.0 1.0 0.0 5,664 6.0 0.0 0.0 0.0	50 26,10 0 0 0 26,50 55 0.0 0.0 0.0 11 11 11 11 11 11 11 11 11 11 11 11 11	5.5 455 0 0 0 455 1,686 0	0 0 179 190 19 50 0 250 0 0 0 1,686 453 0 0 0 1250	24 3 22 0 175 17.35 11.00 12.14 0.03 1.80 0 0 0 0 1.00 0.00 0.00 0.00 4.40 4.00 0 0 0 0.00 4.00 12.20 0.00
2021   505 Chy of Denton - (TX)	35 0.3 72 22.0 0.0	03 5.28 5.28 0.3 224 2,97 2 2,97 113 0.0	0.3 50 50 46 11.3 224 6 224 22 1,636	40 98 98 98 1,655 224 9 224	46 46 15.000 23 1,600 1,655 7,800 13.000
2021 5102 DTE Sechic Company MI MISO 288,500 574,600 8 2021 517 Dies Electric Power Assn MS MISO 2,798	1,12 50.3 118.4 2,79 0.6	1663 1,696,91 7,647,319 9,442,23 46.4 107.0 0.6 6,30 0.6	1528 82,462 98,549 0.6 5 5 338	185,138	82,460 98,640 181,13 6,420 12,330 330 2,200
2011   5304 (Data Elegánic Cosp   4.1   50CC0   34	24 2,629 84.0 33.0	264 264 117,0 1,485,759 2,602,059 4,087,84 84,3 33,2	6 6 6 117.5 12,65 21,36 33,60 18,91 10,36	20,172 12,652 21,304 33,669	18,919 10,300 13,900 13
2011 5419 Dake Energy Carolinas, LLC SC DLR 124,655 67,379 9 2021 5417 Dunn County Electric Coop MI MISO 488 190 0 0	1,43 50.0 12.0 675 0.1 0.0 0.0 0.0	421 533.00 634.07 1,488.69 30.1 11.9 0.1 7.28 2.26 0 0 9.49 0.1 0.0 0.0 0.0	423 4,541 7,65 12,20 4,867 3,667 01 41 4 0 0 45 5 0	8.55 4.54 7.85 12.20 0 0 6 4 4 4 0 0 45	4,80° 3,60° 8,55° 4,90° 13,90° 5° 0° 0° 0° 0° 4° 14,88° 11,72° 0,00° 0,00°
2021 546 Codyadra Cypr Co PA P366 12,415 20,221 17,005 1 2021 5555 East River Siec Per Coop, Inc. SD SWPP 0 0 0 0 0 2021 5564 Cast Kenturka Draws Cross, Inc. SV D.M. 5561 0 0	0 33.0 9.0 34.1 0.0	764 0 0 0 0 0 0 33.0 9.0 344 0.0	76.0 2 0 0 2 530 927 12 22 0 0 0 2 530 927	0 666 2 1 0 0 0 79	4/80 3,600 2,140 10,000 5.140 9330 9355 534 6 6 6 110 46.000
Company   Comp	5,60 2.9 1.3 0.0 0.0 5,20 3.2 3.8 0.0 0.0	41 167,00 133,00 0 0 200,50 2.5 1.7 0.0 0.0 7.6 61,10 223,54 0 0 284,64 3.2 3.8 0.0 0.0	4.1 1,85 979 0 0 2,02 441 660 7,6 1,77 2,00 0 0 3,77 47 59	0 0 1,10 1,45 971 0 0 2,42 0 0 10 107 1,77 2,00 0 0 3,77	441 660 0 0 1,101 18,000 17,00 0,000 0,000 47 56 0 0 107 8,000 13,000 0,000 0,000
2021 577 City of Elix Rover UN MISO 479 87 1,506 2021 578 Citizon Rural Public Per Diet NE SWPP 107 152 202 0	2.06 54 0.0 0.0 0.0 0.0	3,92 1,31 22,50 27,66 0.0 1,65 1,65 2,300 0 5,64 0.0 0.0 0.0 0.0	23 5 96 577 561 26 0.0 34 6 22 C 65 4 4	2 26 72 5 9 17 6 6 20 34 6 22 0 63	601 26 62 265 0.125 15.00 15.00 4 4 15 0 26 15.50 11.00 7.90 0.00
	1,565 0.1 0.1 122 0.6 0.0 0.0	0.0 17.2	0.0 226 46 256 0 0 0.0 55 0 0 55 15 0	0 220 46 256 0 15 50 0 0 50	0 0 0 1586 1200 0.00 0.00 15 0 0 5 1200 1200 1200
201 580 Emple Datric Dactic Co MO SVPP 400 2.80 1,20 201 580 Emple Dactic Ason, Inc CO 8VACM 315 93	4419 0.1 0.4 0.2 1,229 0.1 0.2	08 5.31 36.66 15,040 57,44 0.1 0.4 0.3 0.3 5.454 10,00 16,35 0.3 0.3	0.8 162 230 56 514 16 70 0.4 216 24 24 2 0	3 127 182 230 56 514 2 218 24 246	10 70 33 127 13.00 13.00 13.00 3 6 3 14.73 12.01
201 602 Childrennes Electric Coox Inc (Mil) NNI SWPP 55	50 1.0 1.7 0.4 0.0 51 0.2	31 44,31 194,25 24,508 0 173,07 1.0 1.7 0.4 0.0 0.0 54 54 60 60 60 60 60 60 60 60 60 60 60 60 60	31 156 83 64 0 2,44 0 0 0 3	2 0 302 1,54 834 64 0 2,44	6 0 325 0 325 17.04 16.21 15.00 0.00
2001 6028 Fayetaville Public Works Commission NC CPLE 49 2001 6374 Fitchburg Gas & Elec Light Co MA ISNE 1,122 3,015 898	5.00 0.4 0.5 0.5	1.1 9,512 39,459 11,759 60,749 0.4 0.5 0.3	1.1 36 1,26 37 2,00 21 66 1	1,06 368 1,26 377 2,00	210 655 195 1,054 13.98 11.778 12.039
Col.	1,04 7,370 9.3 9.4	92,92 36,41 6,148 125,42 16,7	1,22 50 2 1,75 1,75 1,24 1,45 8,29	1,220 500 27 1,750 26,700	20.000 12.000 12.000
2011   64:5  Dicks Energy Florids, LLC   FL   FPC   22,65   20,03       2021   64:5  Enistin Spicit Littlies CO   FL   JEA   28   1   5   0     2021   660   City of Fort Collins - (CO)   CO   PSCO   12,32   4,154   4,154   6	420 120 160 28 03 03 03 03	281 341,00 202,02 574,34 12.0 16.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26 132 107 4,42 5,53 2,00 03 73 58 0 0 12 37 19	7,65 1,33 (,65 4,45 4,45 4,45 4,45 4,45 4,45 4,45 4	5.53 2.06 7,60 14.40 11.30 33 16 6 6 5 53 12.60 16.00 6.00 0.00
201 656 City of Fort Colins - (CO) CO PSCO 12:30 4:164 4:164 0 2021 656 Fort Pierce Utilizer Authority FL PMPP 125	0,095 2.7 0.4 0.8 0.0 12 0.0	39 55.10 56.16 56.16 0 167.51 27 0.4 0.6 0.0 0.6 2,00 0.6 2.00 0.6	3.9 1,03 1,04 1,010 0 3,07 609 249 2 0.0 22 7	9 6 1,52 1,03 1,04 1,010 0 3,07 7 2 2	699 249 249 0 1,152 4,550 6,750 6,750 0,000 7 7 55,045
261   464 Feet Peet Anthon Anthony   1	600 0.3 0.1 0.0 0.0 6201 0.9 0.1	0.3 56,16 28,86 2,469 0 87,54 0.3 0.1 0.0 0.0 1.0 36,69 1.93 38,02 1.0 0.1	0.3 278 73 8 0 359 264 50	0 0 314 270 73 0 354	264 50 0 0 314 14.73 14.515 12.65 0.007 96 13 199 2.730 11.746
2001 500 Gainesville Regional Utilities FL GVL 500 2001 700 Buckeye Power, Inc OH P.M 1,577 8,389	50 0.0 9.544 5.0 4.0	0.0 7,54 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 265 265 265 4 0 0 0	265 265 265 1,02	6 6 6 15.00 7.00
2021 714 Georgia Power Co GA SOCO 102,38 201,33 3 2021 726 Glades Electric Coop, Inc FL SDC 111 10 0 0	3,72 14.5 36.7 129 0.0 0.0 0.0 0.0	513 725,95 3,82,63 4,608,59 40.8 64.7 0.0 1,465 120 0 0 1,556 0.0 0.0 0.0 0.0	905 7,107 11,188 18,295 6,305 10,788 0.6 6 6 6 6 6 6 6 6 6	0 0 0 0 0 0 0 0 0 0	10,560 18,368
2001   7.00 C ( C ( C ( C ( C ( C ( C ( C ( C ( C	108 0.0	0.0 1.26	0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 02 345 1,170 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	40 40 500 730 444 40 500 730 444 40 500 730 730 730 730 730 730 730 730 730 7
2021 754 PUD No 1 of Grays Nation County MA SPAT 1,00 430 972 0 2021 755 Grand Valley Power CO PSCO 16	2.792 0.3 0.0 0.1 0.0 10 0.0	0.3 27,03 4,76 9,738 42,329 0.2 0.0 0.1 0.0 107 0.0	0.3 E10 72 75 975 41 7 0.0 0 0 3	8 55 849 72 79 979	41 7 8 55 2000 12.00 10.00 3 3 10.00
2021 7571 Great River Energy WN M5O 36.82 38.74 2021 763 City of Greatville - (TX) TX ERCO 6	5.57 16.8 6.0 6 0.0	228 448,54 609,03 1,058,37 10.8 6.0 0.0 54 5 0.0	224 5.67 2.03 7.51 8.30 2.40 0.6 2 9 9	10.82 5.47 2.03 7,519 6 2 2	8,360 2,468 10,82 12,18 15,74 0 0 12,000
2021 7716 Groton Dept of Usitine - (CT) CT (SME 48 745 0 C) 2021 7716 Groton Dept of Usitine - (CT) CT (SME 48 745 0 C) 2021 7716 Groton Electric Coop, Inc. FL SOCO 99	790 0.0 0.1 0.0 0.0 98 0.9	0.1 6-10 9,692 0 0 10,200 0.0 0.1 0.0 0.0 0.9 968 0.9	0.1 157 728 0 0 886 15 229 0.9 30 30 2	0 0 264 157 728 0 0 885 3 30 30	15 229 0 0 244 12.80 13.00 0.00 0.00 2 2 10.00
Column   C	66 0.1 0.0	0.1 11,04 150 12,00 0.1 0.0 2,00 2,00 2,00 2,0	0.1 32 1 33 0 0 0 23	3,000	0 0 1 14.44 10.00
2021 846 Handerson City Utility Comm NY MISO 0 322 3 2021 8500 High Plains Power Inc NY MACM 3 398 0 0	322 00 0.0 400 0.0 0.1 0.0 0.0	00 0 28.64 28.64 00 01 00 00 00 00 00 00 00 00 00 00 00	0.1 0 23 22 0 34 0.1 1 53 0 0 54	34 0 714 714 0 0 0 1 13 0 0 14	0 155 155 1000 0 0 0 0 0 15.27 15.67 0.00 0.00
2021 8574 Highline Electric Assn CO INACM 100 879 279 2021 8576 Highline Electric Assn NE INACM 22 110 12	148 00 02 02 148 00 02 02	0.5 1,00 12,46 6,400 11,48 0.0 0.3 0.3 0.6 356 1,310 236 1,023 0.6 0.6 0.6	0.4 74 15 25 111 0.5 50 1 0 22	74 15 22 113 10 1 0 22	15.47 12.00 18.70 15.78 12.00 26.00
2021 8023 HLCO Electric Cooperative, inc. TX ERCO 2,855 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,85 0.6 31 0.0 0.0 0.0 0.0	04 2,85 04 00 00 1,47 02 04 00 00	04 25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36 39 39 39 39 39 39 39 39 39 39 39 39 39	1 0 0 1 20.04 12.00 0.00 0.00
2011   STZ Not Charles August Company   1997   1,000   4,044   54   5   5   5   5   5   5   5   5	0.1 U.5 0.0 0.0 0.14 0.5 1.2 2.2 0.0	43 44,59 62,77 115,700 0 29,00 0,9 1,1 2,2 0,0	43 220 334 922 6 1,468 220 154 1	22 296 6 10 0 420 0 520 220 300 922 6 1,460	20 15 15 15 0 52 10.00 11.70 4.21 0.000 220 15 15 15 0 52 10.00 12.00 12.00 0.000
Column   C	290 0.6 0.0 0.6 0.0 5,90 22.4 24.0	0.0 3,677 3,756 0 0 7,427 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 111 0 0 0 111 366 46 57.2 12,13 19,81 22,94 5,003 4,44	0 0 400 111 0 0 0 111 2,460 12,134 10,811 00.04	366 46 0 0 408 25.00 25.00 25.00 25.00 5.00 5.00 4.411 9.463 16.00 11.815
2021 918F City of Idaho Falls - (ID) D PACE 148 5.33 915 0 2021 919 (daho Power Co D PCO 31.15 45.82 60.33 0 5	2.30 0.0 0.2 0.1 0.0 7.30 3.6 5.2 6.9 0.0	0.3 2.000 17.34 13.25 6 32.000 0.6 0.3 0.1 0.6 65.7 155.500 549.94 844.730 0 1,500.27 3.4 5.3 6.0 0.6	0.3 115 277 58 0 445	0 0 115 27 55 0 445 0 14,574 2,866 63,43 115,91 0 182,21	0 0 2384 1300 2450 0.00 31,00 50,25 56,75 0 138,60 5.00 12.00 14.00 0.00
2021 979 (datho Power Co OR PCO 692 653 5,335 6 2021 9216 Imperial Irrigation District CA ID 3,769 4,93	5.600 0.1 0.1 0.6 0.0 1,702 2.6 1.1	0.8 3,460 7,91 74,685 0 86,06 0: 0:1 0.6 0.0 4.0 58,302 80,46 138,66 2.9 1.1	0.6 25 55 746 6 826 162 05 3 4.6 1,002 215 1,279 481 1,018	9 548 129 665 10,44 6 11,23 1,468 1,005 315 1,375	812 1,138 4,009 0 6,019 5,000 12,000 14,000 0,000 461 1,018 : 1,486 17,088 16,600
17   17   17   18   18   18   18   18	53 0.5 128 0.0 0.0	0.5 3,00 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	0.2 95 96 19 46 0.0 2 54 96	46 92 50 150 3 14 5	46 46 1576 500 500
2021 9275 Indianapolis Power & Light Co N MSD 3,003 5,444 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4,555 8.8 15.6 0.8	243 203,475 1,294,873 15,195 15,00,00 2,0 1,4 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0	24.3 2.70 8.90 11.70 10.50 5.60 0.8 70 574 640 0	56,67 2,765 8,965 9 6 2,998 9 11,766 9 70 70 70 70 70 70 70 70 70 70 70 70 70	10,60 5,80 10,67 6,43 13,30 0,00 10,50 10,
2021 9224 Indiana Michigan Power Co N PJM 19,00 46,00 0 0 0 0 2021 9224 Indiana Michigan Power Co MI PJM 19,46 11,43 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.12 4.5 6.3 0.0 0.0 1,89 1.3 2.4 0.0 0.0	108 220.34 556.960 0 6 777.34 45 6.3 0.0 0.0 3.2 62.15 100.13 0 6 171.28 1.2 2.6 0.0 0.0	0.0 869 2,68 0 0 0 103 2,90 2,11 3.2 640 730 0 0 1,37 1,068 502	0 0 4,211 860 2,56 0 0 3,031 0 0 1,00 640 730 0 0 1,37	2,100 2,111 0 0 4,213 11,500 12,900 0,000 0,000 1,600 900 0 0 1,600 5,900 9,500 0,000 0,000
2021 941 Interested Power and Light Co A MISO 42.19 28.77 28.05 1 2021 957 Jackson County Rural E M C - (N) N MISO 480 19	6.94 5.2 6.3 6.0 406 1.6 0.0	17.5 261,333 351,27 251,114 803,72 53 63 6.0 1.6 4,801 188 4,90 1.6 0.6	17.5 2,53 3,84 4,57 10,96 6,92 1,72 1,6 1,6 223 17 25 74 5	90,966 2,535 3,846 4,575 10,955 79 220 17 250	6,922 1,728 1,500 10,100 6,200 12,200 9,63 74 5 79 10,000 10,000
2021 900 Lackson Electric Member Corp (GA) GA 50CO 4,05 808 171 2021 901 JEA 17,54 7,55 1	5,05 13 0.1 0.0 5,05 13 1.0	1.1 20,000 4,200 912 25,000 1.2 0.3 0.0 2.3 08,34 91,02 179,350 1.3 0.6	1.4 1,78 0 5,78 0 0 1.5 913 318 1,22 2,376 471	9 0 1,785 1 0 1,785 2,655 913 316 1,230	0 4 6 500 500 500 500 2,379 471 2,851 5,031 12,125
Compared to the Compared to	247	0.0 MAPE 9.54 0.0 21,62 5.30 25,60	57 6	2 5	673 47 720 8.000 12.000
2001 972 January Central Power & Lt Co. NJ. Publ. 14.22 401 101 10 100 100 100 100 100 100 100	500 15 0.1 0.0 0.0	1.6 162.55 6.22 1.814 0 170.60 1.5 0.1 0.6 0.6	1.6 4.571 60 11 6 4.60 2.400 1.213 3	0 5,000 4,571 60 11 6 4,665	2.480 1.21 222 0 5.002 11.175 14.64 15.000 0.000
2001 977 Johnson County Russi E M C N MSD 199 210 281 291 2021 977 Johnson County Russi E M C N MSD 60 2021 2021 2021 9999 Cby of Kanasa Cbr - MSD MSD 60 2021 2021 2021 2021 2021 2021 2021 2	45 0.1 0.3 224 0.4 0.0 0.0	0.0 1,080 0.71 0 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.2 47 20 77 10 10 0.5 164 12 0 0 0 0	2 2 4 9 0 3 4 2 2 7 9 0 14 12 2 7	9 9 9 9 9 14 5 00 5 00 5 00 0 0 0 0 0 0 0 0 0 0 0 0
2021 1000 Evergy Metro KS SAPP 65 2021 1000 Evergy Metro MO SAPP 48.55 24.57	65 0.6 3,12 10.1 4.9	0.0 641 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 45 49 77 16 15.7 2,00 2,50 4.75 2,10 2.771	96 15 15 15 15 15 15 15 15 15 15 15 15 15	77 18 05 10.00 10.00 0.00 0.00 0.00 0.00 0.00
2001   1008 K C Electric Association   CO   RM-CM   12   542	55 0.0 0.1 2,450 0.7 0.0 0.0 0.0	0.1 180 6.50 0.0 6.82 0.0 0.1 1.7 22,86 17,00 923 40,83 0.6 0.7 0.0	0.1 3 22 24 32 34 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	2 29 29 2 0 86 295 246 13 0 500	47 46 2 6 86 1828 1447 0.00
10	6,50 0.0 0.0 0.0 0.0 0.0	87 34,46 807,22 . 231,60 0.0 87 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.5 77 28 C C 115 O C	0 0 0 77 20 0 0 112	3 1 4 2000 2000 200 10 0 0 340 14.13 12.04 0.00 0.00
2011 1036P-UD No 1 of Mickels County MA BPAT MD 228 1,598 2021 1045F Kooleani Electric Cooperative D AVA 2,45 20 178 0	2.83 0.1 0.0 0.0 0.0	2,761 2,701 18,122 22,61 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	02 06 21 100 270 0 02 06 20 27 0 74 53 4	6 21 16 27 4 0 6 6 0 20 27 0 74	53 4 4 0 60 18:00 11:00 12:00 0.00
2011   1045   Machine Electr Corporation   D.   MAX.   2,485   201   375   105   1	0.00 0.0 0.1 200 0.0 0.0 0.1	13 20.68 2.74 23.43 2.4 1.0 0.2 4.58 19.30 9.84 23.73 0.0 0.3 0.1 0.0 3.08 1.68 0 0 4.78 0.0 0.0 0.0 0.0	0.0 50 100 44 200 0.0 110 20 0 4 44 0	30 44 22 53 13 44 22 0 0 0 11 30 4	1330 1330 4255 1350 2000
2021   1036 Aure Stanic Corp Inc   050   074.7   177   151   6   6   1021   1	021 05 3.0 0.6 0.0 1,25 0.0 0.0	41 34.69 196,76 22,425 C 254,00 C5 4.0 C8 C0 00 25,04 C 25,04 C 25,05 C 25,00 C 25,00 C 25,00 C 25,04	5.3 511 1,722 170 6 2,402 267 1,104 1 0.6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 0 1,508 511 1,722 175 0 2,402 610 0 0	287 1,104 109 0 1,505 10,603 13,000 13,000 0,000 244 366 650 8,000 7,000
2021 1086 City of Leasburg - (PL) PL FPC 26 2021 1087 Lahi City Corporation UT PACE 60	26 0.0	0.0 29 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	00 10 11	6 4 4	0 15.00 0 13.10

8   50   10   10   10   10   10   10   10	Utility Characteristics	Energy Savings (MWh)	Reporting Year Incremental Annual Savings	Incremental Life Cycle Savings  Forms Savinos (MMN)  Dask Demand Savinos (MMN)	Reporting Year Incremental Cost Customer Incretions (Thousand Dallers) All Other Costs (Thousand	Incremental Life Cycle Costs  Continues (Doubles)  All Other Costs  All Other Costs	Weighted Average Life (Thousand Dollars) (Years)
	Data Ukility Usliky Name Year Number 2021 10944 PUD No 1 of Lewis County	State BA Code Residential Commercial Industrial Transport	tation Total Residential Commercial Industrial Transportation Total Resident 7,300 0.3 2.3 0.0 2.5 16	tal Commercial Industrial Transportation Total Residential Commercial Industrial Transportation  Total Residential Commercial Industrial Trans	ration Total Residential Commercial industrial Transportation Total Residential Commercial Industrial Transportation Total Commercial Industrial Transportation Total Commercial Industrial Transportation Total Commercial Industrial Transportation Total Commercial Industrial Transport	nd Dollars) Customer Incentive (Thousand Dollars) Al Other Cests Framportation Total Residential Commercial Industrial Transportation Total Residential Commercial Indu  44 587 273 33 565 277 133	ustrial Transportation Total Residential Commercial Industrial Transportation
	2021 1096 City of Lexington - (NE) 2021 11016 Lincoln Electric System 2021 1113 City of Lodi - (CA)	NE SMPP 222 46 0 NE SMPP 800 860 5,965 CA CSCO 368 507 55	0 200 0.0 0.0 0.0 0.0 0.0 0.1 3 7,500 0.8 0.3 1.4 2.2 9 802 0.1 0.1 0.0 0.0 0.2	0.465 606 0 0 0 4.065 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 0.1 75 4 0 0 82 20 2 0 22 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 22 75 4 0 0 80 20 2 119 223 22 8 23 77 24	0 0 12:00 12:00 12:00 0 111 14:402 11:00 15:00
	2021 1117 Long Island Power Authority	UT PACE 1 475 0 NY NYS 278,00 93,225	470 0.0 0.1 0.0 0.1 20,365 26.0 19.0 54.4 3,001	27 4.09 0 4.72 0.0 0.1 0.0 1,706 1,491,700 5.173,529 26.0 18.0 1855 0.044 10 0.0 10 10		16 2 72 0 74 1 75 2 1 75 2 1 74 1 75 2 1 75	9 18.49 92.00 0.00 31.83 13.03 92.00 50 500 14.00
	2021 1120 Los Angeles Department of Water & Pow 2021 1124 Enterpy Louisiana LLC	or CA LDWP 18,500 94,500 CA MSO 27,000 28,144	113,950 6.8 13.1 19.5 200 55,000 9.4 5.0 14.4 447	5.57 1,003,29 5.39,00 6.8 531 7.29 406,70 854,07 9.4 5.6	193 31,70 27,50 55,33 10,90 22,475 144 2,93 2,96 5,13 2,28 5,13 1,97	34,45 31,76 27,56 59,33 10,66 22,47 4,100 2,931 2,192 5,133 2,201 1,07	34,65 17,98 11,673 4,105 16,19 15,44
	2021 1125 Loup River Public Power Diet 2021 1125 Loup River Public Power Diet 2021 1125 Dity of Loveland - (CO)	NY Colo 3222 41355 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,52 0.0 2.7 2.5 2.6 1.5 2.6 0.1 0.0 0.1 0.1 0.0 0.1 10 0.	938 837,504 80 7.7 960 900 84 17,114 0.2 0.1 0.0 3,961 64,86 72,604 0.1 0.0	0.3 178 41 1 218 42 45 0 0.7 50 900 5,43 255 255	00 170 44 1 20 47 45 560 560 560 900 1,43 252 255	0 90 11.55 11.14 8.92 550 5.98 13.85
	2021 1129 Lumbes Riser Elec Member Corp 2021 11475 City of Madeon - (SD) 2021 1150 Magic Valley Electric Coop Inc	NC OPLE 522 59 50 MSO 21 7x MRO 45	5,20 0.1 0.1 1	120 2,124 11,32 1,420 1,420 3,5 160 160	30 7 2 8	5 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 3.10 21.00 8 330 10.00
	2021 1157 Manitowoc Public Utilities 2021 11640 City of Manietta - (GA) 2021 1170 City of Manualta - (MI)	WI MISO 50 0 0 GA 5000 73 MI MISO 1488 289	0 55 0.1 0.0 0.0 0.0 0.0 0.1 77 0.0	50 0 0 0 50 0.1 0.0 0.0 775 0.0 777 0.0	0.0 0.1 19 0 0 19 0 0 0	0 0 10 0 0 0 11 0 0	0 0 0 1.000 10.20 500 12.20 9 0.000
	2021 11731 City of Manshall - (MN) 2021 11804 Mansachusetts Electric Co	WN MISO 223 474 558 WA SNE 261,865 158,235 50,288	1,274 0.2 0.2 0.4 0.7 2 553,26 40.2 20.5 14.3 85.0 861	2,455 0,604 7,400 10,002 0.2 0.2 0.4 1,120 1,801,022 885,100 3,627,349 40.2 30.5 14.2	0.7 55 66 20 133 31 22 7 850 129,83 78,91 13,00 222,00 38,314 21,40 3,791	61 53 60 38 132 31 22 63,001 129,031 78,91 13,000 222,66 36,514 21,463	7 61 19.53 19.34 13.12 3.78 63.60 3.20 9.49 9.49
	2021 1206 McKenzie Electric Coop Inc 2021 1216 City of McMinnelle - (CR)	NY NYS 63 108 259 ND SMPP OR 8PAT 1,502 1,803 63	0 2,48 0.3 0.4 0.0 0.7 29	467 1,58 2,872 4,922 0.0 3,642 22,908 633 0 52,582 0.3 0.4 0.0	0.0 3 22 13 49 10 41 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 4 22 19 30 23 50 65 564 220 12 802 30 34	1 65 19.195 12.565 10.000 0.0
	2021 1219 Montana-Dakota Utilities Co 2021 12215 Merced Irrigation District 2021 1234 MidAmerican Energy Co	MT SMPP S 1,288 CA CISO 9 224 A MISO 38,25 66,16 10,728	1,28 0.0 0.2 0.3 232 115,15 12,3 21,5 1.7 35.5 145	52 12,809 12,801 0.0 0.3 9 220 221 5,45 1,355,34 152,186 1,652,999 9.8 24.0 1.7	0.2 0 118 118 5 19 2 2 1 255 4.00 0,02 2,422 15,22 1,519 3,257 1,468	6 118 119 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10.000 10.000 1.000 1.000 1,469 6,660 3.000 22.480 14.180
	2021 1234 MidAmerican Energy Co 2021 1237 Midwest Energy Cooperative 2021 1237 Midwest Energy Cooperative	E MISO 8,03 3,315 1,346 MI PJM 5,573 1,003	12,05 2.6 0.6 0.2 3.4 17 6.573 19.0 3.0 22.0 70 6.701 3.0 4.0 2.0 70	7,961 50,211 18,904 87,172 0.5 0.6 0.2 1,146 9,263 78,413 19,00 3.0 1,150 17,503 19,00 10 10 10 10 10 10 10 10 10 10 10 10 1	1.7 570 665 167 1,42 256 220 95 225 445 56 459 459 154 154 178 254 459 158 158	50) 578 660 160 1,42 226 238 659 440 50 460 460 50 460 467 334 4 5 6 140 30 50 470 150 150 150	25 500 2.24d 15.170 14.080 684 12.550 9.250 1.500 5.00 1.500 1.500 1.500
	2021 1239 Menand Electric Coop 2021 1246 Mid-Carolina Electric Coop Inc	5. MSO 0 0 50 50 50 50 50 50 50 50 50 50 50 50	0 0.0 0.0	5 5 0.0 5 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 15.000 13.000 13.000
	2021 12539 Midwest Electric Member Corp 2021 12549 City of Millord - (DE) 2021 1264 ALLETE, Inc.	NE WACM 60 34 14 OE PJM 17,64 49,815	0 10 0.0 0.0 0.0 0.0 0.0 0.0 67,60 22 4.0 6.2 257	933 464 271 6 1,00 0.0 0.0 0.0 7,134 665,002 922,138 1.6 2.6	0.0 0.0 15 0 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 13 12 28 0 47 0 0 4,801 1,910 2,554 4,461 1,872 2,964	
	2021 1268 Entergy Manissippi LLC 2021 1268 Manissippi Power Co 2021 1268 Manissippi Power Co	MS MSO 17,415 17,501 MS SOCO 15,565 6,316 0 MT SOAT 1501 101	35,34 3.4 3.4 6.8 245 6 21,00 2.8 1.9 0.0 0.0 4.7 0.0 7 274 0.0 0.0 0.0 0.0 0.0 0.0	0,000 200,500 471,530 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4	0.0 3,124 2,755 5,86 2,263 1,605 0.0 4.7 1,545 0.0 0.0 0 2,346 1,105 200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4,003 3,524 2,757 5,887 2,203 1,854 0 1,365 1,565 600 0 0 2,349 1,505 260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 0 1,365 12,805 12,865 0,000 0,0
	2021 1289 Evergy Missouri West 2021 1274 Modern Electric Water Company	MO SWPP 62.49 29.08	91,66 12.5 6.5 12. 461 2,84 0.1 0.4 0.5 24		19.1 2,70 3,15 5,86 4,00 2,40 0.5 270 198 410 17 37	6,500 2,700 3,450 5,860 4,037 2,460 55 220 138 444 17 37 37	6,500 7,400 10,800 52 27,211 12,000
	2021 1282 NorthWestern Energy LLC - (MT) 2021 1289 City of Moorhead - (MN)	MT NWW 22.39 45.54 MN SWPP 22 33 1.53	67,93 0.1 0.2 0.3 32 2,07 0.0 0.1 0.2 0.3 3	01,000 01,000 00,000000	03 071 3,320 4,020 2,277 3,600 0.3 28 8 34 60 14 4 17	5,000 679 3,320 4,000 2,277 3,660 22 29 6 54 66 14 4	5,900 14.354 14.00 17 32 17.404 12.174 12.174
	2021 13050 Nountain Parks Electric, Inc. 2021 13050 Nountain View Elec Assn, Inc. 2021 1314 Board of Water Electric & Communication	CO WACM 95 778	872 0.0 0.2 0.3 1 851 0.2 0.1 0.3 0.3 832 0.0 0.3 0.3 0.3 5	3.39 9.33 10.72 0.0 0.3 1.05 6.80 11.01 0.2 0.1 3.30 5.30 0 10.66 0.0 0.1	0.2 74 27 500 15 45 0.2 71 26 50 17 33 0.1 17 52 73 54 18 77	05 89 27 116 15 45 55 71 26 97 17 23 66 17 53 74 56 18	60 14780 12200 50 15300 12200 17 86 11300 8.734 16.00
	2021 1320 City of Naparville - (L) 2021 1321- The Narragansell Electric Co 2021 1333 Nebraska Public Power Diatric	E. P.JM 155 RI ISNE 62,16 45,48 19,96 NE SWPP 678 4,54 2,44	152 3.8 3.9 3.9 2 127,61 9.6 6.8 2.9 19.2 253 0 7,84 0.3 0.7 0.3 0.0 4 4 93	3.64 3.6 3.7 5 537,54 225,72 1,033,73 5.6 2.9 5.0 537,54 225,73 1,033,73 5.1 6.0 2.9 5.0 537,54 5.1 6.2 0.3 0.7 0.9	24 7 18.2 27.29 23.39 10.26 70.00 13.00 5.000 2.032 0.01 1. 21 20 155 0 500 10 40 70	1 221 275 44 22,215 27,38 23,38 10,26 70,955 13,58 5,968 6 243 21 20 155 01 55 01 40	2,63 22,24 4.64 11,80 11,80 7,74 67
State   Stat	2021 1340 Nevada Power Co 2021 1344 New Hampshire Elec Coop Inc 2021 1347 Enterop Inc Coop Inc	NV NEVP 52,53 143,34 6 NH ISNE 3,76 2,58 6 A MSC 1055	0 196,51 15.2 24.2 0.0 0.0 32.6 200 6.30 0.1 0.1 0.0 0.6 24.6 65,00 2.7 5.3		0.5 23.6 5.64 5.25 0 0 10,66 6.76 7.78 0 0.5 2.71 777 3.48 5.15 246	6 14.57 5.64 5.25 6 0 19.00 6.70 7.70 75 2.70 770 3.48 515 240	0 0 14,57 5.70 11,60 0,00 0,0 757 6,570 11,70
State   Stat	2021 1357 Niagara Mohank Power Corp.	NY NYIS 14,433 70,233 NY NYIS 305,875 139,555 NS,76	65,25 34 11.5 15.1 15.7 531,01 16.1 25.8 15.7 25.8 25.8 25.8 25.8 25.8 25.8 25.8 25.8	7.61 676.51 606.129 3.4 11.1 5.37 (.618.59 1.114.53) 5.608.40 10.1 25.0 15.7	14.5 1,05 12.00 14,00 53.2 13.33 50.4 22.30 21,45 13.15 50.60 4,00 2.16 13.33 50.4 22.30 21,45 13.15 50.60 4,00 2.16 13.46	1,846 1,856 12,203 14,00 515 1,303 6,200 22,303 21,45 13,15 55,500 4,622 2,162	1,340 15,000 15,000 1,340 0,500 9,600 13,000 13,000
	2021 1365 North Carolina Mun Power Agny #1 2021 1365 North Public Power District 2021 1367 North Arkansas Elec Coop. Inc	NC DUR 7C 1.60 07 NC SWPP 7C 85 292 AR MSO 216	253 01 09 02 13 7 0 190 02 01 00 00 03 13 25 04	7.54 24,629 0.1 0.9 0.2 3,175 9.35 3,755 0 26,20 0.2 0.1 0.5 2,906 0.4	1-4 100 246 S 366 177 22 25 0.0 0.3 267 45 16 5 32 46 34 6	100 240 9 350 117 37 0 92 267 46 10 0 302 46 30 750 5370	9 9 92 17.20 11.00 12.84 0 5,877 12.00
	2021 1368 North Carolina Easters M P A 2021 1372 City of North Plate 2021 1373 Northwast Power	NC CPLE 23 48 25 NE SWPP 25 26 443 NE SWPP 13 11	40 0.1 0.1 0.0 0.4 2 72 0.0 0.0 0.0 0.0 33 0.0 0.0	2,00 144 00 2,00 0.1 0.1 0.1 200 2,00 0,00 0.0 0.0 0.0 160 131 321 0.0 0.0	0.3 54 0 0 15 122 32 2 0.0 8 15 15 22 6 5 15	158 54 0 0 19 12 20 0 15 66 0 19 12 21 0 15	2 156 7.96 3.00 3.00 11 16 15.5 11.00 15.00 2 15.79 18.00
	2021 1375 Northern Indiana Pub Serv Co 2021 1376 Northern States Power Co	N MSO 46,91 54,76 M MSO 1,50 64	191,70 38.2 7.5 45.8 200 2,24 0.1 0.0 0.1 11	0,32 710,52 970,91 44 48 17,72 7,51 19,25 0.1 0.0	91 2,67 4,60 7,27 3,73 2,160 01 143 25 166 98 84	5,924 2,674 4,600 7,27 3,734 2,195 179 143 25 156 25 84	5,924 5,544 12,97 179 8,851 12,74
	2021 1378 Northern States Power Co - Minnesota 2021 1378 Northern States Power Co - Minnesota 2021 1378 Northern States Power Co - Minnesota	IN MSO 299,00 342,79 53,425 SD MSO 4,272 5,895	695219 82 504 63 1367 4766 18,07 84 69 15 53	6.77 5.647.50 903,545 11,204,305 821 50.4 6.3 3.545 98,83 152,32 0.6 0.5	94 948 122 610 135.7 13.77 33.05 4.44 01.26 14.80 25.44 2.28 1.5 77 555 60 60 32 22 34	42,555 19,77 38,55 4,44 51,22 61,23 52,465 54,255 54,255 52,25 54,255 54,255 54,255 54,255 54,255 54,255 55 55 55 55 55 55 55 55 55 55 55 55	2,28 42,555 15,772 16,477 17,414 52 12,515 17,03
	2021 1378 Northern Wasco County PUD 2021 1378 Northwest lova Power Coop 2021 13834 City of Norwood - (MA)	OR DPAT 760 436 A SWPP 2,925 766 A SWPP 3,925 766 A SWPP 3,925 766 A SWPP 4,936 A S	5,222 0.2 0.1 0.2 55 3,754 0.2 0.1 0.4 61 44 0.0 0.0 0.0 0.0	1822 8.715 94.54 0.2 0.1 182 12.76 74.85 1.4 0.1 38 2.05 3.06 5.11 0.0 0.0 0.0	0.3   466   81   666   105   8	112   499   81   566 105   8   4 1,041 180   1,226 0 0 0   66 135 56 47 224 64 61	112 20.003 29.000 0 15.00 15.00 2 72 1.000 19.00 19.00
The number   1	2021 1399 Oskdale Electric Coop 2021 1399 Oskdale Electric Coop	WI MISO 127 1 0 OH PJM 2.5M 0 0 D DM 2.5M 0 0	6 128 0.0 0.0 0.0 0.0 0.0 1 0 2.58 0.4 0.0 0.0 0.0 0.5 0.4 25	986 98 0 0 0 2,05 0.0 0.0 0.0 594 0 0 0 0 25,94 0.4 0.0 0.0	0.0 0.0 20 0 0 0 20 30 4 0 0.0 0.4 2.00 0 0 0 0 2.00 200 0 0	0 41 28 0 0 0 23 38 4 0 20 2,00 0 0 0 2,33 20 0	4 0 41 15.705 17.65 0.00 0. 0 0 200 10.025 0.000 0.00 0.
The number   1	2021 1406 Okishoma Gas & Electric Co 2021 14106 Okishoma Gas & Electric Co 2021 14109 Okegon Trail El Cons Coop, Inc	OR SPAT 197 1,582 1,647	0 160,531 11.5 7.6 7.6 0.5 20.7 665 2,831 0.3 1.1 0.3 1.4 3	207 509,405 599,465 0 1,881,00 92 6.1 6.1 0,855 13,465 10,374 27,465 0.2 1.1 0.3	0.0 21.4 12.00 4.10 4.10 0 20.43 5.50 4.01 4.01 1.0 1 1.0 1 1.0 1 2.0 5.5 25 25 25 55 6 24 5.5 5	0 13,99 12,00 4,195 4,195 0 24,23 5,203 4,011 67 65 226 236 5,57 6 24	4,011 0 13,95 11,35 12,00 12,00 0, 50 67 18,58 12,28 9,90
The number   1	2021 1415 Orange & Rockland Utilis Inc 2021 1425 Otter Tail Power Co	Nr. 5000 2,865 9,285 0 NY NYS 49,444 20,245 2,757 UN MSO 21,370 41,615 5,760	0 12/40 22 20 00 01 52 22 00 01 01 52 22 0 00 01 52 22 20 00 01 52 22 20 00 01 52 22 20 00 01 52 22 22 22 22 22 22 22 22 22 22 22 22	250 12550 0 0 155,00 20 20 00 456 250,00 20,00 0 00,00 34 43 02 3,50 566,75 155,00 0 066,79 155 63 1.0	0.0 0.0 1,000 760 0 0 0,00 35 100 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2.461 1,002 2,625 232 0 4,681 1,255 1,205 0 2,155 1,004 4,544 1770 0 6,222 1,669 1,302	6 0 2,465 11,225 12,245 10,559 0, 175 0 2,155 12,726 13,625 20,000 0,
		SD MISO 1,565 10,365 0 MN MISO 360 1,490 1,778	0 11,869 0.2 1.7 0.0 0.0 1.9 27 0 3,829 0.1 0.2 0.2 0.0 0.2 3	7.546 152.435 0 0 179.605 0.2 1.7 0.0 3,621 14,901 17,705 0 36,26 0.1 0.2 0.2	0.0 1.9 182 568 0 0 750 57 126 0 0.0 0.5 75 130 584 0 356 42 17 19	6 177 163 548 0 6 755 57 120 6 78 70 120 18 0 264 43 17	0 0 177 17.445 14.795 0.005 0.1 19 0 78 10.005 93.005 10.005 0.1
Column	2021 14326 Pacific Gas & Electric Co. 2021 14356 PacifiCorp 2021 14356 PacifiCorp	CA CISO 967,00 867,50 56,331 CA PACW 108 1,00 2,90 D PACE 5,160 8,51 3,516	0 1,890,91 170,0 148,0 9,0 0,0 227,0 11,526 4,181 0,0 0,2 0,5 0,8 1 17,198 1,0 1,7 0,7 3,5 3,5	5.32 12,163,03 413,62 6 24,112,06 140,0 1750 9.0 1,532 11,16 27,07 40,00 0.8 0.3 0.2 13,33 11,759 47,777 191,030 1.8 1.7 0.7	0.0 204.0 15,504 17,715 13,604 0 47,205 161,605 64,465 23,605 0.0 507 207 161,005 64,465 23,605 0.0 507 207 507 207 507 507 507 507 507 507 507 507 507 5	0 250,386 15,526 17,715 13,000 0 47,220 101,003 64,461 883 266 185 446 925 1575 225 2279 778 778 778 778 778 778 778 778 778 7	23,925 0 250,36 11,903 14,003 7,305 0, 500 882 14,18 10,305 9,32 655 2,079 3,906 13,809 13,449
Column	2021 1435 PacifiCorp 2021 1435 PacifiCorp	UT PACE 163,275 136,544 28,965 WA PACW 9,645 16,785 5,035	220,00 23.6 12.7 42 47.5 960 31,466 1.3 2.3 0.7 4.3 117	5,76 1,652,16 350,86 3,000,33 22,6 127 4.2 7,83 212,55 61,76 322,77 13 23 0.7	47.5 12.60 16.30 2.61 33.20 7.47 12.10 1.36 4.3 1.20 1.00 30 2.61 2.59 3.25 3.34 1.31	21,04 12,65 18,30 2,81 33,20 7,473 12,96 7,474 1,20 1,06 20 2,56 3,25 3,26 3,26 3,26 3,26 3,27 3,27 3,27 3,27 3,27 3,27 3,27 3,27	1,30: 21,04 6,000 12,10 12,30: 1,31: 7,914 12,25: 12,65 12,20:
Column	2021 1440 City of Palo Alto - (CA) 2021 1440 People's Cooperative Services	OA OSO 61 4.34 MN MISO 5,155 606 6	4.40 0.1 0.5 0.6 0 1.75 0.1 0.1 0.0 0.0 0.2 15	415 69,22 66,63 01 0.5 5,20 6,68 0 0 24,04 0.1 0.1 0.0	0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1,004 0 30 30 50 0 50 50 50 50 50 50 50 50 50 50 50	0 0 154 14.04 14.28 0.00 0.0
Column	2021 14534 City of Pasadena - (CA) 2021 14532 Pascoag Utility District 2021 14552 Pasel River Valley El Per Assn.	OA OSO 6.442 1.634 0 RI ISNE 66 48 NS MSO 1,000	0 8,19 0.4 0.3 0.0 0.0 0.7 12 112 0.6 0.6 0.6 0.1 1,000 0.3 0.3 0.0 99	2.72* 11,65 0 0 24,57 0.4 0.3 0.4 6.6 60 60 12,23 0.6 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 12,23 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	0.0 0.7 1,465 372 0 0 1,546 837 300 0 0.1 133 340 177 28 8	6 1,007 1,465 377 0 0 1,144 887 380 2.6 123 28 177 28 6 152 150 150 150 155	6 6 1,260 8.432 9.433 0.000 0. 36 9.102 12,800 0.000 0. 152 19,210
Column	2021 14608 Peace River Electric Coop, Inc. 2021 14619 Orlando Utilities Comm 2021 14629 PUD No 2 of Grant County	FL SEC 299 36 FL FMPP 14,001 10,002 NA GCPD 208 515 842	22 2 24,00 0.6 1.8 2.4 34 1,65 0.0 0.1 0.0 0.1	1,600 364 3.94 1,900 160,746 203,67 0.6 1.8 1,900 7,738 8,115 22,500 0.0 0.1 0.0	24 721 250 1,07 2,484 600 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	346 311 31 31 31 31 31 31 31 31 31 31 31 31	342 12.375 12.375 3.000 2430 15.444 71 167 26.090 15.000 9.875
The second column	2021 1466 Peninsuls Light Company 2021 1471 Pennsylvania Electric Co	NA BOAT 829 1,15 PA P.M 21,64 15,97 23,710	1,98 0.6 1.2 2.0 12 0 61,33 2.2 2.1 2.7 0.0 8.1 100	2,45 13,84 26,27 0.8 1.2 2,33 223,29 346,41 0 672,09 2.2 2.1 3.7	2.0 411 135 555 118 45 0.0 8.1 985 1,00 76 0 2,74 3,00 1,50 1,64	9 5,655 965 1,00 70 0 2,74 3,00 1,555	1,04 0 5,655 4,725 13,675 14,619 0
The second column		PA P.M 35,610 116,679 35,601 PA P.M 6,403 10,103 648	0 187,89 59 188 48 0.0 293 300 9 17,10 10 13 0.9 0.0 23 38	0.40 1.633.50 498.41 0 2.452.49 9.4 18.7 22.2 8.500 140.414 8.113 0 180.09 1.5 1.3 0.1	0.0 50.3 5532 7.919 1.700 0 15.153 14.743 6.743 2.619 0.0 2.3 570 465 22 0 1.644 913 629 265	0 24,522 5,532 7,649 1,743 0 15,157 14,745 6,745 0 1,869 5,73 465 22 0 1,009 913 629	2,618 0 24,102 9,002 14,000 14,000 03
The second column	2021 1471 Pee Dee Electric Member Corp 2021 1494 PECO Energy Co		13 10.7 10.7 10.3 181,22 8.8 13.2 22.5 1,05	246 10.7 4.65 635.30 1.690.10 8.8 13.2	92.5 9 9 9 10 7	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16.00 12.00 164 12.00 12.00
The second column	2021 1523 City of Post Angeles - (WA) 2021 1525 Poudre Valley REA, Inc	NA BPAT 460 127 CO WACM 537 834	532 02 0.1 0.3 4 1,37 0.2 0.2 0.4 0	(602 1,272 5.39 0.2 0.1 8,13 10,12 18,25 0.2 0.3	0.3 13 27 153 0.4 20 35 24	136 27 651 200 32 246	1200 1000 8.00 2.00
The second column	2021 15279 Potomac Electric Power Co 2021 15279 Potomac Electric Power Co 2021 15299 New York Power Authority	ND P.M 8030 31,75 4,85 NO P.M 130,95 199,22 NO NYS 12,100 6	0 110,720 523 524 08 00 182 430 240,77 27,6 95,7 43, 616 3,98 15,59 18 06 0.6 2.4	0.60 (0.61) (0.6	0.0 43 14,67 28,00 43,59 9,00 13,00 50 0.0 24 0 0 0 2	9 10,007 8,510 8,760 1,722 0 17,942 5,001 3,001 22,001 23,001 22,001 3,001 22,001 3,001 22,001 3,001 22,001 3,001 22,001 3,001 22,001 3,00	57 0 10,03 5.73 14,74 14,74 0. 22,57 4,70 14,80 15,00
The second column	2021 1534 Polk-Burnet Electric Coop 2021 1541 PUD No 3 of Mason County	W MSO 238 170 0 WA BPAT 942 427 340	0 512 0.1 0.0 0.0 0.0 0.0 5.0 5.0 5.0 5.0 5.0 5.0	\$380 2,815 0 0 8,259 0.1 0.0 0.0 \$390 4,659 4,000 0 24,140 0.9 0.4 0.3	0.0 0.1 166 17 0 0 179 12 1 0 0.0 1.6 440 85 27 0 556 203 96 73	6 15 160 12 0 0 170 15 1 9 367 446 85 31 0 554 203 93	6 0 12 15.54 16.000 0.000 0. 73 9 367 15.000 11.000 12.000 0.
1	2021 1546 Public Service Co of Colorado 2021 1547 Duke Energy Indiana, LLC 2021 1547 Public Service Co of NH	OO PSCO 284,298 242,213 57,135 N MSO 87,164 72,318 6 NH ISNE 45,862 82,938			0.0 25.4 2,874 9,140 0 0 12,014 5,440 5,160 0	0 10.00 2.07 9.14 0 12.01 5.40 5.16	2,010 23,02 13,18 16,00 14,526 6 9 10,00 4.702 12,90 0,00 0,0 4,00 5,20 11,67
1	2021 1547 Public Service Co of NM 2021 1547 Public Service Co of Oklahoma 2021 1547 Public Service Dier & Geo Co.	NM PNM 57,88 24,00 25,04 OK SWPP 81,473 62,594 6 U D M 39,795 81,173	0 106,98 125 2.4 3.6 0.0 19.6 995 0 144,074 19.3 11.3 0.6 0.0 30.6 800	9,24 249,03 250,03 0 1,509,11 12.5 2.4 3.6 2,52 661,72 0 0 1,664,24 19.3 11.3 0.0		6 10,00 6,00 1,00 1,15 0 12,25 5,29 2,30 6 10,80 19,85 7,96 0 18,84 6,27 4,51 8 10,00 1,00 1,00 1,00 1,00 1,00 1,00 1,	2.40 0 10.03 13.60 10.60 10.60 0.0 0 0 10.03 9.00 10.60 0.00 0.0
1	2021 1550 Puget Sound Energy Inc 2021 1557 Randolph Electric Member Corp	NA PSEI 48,42 199,24 12,136 NC CPLE 50	160,819 12.8 16.5 1.8 20.8 660 50 50 50 50 50 50 50 50 50 50 50 50 50 5	0.00 1.407,69 150,429 2.244,69 12.2 16.5 1.8 1.04 1.04 1.04	30.4 21.48 28.96 3.25 53.70 6.637 6.94 76	14,353 21,466 28,66 3,25 53,70 6,633 6,945	766 14.35 15.72 13.32 9.80 15.00
1	2021 1574 Town of Reading - (MA) 2021 1576 Dity of Reading - (CA)	MA 50.00 MA 5365 155 1,055 CA BANC 786 2,225 0	5,205 0.1 0.3 0.4 1 0 3,115 0.1 0.4 0.0 0.0 0.5 11	,86 8,03 1069 0.1 0.3 1,25 20,39 0 0 31,60 0.1 0.3 0.0	0.0 0.4 41 225 28 13 44 0.0 0.0 0.4 778 383 0 0 0 1,52 155 152 0	57 41 235 44 10 44 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 257 13.04 8.352 0 0 257 15.07 11.450 0.00 0.0
1	2021 15975 City of Richland - (WA) 2021 16060 Riverland Energy Cooperative 2021 16060 City of Riverside - (CA)	(WA BPAT 960 2,025 643 WI 165O 1,160 2,337 340 CA DSO 4,507 5,782	3.63 0.1 0.2 0.1 0.4 16 0 3.65 0.1 1.3 0.0 0.0 1.5 16 10.26 0.5 0.7 1.3 100	3.324 4907 0 5527 01 0.3 01 8.00 54.42 104.22 0.5 0.7 0.1 0.3 0.1	0.0 1.2 90 40 40 120 100 0 0 1.2 0 0 0 0 1.2 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	412 460 150 1,031 0 0 0 0 43 4 0 125 0 0 1,000 500 1,584	97.01 95.70 15.64 0 0 14.377 54.25 14.66 0. 24.400 9.410
1	2021 1610 Roanoke Electric Member Cosp 2021 1610 Rochester Public Utilities 2021 1610 Rochester Gas & Electric Corp	NC PJM 678 MN MSO 2,60 10,00 5,978 NY NYIS 9,675 25,88	671 0.1 0.1 10.1 10.1 10.2 10.2 10.2 10.2	3,95 90,16 0.1 4,400 124,91 69,560 2231,160 0.5 1.2 0.6 5,52 248,015 201,53 1.6 4.8	0.1 122 152 35 152 24 377 779 202 1,34 170 205 74 6.2 1,002 4,102 5,223 557 566	26 500 507 507 507 446 508 327 779 200 1,348 176 206 1,122 1570 508	74 5.00 15.00 10.00 10.00 10.00 10.00 11.00 10.0
1	2021 1621C Rockland Electric Co 2021 1629 City of Roseville - (CA) 2021 1655 Sergments Municipal US 704	NU PJM 960 CA BANC 7,47 2,45 95	900 0.1 0.1 0.1 14 10.15 0.4 0.7 0.0 1.1 22		0.1 85 64 15 85 2 1.01 100 1.1 886 634 15 1.532 2.000 1.013 100 1.1 0.007 4.77 (422) 8.44	2 85 65 18 2 181 4,003 880 654 18 5,533 2,566 1,873 1,1864 6,877 4,777 4423	100 4,003 11,017 11,115 20,000
1	2021 1655 Salem Electric - (DR) 2021 1655 Salem Electric - (DR)	OR BPAT 503 719 AZ SRF 460,42 170,69 0	1,223 4.3 4.5 8.8 11 0 631,11 1180 230 0.0 0.0 1514 2,601	1,50 9,50 21,15 4.3 4.5 1,70 2,879,73 0 0 5,508,44 118.0 20.0 0.0	84 208 100 310 133 31 00 00 1514 13,721 13,26 0 0 23,50 8,232 8,052 0	. 958 259 150 513 153 51 0 15,555 13,72 19,26 0 0 23,86 8,333 8,623	958 2259 1339 0 0 16,826 5.716 95,875
1	2021 1660 San Luis Valley R E C, Inc 2021 1660 City of San Antonio - (TX) 2021 1660 Santee Electric Coop, Inc	DO	43 0.6 0.0 0.0 117,43 9.3 54.2 23.5 374 266 3	223 606 0.0 0.0 4,775 1,542,75 1,517,63 9.3 54.3 1,100 2,100	9.9 6 2 11 23.2 15.50 11.85 27.33 5.478 572	2 95 2,003 15,504 11,834 27,335 1,430 575 117 2003	17.055 18.505 2,005 16.805 12.005 202 12.005
1	2021 16609 San Diego Gas & Electric Co 2021 16612 City & County of San Francisco		590,387 54.5 41.8 3.8 100.4 4,560 666 0.1 0.1	9,67 3,034,69 360,457 7,974,82 323 247 2.3 10,275 10,275 0.0	52 5.00 6.20 67 11.30 14.35 17.60 19 0.1 56 56 56 6	22,237 5,036 6,207 67 11,200 14,257 17,665 6 567 0	121 12.231 13.332 13.170 16.070 0 15.000
1	2021 16622 San Miguel Power Asan, Inc 2021 16655 City of Santa Clara - (CA) 2021 16634 Satita Rural Elec Member Corversion	CO 194CM 50 568 . CA DSO 110 8,002 0 GA SOCO 15 0 A	600 0.0 0.2 0.2 1 0.20 0.0 1.1 0.0 1.1 0 1 0.0 0.0 0.0 0.0 0.0	7.00 6.20 8.48 0.0 0.2 600 87.19 0 87.70 0.0 0.7.00 0.0 515 0 0 0 5.15 0.1 0.0 0.0	0.2 17 11 22 0.4 57 2,203 0 2,204 100 2,205 0 0.0 0.1 2 0 0 0 2 4	2,474 57 2,00 0 2,200 168 2,300 0 4 30 A3 A	9 2,476 7,000 14,145 0,000 0 0 43 10,003 10,003 15,764 40
1	2021 1674 Scanic Rivers Energy Coop 2021 1686 Sawnes Electric Membership Corporation	WI MISO 466 55 0 1 GA SOCO 1,105 7 0	0 52 0: 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1	.802 800 0 0 7,604 0.1 0.0 0.0 602 72 0 0 11,702 1.6 0.6 0.6	0.0 0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56 61 6 0 0 67 55 1 63 79 2 2 3 86 63	0 0 54 14.792 14.592 0.000 0 0 15 15.000 19.000 0.000 0
1	2021 1697 Shakopee Public USRies Comm 2021 1719 Sierra Pacific Power Co	WN MEVP 94.65 46.20 0	7.52 15 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.	500 27,728 63,109 14 00 0.8 1,271 600 27,728 63,109 14 00 0.8 1,224 562,42 0 0 0 631,64 5.4 8.6 0.0	2.4 201 8 277 6 14 62 6 67 637 638 637 638 637 64 64 62 6 67 638 637 64 64 62 6 67 638 638 638 638 638 638 638 638 638 638	2,508 0,009 44 12,184 3,47 10,802 148 209 8 277 61 00 0 0 0 4,40 512 2,44 0 0 0 2,65 2,194 2,265	67 9 4,66 2.60 12.60 0.00 0 6 0 4,46 3.60 12.60 0.00 0
1	2021 1725 Singing River Elec Cooperative 2021 1726 Sioux Valley SW Elec Coop 2021 1726 Sioux Valley SW Elec Coop	MS MSO 960 MN SWPP 544 48 SO SWPP 775 277	962 0.6 0.0 0.0 15 156 0.1 0.0 0.0 3 1,144 0.2 0.0 0.3	7.751 15.775 0.0 15.751 0.0 1.660 7.705 0.1 1.660 7.705 0.1	0.0 100 100 200 0 0 0 0 0 0 0 0 0 0 0 0 0	265 100 100 100 203 92 0 93 719 6 728	903 16.375 15.005 22.005 15.005 22.005
1	2021 1747 PUD 1 of Snohomish County 2021 17538 Dominion Energy South Carolina, Inc. 2021 17545 South Carolina Public Service Authority	WA SPAT 40,82 11,34 18,26 SC SCBG 22,00 57,45 5,46 SC SC 30,00 13,00 A	70,45 8.7 2.4 4.1 15.7 500 0 94,91 7.3 13.0 1.0 0.5 21.7 326 0 17,555 1.6 2.4 0.6 0.7 2.4 70	0.464 128.605 185.005 834.105 5.2 1.5 2.7 0.200 689.40 70.005 0 1.009.505 8.6 5.0 0.5 0.401 172.315 0 0 242.725 1.6 9.4	9.4 6.03 3.26 2.46 11.79 1.51 817 624 0.6 13.5 7.29 10.39 966 0 18.64 3.20 4.00 437 0.0 4.4 1.11 844 0 0 15.00 407 4.00 427	2,902 6,003 3,260 2,460 11,70 1,510 810 6 8,520 7,520 10,100 986 0 18,641 2,200 4,000 0 2,460 1,111 864 0 0 1,500 AM 1,640	427 9 8,555 19,000 12,000 13,000 0 0 0 2,466 19,000 12,000 13,000 0
2   Control of the co	2021 17572 South River Elec Member Corp 2021 17598 Southeastern Indiana R E M C		63 0.3 0.3 13 500 0.7 0.6 0.7 14	1,946 0.3 1,949 4,320 19,515 0.6 0.6	0.3 46 46 46 46 6 6 6 6 6 6 6 6 6 6 6 6 6	45 46 48 46 7 218 228 445 341 1	542 15.500 2.000
Company	2021 1760 Southern California Edison Co 2021 176 C Bear Valley Electric Service 2021 1763 Southern Indiana Gas & Elec Co	DA DSO 226,324 15,322 12,098 CA DSO 12 0 0 0 N 185O 12,622 13,722 6,457	203,98 34.8 3.7 1.9 45.2 1,387 6 11 0.6 0.6 0.6 0.6 0.6 0 39,00 4.4 3.6 1.8 0.5 9.8 166	7,960 102,745 01,037 1,002,299 34.0 3.7 1.9 140 0 0 0 144 0.0 0.0 0.0 222 100,50 02,60 0 478,60 4.4 2.6 1.7	eq.         on.er.         5.50         462         00.14         48.16         46.317         2.66           0.0         0.0         2.2         4         0         0         2.2         4.3         0         0         0         0         2.2         4.3         0         0         0         0         0.2         4.3         0	MARKE   \$4,472   \$5,500   401   \$90,544   40,507   40,0	2.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Proceedings	2021 1763 Southern Maryland Elec Coop Inc 2021 1764 Southern Public Power District 2021 1764 Southern Pine Electric Cooper No.	NO PJM 52,78 16,54 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	69,30 8.4 2.5 11.3 315 0 1.67 0.1 0.1 0.0 0.0 0.2 6 1,04 0.3 0.1 0.1 0.1	815 224.57 543,72 8.4 2.6 1,904 10,83 2,913 0 20,41 0.1 0.1 0.0 10,64 0.1 0.1 0.1	11.2 6.07 4.19 10.26 5.20 1,701 0.5 0.2 127 46 19 0 19 16 42 8 0.3 111 111 112 124	7,00 6,07, 4,19 10,26 21,76 24,40 0 0 0 122 44 15 0 10 10 16 42 11 11 11 11 11 11 11 11 11 11 11 11 11	8 0 66 16.86 11.00 9.30 ii
Control   Cont	2021 1769 Southwestern Electric Power Co 2021 1769 Southwestern Electric Power Co	AR SWPP 17.54 21.09 4,022 LA SWPP 3.93 3.72 6	0 42,66 3.8 2.9 0.6 0.0 7.2 227 0 7.65 1.6 0.6 0.6 0.6 1.6 70	3.53 54.98 0 0 125.52 1.0 0.0 0.0	0.0 7.3 2,88 2,22 40 6 5.53 2,145 1,745 327 0.6 1.6 915 364 6 6 1,31 191 200 6	6 42H 28G 22Z 4Z 6 533 214 174 6 430 915 590 0 6 13H 19 286	227 9 4214 13.00 13.80 12.50 6 9 470 17.00 14.80 0.00
Company	2021 17719 Southwestern Public Service Co 2021 17719 Southwestern Public Service Co 2021 17719 Southwestern Public Service Co	NM SWPP 20.36 1.54 32.38 TX SWPP 12.50 12.47	0421 192 0.5 4.6 243 45 25.39 3.8 2.5 6.3 176	1,70 53,57 490,745 90,017 19: 0.5 4.6 6,11 160,48 345,52 3.8 2.2	24.1 1.722 177 2.34 4.35 1.81 90 4.65 6.3 1.771 1.552 3.37 2.22 1.35	6,696 1,792 179 2,346 4,319 1,614 669 340 1,771 1,502 3,327 2,22 1,21	4,101 0.009 15230 147/0 0.000 4,101 12,00 15240 15.440 347 12,00 12,56
20 10 10 10 10 10 10 10 10 10 10 10 10 10	zoun 17828 City of Springfield - (IL) 2001 17832 Snapping Shoals Di Member Corp 2001 17832 City Utilises of Springfield - (MO)	SA SOCO 15,70 2,80 1,98 MO SWPP 752 2,60 4	2030 3.4 0.7 0.6 0.5 20 0 3,44 0.3 0.4 0.0 0.5 0.6	AA32 0,30 0.1 222 35.30 60,132 297,60 3.4 0.7 0.4 2,01 26,01 0.1 3,503 0.3 0.4 0.0	Qua 100 11	255 184 11 125 506 85 1122 2,775 12 8 2,754 3,517 224 6 6 3 361 100 0 0 445 0 0 0	252 14.365 15.005 168 3,000 25.005 25.005 25.005 0 0 0 15.000 35.005 0.005 1
20 O Conference Confer	2021 17838 City of Springfield - (OR) 2021 18255 City of Stungle 2021 18285 Substar Springs Valley E C Inc.	OR SPAT 1,085 706 61 MI PAM 465 1,665 AZ WALC 68 0 1 1988	1,825 0.1 0.1 0.0 0.2 12 2,145 0.0 0.3 0.2 0.2 0 1,296 2,5 0.0 12,6 0.4	9.40 8,92 920 20,94 0.1 0.1 0.0 984 18,50 15,40 0.2 0.2 0.2 677 0 11,960 0 12,60 0.4 14 47	0.5 758 167 17 920 177 920 31 0.2 64 122 957 22 84 0.6 43 21 0 0 0 3 3 1 4 74	200 758 167 17 920 177 122 150 64 122 197 22 84 0 76 21 10 0 0 2 2 3	31 31 17.80 12.83 15.10 100 3.34 13.80 10.00 74 0 78 30.00 10.00 10.00
	2021 18305 Sunter Electric Coop, Inc. 2021 18335 Sunter Electric Coop Inc. 2021 18335 Sunter Plack Electropies Corp.	FL 56C 1025	10,25 1.7 45	5.100 45.100 17	15 15 15 42 200	28 4 43 28 28 40 4 10 28 40	200 207 1.000 4.30 14.20 1.000
	2021 1942 City of Tacoma - (WA)	MA TPWR 2,50 7,64 4,808	0 15,01 0.0 2	1,337 84,58 38,338 0 176,249 0.0 0.0	873 1,04 665 6 2,57 1,586 1,00 635	6 3,224 15,832 12,47 5,225 6 33,527 28,579 12,009	5,000 0 45,735 16,035 11,985 7,97

Utility Characteristics Reporting Year Incremen	i Annual Savings		Incremental Life Cycle Savings	Reporting Year Incremental Cost	Incremental Life Cycle Costs	Weighted Average Life
Energy Savings (MWh)	Peak Demand Savings (MW)	Energy Savings (MWh) rtation Total Residential Commercial Industrial Transpor	Peak Demand Savings (MW)	Customer Incentives (Thousand Dollars) All Other Costs (Thousand Dollars)	Customer incentives (Thousand Dollars) All Or	ther Costs (Thousand Dollars) (Years)  (a) Industrial Transportation Total Residential Commercial Industrial Transportation
Data Utility Utility Name State BA Code Residential Commercial Industrial Transportation Total Ra	idential Commercial Industrial Transpo	rtation Total Residential Commercial Industrial Transpo	ortation Total Residential Commercial Industrial Transportation Total	Residential Commercial Industrial Transportation Total Residential Commercial Industrial Transportation	n Total Residential Commercial Industrial Transportation Total Residential Commerc	ial Industrial Transportation Total Residential Commercial Industrial Transportation
Year         Nicosher         Commercia         Industria         Commercia         Industria         Indu	0.5 0.0 0.0	4.20	429	1,314 54 0 1,309 1,109 40 0	1,24 1,31 54 1,36 1,16	359 12.379
	39 113 13	962 62036 1,517,633 968,633 0.2 4,335	2,305,99 7.1 6.1 0.7 13 4,333 0.3 0	25 2,40 64 7 2 1,13 2,51 9,30 1,00	13,925 2,405 648 73 3,128 3,511 9,	360 1,040 13,000 20,000 20,000 20,000
200 480 To 100 Court Post COC	0.3	0.5 4,330	179 69 0	03 169	10 10	22,000
2221   1844	0.0 0.0	0.0 0.3 16,97 1,79 0	0 18,77 03 0.0 0.0 0.0 0	02 0 726 0 0 726 1,004 386 6	0 2,388 0 728 0 0 728 1,994	386 8 0 2,386 14,00 12,00 0,00 0,000
2011 1864 Tennessee Valley Authority GA TVA 201 0 0 0 228 2021 1864 Tennessee Valley Authority GY TVA 305 0 0 5 205	0.0 0.0 0.0	0.0 0.0 4.424 0 0	0 4424 00 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 200 0 0	0 20 0 0 0 0 20	0 0 0 0 20 13.00 0.00 0.00 0.00 0 14 0 600 13.00 0.00 0.00
2021   1866   Terminana Virlay Androlly   Mr.   Viv.   Gr.   G.   G.   G.	0.1 0.0 0.0	0.0 0.1 5,925 0 0	0 5,90 0.1 0.0 0.0 0.0	0.1 0 0 0 0 0 1,031 0 10	0 1,041 0 0 0 0 0 1,031	0 10 0 1,04 11,00 0,00 0,00 0,00
2021 1864 Tennesses Valley Authority NC TVA 64 0 0 0 6 64 200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 00 00	0.0 0.0 929 0 0 0.0 1.3 129.85 88.32 3.585	0 929 0.0 0.0 0.0 0.0 0.0 0 0 22176 1.3 0.0 0.0 0.0 1	0.0 0 0 0 0 0 0 0 0 0 0	0 46 0 0 0 0 0 0 44 4 650 0 77 0 0 77 46.00 2	0 0 0 0 46 14.00 0.00 0.00 120 1.117 0 19.52 13.00 14.00 3.00 0.00
2021 1864 Tennessee Valley Authority VA TVA 55 0 0 0 0 15	0.0 0.0	0.0 0.0 236 0 0	0 236 0.0 0.0 0.0 0.0 0	0.0 0 0 0 0 13 0 0	0 12 0 0 0 0 0 12	6 6 0 12 1200 0.00 0.00 0.00
2011 1884 (18800X Propies USE) DEC USE BRIL 688 800 208 1,749 2011 1885 Tai Create Core (CA) 4 6 500 21	0.1 0.1 0.0	0.0 12,90 9,37 2,079	24.435 1.5 1.1 0.3 2	24 404 115 53 573 100 50 150	200 401 119 50 570 100	53 150 200 20.00 10.00 10.00
2021   1805 The Totales Edition Co	0.3 0.0 0.0	0.0 0.0 20,05 0 0	0 20,05 0.3 0.0 0.0 0.0 0	0.3 1,78 0 0 0 1 1,78 87 0 0	0 87 1,76 0 0 0 1,78 87	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2021 1912/City of Traverse City - (MI) MI MISO 859 2,003 0 0 3,554 2021 1912/Michael Company A MISO 1937 800 01 0 1921	0.0 1.0 0.0	0.0 1.3 5.920 24.000 0	0 29,99 0.3 1.0 0.0 0.0 1	13 64 234 0 0 254 21 21 0	0 40 66 230 0 0 29 21	21 0 0 49 6.910 8.920 0.000 0.000
	0.4 0.1 0.0	0.0 0.5 42,32 19,71 325	0 62,365 0.4 0.1 0.0 0.0 0	0.5 244 31 0 0 275 30 3 0	0 20 244 34 0 0 277 30	3 0 0 23 14.50 13.80 14.66 0.00
200   100	0.0 0.0 0.0	0.0 0.0 2,255 0 0	0 2,25 0.0 0.0 0.0 0.0 0	0.0	104 104	104 1236 0.000 0.000 0.000
2021 1028 Turkok Rigation District CA TIDC 566 1,546 2,008 0 5,665	0.1 0.0 0.3	0.0 0.3 0.070 23,100 43,000	0 75,04 0.1 0.0 0.2 0.0 0	03 25 29 28 0 00 50 50 85 160	0 30 25 29 20 0 00 53	85 163 0 301 19.143 14.99 14.98 0.000
2021 1932 Umatila Electric Coop Ason OR BPAT 1,12 139 13,169 14,440 2021 1939 UGI Litilities, Inc. PA P.M 1,15 30 3,92 5,460	0.1 0.0 1.5	1.6 20,38 1,51 92,85	114,75 0.1 0.0 1.5 1 0 76,50 0.1 0.1 0.5 0.0 0	1.6 211 11 911 1,24 23 1 60	90 31 10 90 1,24 23	1 66 90 18.09 12.00 7.04 130 436 0 860 14.00 14.00 14.00 0.00
2001 10389 GT (- County Section Coop (M) MI MSO 2,693 1,000 3,693 2,693 2,000 3,693 2,000 3,000	0.7 0.3	. 0.9 33,92 5,38 54,97	43,15 0.7 . 0.3 . 0	0.9 198 50 254 268 100	20 10 10 44 25 46 27 20 10 10 10 20 25 250	100 430 0 86 14.00 14.00 14.00 00.00 100 300 12.50 9.200
2021 1940 Union Electric Membership Corp. (NC) NC DUK 4,580 16402 16.400 366.94		15,400 117,5 2,784,205 2,594,509 229,400	15,40 5,618,298 01:2 52:0 3.7 117	3 410 7.4 18,644 21,75 1,79 42,19 19,100 15,477 1,279	410 3 410 35.80 18.64 21.75 1.79 42.19 19.69 15	470 1279 25920 14.904 15.31 14.705
2011 1944(Outs Energy Karlucky NY P.M 3,00 94,00 19,00	0.7 1.0	26 30.16 136.414	166.57 0.7 1.8 2	72 18,840 21,52 1,59 42,190 19,190 15,47 1,270 24 70 3.19 3.91 2.65 538	2500 700 3.100 10,000 15, 2.500 700 3.110 3.913 2.057	250 250 7.75 14.66
2001 15469 United Electric Coop Service Inc - (TX) TX	1.4 0.1	1.4 79,22 1,86	81,10 1.4 0.9 1	1.4 425 6 462 711	751 475 8 462 751	711 9.670 13.60
2001 1940 United Burshating Co CT ISNE 16,27 36,92 6,518 0 50,71 2001 1940 United Power, Inc CO INACM 338 3,16 3,50	01 10	0.0 12.4 135,040 463,85 81,859 5.1 5.13 42,913	0 601,55 5.5 5.9 1.0 0.0 12 40,045 0.1 0.0 0	2.4 0.23 14,74 2,60 0 25,57 9,64 6,470 1,640	0 17,40 0,22 14,74 2,60 0 25,579 9,840 6,	470 1,560 0 17,460 0.340 12,560 12,560 0.000
	0.0 0.2	0.0 4.090 24.15	28,174 0.0 0.2 0	0.2 5 100 111 4 51	57 5 100 111 6	51 57 12.03 14.01
2021 1957 Upper Peninsula Power Company MI MISO 5,910 4,460 1,980 0 11,640 0001 1979 UNS Secretary No. 5 (279 UNS Secre	05 05 03	0.0 12 44.85 60.87 17.25 52 294.65 9.39 147.57	0 123,00 0.5 0.5 0.0 1 441,619 3.4 0.1 1.7 5	12 61 29 85 0 98 81 51 140 50 90 11 52 140 85	0 1,40 61 29 60 0 90 818	590 146 0 1,46 7.57 11,65 13,64 0,00 4 129 786 15,95 14,69 14,54
2021 1972 UNS Sketic, Inc AZ TEPC 17,84 648 10,148 20,62 2021 1979 Venedays Electric Coop Inc NO MSO 20 20 24 0 0 20	0.1 0.7 0.0	0.0 0.7 19 2,45 0	0 2,61 0.1 0.7 0.0 0.0	0.7 S 70 C C B S 70 C	0 84 9 70 0 0 84 9	76 6 6 84 10.00 10.00 0.00
	0.7 0.2	0.8 43,23 8,877	52,19 0.7 0.2 0	1,00 47 1,51	1,00 47 1,51	11,00 14,97
2021   1950 Walderla Electric Copp. Inc   TX   ERCD   3   0   0   3   2021	0.4 0.3	0.6 61,414 14,200	75,610 0.4 0.3 0.0 0	24 37 40 77 36 44	79 370 400 777 340	4G 79 1590 8.60 0.00
2021 19879 Veginia Electric & Power Co VA P.M 205,534 53,344 258,889	13.1 6.3	212 2,279,83 473,016	2,752,85 13.1 8.3 21	1.5 21,60 10,12 31,73 13,60 8,40	21,892 21,608 10,122 31,735 13,461 8,	21,802 11.102 8.903
	02 03 03	0.0 0.0 4.00 13.90 30.913	1,89 1.0 1 0 4882 02 03 03 03 00 0	10 10 10 20 20 0 0 0 0 0 0 0	9 90 30 20 20 0 63 61	45 25 0 16 20.05 13.01 13.29 0.00
2021 2003 Town of Wallingford - (CT) CT ISNE 200 1,060 2,300 0 3,500 2001 2010 Avida Corp ID Avid 4,900 11,000 541 0 16,000	87.5 207.1 2.5	0.0 2973 67,64 244,55 44,115	0 356,31 87.5 207.3 2.5 0.0 297	7 96 2,94 3 0 3,94 50 740 46	0 1,365 965 2,94 36 0 3,94 580	743 46 6 1,366 22.22 11.41 14.37 0.00
2001 2016 Water Married 1956s 50 5000 50 100 38 106 156	1997 498.9 5.9	0.0 704.5 212.76 455.58 6,100	0 674,45 1992 4993 55 0.0 704 23,78 0.0 0.2 0.1	1.2 1.210 5.370 64 0 6,650 1,570 1,340 82	0 3,000 1,210 5,370 64 0 6,650 1,570 1, 50 10 67 10 10 10 10 10 10 10 10 10 10 10 10 10	340 84 0 3,000 22.75 11.60 13.30 0.000
2001 2008 West Penn Power Company PA PUM 28,00 19,50 20,381 0 77,90 2001 2001 2001 2001 2001 2001 2001 20	3.4 2.0 4.3	0.0 104 136,06 269,76 423,790	0 828,64 3.4 2.8 4.2 0.0 10	0.4 1,75 1,72 1,05 0 4,49 3,64 2,79 1,05	0 7,49 1,75 1,72 1,05 0 4,49 3,640 2,	798 1,05 0 7,492 4.856 13.744 13.94 0.000
2001 2040 West River Electric Assen Inc. SD SWPP 0 8D	0.1 0.0	0.1 0 971	974 0.1 0.0 0			0 0 1500 14.00
2001 2010 Plate 1 (100) CH P.28 1.555 1 1.555	0.3	0.3 7,789	7,784 0.3 0	0.1 120 120 50	59 13 13	50 50 12.00
2021 2046 City of Weedlad - (MA) MA (SNE 8) 913 108 1,108 2021 2046 City of Weedlad - (MA) MA (SNE 8) 913 108 1,108	0.0 0.2 0.0	0.3 1,20 13,67 1,500	16,47 0.0 0.2 0.1 0	0 5 12 1 20 17 15 3	34 55 12 11 20 17	15 3 12.78 14.98 15.00
2021 2003 WM Roe Electric Coop, Inc. MN MISO 1,565 3,65 4,629	0.0 0.4	0.0 0.7 2,71 0 0	20,904 0.2 0.1 0	13 162 77 244 113 28	144 1,34 33 1,66 1,36	1,620 14.660 12.530 0.000 0.000
2021 2073 Wilman Municipal Utilities MN MSO 54 76 773 90	0.0 0.0 0.3	940 926 9,367	11,23 0.0 0.0 0.0 0.0	0.2 2 5 5 7 11 3 20	26 27 5 51 77 11	3 26 39 17.57 12.12 12.12
	0.0	0.0 0.0 12.414 11.034 23.700	9 49,001 0.3 0.1 0.3 0.0 0	24 26 57 26 4 1.19 64 97 564	0 152 20 57 20 0 119 60	97 56 6 2.17 10.00 15.00 15.00 0.00
2021 2006 Withiacocchie River Elec Coop PL SEC 300 30 0 0 0 0 0 0 0	0.0 0.0 0.0	0.0 0.0 4,52 3,75 0	0 8,275 0.0 0.0 0.0 0.0 0	4 174	131 4 4	174 12 12 30 12 30
2021 2000 Valley tree Valley Day Cours MT WALNY 95	10 40	44	20 10 40 4	44 21 21 21	20 1 20 20	4 100
200   2100   Yes Entirol Report   200	0.2	0.2 0 1,19 0	1,19 0.0	0 0 0 0		6 0.000 15.000 0.000
2021 2:01 City of Workington - (MN) MSO 35 225 298 555	0.0 0.1 0.1	0.0 496 2,966 3,935	7,39 0.0 0.1 0.1 0		2 1 1 1 4 4	6 7 22 15285 13.20 13.20
200 2 100 Y W Electron without pure Colors or 100 EACM 6 1 1 1	0.0 0.4	0.4 144 54	158 0.0 0.3 0	0.2 4 63 64	4 6 6 7	13.34 15.80
2021   2111   Personal Public Power Dist   45   580P   46   70   48   666	0.0 0.1 0.0	0.1 1,640 6,054 960 0.5 1,515 49,796	8,654 0.0 0.1 0.0 0	01 30 23 13 73	107 44 27 175	12.100 11.200 10.400
200 4112 Cop a selfinate 1900 00 00 00 00 00 00 00 00 00 00 00 00	0.1	0.1 468	464 03			1 10 100
2001 2135 Municipal Energy Agency of NE A MSSO 34 34 2001 2135 Municipal Energy Agency of NE ME SWPP 645 645	0.1	0.1 622	622 . 623 . 6		2 2	10.00
2021 2135 Markoya Cherty Agency of NE MY INACM 11 11 11	0.1	0.1 164	164 0.1			10.000
2021 2153 Mohave Electric Cooperative, I AZ INALC 778 2 0 0 778	0.3 0.0 0.0	0.0 0.3 6,438 7 0	0 0.0 0.0 0.0 0.0 0.0	2.3 117 12 0 0 128 179 7 0	0 187 117 12 0 0 128 179	7 4 9 187 8.300 3.000 0.000 0.000
2011   2115   Antique Design   Agency of 186.   277   400.000   1	0.1 0.0 0.0	0.0 0.1 4,545 0 0	0 4,540 0.1 0.0 0.0 0.0 0		0 274 0 0 0 0 0 274	0 0 0 274 16.600 0.000 0.000 0.000
2021 2281 Data Dischic Power Assn MS MSO 543	0.1	0.1 547	. 547 0.1	01 0 3	3 6 . 6 3	3 1000
2001 2447 High Maricinal Power Asserts III DATE 1 1964 199 2 2000	218 15 28 04 0.0	25.9 1,866,744 142,244 250,128 0.4 41,73 2,201	2,259,126 21.8 1.5 2.6 . 25 43.93 03 0.0 0	5.9 6,877 469 300 7,675 3,264 114 66 03 60 431 505	3,447 6,67 466 303 7,675 3,264 601 601 601 601 601	154 60 2,447 17.00 11.40 14.10 16.10 162 162 162 162 162 162 162 162 162 162
2012   3-650   300   5	0.8 1.1 0.3	0.0 23 25,135 80,068 27,463	0 132,665 08 1.1 0.3 0.0 2	22 1,59 2,09 520 0 4,18 450 510 120	0 1,000 1,500 2,000 500 0 4,100 450	16 120 0 1,080 6,630 10,570 10,570 0,000
2021 2659 Libert Utilites Grante State Secti NH ISNS 34 . 34 2021 2659 Libert Utilites Grante State Secti NH ISNS 1.120 6.20 1.800 4 11.15	03 03 0	0.0 0.6 15.124 46.12 28.268	0 8950 20 62 28 67 47	24 2 90 2 20 374 0 478 630 750 434	9 1513 2101 2301 374 C 478 858	759 524 0 1,513 5,730 11,300 13,331 0,000
2021 2651 Liberty Utilities (Granite State Dach) NH SAE 1,525 6,300 3,801 0 11,125 2021 2750 Carol-White REMC N M5O 517 510	1.7	1.7 5,170	5,170 1.3 1	12 29 29	26 29 0	0 10.00
2021 2654 Clark and People Uti Dat DR BPAT 262 27 829 0 1,13	00 00 02	0.0 0.0 3,751 386 7,896	0 11,83 00 0.0 0.3 0.0 0 5,29 0.0 0.0	02 11 8 168 6 288 18 2 55	0 71 113 8 166 0 286 18	2 52 0 71 13.29 94.19 9.279 0.000
2011   24000 Favorest relation   2011   2012   2013   2013   2013   2013   2014   20	4.0 2.3	6.3 151,364 41,67	193,04 3.8 2.1 5	55 1,140 25 1,400 1,330 669	2,00 1,98 25 1,98 1,33	2,00 12,50 9,20
2021 4005 Texas New Mexico Power Co TX ERCO 9,186 9,99 19,177	4.1 2.5	6.6 175,50 145,329	320,634 4.9 1.7 6	64 2,76 1,56 4,36 497 168	664 2,764 1,595 4,387 497	168 664 19.775 14.545
2021 4021 Wabash Valley Power Assn, Inc. L. 665O 102 1,05 654 0 1,85 2021 4021 Wabash Valley Power Assn, Inc. N. PJM 288 542 3,722 0 4,555	0.0 0.1 0.3	0.0 0.0 2,395 14,321 0,650 0.0 0.4 6,775 7,345 47,653	0 25,37 0.0 0.3 0.1 0.0 0 61,78 0.0 0.1 0.3 0.6 0	0.4 51 56 216 125 14 20 20	0 100 10 100 6 0 100 11 0 70 5 50 20 0 0 32 14	46 46 0 10 20 20 1159 1120 0.000 20 20 0 72 2174 1150 1280
2021 4021 Wabash Valley Power Assn, Inc. IN MISO 757 15,432 8,001 0 24,190	0.1 1.7 1.0	0.0 2.0 17,825 201,253 108,522	0 327,60 0.1 1.7 1.6 0.6 2	24 143 601 415 0 1,165 58 157 157	0 372 143 600 415 C 1,160 58	57 157 0 379 23.55 13.04 13.56 0.000
2021 4021 Wabash Valley Power Assn. Inc. MO MISSO 404 1,202 1,602 0 3,254 2021 4043 Emerald People's Utility Dist OR PACW 864 26 325 0 1,212	0.0 0.0	0.0 0.4 9.40 16,405 21,605 0.0 0.6 14,21 35 1,627	0 47,582 0.0 0.2 0.3 0.0 0.0 0 16,189 0.5 0.0 0.1 0.0 0.0	04 90 120 113 9 290 9 25 25 04 570 5 44 0 610 532 4 44	9 58 60 122 117 0 294 9 0 58 570 5 44 0 6 64 59	25 25 0 56 23.49 13.51 13.51 0.000 5 41 0 581 16.50 13.40 5.00
2001 4013 Columbia River Peoples UCI of OR SPAT 200 1,565 0 2,000 2001 4007 Ubb Associated Man Power Sys UT WALC 155 00 0 0 58	0.1 0.2 0.2	0.0 0.5 6,525 15,016 11,625	0 33,179 0.1 0.2 0.2 0.0 0	05 182 194 195 0 0 470 5 19 22	0 50 185 196 10 0 470 5	19 29 0 50 19.84 12.94 7.70 0.00
2021 4007 Utah Associated Mon Power Sys UT WALC 159 26 0 0 150 2021 4437 Oncor Silectric Delivery Company LLC TX ERCO 168,839 124,669 399,515	0.0 0.0 0.0 63.3 27.8	0.0 0.0 1,390 380 0 91.0 2,000.040 1,397.99	0 1,781 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 35 0 0 0 32 7 0 0 0.1 25,98 14,94 40,82 2,87 2,17	6 7 35 0 0 0 32 7 5,000 25,000 14,04 40,020 2,070 2,	0 0 0 7 0.014 0.015 0.000 0.000
	32.1 59.9	91.0 2,060,94 1,787,29 92.0 700,64 4,990,19	3,856,23 268 13.5 40 5,860,83 32.1 59.9 92	2 25,99 14,84 40,82 2,87 2,172 2 102,41 140,17 242,59 30,66 30,46	5,053 25,980 14,844 40,822 2,875 2, 69,445 102,411 140,175 242,586 38,969 30,	60,44 3.40 12.29
2021   2021   2014   English Valley   2021	0.0 0.1 0.0	0.0 0.1 10.71 3.01 0 13.6 216.99 364.50	6 13,73 0.0 0.1 0.0 0.0 0.0 0.0 0.0 0.0 13	0 42 2 0 0 44 2 1 0	0 3 42 2 0 0 45 2	1 0 0 3 10.00 10.00 0.00 0.00
201 5000 Entargy Texas Inc. IX 950 2034 36,00 50,00 57,00 5,400 11,29 201 11,29	1.4 1.3	2.7 40,229 107,259	561,50 65 6.6 13 547,40 1.4 1.3 2	2 180 1,20 1,450 2,008 811	2,019 180 1,20 1,450 2,000	200 15.211 9351 861 2,011 6.941 19.531
2021 S600 Marin Clean Energy CA DSO 288 5.77 488 0 6.54 2021 S600 America Binois Company B. MISO 120.94 235.62 256.50	0.0 0.0 0.1	0.0 0.3 4.27 57.13 2.512 53.0 1.546.99 3.172.53	0 63,91 0.0 0.2 0.1 0.0 0 4.219.537 17.4 256 53	0.2 718 452 28 0 1,19 1,162 1,171 272 2.6 17,702 27,64 55,34 16,539 13,000	0 2610 71 452 25 6 1,10 2,726 2, 20,540 17,70 37,64 55,34 16,530 13,	A29 960 0 6,13 9,275 11,235 7,335 0,000 009 20,540 10,200 14,400
2021 S669 America Illinois Company L. MISO 120,941 235,623 26,563 2021 S715 NYSERDA NY NYS 17,590 294,253 75,605 377,509	4.0 1.0 6.0	11.0 203,949 4,205,379 1,134,075	4.39527 17.4 35.6 53 5.663.30 4.0 11.0 6.0 11. 0 4.662.49 15.0 21.0 96.0 0.0 52		. 56,010 74,820 44,241 6,50 125,573 26,750 25,	241 4,015 . 56,010 15,000 15,000 15,000
2021 5720 Energy Total of Orecon OR PGE 70.520 163.907 124.590 0 359.10	16.0 25.0 17.0	0.0 58.0 909,959 2,188,309 1,504,232		2.0 20,054 31,260 18,676 0 70,190 17,114 28,280 12,560	0 57.440 20.054 31.200 18.874 O 70.190 17.114 28.	280 12,040 0 57,440 14.000 13.000 12.000 0.000
2021         5734 Efficiency Mains Trust         WE         ISNE         19,75         64,000         174,85           2021         5734 Vermord Energy Investment Corporation         VT         ISNE         27,92         43,50         71,52	5.0 6.0	19.7 1,422,405 819,541 11.8 382,005 567,221	2,241,941 12.4 7.3 19 949,254 5.8 6.0 11	2 27,65 12,18 39,34 7,92 3,26 1 11,53 14,69 26,22 6,38 5,219	11,185 27,10 12,18 38,34 7,920 3, 11,526 11,535 14,656 26,236 6,386 5,	21 11,59 13,67 13,61
2021 5734 Focus on Energy WI MISO 282,042 175,458 243,108 700,604	34.0 28.0 30.2	92.2 3,018,64 2,605,266 3,730,862		2 22,10 13,90 15,05 51,05 14,59 9,16 9,39	23,151 22,103 13,903 15,054 51,055 14,591 9,	163 9,398 33,651 19,703 14,845 15,343
2001 ST4E (Liberty Utilizes CA OSO 160 300 507 201 507	94.7	0.2 1,650 4,960 147 147	9,000 0.3 0.0 0 163 143 44	4 9 12 140 121	40 120 140	40 10,000 54.100
2021 SH2CUP OF THAT FOR THE	2.0 2.4	4.4 111,450 140,300	251,76 0.4 0.4 0	0.8 27,66 0,50 36,16 10,60 3,65	54,715 27,66 8,500 36,160 10,660 3,	853 14,715 7.6TG 9.34
2001         S612 Claye Light Compact         MA         SME         14.55         15.01         29.55           2001         S612 CC Sustainable Energy Lithy         DC         P.M         38.47         61,15         99,03           2001         S682 Colleane Sustainable Energy Lithy         DC         P.M         4,50         4,50         3.71           2001         S682 Colleane Sustainable Energy Lithy         DC         P.M         4,50         4,50         3.71	6.4 3.0	10.2 258,46 653,87 11.6 74,89 81,89		02 4,90 4,22 9,15 2,80 3,63 19 4,30 2,819 7,14	6,430 4,930 4,22 9,15 2,804 3, 4,542 2,814 7,359	631 6,435 9,316 13,663
2021 S86S Hawai Energy Efficiency Program HI NA 42.84 57.36 100.214	7.9 8.7	15.0 74,000 81,000 16.6 440,010 826,75		5.9 4,335 2,859 7,769 6.6 7,374 14,46 21,635 4,667 5,507	. 9,50 2,85 7,374 14,46 21,825 4,067 5,	500 9,564 10,300 14,400
2021 5865 Havai Energy Ettolercy Program ill NA 42,84 57,36 57,36 100,21- 2021 5901 PUD No 1 of Jefferson County NA SPAT 825 1,460 2,280	0.8 1.5		31.452 0.1 0.2	450 100 550	450 100 500	2130 1300
2011         SSCH (MD) Not of Jafferson County         RA         EPAT         BD         1,466         2,206           2011         SSCH (MD) Not of Jafferson County         RA         EPAT         BD         1,466         2,206           2011         SSCH (MD) Not of SSCH (MD) Not of SSCH (MD) Not of SSCH (MD)         CSC         2,00         2,00         2,00           2011         GSSSH (MD) Not of SSCH (MD) Not of SSCH (MD)         CSC         2,00         0         0         64	01.0 SS.3 0.0 0.0 0.0	1063 8,427,39 4,270,09 0.0 0.0 24 215 0	12,697,479 51.0 55.3 106 6 229 0.0 0.0 0.0 0.0 0.0	6 52,34 78,86 131,20 12,03 14,135 00 4 14 0 0 1 86 350 0	20,100 52,345 78,862 131,20 12,034 14, 0 440 4 14 0 6 4 61	20 20,162 94,613 15,203

# Attachment I

Usiby Characteristics	Energy	Reporting Year Incormental Annual Savings (MRN)	ings Peak Demand Savings (MW)	Inco Energy Savings (MWh)	emental Life Cycle Savings Peak Demand Savin	pa (MW)	So Customer Incentives (Thousand Dollars)	sporting Year Incremental Cost All Other Costs (Thou	usand Dollars) Customer Incentives (Thousand Dollars	Incremental Life Cycle Costs  All Other Costs (Thousand Dollars)  (Years)
Wilson   Consentence   Wilson   Consentence   Wilson	State   BA Code   Residential   Commercial   1	dustrial Transportation   Total Residential Cor   0   0   213   0.0     1,000   2.3	Industrial   Transportation   Total   Residenta	i Commercial Industrial Transportation 6 0 1,150 0	Total Residential Commercial Industrial 61,038 66 66 0.6 0.6 0.0 0.0 0.0 20,007 2.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	Transportation Total Res	seidential Commercial Industrial Transportation 0 0 0 0 0 0 0 0 0 772	Total   Residential   Commercial Industrial   0   24   0   772   422   147	Transportation Total Residential Commercial Industrial Transportation  0 0 24 0 0 0 0 0  422 772 772	Total   Residential Commercial Industrial Transportation   Total   Residential Commercial Industrial Transportation   Total   Residential Commercial Industrial   Transportation   Total   Residential Commercial Industrial   Industrial   Total   Total   Residential Commercial Industrial   I
2000 200 Harmeda Murridgal Power 2000 200 Dity of Alexandria - (MN) 2020 400 Marriaha Electric Member Corp	SA 5000	6 1,140 0.3 1,800 2,776 0.1	0.1 0.9 0.4 1,5 0.1 0.3 0.5 4,7	20 14,341 0 06 6,900 24,800	15,876 0.3 0.1 0.8 36,500 0.1 0.1 0.3	0.4	96 229 0 46 19 64	328 275 598 130 28 9 3	6 634 96 224 6 23 66 48 18 64	328 279 350 6 674 14.520 14.155 61 156 24 9 33 66 13.02 13.07 13.07
2020 554Cby of Armas - (IA) 2020 590 Cby of Arnahelm - (CA) 2020 691 Cby of Arnahe 2020 7334ppalachian Power Co	100   100	0 0 3,284 0.7 2,736 17,200 0.6 2,136 0.0 2,224 0 23,410 0.2	08 00 00 1.5 9.3 20 02 2.7 40.2 04 0.4 0.4 2.3 2.1 0.3 00 2.0 16.6	0 43.120 0 0 4 125,75 29,56 3 18,656 9 189,789 18,861 0	52,425 0.7 0.8 0.8 195,537 0.6 2.0 0.2 20,530 0.6 0.4 205,505 0.3 2.1 0.3	00 1.5 2.7 0.4 0.0 3.6	275 90 0 0 714 2,145 0 . 30 166 . 787 1,007 122 0	367 38 13 2,859 1,175 725 192 96 13 2,006 846 98 10	0 6 66 279 93 0 1 1,880 754 2,145 0 108 20 1622 00 0 1,886 787 1,000 122	367 38 13 6 0 46 11:82 10:040 2.895 1;173 722 1 1.895 11:537 11:432 10:3 195 96 12 930 12:000 14:000 2.000 866 962 199 0 15:00 14:000 8:0000 8:000 8:000 8:000 8:000 8:000 8:000 8:000 8:000 8:000 8:000 8:0
2020 733 Appalachian Power Co 2020 803 Artona Public Service Co 2020 814 Enterpy Arkansas LLC	W PJM 4,552 0 AZ AZPS 80,56 67,70 AR MISO 99,51 100,59	6 6 4,553 0.3 156,56 62.2 85,10 293,20 21.3	0.0 0.0 0.1 0.3 36.2 13.1 75.2 744.3 16.7 12.1 50.1 1,820,0	2 C C C G C 983.78 19 1,597,93 1,962,669	36,233 0.3 0.0 0.0 1,728,402 62.2 13.1 4,400,462 21.3 16.7 12.1	0.3 75.3 50.1	256 0 0 0 11,474 3,156 18,301 10,862 6,203 .	254 1,125 0 14,626 11,105 7,145 35,374 6,48 4,32 4,15	0 1,123 256 0 0 18,24 11,47 3,154 20 14,93 16,30 10,80 6,20	254 1,102 G G G 1,125 8,000 0,000 0,0 14,022 11,105 7,145 19,026 8,405 14,505 35,322 0,482 4,322 4,125 14,034 18,405 14,705 12,2
2020 963 Atlantic City Electric Co 2020 1009 City of Austin - (MN) 2020 1015 Austin Energy	NJ PJM 12,140 0 MN MISO 411 2,120 TX ERCO 39,600 75,679	0 0 12,140 2.9 97 2,635 0.1 25,29 140,531 15.3	0.0 0.0 0.0 2.0 2.0 2.0 0.0 0.0 0.0 0.0	0 C C 0 7: 21,20: 970 2: 1,262,669 420,89	24,000 2.9 0.0 0.0 26,340 0.1 0.4 0.0 2,367,69 15.3 23.3 7,6	0.0 2.9 0.5 46.4	911 0 0 0 72 245 11 . 5,531 2,275 760 .	911 1,22 0 328 27 10 8,570 4,10 1,30 45	0 0 1,200 911 0 0 0 37 72 345 11 55 5,99 5,53 2,27 760	91 5.20 0 0 0 1,200 2,000 0,00
2000 1950/City of Ansusa 2000 1957 Saltimore Gas & Electric Co 2000 1259 Saltimore Gas & Electric Coop 2000 1279 Saltimore Electric Coop, Inc 2000 1300 City of Bay (21-yilli) 2000 1300 City of Bay (21-yilli) 2000 1500 Saltimore Electric Coop, Inc	CA CISO 498 2,653 MD PJM 249,24 207,50 WI MISO 254 5 TX ERCO 13	60 3,208 0.0 456,22 54.0 810 0 1,008 0.1 102 0.0	0.5 0.1 0.6 3,1 34.4 0.0 0.0 0.1 1,033,0 0.0 0.0 0.1 3,9	22 22,000 900 11 2,640,680 9 73 0,654 0	20,042 0.0 0.5 0.1 2,724,402 54.8 34.6 12,722 0.1 0.0 0.0 144 0.0	0.0 89.4 0.0 0.1	64 639 20 24,500 45,300 46 0 6 0	713 28 191 68,654 17,94 12,28 53 106 2 2 1	7 224 64 629 20 30,22 24,506 45,30 0 0 100 46 0 6	712 28 197 7 229 11.30 11.728 15.5 69.55 17.94 12.28
2020 1579PUD No 1 of Benton County	MI MISO 808 1,002 1,002 1,003 1,115 1,002 1,115 1,002 1,003	1,000 0.1 0 0 2,030 0.2 1,100 3,000 0.5	0.1 0.2 0.0 0.0 0.4 20.4 0.3 0.1 0.5 20.1	8 11,785 7 12,93 0 0 2 19,66 14,26	20,172 0.1 0.1 33,416 0.2 0.2 63,061 0.5 0.3 0.1	0.2 0.4 0.9	143 106	309 60 76 174 106 2 913	140 143 155 112 96 76 536 217 157	200 63 96 100 11.400 14.500 174 105 2 11.60 12.0
2020 1723 Big Bend Electric Coop, Inc	SC SC 322 236 KY MISO 0 0 WA SPAT 1,050 66	0 0 501 0.7 0 0 0 1,160 0 2,339 0.3	0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	\$ 1,150 0 0 0 0 0 0 0 11 1,250 10,000 0	5,650 0.7 0.1 0.6 0 23,660 0.1 0.0 0.7	0.0 0.0 0.0 0.4	118 4 0 0 0 0 0 0 279 28 287 0	521 74 1 0 502 27 1 7	0 0 72 110 4 0 0 0 0 70 0 20 207	52 11 0 0 0 11 11.30 5.000 0.0 0 0 0 0 0 11.63 14.300 5.4
2020 1783 Black River Electric Coop, Inc (SC) 2020 1775 Black River Electric Coop - (MO) 2020 1785 Black Ridge Elect Member Corp (MC) 2020 2001 Bloome Electric Coop 2020 2001 Bloome Electric Coop	SC SC 0 0 MD AECI NC DUK 100 MD AECI	927 1.0	14 8	o o o o	0 0.0 0.0 0.0 851 1.0	1.0	67	12 0		68 6 6 7,000
2020 2089 Somah Light & Power Company 2020 2212 Stood River Electric Coop. Inc	MO AECI MV WALC 126 0 CT SME 11 SM NC SUK	6 6 120 6 6 68 0.0	0.0 0.0 0.0 0.0 1.2 0.0 0.0 0.0 0.0 1	00 C C 0 54 758 C 0	1,206 0.0 0.0 0.0 912 0.0 0.0 0.0	0.0 0.0 0.0 0.0	28 0 0 0 7 60 0 0	28 6 6 17 4 6	0 0 8 28 0 0 0 10 7 10 0	00 0 00 000 000 0 0 0 0 0 0 0 0 0 0 0
2000   2285 City of Brookings - (DD)   2000   2440 Brookings - (DD)   2000   2440 City of Bryss - (TX)   2000   2440 City of Bryss - (TX)   2000   2557 City of Burbanis Water and Power   2000   2558 City of Burbanis Water and Power   2000   2558 City of Burbanis Water and Power   2000   2558 City of Burbanis Water (-VTT)   2000   2558 Dutlet County Poural Elec Coop - (IA)   200	TX ERCO 513 2,45 CA LOWP 700 6,413	2,984 0.1 7,117 0.6	0.0 0.2 0.1 0.2 7 0.7 0.7 5.5 1.9 2.2 9.4	0 24,665 6 34,665 6 35,00 3 39,245	13,880 0.0 0.0 0.2 29,836 0.1 0.7 85,665 0.6 1.9	02 02 25	10 10 20 0 101 102 0 678 666	251 45 30 1,283 476 726	79 10 10 10 10 10 1 10 1 10 1 10 1 10 1	25 47 38 77 1000 1000 1000 1100 1100 1100 1100
2020   2540 City of Burlington Electric - (VT)   2020   2650 Burlier County Rural Elec Coop - (IA)   2020   3040 Duke Energy Progress - (NC)   2020 Duke Energy Progress - (NC)	W MALC 122 C T 50.6 11 58 NC 50.00 41 228 NC 5	3,790 0.1 317,59 63.9 52,000 10.9	0.4 0.5 18,1 15.3 79.3 1,867,4 2.0 13.4 200.5		57,343 0.3 0.5 2,005,87 63.5 15.3 427,753 90.5 2.4	0.7 793	23,711 10,475	1,738 398 679 34,196 15,32 5,59 5,606 2,519 314	1,070 600 1,060 20,88 22,711 10,475 3,20 3,000 1,715	1.731 507 679 1.077 15.003 14.000 34.100 15.300 5.500 20.005 8.144 13.244 5.500 2.507 0.11 3.244
2020 3107 Carteret Craven El Member Corp. 2020 3108 City of Carteraville - (GA)	us loss des	1,573 22.8	0.1 324 1,0	25 6,082	7,700 23.9 0.1	22.5	1 0 .	1 7		4 1,000 17,000
2020 3200 Cedar Falls Utilities 2020 3205 Cedar-Knox Public Power Dist 2020 3240 Central Electric Coop Inc - (CR)	GA SOCO 1,037  NA MISO 1,122 5,500  NE SMPP 55 228  OR SPAT 958 1,524	245 2,874 0.3 98 479 0.6 1,349 3,824 0.1	0.4 0.0 0.7 14,4 0.0 0.0 0.7 6 0.2 0.2 0.4 99,5	1 24.27 4.40 51 3,60 91 56 37,54 15,64	43,172 0.3 0.4 0.0 5,160 0.0 0.0 0.0 153,22 0.1 0.3 0.2	0.7 0.1 0.4	150 95 16 15 12 6 250 95 60	271 265 24 23 2 13 519 6	7 20 156 85 56 4 55 55 52 6 6 2,315 641 308	27 26 2 7 257 12.85 19.68 24.0 32 1 1 4 19.22 11.00 54.1 3.36 3 37 16.63 13.00 12.2
2020 3245 Central Florida Elec Coop, Inc. 2020 2346 Central Georgia El Member Corp. 2020 3246 Central Hudson Gas & Disc. Corp. 2020 3255 Central Invas Power Cooperative	GA SOCO 228 NY NYS 54.09 27.61 IA MISO 1.75 2.08	219 0.0 228 0.1 81,754 3.2 219 4,000 0.6	47 0.1 0.1 0.1 2.1 47 7.4 402.2 0.2 0.1 0.1 12.4	27 253,761 00 21,15 3,370	2,02 0.1 0.5 0.5 2,02 0.1 0.1 840,00 3.2 4.7 53,00 0.6 0.2 0.4	0.0 0.1 7.8	0 0 0 0 28 1 1,924 5,000 960 408 61	9 218 124 28 22 7,000 2,059 308 1,453 377 157 2	2 29 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	211 54 5 5 334 54628 12.265 0.C 22 25 2 22 11.002 7.003 2.005 300 2.005 0.00 12.80 4.45 377 55 22 550 5074 55.403 15.1
2020 3020 Arms 1998 Power Cooperative Coop	OR SPAT 2,000 470 TX ERCO 24,922 34,333 NM SWPP 62 309 MA SPAT 33	25 2,50 1.8 0 0 50,254 13.1 180 575 0.1 3.19 1400	0.0 0.0 15 43.4 37.3 0.0 0.0 50.4 267.2 0.1 0.0 0.0	10 7,05 214 00 415,15 0 0 0 11 1,02 500 10 2,00 ,00 AD	50,66 1.8 0.0 0.0 782,46 13.1 37.3 0.6 2730 0.1 0.1 0.1 46,333 0.6 0.8	0.0 50.4 0.0 0.3	643 83 2 . 7,411 5,246 0 0 2 50 20 .	727 68 29 12,657 77 579 73 82	110 643 83 2 0 0 1,355 7,410 5,246 0 83 2 50 50	7Z 66 2 1 110 21.027 15.42 5.1 12.65 77 57 6 0 1.02 14.00 12.00 0 27 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2020 3400 Day of Chasks - (MN) 2020 3401 Day of Chasks - (MN) 2020 3415 PUD No 1 of Chasks County 2020 3451 Chayenne Light Fuel & Power d/b/s Blac	WA MISO 438 2,498 WA CHPD 2,875 5,992 WY MADM 500 6,551	2,477 5,413 0.2 9,955 19,824 1.8 7,055 0.3	0.3 0.2 0.7 4.3 1.4 1.9 5.0 0.2.5 1.2 . 1.7 7.5	9 24,97 24,709 9 77,38 123,98 0 98,20	54,122 0.3 0.3 0.3 203,992 1.8 1.4 1.5 105,762 0.3 1.3	0.7 5.0 1.7	60 300 80 840 1,004 1,208 47 347	515 9 50 5 3,221 355 333 7 394 110 285	20 150 66 20 66 79 70 840 1,00 1,20 40 40 47 347	517 5 5 5 5 5 192 1930 1030 1030 1030 1030 1030 1030 1030
Service of the servic	1	100 000 0.0 27 110.0 0 0 1 0.0 200.05 96.0	0.1 0.0 0.1 1,4 110.6 6 0.0 0.0 0.0 0.0 0.0 10.9 47.8 1,447.6	5,360 2,886 56 10 0 0 0 27 880,419	9,654 0.0 0.1 0.0 408 57.9 10 0.0 0.0 0.0 2,327,94 26.9 10.9	01 573 04 00	71 84 20	175 50 47 1 9 0 1 0 0 12,500 5,22 1,30	11 100 71 04 20 0 0 0 0 0 0 0 0 0 0	173 55 67 11 168 10.002 15.005 15.00 6 6 6 6 6 5.005 15.0
2000 3844PUD No 1 of Clatter County 2000 3660PUD No 1 of Clark County - (WA) 2000 3755 Cleveland Electric Blum Co	WA SPAT 1,23 1,024 WA SPAT 24,49 22,04 OH PJM 131,713 61,160	219 2,974 0.2 11,375 0 50,835 5.6 30,874 0 221,745 17.7	0.1 0.0 0.3 27.4 5.3 2.6 0.0 13.1 185,3 7.5 6.0 0.0 31.3 1.403,0	0 13,450 2,850 0 253,50 102,33 4 13 674,90 404,39 0	43,715 0.3 0.1 0.6 551,66 5.6 5.3 2.6 2,462,420 17.7 7.5 6.6	0.0 0.0 13.5 0.0 21.2	367 100 20 . 2,452 2,508 2,157 0 9,754 2,504 1,308 0	490 100 50 7,540 1,20 134 13,751 4,72 1,775 60	7 233 347 102 20 5 0 1,400 2,455 2,938 2,157 22 0 7,42 9,758 2,594 1,384	6 16 5 7 125 125 125 125 125 125 125 125 125 125
2020 3628 Street and Exercise Cooperative, Inc. 2020 3628 Street and Exertic Co-op. 2020 3645 Cool Exercise Power Assn. 2020 3645 Coldwater Soard of Public US	MI MISO 2,561 5,374 MS SCOO 6,024 31 MI MISO 131 464	3,634 6.2 0 4 7,034 0 6 6,032 1.0 788 1,386 0.0	0.2 46.6 30.7 0.0 0.0 0.0 1.5 40.2 0.1 0.2 0.3 9	54,400 0 0 15 458 0 0 50 4,640 7,000	95,000 93 95,200 90 00 10,479 00 01 02	0.2 0.0 0.3	252 156 0 0 357 7 0 0 22 35 72	2.02 446 31 452 303 46 0 133 13 25 5	0 0 762 253 198 0 0 0 46 357 7 0 98 98 22 32 77	A,843
2020 2940 City of College Station - (TX) 2020 3989 City of Colorado Springs - (CO) 2020 4003 City of Colon - (CA)	TX ERCO 1,666 255 CO PSCO 2,696 8,285 CA CISO 645 681	1,268 0.8 10,862 0.3 2,588 3,918 0.2	0.1 0.3 13.2 1.1 1.4 20.5 0.1 0.4 0.7 6.9	0 3,28 6 83,06 2 7,60 37,00	16,403 0.8 0.1 114,036 0.3 1.1 51,601 0.3 0.1 0.4	0.9 5.4 0.7	317 7	324 93 26 2,464 553 464 817 66 38 4	110 317 7 1,022 307 2,156 48 153 83 5 0	224 80 28 119 13.003 13.000 2.46 551 468 1.1025 11.478 10.003 81 60 38 48 112 13.46 1150 14.6
2020 4110 Commonwealth Edison Co 2020 4170 Commonwealth Edison Co 2020 4170 Connecticut Light & Power Co	MO MISO 638 1,010 L PJM 968,76 1,027,16 CT SNE 134,59 142,68	1,646 0.4 2,055,966 122.6 42,679 220,151 18.4	0.3 0.7 7.6 193.6 193.6 22.8 6.8 47.5 839.6	6 12.13 6 13.702,80 6 1,650,25 492,93	19,766 0.4 0.3 22,968,969 132.0 193.0 2,983,073 18.4 22.8 6.8	0.7 325.0 47.8	361 81 62,202 144,381 48,822 29,846 8,915	441 546 72 206,58 38,22 54,49 87,584 15,30 23,25 9,45	21) 361 85 92,72 62,23 144,38 2 47,65 48,82 29,84 8,915	461 162 77 222 12303 12304 12304 12304 12304 12305 123
2020   4229 Consolidated Edison Co-NY Inc   2020   4227 Consolidated Electric Coop   2020   4254 Consumers Energy Co   2020   4317 Coos-Curry Electric Coop, Inc	NY NYS 431,003 207,772 MO AECI MI MISO 173,025 257,255 OR 8PAT 236 246	639,575 25.4 157,673 588,553 16.7 536 0.0	41.5 76.9 4.444,5 34.0 20.8 71.5 2,250,8 0.0 0.1 5.7	0 2,279,328 0 3,932,51 1,362,76 0 3,99	6,724,223 7,575,144 16.7 34.0 20.0 8,979 0.0 0.0	71.5 0.1	24,565 58,849 20,256 31,525 19,325 137 54	83,608 10,408 10,452 71,108 18,131 13,530 8,25	20,86 24,98 59,46 92 39,85 20,29 31,52 19,32 137 54	64.69 10.41 10.538 20.94 10.202 10.202 71.100 18.13 13.53 0.202 30.05 6.002 12.40 12.40 19.94 19.94 10.302
2000         4363 Com Selt Power Coop           2000         4401 Cotton Electric Coop, Inc           2000         4402 Coveta Fayette El Member Corp	A SWPP 1,313 6,078 OK SWPP 322 GA SOCO 1,626 26	3,192 10,596 0.2 322 0.0 0 0 1,653 1.9	15 05 23 10,0 0.0 1,0 0.0 0.0 0.0 21 10,0	34 54,869 50,760 74 257 0 0	10(819 02 15 03 1,876 12 . 16,533 19 02 04	2.3 1.2 0.4 2.1	203 229 87 . 67 60 5 0 0	511 40 30 1 67 11 65 236 11	90 87 269 221 87 111 67	51 42 31 55 87 14.00 9.011 92 65 14.00 9.011 92 65 11 11 12.000 11 10.000 9.011 92 75 12.000 11.0000 9.01
Committee of the Commit	MA SPAT 2,00 1,340 OH PJM 0 455 VA PJM 178 914	3,774 6 7,162 0.3 231 0 606 0.0 81 1,172 0.1	0.2 0.4 0.5 0.5 22,5 0.1 0.0 0.0 0.3 0.4 0.0 0.5 2,4	7 17,73 41,836 6 6 6,92 3,466 6 8 9,12 807	92,416 0.3 0.2 0.4 10,265 0.6 0.1 0.6 12,425 0.1 0.4 0.6	0.0 0.9 0.0 0.1 0.5	779 253 534 0 0 23 14 0 50 62 6 .	1,584 254 134 11 38 0 0 120 171 6	13 0 50 779 253 534 0 0 0 0 0 23 14 150 53 60 4	1,56 22 13 11 15 0 567 15.96 13.40 11.5 28 0 0 0 0 0 15.00 15.00 15.00 15.00 50 37 4 18 18 4.00 14.00
2020 491 Dawson Power Bistrict 2020 4922 Dayton Power & Light Co 2020 5027 Dayton Power 2020 5027 Malinarya Power	NE SWPP 865 711 OH PJM 81,31 84,64 OE PJM 22,995 MD PJM 18,94 45,370	988 6 2,565 0.3 64,636 220,590 10,4 22,930 4,6	0.1 0.1 0.6 0.4 15.3 13.0 10.4 34.4 1,342.5 4.0 142.6 5.5 0.0 0.0 0.0 37.5 118,1	22 7,875 13,861 0 44 873,259 675,522 5 6 649,000 0 0	37,051 0.2 0.1 0.1 2,891,72 10.4 13.6 10.4 142,85 4.2 768,000 32.4 5.5 0.5	0.0 0.4 34.4 4.2	245 37 71 0 4,85 6,267 4,80 .	353 16 14 1 15,968 2,963 2,223 1,88 303 1,79 46,553 1,091 3,095	15 0 46 245 32 75 26 6,872 4,800 6,200 4,800 1,770 300 0 0 7,912 2,900 14,300 0	201 11 14 17 0 46 17.774 11.00 14.51 15.00 2.00 2.20 1.00 6.00 10.74 10.00 10.1 201 1.77 1 1.00 0 10.1 15.00 1.77 2 1.00 0 7.711 6.000
2020 506) City of Denton - (TX) 2020 507/Delaware Electric Cooperative 2020 5109/DTE Electric Company	TX ERCO 286 DE PJM 341 452 MI MISO 279,755 490,034	700 1.6 700 7.0 700 781 53.5	0.0 7.0 1.4 60.0 121.0 20.297.0	92 3,049 249 27,473,009	4,000 1.6 4,453 3.6 0.0 47,770,735 34.2 50.1	1.0 2.0 92.3	96 120 1,601	96 48 1,777 12 566 67,62 61,219	40 96 179 120 1,65 120,04	96 41 62 55.00 1.277 1.278 1.2
2020 5304 Olsie Electric Coop 2020 5336 Clay of Dover - (OH) 2020 5416 Ouke Energy Carolinas, LLC	AL AEC 22 DH PJM 22 NC DUK 416,60 152,25	22 23 509,551 94.3	26.4 120.7 2,327,5	0 2,055,00	225 4,653,135 94.3 26.4 1,034,075 34.4 9.6	120.7	10,54	10 34,79 18,93 8,03	20,000 10,000 10,140	34,79 18,00 8,02 20,00 5,00 13,00
2020 5416Duke Energy Carolinas, LLC 2020 5417 Dunn County Electric Coop 2020 5487 Duquesne Light Co 2020 5552 East River Ellic Par Coop Inc	AL AEC 2:  OH PAM  NC SUK 458.00 152.25  NC SUK 152.00 55.55  NN MSO 66 5.32  NN MSO 70 66 12.27  NN MSO 70 66 12.27  NN MSO 70 70 70 70 70 70 70 70 70 70 70 70 70	207,643 34.4 0 0 2,475 0.1 34,25 90,005 1.0 0 34.0	9.6 44.1 874.5 0.0 0.0 0.0 0.1 0.1 10.5 7.4 4.4 12.1 65.3 9.0 29.0 72.0	64 749.91 65 24.146 20 440.91 342.33 6 6 6	849,160 1.0 4.9 2.3	44.0 0.1 0.2 72.0	6,000 5,000	12,694 6,901 2,901 71 10 1 6,541 4,701 5,141 2,44 494 201 57 1	9,83 6,80 5,800 100 50 21 46 12,30 751 4,34 1,403 16 353 310 12,3 31	12,69 6,500 2,501 9,037 5,000 13,500 77 107 1 150 1 150 15,422 13,210 6,549 4,708 5,44 2,446 12,230 6,900 7,000 15,0 660 201 57 19 327
2020 SSB0 East Kentucky Power Coop, Inc 2020 SSB0 Eastern Blook Elec Coop 2020 SSB0 Electric Co	EY PJM 5,995 0 E MISO 0 NM EPE 12,73 9,170	6 6 5,595 1.9 6 0.0 6 21,905 4.1	0.0 0.0 0.0 1.5 94.5 0.0 0.0 0.0 5.4 223,0	2 C C C G	94,522 1.5 0.0 0.6 4 0.0 255,846 4.1 1.3 0.6	0.0 19 0.0 0.0 5.4	768 0 0 0 1,925 1,153 0 0	768 117 0 0 2,077 66 766	0 0 117 768 0 0 0 0 1,60 1,605 1,150 0	766 117 G G G 117 16,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2020 5726 Section Dist Not Maricopa 2020 5775 Sept of Six Rover 2020 5786 Sixton Rural Public Per Dist	AZ AZPS 100 MN MISO 422 353 MS 5MPP 71 94	3,494 4,272 200 4 365 0.0	0.0 0.0 0.0 0.0 0.0	32 5.208 47,039 86 1,032 1,664 4	50,505 2,700 0.0 0.0 0.0	00 00	51 54 134 . 20 4 18 0	199 171 21 8 50 4 6 1	58 58 50 50 50 50 50 50 50 50 50 50 50 50 50	50 20 20 13 20 13 20 13 20 15
2020         5820 Elimburst Muhasi Power & Light Co           2020         5800 Empire Distric Electric Co           2020         5800 Empire Distric Electric Co           2020         5800 Empire District Electric Co           2020         5800 Empire District Electric Co	WA SPAT 196 363 AR SWPP 122 9 MO SWPP 366 1,662 CO WACM 466 1,253	572 0.0 0 0 134 0.0 3,87 0 5,028 0.1	0.0 0.0 0.0 0.0 1,7 0.0 0.0 0.0 0.0 0.0 1,7 0.0 0.0 0.0 0.0 0.0 5,0	06 5,025 44 118 0 0 05 50,405 21,000 0 22 15,004	10,048 0.0 0.0 0.0 1,658 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.1 0.0 0.0 0.0 0.0	62 40 33 3 0 0 10 342 146 0 200 36	100 36 26 3 651 4 41 1	62 40 0 0 23 33 3 0 17 0 50 160 342 140	100 26-861 13-90 00 22 13-00 13-00 13-00 00 23 13-00 1
2020 5820 Village of Fairport - (NY) 2020 6022 City of Eugene - (CR) 2020 6198 Farmers Electric Coop, Inc - (NM)	NY NYIS 1,89 671 OR SPAT 2,363 6,188 NM SWPP 138	6 6 2,575 24.3 6,500 6 15,053 0.9 129 0.0	1.1 0.0 0.1 25.4 18.8 18.1 18.1 1.1 0.1 2.2 41.8 0.1 1.1 0.1 1.1 0.1 1.1 1.1 1.1 1.1 1.1	6 8,145 0 0 6 95,995 97,535 0	27,105 24.3 1.1 0.8 235,295 0.5 1.8 1.1	0.0 25.4 0.0 3.7 0.0	162 285 0 0 1,414 852 120 0 3	467 27 43 2,464 0 0 1,25 3 1	6 C 70 182 285 C C 1,296 1,414 852 198 C 1 3 C C C C C C C C C C C C C C C C C	46: 7: 42 6 6 70 10000 12,000 2,66 0 0 1,200 6 1,200 12,771 15,513 15,00 2,66 1,000 12,000 12,000 15
2020 6355 Florida Power & Light Co 2020 6455 Florida Power & Light Co 2020 6455 Duke Energy Florida, LLC	MT 8PAT 866 2,205 FL FPL 1988 22,02 FL FPC 22,61 38,19	6 6 70,814 23.0	9.2 18.0 22.0 0.0 0.0 45.0 261,5	9 30,800 9,900 5 468,000 0 0	50,995 729,640 23.0 22.0 0.0	0.0 45.0	377 370 170 3,595 6,564 5,996 2,288 0 0	921 10,160 14,29 9,330 8,280 6,51 2,39	23,61 0 0 0,000 5,990 2,200 0	200 00 00 1200 1200 1200 1200 1200 1200
200   100   7 km hand C	1	5.06 0.4 6.06 0 25.246 1.7 25.5 0.0 20.675 1.1	0.0 0.0 0.0 0.4 4.7 0.8 0.8 0.0 0.1 3.2 5.8 0.4 2.8 1.1 206.7	430 0 0 0 82,332 82,332 0 0 50	223,575 1.7 0.8 0.8 2.800 0.0 2.00,755 1.1	0.0 0.4 0.0 3.3 0.0	46 7 0 955 1,403 1,403 0 40	3,941 600 325 33 3,941 600 325 33 44 325	9 498 177 146 0 0 1,26 955 1,467 1,467 3 20 40	3.564 604 51 60 1,000 10,000 10,000 10,000 20 10,000 20 10,000 20 10,000 20 10,000 20 10,000 20 10,000 20 10,000 20 10,000 20 1,0
2000 6779 City of Fremost - (NE) 2000 6782 Freshorr-Mouer Electric Cooperative 2000 6784 French Broad Elect Member Corp 2000 6809 Calingry in Dunional Hilling	ME SWPP  MN MSO 2.00 6.736  NO CPLE 8,96 472  FL GOL 676	361 0 9,00 0.3 9,436 1.0	0.6 0.0 0.1 0.1 41.4 0.1 1.1 40.3	9 07,425 4,000 0 5 2,120	133,09 03 06 06 42,471 1.0 0.1 9,132 0.1	00 0A	288 184 9 0 422	401 322 57 423 423	0 0 379 288 154 9 858 479	401 300 57 0 0 278 14.791 12.905 11.3 666 17 0 698 1.746 11.005
2020 70040 sckeye Power, Inc 2020 7140 Georgia Power Co 2020 7254 States Electric Coop, Inc	OH PJM 2021 9.194 GA SOCO 86.351 154,160 FL SEC 54 0	11,212 1.0 263,515 12.0 0 0 94 0.0	23 33 30,9 26,1 385 725,6 0.0 0.0 0.0 0.0 1,8	92 65.361 60 3,804,10 52 0 0 0	95,500 1.0 2.3 4,610,06 40.8 64.7 1,160 0.0 0.0 0.0	2.3 105.5 0.0	665 547 . 5,341 9,168 6 6 6 0	1,212 14,515 5,55 9,482 0 0 0	5503 9,00 13,000 0 0 0 0 0 0	1.25 13.00 7.00 27.60 7.00 7.00 13.00 7.00 27.60 7.00 7.00 7.00 7.00 7.00 7.00 7.00
2000 7294Cby of Glandale - (CA) 2000 7353 Golden Valley Elec Assn Inc 2000 7483Cby of Grand Haven - (MI)	CA LDWP 8.202 2,402 AK NA 200 MI MISO 779 984	10,664 5.5 200 0.1 961 2,706 0.0	03 62 17.7 03 03 04 7.6	2 22,125 32 11 15,131 15,132	30,064 5.5 0.6 1,432 0.1 37,672 0.0 0.1 0.1	6.1 0.1 0.3	1,213 668 6 62 62	1,885 214 145 0 15 259 36 49 4	36 1,217 608 10 0 0 40 132 96 60 62	1,86 214 16 36 8.52 10.63 3 74 77 5.66 2 31 6 6 12 12.65 6.81 8.2
2000 7540 PUD No 1 of Grays Harbor County 2000 7550 Grand Valley Power 2000 7570 Grant River Energy 2000 7534 Day of Generylle - (TX)	AK NA 200 MI MISO 773 664 MA 8PAT 908 3,308 CO PSCO 11 MN MISO 38,00 61,054 TX 8ARCO 11 TX 8ARCO 128 TX 8ARCO 128 TX 8ARCO 128	2,85 0 6,508 0.1 11 0.0 99,085 25.4 11 0.0	0.6 0.3 0.6 0.7 18,7 0.6 1 10.7 36.9 50.5 0.6 1	21 29,701 22,676 6 06 11 905,925	81,104 0.1 0.4 0.2 108 0.0 : 1,411,84 254 10.7 102 0.0	0.0 0.0 36.1	2,664 2,568 60 0 6 5,672 2,569	5,000 3 0 3 0,227 5,992 1,792 6 0	2,465 2,558 65 2 5 7,772 5,672 2,553	20.000 12.000 10
The second secon	CT SNE 35 1,316 TX SRCO 120 FL AEC 120 FL AEC 9277 2007	0 0 1,254 0.0 127 1.2 4 304 1	0.1 0.0 0.0 0.2 4 53 1,2 0.0 0.0 0.0 0.2	54 10,45 0 0 75 96 11,002	18,912 0.0 0.1 0.0 1,270 1.3 30,000 5.9 4.4	12	27 463 6 0 46 91	400 16 277 42 4 175 216 701	0 0 299 27 46 0 4 42 4 599 MM 0	400 56 277 6 6 9 290 12.000 14.000 0.0 45 4 4 10.000 4 10.000 171 171 171 171 171 171 171 171 171
2000 8179 Harrison County Rural E M C 2000 83190 Hardiand Power Coop 2000 8339 Haywood Electric Member Corp	1	2,000 2,000 0.1	00 00 01 12.4 2.2	01 88 24,046	36,538 0.1 0.6 0.6 2,306 2.3	0.1	54 1 21	40 0	0 0 1 58 1 21	8 1 0 0 0 1 15,272 14,000 1010 1 10,000 0,000 000
2000 8509-ligh Plains Power Inc 2000 8509-ligh Plains Power Inc 2000 8570-lightine Electric Assn 2000 8570-lightine Electric Assn	NY	747 400 1,055 1,115 0.0 142 147 0.0	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	2235 53 5,30 48 13,28 73 1,775	30,300 0.1 5,457 0.1 14,132 0.0 0.2 1,842 0.0	0.1 0.1 0.2 0.0	199 1 53 27 21 4 6	110 98 54 68 90	1,010 1 12 37 12 4 4	1000 119 119 10.000 14 15.277 15.677 66 14.597 15.677 15.673 14.597 19.27 15 14.597 19.27
2000 8520 HLCO Electric Cooperative, Inc. 2000 8599 Inland Power & Light Company 2000 8599 Inland Power & Light Company 2000 8599 Light Company 2000 8723 Light Children	TX ERCO 2,265 D SPAT 45 2 WA SPAT 1,38 1,365 WI MSO 5398 459	2,265 0.6 0 0 44 0.0 265 4 2,938 0.2 7,753 10 799 4	06 00 05 00 1,5 02 02 02 03 1,4	65 0 0 0 44 66 0 0 0 7,05 1,746 0	2,363 0.6 1,211 0.0 0.0 0.6 20,64 1.3 0.0 0.6 165,532 1.2 1.5	0.0 0.0 0.0 1.4	47	47 18 4 0 766 126 120 2 843 12 43 11	0 0 4 18 3 0 0 0 28 59 197 42 19 22 32 39 177 59	45
2000 8773Moly Cross Electric Assn. Inc 2000 8774City of Holyoke - (MA) 2000 8786Horry Electric Coop Inc	CO PSCO 3,046 2,225 MA SNE 30 21 SC SC	5,374 0.4 0 0 0 00	08 12 31.6 00 00 00 00 00 9	30 29,115 C2 519 0 0	67,745 0.4 0.8 1,506 0.0 0.0 0.0	12	229 354 134 35 0 0	563 300 161 166 0 0	464 229 354 0 0 0 134 35 0	56 300 16 46 42 207 12 66 16 16 C C C C C C C C C C C C C C C
2020 9137 Cly of Idaho Falls - (ID) 2020 9137 Cly of Idaho Falls - (ID) 2020 9137 Idaho Power Co 2020 9137 Idaho Power Co	D PACE 141 2,200 D PCO 43,34 41,65 OR PCO 13,77 14,74	190,920 52,2 500 2,841 0.0 105,240 0 190,220 4.9 3,722 0 6,531 0.2	1712 1712 1,730, 0 00 00 00 0.5 3,3 48 120 00 217 458,1 0.2 0.4 00 0.8 148	1,347,965 44 26,296 6,008 4 495,65 1,578,509 0 51 17,565 55,831 0	2,007,071 523 1193 35,772 0.0 0.0 0.0 2,542,30 4.0 4.8 12,1 88,22 0.2 0.2 0.4	171.2 0.0 0.0 21.7 0.0	13,281 13,291 89 101 20 1,721 4,833 18,041 0 45 134 50 0	26,684 4,815 4,703 279 24,201 9,021 3,431 4,71 713 266 186 22	9,52 13,38 13,26 20 20 75 17,22 18,532 52,738 270,716 20 20 20 20 41 1,472 8,144	20.00 4.00 4.70 9.50 17.00 14.64 271 9.20 12.70 12.00 12.70 12.00 12.70 342.04 97.24 40.00 71.00 0 20.00 11.00 12.00 12.00 15.00 10.00 3.74 2.10 3.44 0 8.73 11.00 12.00 15.0
2020 9216/mperial Irrigation District 2020 9221/Dby of Independence - (MO) 2020 9224/ndars Maricipal Power Agency 9020 9224/ndars Exemples	CA ID 2.5% 7.53 MO 5MPP 458 N MSO 20 3	11,528 1.5 459 0.5 80 100 0.0	14 25 53,5 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	a. 138,65 22 05 15 400	192,232 1.5 1.4 1,722 0.3 515 0.0 0.0 0.0 240,000 4.6	2.9 0.2 0.0	1,874 617	2,491 534 835 119 49 14 2,461	1,305 1,876 617 464 71 466 2 1 11 1 10 <sup>101</sup>	2.49 55 0.50 15.00 16.70 16.70 16.70 17.70
2020 9273/ndarapolis Power & Light Co 2020 9273/ndarapolis Power & Light Co 2020 928/dillinois Municipal Elec Agency 2020 9292/nder County Energy Coop Corp	N MISO 59,992 97,794 L MISO 99 KY PJM	14,965 4.5 157,782 13.3 4,966 5,065 0.0	14.0 28.0 554,8 0.0 0.0 3	196,20	741,012 13.3 14.6 20,258 0.0 0.8	28.8 0.8	2,117 9,612 36 620	11,736 12,679 5,322 664 3 2 2	17,792 2,117 9,612 26 28 26 628	11.72 12.43 5.32 17.76 19.66 2 5.32 2 4.001 4.60 4.00 1 4.
2000 9024 Indiana Michigan Power Co 2000 9024 Indiana Michigan Power Co 2000 9417 Internate Power and Light Co 2000 9475 Insuca-Mantras Co-os Sactricol Asses	N PJM 50,15 44,73 MI PJM 12,75 6,25 M MSO 42,13 37,50 MN MSO	6 6 94,80 6.3 0 0 21,01 1.4 28,00 0 937,70 5.4	5.7 00 00 128 545,2 0.8 00 00 00 22 00,6 8.1 6.1 0.0 198 286,2	7 306,425 0 0 4 70,485 0 0 6 449,14 267,82 0	852,09 63 5.7 0.6 150,132 1.4 0.8 0.6 1,006,06 5.4 8.1 6.1	0.0 12.0 0.0 2.3 0.0 12.0	1,025 2,015 0 0 489 575 0 0 2,874 4,050 5,087 0	3,944 3,66 2,00 1,064 1,229 766 12,014 6,138 1,635 90	6 6 5,75 1,935 2,015 6 0 0 2,006 499 575 9 0 0 0 8,671 2,874 4,053 5,087	3,64 3,65 2,08 6 6 5.70 10,000 6.80 0.0 10,00 10
2000 557 Usekson County Rural E M C - (IN) 2000 9601 Jackson Electric Member Corp - (GA) 2000 9611 JEA	N MISO 1,00 2,176 GA SOCO 3,654 767 FL SCA 22,66 12,00	3,10 0.4 157 4,578 1.6 25,554 3.9	18 28 10,6 0.1 00 1.2 10,8 2.1 0.6 110,1	7) 21,765 6 3,955 824 1 155,605	31,031 0.4 1.6 23,664 1.1 0.1 0.6 274,79 3.9 2.1	2.0 1.3 6.0	299 30 1,016 1 0 740 584	329 11 15 1,617 0 0 1,324 1,95 614	0 12 29 30 0 0 0 1,010 1 0 0 2,571 740 584	200 1111 9 122 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000
9000 September Board of Public Util 2020 9680 Sefferon Electric Member Corp 2020 9690 Serraz Mountains Elec Coop, Inc 2020 9720 Serray Central Power & Lt Co	GA SOCO 2,90 560 MM WALC 19 660 NU PJM 750 0	9 269 0.0 3,470 920 0.0 0 0 750 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7,770 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	22,445 0.1 0.5 11,629 0.5 0.3 11,619 0.1 0.5 0.3	0.0	4 22 1,973 6 6 0	26 10 26 10 1,075 660 0	4 4 50 4 6 6 6 1,073 4 6	1 4 5 6 7 10,000 5.005 0.5 6.77 47 72 720 8.000 10,000
2020 9750 Jo-Carroll Energy, Inc 2020 9778 Johnson County Rural E M C 2020 9990 Dey of Kansas City - (KS) 2020 10000 Desarroll M-	NU 750 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,500 0.1 125 501 0.2 0 0 61 0.1	0.1 0.0 0.1 118.0 0.0 0.0 0.1 118.0 0.0 0.0 0.1 0.1 3.6	6 15,556 7 134,76 2 674 0 6	20,52* 0.1 0.1 253,44\$ 0.3 0.1 0.1 4,30* 0.4 0.1 0.2	0.2 0.4 0.0 0.5	36 11	47 11 11 65 0 0	32 26 11 13 53 13 13 50 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	45 11 11 20 16.005 13.04 0 15.05 15.
2020 10000 Evergy Melto 2020 10000 Evergy Melto 2020 10000 Evergy Kansas South, Inc 2020 10060 K C Electric Association	MO SWPP 38,64 28,172 MS SWPP 0 0 CO MAOM 3 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	5.2	15 0 64 304,424 0 0 10 10 7	500,382 8.9 5.3 4 0.0 0.0 28 0.0 0.1 0.5	94.2 0.0 0.6	1,872 2,630	4,500 3,00 2,24 0 0 0	5,310 1,873 2,638 0 0 0 0 0 0	450 3.06 2.34 5.31 7.10 10.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2020 1007 Mauai Island Utility Cooperative 2020 1017 Kentucky Utilities Co	HE NA 946 530 KY LGEE 1,545 36,58	178 0 1,642 0.6 30,100	0.4 0.0 0.0 1.1 15.2 7.4 7.4 20.2	9 9,90 3,30 6 9 731,83	28,471 0.6 0.3 0.6 762,132 7.4	0.0 0.9 7.4	196 108 37 0 6 1	341 53 25 1	10 0 90 196 108 37 5 0 1	34 50 26 10 0 0 15.000 14.225 4.6 1 4 5 20.000 20.000

USBY Characteristics Reporting Year Inc.  State USBy INDEX None State BA Code Septiminal Companying Indiated Plansacouring Linguistics	Peak Demand Savings (MW)  Pask Demand Savings (MW)  Pasking   Industrial Transportation		Suporting Year Incremental Cost  Customer Incentives (Thousand Dollars)  Total  Sasinatial Community Industrial Transportation  Total  Sasinatial Community Industrial Transportation  Total	Control (Season (Seaso
Section   Sect	0 0.1 54 00 0.0	5.57 4.511 14.015 0 0 155,40 0.1 5.4 0.0 0.0 1 1,960 4.00 3,566 10,000	5.5 80 55 0 0 152 0 0 0 C C C C C C C C C C C C C C C C	4 6 66 55 6 9 132 27 28 6 1 300 14.00 12.00 0.00 0.0 6 76 56 177 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
100   Control Contro	4 03 00 00 00 4 13 07 4 00 00 00	02 9,69 4,574 4 4 14,656 02 03 03 03 11 11 23,06 15,77 2,36 25,76 13,36 02 02 03 03 03 03 03 03 03 03 03 03 03 03 03	0. 154 46 4 0 200 4 G 6 5 3.0 500 100 600 0. 47 15 20 55	9 4 54 44 4 6 220 4 6 4 1 1762 1220 5000 55 5 22 120 500 50 5 1200 1200 1200 1200 12
2001 1000 List County Seet W MOSCI 2001 1000 List C	0 0 17 02 00 0 00 00	23 77,67 166,06 17,67 0 261,73 0.0 2.2 0.3 0.0 0.1 41,59 0 41,19 0.0 0.0	3.3 811 1,315 91 0 2,216 54 775 344 0 0.0 6 0 0 0 150 346	6 1,65 819 1,516 91 0 2,216 546 778 546 0 1,655 10,000 13,000 13,000 553 0 0 0 0 168 544 533 8,000 7,000 1
2000 100/36 ah City Coponation UT PACE 12 0 0 1 1 2000 100/36 ah City Coponation UT PACE 12 0 0 1 1 2000 100/46 (City No 1 of Lewis County) MA SEAT 1,516 900 1,017 3,51 2000 100/67 by of Lewis (County) No Lewis County 100 100 100 100 100 100 100 100 100 10	2 0.0 0.0 0.0 0.0 6 0.6 0.3 0.4 6 0.0 0.0 0.0	04 13 0 0 0 0 130 0.0 0.0 0.0 0.0 0.0 13 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0 3 0 0 0 3 0 0 0 0 1 1.1 1,166 286 153 15.503 27, 66 36 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 0 0 0 0 0 0 0 0 0 0 0 0 13,00 370 1.66 286 555 1,651 272 66 36 370 24,071 12,701 12,000 0 15 20 7 2 0 4 4 8 0 0 0 1 0 15,520 10,001 15,000 0 0
2002   1111/14[Loso Ellectric System   ME   584°F0   586   1,435   8,82°   0   10,92°   10,	04 04 04 14 00 0 0.1 0.2 0.4 0 0.0 0.5 0.0 0.5	2.8 6.972 17.232 107.052 0 131.235 0.6 0.6 1.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	2.8         640         2.22         470         0         1.340         55         55         55         55           0.1         2.28         1.51         7         304         8         33         0           0.2         1         66         0         0         63         8         5         C	6 144 64 222 47 0 1.34 52 55 55 6 144 1200 12200 12000 0.0 154 52 22 153 7 2 26 8 20 0 114 3.02 1130 1100 0 15 77 0 0 78 4 0 1 15 3.02 11000 0.00
2005   111°   Seng limbor Douar Authority   NY   NYS   223.50   69.286   323.76	25 25 10.5 25 0.9 1.0 27 A 33.5	54.0 2,600,00 1,372,376 4,241,70 35.1 16.5 11, 7,415 10,105 114,523 0.0 1.0 61, 50,900 2,007,00 2,005,00 27,8 33,5	53.1 48,55 28,010 48,66 22,01 10,005 1.5 138 1,30 1,00 2,268 30 274 61 28,07 87,66 120,07 26,57 35,00	22,949 14,152 26,04 44,164 22,94 15,022 22,94 11,11 16,000 16,00 130 130 130 130 12,00 12,00 130 130 130 130 12,00 12,00 130 130 130 12,00 12,00 130 130 130 12,00 12,00 130 130 130 130 130 130 130 130 130 1
2020 1125 Loup River Public Power Diet NE SWPP 660 671 4,760 6,15	2 0.0 7.8 0.0 0.0 2 0.1 0.1 0.4 3 1.3 1.6	8 de 200 de 20 de		Ann
2000   1122/20pg of Lowester (-CO)   CO   PECO   2,391   6,641   50,25	1.6 5	12,07 0 12,07 00 14 1,00 1,00 1,00 1,00 1 190 198	QQ 58 C 58 12 12 Q LB 5	12 16 0 18 15 0 15 1A00 0.000 0 55 5 5 0 5 5 5 0 5 5.50 1 10 10 10 10 10 10 10 10 10 10 10 10 10
100   110   100	9 00	0.1 154 0 0 0 155 0.1 0.0 0.0 0.0 0.0 60 0 037 0.0	0.1 27 0 0 0 0 27 0 0 0 0	6 6 27 6 0 0 27 0 0 6 6 6 1.00 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
200   1100   100	0.1 0.3 0.1 0.0 20 87.0 28.3 13.3	1/368 24-462 4.163 0 21.013 0.1 0.3 0.5 0.0 1286 1,389.99 2,372.67 1,116.55 4.878.03 87.6 20.1 13.5 0.1 0.1 0.2 0.0 1286 1,389.99 2,372.67 1,116.55 4.878.03 87.6 20.1 13.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.5 06 77 11 0 144 22 27 5 0 1284 1284 1284 1284 1284 1284 1284 1284	781 31 90 172 181 181 272 182 182 182 182 182 182 182 182 182 18
2000   1200 McGardia Electric Coop Inc   NO   2667P   0	0 0.0 0 0.1 0.3 0.0 0.0	04 7,43 21,62 733 0 20,76 0.1 0.3 0.6 0.6 0.1 0.2 0.6 0.1 0.2 0.6 0.1 0.2 0.6 0.1 0.2 0.6 0.2 0.1 0.2 0.6 0.2 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.4 214 186 5 8 422 8 50 2 C 0.2 0 122 122 122	t d d 214 514 5 0 46 9 50 2 d d d 22.50 12.00 12.00 0.00 0.00 0.00 0.00 0.00 0
Col.   Vall Marca Canto, Cap. 10.   Col.	0 6 13.7 19.2 3.3 71 2.9 0.3 1.0	14   041   805     361   170,055   1,201,033   353,376   1,725,04   9,7   22.3   3,3     42   20,34   23,05   92,235   141,725   1,1   0,3   0,3	8 56 68 68 58 58 58 58 58 58 58 58 58 58 58 58 58	8 59 68 1000 1,000
1.53   1.55	5 520 140 5 67 21 24 04	66.1 65,178 13,115 78,297 65.5 13.6 11.1 201,005 190,56 270,559 0 662,505 6.7 2.1 2.4 0.0	78.5 500 84 504 664 465 19 11 11 2,266 364 1,500 0 4,146 5,333 1,016 1,265 0	692 500 64 1,000 0 4,146 5,332 1,016 1,246 0 7,555 3,000 14,000 1
2020   1252-Middeest Energy Inc   KS   SWPP	0.0 0.0 0.0	0.4 1,204 4,655 1665 G 6,167 0.6 0.0 0.4 0.6	0.4 27 4 6 6 66 0 0 C	C
2009 120474LETE, Inc. MN MISO 13,994 50,055 64.00 2000 12081Energy Manissippi LLC MS MISO 19,93 19,78 27,71 2000 12086Manissippi Power Co MS 5000 9,215 1,705 0 0 10,93	2 1.0 4.5 2 1.8 2.0 9 1.9 0.7 0.0 0.0	61 228.36 600.52 680.00 15 28 480.00 17 28 44 106.00 213,86	43 1,000 2,500 3,860 1,500 2,000 48 2,021 2,211 4,222 1,615 1,465 2,2 4,62 2,02 6 0 756 1,2 4,65 0 0	4.202   1.206   2.206   3.888   1.522   2.605   4.522   17.000   13.000       3.07   2.07   2.211   4.222   1.723   1.602   3.345   12.744   3.722     3.88   451   202   0   0   751   122   465   0   0   5   6.146   11.622   0.000   0.000     3.89   451   202   0   0   755   122   465   0   0   0   0     3.89   451   202   0   0   755   122   465   0   0   0     3.89   451   202   0   0   755   122   465   0   0     3.89   451   202   0   0   0   0     3.89   451   202   0   0   0   0     4.202   4.202   4.202   4.202   4.202   4.202     4.203   4.202   4.202   4.202   4.202   4.202     4.203   4.202   4.202   4.202   4.202     4.203   4.202   4.202   4.202   4.202     4.204   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202   4.202     4.205   4.202     4.205   4.202
2000   17/00/Milesona North Copy NO	0 103 32 01 0 103 00 00 00	0.0 0.5 1 2.77 168 8.68 0.4 0.4 0.0 0.0 1.1 11.1 11.1 11.1 11.1	0.0 56 20 2 1.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 10 2 2 10 10 1 10 1 10 1 10 1 10 1 10
2020 12805 NorthWestern Energy LLC - (MT) MT NWMT 18,465 49,145 67,60	10 14.7 1.0 21 0.0 0.0 0.1	15. 265.73 700.064 905.07 43 03 03 03 03 03 03 03 03 03 03 03 03 03	46 200 4,100 4,400 1,573 2,655 0,3 2 7 22 77 18 4 17	5.222 200 4.100 4.400 5.27 3.65 5.222 44.39 44.20 24 2 77 20 77 1 4 1 20 20 12.60 12.60
	02 02 02 02 04 04 04	04 527 927 15.54 0.0 0.2 0.4 423 2.19 0 8.40 0.0 0.2 0.1 423 2.19 0 8.40 0.0 0.0	04 85 45 525 5 15 0. 26 15 48 5 15 15 0. 27 15 48 5 15 15 15	14
201   201	3 249 90 39 7 03 05 03 05	37 8 766.53 756.69 329.55 1,646.59 244 9 8 33 1.6 12,409 34,541 20,555 0 77,514 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	37 f 3193 24,24 (0,65 68,65 9,47 5,69 259 14 6 6 9 446 22 63 6 6 6	1794 33.93 24.24 10.05 44.05 9.44 5.97 2.06 1794 48 12.06 12.06 14.07 14
2000 1544 New Hampshire Size Coop Inc 94 5016 4,22 3,77 8,06 2000 1544 New Hampshire Size Coop Inc 94 5016 4,22 3,77 8,06 2000 1547 Microsy New Orleans, LLC LA MISO 35,565 29,97 75,56	4 14.1 20.1 0.0 0.0 6 0.5 0.2 7.2 2.6	09 33,27 30,50 83,00 02 03 105 292,94 393,94 686,80 7.2 3.4	34.4 8 5-120 6 0 5-126 9.877 0.05 6 0 0 0.05 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 (402) 4 (5.19) 6 (5.19) 605 6 (6.10) 6.27 (172) 6.68 (9.2) 57 (2.11) 6.7 (
	7 124 194 244 15.0 2 0.2 1.0 0.4 1 0.2 0.2 0.0	17:7 16:1,72 034:77 034:77 086:35 46 14:6 28 1 16:5037 16:5047 46 1,116:300 46:02:200 10:4 02:4 15:5 16 10:803 14:964 4.102 29:032 02 03 03 04 15:331 50.79 534 02:504 02 02 02 03 03	58.1 20277 20.77 12.46 53.72 26.77 16.64 1.4 152 201 59 50 50 12 77 24 1.4 152 201 59 50 50 12 77 21 0.4 224 44 8 0 346 22 33 4	7.50 2.07 2.07 12.08 5.12 5.12 5.12 5.12 5.12 5.12 5.12 5.12
2002   12-00 value fraction - years   2007	9 0.5 0 0.4 0.4 0.7	0.0 2.726 0.0 2.726 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.5 de 6 5 10 14 8 5 14	66 16 16 16 16 16 16 16 26 74 3 300 200 16 16 16 16 16 26 74 3 300 200 16 16 16 16 16 16 16 16 16 16 16 16 16
2000   1372/\$Copt of Non Pictals ME SHIPD   165 (1)   172 (2)	0.0 0.1 51 45.4 8.3	0.1 001 0.716 7.736 0.0 0.1 527 248.16 008.00 1.008.12 4.8 5.6	0.1 28 26 57 3 15 13.4 2,64 4,577 7,213 3,75 2,44	68 28 56 57 3 55 68 8428 11.000 6.156 2,64 4,572 7,21 2,72 2,64 6,19 4,622 13,25
2000   1237   2004   1237   2004   1237   2005   1237	474 507 67 04	10.5 3.80.327 4.847.33 852.50 9 8.503.00 47.4 507 6.7 0.5	51 600 51277 50 460 51577 6160 5160 5160 5160 5160 5160 5160 5160	50 50 600 1,27 50 600 2,250 6,60 1,00 1,00 1,00 1,00 1,00 1,00 1,0
COD   CENTRAL Base Part C   COD	01 01	02 10.30 550 10.010 0.0 0.1 04 53,112 13,845 66,555 1.4 0.1	0.2 349 85 327 86 55 1.4 753 236 965	152 360 15 337 66 57 153 20.00 20.000 7.53 200 666 1 15.000 15.000
2000         130302 by V Manusod - (MA)         MA         ENK         B         25         48         0         B           2000         15000 Chalda Electric Coop         M         MSD         200         22         6         6         2         2         6         9         2         2         6         9         2         2         0         2         6         9         2         2         0         2         6         3         2         2         0         2         8         3         4	0 00 00 01 01 00 4 01 00 00 00 5 233 87 66 00	0   6   2,007   3,002   6   5,077   0,0   0,0   0,1   0,0	0: 67 26 46 0 547 26 4 2 0 0: 44 0 4 0 42 31 4 0 0 38: 13.22 2.80 2.12 0 18.60 6.20 2.03 1.33 0	6 6 6 6 7 24 45 0 14 5 9 4 2 6 6 1 1000 10000 0.00 0.00 0.00 0.00 0.
2000   140002/nio Power Co   CH   P.M   213.02   315.00   204.73   6 724.3   200.00   204.73   6 724.3   200.00   204.73   6 724.3   200.00   204	37.9 46.9 30.7 0.0 24 1.8 3.2 0.0 0.0 12.5 8.1 8.1 0.0	115 2,347,261 4,963,229 3,727,700 41 10,596,539 37,9 46.5 30.7 0.8 45.1 45.1 46,071 290,070 0 0 0 43,000 1.5 3.0 0.0 0.0 224,1 736,73 507,646 507,646 41 1732,072 10.0 65 6.5 0.5 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	115.1 15.07 17.032 11.703 0 41.477 9.402 8.50 4.55 0 4.5 4.5 0 4.5 4.5 0 6 4.5 0 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	4 2242 1137 1732 1170 0 4147 2441 4.69 439 9 2242 1100 1600 1600 0 0 0 0 0 0 0 0 0 0 0 0
2005   1415   Sentra Pulse Plant Delete   145   1979   1,76   11,68   1,76	3 19 29 3 24 34 03 04	48 19.70 146.00 155.70 15 25 64 466,33 (71,56 13,82 4 661,78 24 3.4 0.3 0.5	48 60 86 1,777 36 200 64 1,66 785 81 6 2,331 1,72 571 0 C	560 50 840 1,772 36 300 560 11,23 13,300 3 2,300 1,66 762 61 0 2,301 1,700 0 0
Color   Colo	22 10.7 5.8 3.1 24 0.5 1.7	278 284,023 299,55 311,003 994,24 18.7 5.8 3.9 2.7 15,58 151,49 197,07 0.5 1.7	278 1,466 2,537 1,659 5,377 2,037 1,06 6,77 2,3 1,06 5,77 2,0 1,06 6,77 2,0 1,06 5,77 2,0 1,06 6,77 2,0 1,06 6,77 2,0 1,06 6,77 2,0 1,06 6,77 2,0 1,06 6,77 2,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1	2/05 1,665 2,537 1,605 5,877 2,009 1,006 677 3,707 12,009 14,819 14,508 132 15,00 527 2,00 100 100 100 100 100 100 100 100 100
2000 14-039 Pacific Case & Electric Co. CA CISCO 873,671 823,294 82,304 0 1,756,17	15 150.0 136.0 12.0 0.0	296.0 19,827,70 11,522,35 565,572 0 22,910,603 124.0 1220 15.0 0.0	201 1 19,332 23,683 9,816 0 52,84 134,923 56,74 24,437 0	113 77 24 54 0 37 6 22 77 1 10 10 00 10 10 10 10 10 10 10 10 10 1
2006	0.1 0.5 0.3 0.6 21 1.4 1.6 1.8 0.0 22 19.6 22.1 6.4 0.5	0.9 5.00 35.00 20.72 4 64.866 61 6.5 0.5 0.5 0.6 4.4 4.4 33.25 63.29 15.11 15.	09 204 488 290 0 1000 331 550 527 0 44 451 937 1000 0 2,451 861 109 139 0 482 9,50 19,83 3,71 0 32,647 7,29 12,70 3,84 0	6         f. 166         201         448         202         0         1,000         331         532         227         6         1,118         13,97         13,000         12,44         0.0         0         2,41         8,50         1,00         0         1,118         1,00
2000   14:56-PacifiCorp   WA PACW   13:30   42:30   13:30   67:30   77:00   2000   14:56-PacifiCorp   69Y PACE   17:21   7:31   35:59   60:11   2000   14:36-PacifiCorp   69Y PACE   17:21   7:31   35:59   60:11   2000   14:36-PacifiCorp   69Y PACE   7:31   35:59   60:11   2000   14:36-PacifiCorp   69Y PACE   7:31   35:59   60:11   2000   14:36-PacifiCorp   69Y PACE   7:31   35:59   60:11   2000   60:11	9 14 54 21 04 9 22 16 46 05 0 00 00 00 00	141 (2022) 1272.7 (2024) 128.2	94 1,500 2,009 627 6 4,598 5,402 2,902 1,508 0 7.7 1,502 782 3,119 0 5,500 1,40 2,76 4,466 0 0.0 6 0 0 0 0 0 0 0 0 0 0	4 0.54 1.30 2.004 027 0 4.30 5.41 2.00 1.54 0 0.524 11832 12.200 12.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10   10   10   10   10   10   10   10	10 20 20 20 10 10 10 10 10 10 10 10 10 10 10 10 10 1	0.4 20.59 14.48 1.48 0 36.57 0.2 0.2 0.2 0.2 0.2 114 12.18 13.65 2 25.07 0.7 0.7 0.7 0.7 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0. 124 4 1 0 502 10 10 2 C 114 1,22 74 1 1,00 04 30 0.0 52 30 0 0 0 04 24 11 0 0	0 200 12 4 1 0 100 100 10 10 2 200 1425 10.05 14405 0.0 1,000 1,000 1,000 7460 1,000 80 1,000
2000         14605 Plass Disc Electric Coop, Inc.         SC         SC           2000         14605 Plass Des Electric Coop, Inc.         SC         SC           2000         14605 Plass Rose Electric Coop, Inc.         RS         SSD         SSB           2000         14605 Plassos Riser Electric Coop, Inc.         RS         SSC         SSB         SS           2000         14605 Plassos Riser Electric Coop, Inc.         RS         SSC         SSB         SS	0.3	0.2 10,025 10,035 0.3 3,61 779 4,200	03 64 64 86 86 86 86 86 86 86 86 86 86 86 86 86	66 66 66 66 66 66 12.77 665 66 66 66 12.35 12.35
2000   1469 (Juliando Calalas Corrier)   61, 1999   19, 1999   1	0 00 02 13 0 15 05	23 44,50 198,80 201,30 07 22 46 6,00 3203 221,26 200,97 07 02 12 25 1809 5.07 24,50 15 0.5	2.0 260 531 236 177 42 2.0 260 531 236 177 42	3,00 50 94 1,100 2,00 100 3,00 2,00 100 3,00 2,00 100 3,00 200 10.
2000   14600 Personal tyle Company   90.   90.51   1.662   455   1.602   1.6	G 48 29 08 00 9 123 156 68 00	22 130.00 5.07 2 24.60 11 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	8.2 1,422 821 514 0 2,754 4,44 1,30 633 C 50.0 3,571 8,20 2,598 0 14,178 16,64 5,00 2,519 C	6 525 1.625 820 514 0 2.75 4.41 1.30 625 6 6.26 1.82 14.68 14.711 0.0 6 24.37 3.576 8.26 2.38 0 14.17 16.84 5.00 2.516 6 24.37 9.00 14.00 14.00 0.0
2001   14"   Prompton Berlin C.   Ph.   PM   G.   17.20   6.46   17.20	0 00 0 340 250 00 00	24 0000 1 10000 20 00 00 00 00 00 00 00 00 00 00 00	24 73 25 10 10 10 10 10 10 10 10 10 10 10 10 10	1 0 1 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0
2001   1617 Phys Des Estats Merker Copy   NC   CPLE   28   2   2   2   2   2   2   2   2	4 02 02 00 7 03 10 00 00 122 67 48 00	04 3.72 2.07 1.50 7.34 0.2 0.2 0.2 0.2 0.2 1.50 1.50 7.34 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.4 132 22 32 55 565 1.1 253 115 6 0 277 223 5,100 6,507 4,000 0 16,434 4,856 2,65 1,927 0	103   22   32   16   10.000
2009         1502PB-lostonac Electric Power Co         MO         P.JM         66,861         186,06F         0         233,05F           2009         1502PB-lost Vota Plane Author Unit         NY         NY5         0         6,332         6         7,05E         14,15E           2009         1504P-Rate Glumett Electric Coop         66         MSO         66         64         6         0         1,28E           2009         1504P-Rate Glumett Electric Coop         66         MSO         66E         64E         6         1,28E	54 13.2 20.3 0.6 0.0 62 0.0 40.9 0.0 1.3 18 0.1 0.1 0.0 0.0	44.1 275.208 2.201.34 0 0 2.005.54 13.2 29.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	41.1 10.226 23.815 0 0 44.11 7.415 12.826 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 20.015 (0.026 20.015 0 0 44.11 7.415 (2.00 0 0 20.015 5.00 13.405 0.00 0.00 0.0 0 0 0 0 0 0 0 0 0 0 0 0
2000         15460 Public Service Co of Colorado         CO         PECO         265.66         260.08         39.13         6         564.61           2000         15470 Shate Service Co of SHE         N         MISCO         50.26         77.94         C         61.76           2000         15470 Shate Service Co of SHE         N         50.61         31.34         63.34         94.40	60.0 50.8 5.2 0.0 10.5 15.7 0.0 0.0	116.0 3.383.53 4.342.25 643.173 0 8.266.25 60.0 50.0 52 26.3 666.76 1,038.65 0 0 1,664.65 10.1 15.7 0.0 0.0 164.2 12.171 505.164 1,10.0 0 0 0 0.0	116. 15.60 20.30 3.30 0 47.43 8.15 13.13 13.77 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2256 5.00 26.00 3.00 3.00 3.00 3.00 3.00 17.00 5.00 10
Column   C	8 93 27 24 05 8 194 125 06 06 7 7.6 26	11	15.1         4 (att.)         2 (207)         2 (027)         6 (18,82)         4 (25)         2 (7)	4         8.00         4.00         2.07         2.07         0         1.831         4.26         2.17         2.17         0         1.200
2000   1500 Pagel Sound Charge be   MA   PGE    100 (37)   80 (33)   11 (50)   0   200 (37)	123 12 01	1,000 1,000	2.1 59 200 0 0 050 22 161 0	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2005   15776 Ready Creak Improvement Dat   \$2, FPC   \$5.66   \$5.66   \$5.66   \$2.00   \$1.0740 Page   \$7.00   \$7.0	8 0.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2 1 160 57435 6 5 56509 6 1 22 0 05 05 05 05 05 05 05 05 05 05 05 05 0	0.6	446 278 278 278 278 5501 5501 5501 5501 5501 5501 5501 550
100   107   Institute Conference   10   107	0.1 0.1 0.0 0.0 6 0.6 1.4 6 0.1	0.1 (2.05) 33.795 350 (4 43.15) 0.1 0.1 0.0 0.0 2.2 (15.00) 151,00 (2.75,07) 0.0 1.4 0.1 3.24 (3.25) 0.1	0: 78 78 6 0 553 6 0 6 2 22 1.07 778 2.244 0 0: 400 . 400 20	4 4 79 79 6 6 15 6 6 6 6 6 6 15.52 12.52 14.65 0.0 1,1,13 778 2,26 2 226 2 23.05 12.36 32 46 5 66 33 32 32 15.50
2005   16/10/90/chaster Seal Secret Copy   NY   NY 5   73.89   13.89   4.79   20.70	5 22 54 1 0.5 2 0.5 12 64	29 25.50 120.172 72.30 220.000 0.7 14 0.8 72.00 0.5 72.00 0.5 72.00 25.00 0.5 72.00 25.00 0.5 72.00 25.00 0.5 72.00	6.4 2.605 5.504 7.728 532 555 50 0.1 63 65 7.728 532 665 7.728 532 665 7.728	1.50 2.602 5.64 7.73 6.5 3.6 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50
2005   16486 Ruhenford Clark Mendler Closp   NC   ZVK	5	13.8 232.47 592.101 0 0 824.57 54 84 06 0.0	13.8 11.7% 5.912 8 0 17.675 7.728 6.66 C C 6.6	1 (37% 17% 5912 1 0 176* 772 6.64 1 3 (37% 11.5% 1.66% 0.60% 0.00 0.00 0.00 0.00 0.00 0.00
2000         16607/Earli Rour Poject         AZ         58P         456,79         174,34C         6         683,153,163           2000         16600/Earli Lav Valley R C, Inc.         CO         64CM         3         9         168         17         9         168         17         200         34,075         86,485         6         6         124,47         6         124,47         6         124,47         6         124,47         6         124,47         6         124,47         6         124,47         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         124,47         6         6         6         124,47         6         6         124,47         6         6         124,47         6         6         6         124,47         6         6         6         124,47         6         6         124,47         6	1246 550 00 00 11 0.0 01 61 12.1 15.4 00 0.0	18 02.75 8.67 7 16.08 4.2 10.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	19a	4 15.44 12.64 12.04 0 0 2566 77.2 7.69 0 0 15.44 4.78 17.25 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
100   100	54 47.5 44.1 3.7	96.3 4.540,103 2.800,72 300,76 7.656,68 28.0 28.0 28.0 23	56. 1,59 4,16 93 6,22 7,27 26,66 6,03	4/16 1/19 4/16 929 6/27 7/27 20/36 6/29 4/16 1/3/46 1/3/20 1/2/26
2000 1600/25tan Migray Power Assn., Inc. DA MACM 197 1,022 1,22 2000 1600/25tan Migray Power Assn., Inc. DA MACM 197 1,022 1,22 2000 1600/25tan Migray Or Sanda Class - (CA) DA CS D D D 13,484 0 13,484	67 6 0.1 0.3 6 0.0 2.5 0.0	0.7 27.66 27.66 07 0.1 3.66 12.47 15.57 0.1 0.2 2.7 28 176.42 0 176.68 0.0 4.7 0.0	0.7 729 729 288 729 288 729 729 729 729 729 729 729 729 729 729	288 729 729 288 288 555000 555000 555000 55500 55500 55500 55500 55500 55500 55500 55500 55500 5
100   100	0 0.1 0.0 0.0 0.0 0 0.0 0.0 0.0 0 0.0 0.0	0.1 5.411 522 0 0 0.5511 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.1 62 1 0 0 63 55 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 51 66 1 61 61 62 52 1 6 6 5 1 50 60 000 000 000 000 000 000 000 000 0
2002   16400-1659 to mellion (1611)   1611	9 12 00 07 9 08 20 27 112	13 22,57 12 10,55 40,65 12 03 03 00 0 0 0 0 0 143,05 12 02 03	1.0 26 1 10 466 22 100 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	122 26 1 50 460 2 0 10 22 8.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
10   Section Field (1988)   10   10   10   10   10   10   10   1	9 0.1 0.0 0.0 5 0.0 0.0 6 0.2 0.0	0 11.77 G 6 117.77 G 02 02 02 02 02 02 02 02 02 02 02 02 02	0: 77 5 5 0 72 77 6 6 C 0: 18 2 2 25 26 0 0: 19 44 055	6 77 72 5 5 5 72 77 6 5 77 16.27 77 2 77 15.50 22.000 64 18 65 15.50 22.000
2009   174-09/EU of Sentencial County   IRA   IRAN   40.395   68.000   68.000   73.0	9 6.8 42 25 6 6.8 10.0 13 0.0 20 1.1 2.7 0.0 0.0	73.0 576.65 188.48 157.51 873.95 52 24 14 14. 26.78 53.05 71.89 6 80.33 4.7 6.5 0.1 0.5 3.8 56.63 138.38 0 6 192.03 1.1 2.7 0.1 0.5	Me 2,000 2,240 1,500 9,500 3,64 1,532 00 12,1 4,77 4,77 6,03 0 10,101 1,57 1,22 24 0 3,1 9,00 6,00 0 0 1,64 9,00 6,00 6	and 3408 234 338 9.99 364 1.83 80 5.00 12.81 12.81 12.21 15.00 60 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
2005   17572   South River Disc Member Corp   MC   CPLE   665   68   68   69   68   60   68   60   68   60   68   60   68   60   68   60   60	0 03 0 00 00 0 313 44 12	0.3 32,0° 0.3 0.00 0.0 0.0 0.0 0.0 0.0 0.1 14,48 4,32° 18,600 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	45 45 45 45 45 45 45 45 45 45 45 45 45 4
2000   178 G Bear Valley Electric Service   CA   2,55   58   6   6   6   1	8 00 00 00 00 4 64 32 14 00 8 69 19	01 21 0 4 5 211 00 00 00 00 00 00 00 00 00 00 00 00 0	0.0 25 6 6 0 22 5 6 0 0 111 114 125 2.06 60 0 4.00 3.36 3.36 655 6 6 8.0 2.00 7.96 5.00 1.786	4 22 23 5 5 5 22 25 5 5 22 25 5 5 5 22 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
2007   CR3/Sachen Maybraid Sec Coap Inc.	0.1 0.2 0.6 0.5 8 0.2 14 0.2 0.2 0.5	0.1 8.008 12.488 13.72 4 22.798 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0. 156 55 8 0 214 25 45 5 0 0 2 4 5 0 0 2 4 5 0 0 0 2 4 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 71 509 50 9 0 249 24 45 5 77 17325 1502 50.02 61 62 64 5 1 1000 500 500 500 500 500 500 500 50
2009   1700   Confinentian Sectic Power Co	32 7.0 0.0 0.0 3 5.3 0.5 3.6 4 44 2.4	13.2 126.47 142.09 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	10.1 1,600 1,500 0 0 3,370 277 260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	466 1,668 1,668 1 0 1,378 37 28 1 1 264 2,000 1 1,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2000 17828 Day of Springfield - (IL) L MISO 831 1,000 1,00	03 03	GA 50,48 54,92 25,475 03 03	0.3 166 52 158 24 12	260 560 32 150 244 123 260 12.00 15.000

	Usility Characteristics					Report	ing Year Incremental Arm	sual Savings						incremental Life Cycle	Savings					R	sporting Year Incremental C	Cost				Incremental Life Cycle Co	oets	Weighted Average Life
Column	Data   Utility	-	1		Ene	ogy Savings (MWh)		Peak	Demand Savin	ngs (MW)						Demand Saving	ps (MW)		Customer Inc					Customer In				Weighted Average Life (Years)
Column	Vasc Number Utility Name 2000 17830 Susceion Should El Monter Com	Stat			Commercial 2.500	Industrial Transportation		al Commercial	il Industrial	Transportation	Total Residen	tial Commercia		Total Resid	ential Commercia	i Industrial 1	Transportation	Total Residentia	of Commercial	Industrial Transportation	Total Residential	Commercial Industrial Transportatio	Total Residential	Commercial	Industrial Transportation	Total Residenti	al Commercial Industrial Transportation	Total Residential Commercial Industrial Transport
Column	2000 17830 City Usities of Springfield - (MO)	MO	SMPP	60	7,007	1,000		0.1 0.0			0.9	0,290 78,87		88,170	0.1 0	4 .		0.9 2	94 283	- 1	577	1 1 1	294	293		577	* ** **	15.000 10.000
Column   C	2020 17839City of Springfield - (OR)	OR	BPAT D IM	74	571	136 0	1,460	03 03	2 60	6 0.0	0.5 1	5,350 7,40	1,470	25,300	63 0	2 06	0.0	0.5 3	66 103	16 0	509 110	90 21	0 227 388	103	16 Q	509 1	116 90 21 0	227 21.900 12.900 10.800
Column	2000 18019 Steams Cooperative Disc Assn	MN	MISO					1 -				_				1 1											1 1	
Column	2020 18047 Steele-Waseca Cooperative Electric	MN	MISO													_												
Column	2000 16250 Sulphur Springs Valley E.C. Inc.	AZ	WALC	6	1,525	2.001	2.003	1.9	20.0	ó .	213	619 24,51	20.010	20,525	0.0	20.0	_	20.4	259		217 23	124	126 29	134		20	2 124	126 10.000 10.000 1
Column	2020 1830#Sumter Electric Coop, Inc	77	SEC	12	ſ		124 0	0.0			0.0	2,400		2,480	0.0			0.0	6		4 3	187	100 6				2 187	109 20.000 1.000
Column	2020 1833/Suwannee Valley Elec Coop Inc	FL.	SEC	12,66			12,004 0	0.0	+ -	1 -	0.0 4	1,001	1 1	2,361	0.0		_	0.0	**		18 21-		219 305			305	136	110 12.30
Column	2020 18429 City of Tacoma - (WA)	WA	TPWR	3,44	11,430	13,200 0	28,079							0				. 2	1,389	1,389 0	3,576 1,46	1,001 1,001	3,648 .		. 0	¢		0 18.823 11.324 9.800
Column	2020 18445City of Talishasses - (FL) 2020 18445Talouin Diartic Coop. Inc.	PL D	SEC	5,42	147		5,575 0	0.0		+	0.9 6	1,714 2,63 1,364	4	5.360	0.0	4		0.0 1,3	1		1,367 1,18		1,160 1,366	- 1		1,367 1,1	100	1,187 12.928 17.928
Column	2020 18454 Tampa Electric Co				21,691	2,410	32,500	28 43	3 05		7.6 56	7,764 500,86	55,652	1,124,282	64 4	2 05		11.0 2,2	90 4,133	459	6,878 2,45	258 25	3,701 2,200	4,132	450	6,870 2,4	15 25 29	3,704 20.000 20.000 20.000
Column	2020 18489City of Taumon 2020 18499Touler Crumb Plant E.C.C.	WA ICY	DM	2			354 (	0.2	+	+	0.2	3,543	+ + +	3,543	0.2	+ - +		0.2 1	54		154		154			154		10.000
Column	2020 18640 Tennessee Valley Authority	AL	TVA	2,09	0 0	7,000 0	9,976 6	0.4 0.0	0.0	0.0	0.4 2	2,600	96,740	116,254	0.4 0	0.0	0.0	0.4	0 0	0 0	0 72	0 27	754 0	0	0 0	0 3	128 0 27 0	754 14.000 0.000 11.000
Column	2000 18540 Tennessee Valley Authority	GA	TVA	70		0 0	709 0	0.0	0 00	0.0	0.2	0,057	0 0	9,857	0.2 0	0.0	0.0	0.2	0 0	6 0	0 252	9 9	255 0		0 0	9 3	25 0 0	255 14.000 0.000 0.000
Column	2020 18640 Tennessee Valley Authority	us	TVA	75		9,601 0	10,353	0.1 0.0	0 00	0.0	0.1	9,906	0 105,614	115,523	0.1 0	0.0	0.0	0.1	0 0	0 0	0 24	0 20	0 276 0		0 0	0 3	246 0 32 0	276 13.000 0.000 11.000
Column	2000 18540 Tennessee Valley Authority	NC.	TVA	9	0 00	0 0	90 0	0.0	0 00	0.0	0.0	1,194	0 0	1,194	0.0 0	0.0	0.0	0.0	0 0	6 0	0 30		0 30 0	- 0	0 0	0 43	20 0 0 0	200 14.000 0.000 11.000 270 13.000 0.000 11.000 28 13.000 0.000 0.000 13.000 13.000 11.000 13.000 13.000 11.000 1 13.000 0.000 0.000
Column	2020 18642 Tennessee Valley Authority	VA.	TVA	2	20,000	0 0	26 0	0.0 0.0	0 00	0.0	0.0	339	0 0	339	0.0 0	0 0.0	0.0	0.0	0 0	0 0	0 1	0 0	0 0	- 0	0 0	0 12	0 0 0	8 13.000 0.000 0.000
Column	2000 18917 Tillamook Peoples Utility Dist	OR	SPAT	43	772	1,571	2,793 0	0.1 0.1	1 02	2	0.3	1,712 7,72	15,745	32,180	1.0 0	9 1.8	0.0	3.7 2	42 124	352 .	718 91	49 129	294 242	124	352 .	716	96 49 129	254 20.000 10.000 10.000
Column	2020 18997 The Toledo Edison Co	CH	PJM	50,21	15,687	28,491 0	95,390	6.9 3.0	.0 2.4	4 00	13.3 51	4,904 210,41	237,921	1,063,296	6.9 3	0 34	0.0	13.2 3,7	101 420	1,220 0	5,427 1,92	30. 73	3,048 3,781	420	1,226 0	5,423 1,1	820 360 736 0	3,040 10.253 12.613 11.861
Column	2020 19125 City of Traverse City - (MI)	WI.	WISO	54	2,740	0 0	3,297	6.7 6.6	0.0	0 00	5.5	0,664 24,81		20,475	67 6	0.0	0.0	1.5	45 200	0 0	245 3	34 0	0 60 60	200	9 9	240	34 0	65 6.700 9.050 0.000
Column   C	2020 1915/MEnergy Cooperative	MN	MISO	3.40	952	107	4.540	0.5 0.1	1 0.0				1.570	65.773	0.5 0	1 90	_	96 1	64 12	1 :	177 21	1 1	21 164	12	- 1	177	29 3 0	
Column   C	2020 1916: Tri-County Electric Coop, Inc (FL)	R.	SEC			0 0	0 0	0.0 0.0	0.0	0.00	0.0	0	0 0	- 4	0.0	0.0	0.0	0.0	1				1					0.000 0.000 0.000
Column	2020 1938 Turlock Intigation District	CA CA	TIDC	15	3,040	10,964	158 0	0.1 0.4	4 23		2.0	7,280 45.00	164,400	217,410	0.1 0	4 23		2.0 2	92 831	1,101	2214 2	99 358	481 282	831	1,101	2,214	24 90 354	481 20.664 14.992 15.000
Column	2020 19325 Umatilla Electric Coop Assn				54	11,90	11,641	0.0 0.0	0 13	3 .	5.3		121.44	127,654	0.0 0	10 13		13 1	00 6	230	446 21	80	100 100	- 6	233	440	24 1 80	100 24.540 5.320 10.900
Column   C	2020 19396Tri-County Electric Coop (MI)	MI	MISO	1,37	270	6,726	8,369 0 3,269 0	0.6	. 03	1	0.9 2	2,716 2,813		117,100	0.6	. 03		0.9 1	90 30	313 50	579 40 245 29	109 425	935 236 386 195	30	313 50	579 4 240 2	109 405 280 - 108	930 14.000 14.000 14.000 380 12.590 9.200
Column   C	2020 19435 Union Electric Membership Corp - (NC)	NC	DUK	3,97	254		4,230					1,450 3,01		10,274					3 7		10 25		200 3			10 4	636 6	
Column   C	2020 1940 Dake Energy Kentucky	KY KY	PJM	200,77	130,550	25,484	356,816 S	1.1 1.6	A 7.0	1	104.0 2,91 2.0 6	5,000 1,923,8 5,500 149,5	349,450	5,188,944 216,024	1.1 1	4 7.6	_	104.6 10,8 2.8 9	m 13,783 60 1,235	2,379	35,050 18,30 2,220 1.18	632	25,923 10,090	13,780	2,371	35,054 18.1 2,221 5.1	80 6,441 1,194 18 630	25.925 14.522 14.933 13.988 1.819 9.304 14.288
Column	2020 19490 United Electric Coop Service Inc - (TX)							1.1 0.3	2 .		5.4	1,740 2,80	4 .	67,600	1.1 0	.2		14 4	99 29		520 20	9	200 400	29		529 2	200	280 9.210 12.000
Column	2020 1949 United Huminating Co 2020 1949 United Power, Inc	CT	WACM	13,66	8,603	5,425 0	49,849	0.1 4.2	4 00	0 00	10.1 9		64,174	519,073	03 1	4 0.0	0.0	1.9 9	56 460	2,600 0	25,529 3,67 626	1,764 665	8,100 8,196	54,731 460	2,600 0	25,523 3,6 626	or 3,768 665 6	8,100 6,669 11,850 11,850 15,190 13,910 0,000
Column	2020 19545 Black Hills Power, Inc. d/bla	\$0	WACM	69	4,020		4,723	0.1 1.0	.0		5.6	5,584 59,19		64,775	0.1 1	4		1.0	20 612		632 71	36	419 20	612		630	78 340	419 8.090 14.670
Column	2020 1972 Upper Peninsula Power Company 2020 1972 UNS Electric, Inc				5,340	1,510 0 3,010	54,541 0 21,400	35 03	2 00	6 00	5.3 6 4.3 25	7,990 0.07	16,53		3.5 0	2 00	0.0	1.3 3 4.3 9	51 25	131 0	957 1,02 1,174 78	474 134 10 120	1,632 366 931 951	451	131 0	957 1,0 1,174 3	126 474 126 I	935 16.660 15.120 13.140
Column	2020 19790 Verendrye Electric Coop Inc	90	WISO	10	317	0 0	410 0	0.3 0.5	9 00	0 00	5.1	1.002 2.17	3 0	4.175	0.3 0	9 00	0.0	5.1	17 16	0 0	25 17	18 0	35 17	16	0 0	35	17 18 0	25 10.000 10.000 0.000
Column   C	2020 19800 Victoria Electric Coop, Inc.	TX	ERCO	+			1 1	0.0	- 03	1	0.0	20		20	0.0	- 02		0.0	0 1,019	660	1,765		0 0	1,019	663	1,740		0 15.000 11.500
See No. 19	2020 19878 Virginia Electric & Power Co	NC NA	PJM	2,73	1,000		4,500	03 03	3 .		0.5 4	5,000 16,81	e e	61,046	0.3 0	3		0.5 1	84 479		663 211	20	575 184	479		663 3	210 250	575 16.400 12.700
See No. 19	2020 1996 Wake Electric Membership Corp	NC.	CPLE	1,02			1,024	1.0			163 1,41	1.070		1,070	1.0	•		10	13,52		21,729 5,99	- 0,20	11,295 8,200	13,524		21,729 5,0	1 0,00	1 1.040
Column   C	2020 20038 Town of Wallingford - (CT)				1,127	1,852 .	3,131	0.1 0.3	2 00		0.3	2,452 14,74	27,345	44,544	0.1 0	2 0.0		0.3 2	40 262	290 .	790 30	20 20	80 243	262	290	790	33 23 27	83 16.250 13.080 14.760
Column   C	2020 2016 Avista Corp	0	AVA	5,22	11,140	67 0	16,438 9	91.0 195.7	13	2 0.0	200.7 6	2,651 232,75	43,974	339,38	91.0 193	3 13	0.0	266.7 1,0	HI 2,358	14 0	3,417 89	273 10	1,160 1,046	2,358	14 0	3,41	GR 273 10 I	1,165 22.23 11.410 14.379
## Committee Com	2020 20169 Avista Corp	WA	AVA	36,01	20,584	243 0	56,046 6	53.3 261.5	4.3	3 00	429.0 20	1,39 427,11	6,090	634,660	63.3 361	5 43	0.0	429.0 1,4	2,462	41 0	4,968 1,58	457 26	0 2,067 1,464	3,460	41 Q	4,961 1,1	554 457 26 1	2,067 22.757 11.606 13.365
Column   C	2020 20187 West Penn Power Company	PA	PJM	55,73	20,540	6,719 0	2,349	7.0 23	3 10	0 0.0	113 20	6,83° 305,0°	99,807	29,40H	7.0 3	3 10	0.0	11.2 2,4	60 790	619 0	3,892 6,27	1,644 653	0 0,567 2,400	793	619 0	3,893 6,2	11 22 19 270 1,644 653 0	8,567 2.711 14.778 14.852
Column   C	2000 State of Part Parts Are by	rn.	nunn				400				0.7			4.704				0.0			40					40		4 45 75 44 75
Column   C	2000 2040/AEP Texas North Company	TX	\$800	3,53		0 0	12,766	1.0 4.0	0 00	0.0	5.8 8	3,290 136,00	6 .	216,313	1.0 4	0.0	0.0	5.8 1,3	1,429	6 0	2,800 211	23 0	0 447 1,372	1,429	0 0	2,800	210 220 0 0	
Column   C	2020 20477 City of Westerville - (OH)	OH	PJM		1,510	636	1,510	0.1	3 .		0.3	7,55	0.00	7,550		3		0.3	. 82	442	80	58	. 59 .	82	442	80		
Column   C	2020 2052 Wheeling Power Co	w	PJM	50		0 0	500 0	0.1 0.0	0 00	0 00	0.1	1,020	0 0	4,000	0.1 0	0.0	0.0	0.1	20 0	0 0	29 12	0 0	0 125 26		0 0	29 1	125 6 6 6	125 8.000 0.000 0.000
Column   C	2020 20639 Wild Rice Electric Coop, Inc	MN	WISO	1,43	259	4.000	1,794 0	0.3 0.1		_	0.3 1	3,073 3,20	4534	16,341	0.3 0			0.3 1	15 29		144 111	21	130 1,155	299		1,440 13	22 30	1,536 14.252 11.625
	2020 2084 Wiregrass Electric Coop, Inc.	AL	AEC	21		-	213 0	0.2			0.2	2,133	1000	2,133	0.2			0.2	54		64 6		0 197			190	o .	0 10.000
	2020 20847 Waconsin Electric Power Co 2020 20854 Marconsin Power & Links Co.	WI	MISO	_				+	+	+ -		_			_	+ +		_	+ -								<b>.</b>	
	2020 20858 WPP1 Energy	WI	VISO	1,20	665	2,450	4,351	0.2 0.1	1 0.4	4	0.7 1	2,073 10,23	35,871	59,224	0.2 0	1 04		0.7 5	40 491	307	1,344 600	954 564	2,120 546	491	307	1,34	500 956 566	2,128 10.000 15.000 15.000
	2020 2088 Whitecochee River Elec Coop 2020 2098 Wheeler Elector Coop Corp.	FL AD	MISO		66	0 0	66 (	0.0	40	9 00	40	0 80	9 0	822	0.0 0	40	0.0	4.0	0 0	0 0	9 0	9 9	0 0		9 0	9	0 0 0	0 0.000 12.367 0.000
	2020 20997 Yellowstone Valley Elec Co-op	MT	WALIW	34			349	1.0			1.0	349		349	1.0			1.0	12		12 25		29 8				41	41 1,000
Column   C	2020 21013 City of Worthington - (MN)	MN	MISO	2	13	210 .	407 0	0.0 0.0	0.0	0 00	0.1	640 2.02	2.679	5.344	0.0	0 00	0.0	0.1	23 10	13	46 1		24 23	10	13 .	40	12 3 7	24 16.801 12.756 12.756
Column   C	2020 21048 Wyandotte Municipal Serv Comm	WI	WISO	4	64		100	0.0			0.0	720 1,04		1,709	0.0	.0		0.0	54 50		24 25	29	55 54	10		24	26 29 .	
Column   C	2020 21075Y-W Electric Assn Inc. 2020 21111 Perennial Public Power Dist	95	SWPP	17	600	- 10	51 I	0.0 0.1	1 0.0		9.5	2.994 5.00	900	9.013	0.0	1 0.0	-	0.9	29 110	13	139		29	110	21	136		
Column   C	2020 21158 City of Zeeland - (MI)	WI	WISO	25	723		970	0.0 0.1			0.1	2,980 7,22		10,209	0.0	it .		0.1	36 73		109 1	536	154 36	73		100	18 136	150 13.343 13.153
Column   C	2020 21353 Municipal Energy Agency of NE 2020 21353 Municipal Energy Agency of NE	IA.	MISO	_	146		149	9.1		1 -	0.1	56		591		d d	_	0.1	3		1 1			26		24		10.000
Column   C	2020 21353 Municipal Energy Agency of NE	ME	SWPP	4	601		649	. 0.1	d .		0.1	40 2,50		2,157		d .		0.1	2 51		53		. 2	272		274		1,000 10,000
Column   C	2020 21538 Mohave Electric Cooperative. I				10		864 0	0.1			0.7	5,910 1	7	5,931	0.4 0			0.4	63 17		79 130		126 63	17		79 1	38 3	129 6.890 3.000
Separate   Column	2020 21633 EnergyUnited Elec Member Corp	NC.	DUK	3	100		223	7.5 11.6	4		193	111 21	4	427	5.6			14.4	2 3		1		11	15		20		19.001 7.000 200 16.601 0.000 0.000 1
Column   C	2020 22500 Evergy Kansas Central, Inc.	KS	SWPP	14	0	9 0	900	0.0 0.0	.00	1 00	9.0	0	3 1	2,30	0.0 0	0.0	0.0	0.0	1 9		9 20		200 0				9 9	
A	2020 22813 Delta Electric Power Assn	WS	WISO	52			523	0.1			0.1	520	20.00	523	0.1			0.1	0	240	0 3		7 0		200	0	7	7 1.000
Column   C	2020 2443 Utah Municipal Power Agency				266		900	0.1 0.1	d 25		0.2 1	1,422 4,83		10,254	0.1 0	1 29		0.2	24		24 13	43	180 24	549		24	136 43	
Column   C	2020 24556Uniti Energy Systems 2020 24949Cass County Elec Coop by	NH ND	MISO	6,06	90,111	313 0	16,490	0.6 13	3 0.0	0.0	26 3	2,734 133,10	4,119	170,034	0.6 1	3 01	0.0	2.0 2,0	113 2,700	84 0	4,800 511	686 21	1,225 2,013	1,749	90 0	3,85 5	519 3,124 164	3,801 5.575 13.166 13.166
Second	2020 25295 Western Indiana Energy REMC	N	MISO																									
Column   C	2020 27596 Carroll-White REMC	NA.	MISO	1,76	6,710	4,110	12,592	9.6	0.3	1	98	1,070	27,153	4,870	5.0	4.1		12.5 1,9 5.0	29 2,223	360	4,544 76 29	748 122	1,633 1,950	2,223	302	4,544 3	748 123	10.000
Column   C	2020 2854 Clatakanie Peoples Util Dist	OR TV	\$PAT	99	89	0 0	1,000	0.2 0.0	0.0	0 00	02 1	1,640 90	c c	12,540	0.2 0	0 00	0.0	02 4	00 14	0 0	445 00		92 430	54	0 0	440	85 8 0	92 12.748 10.466 0.000
Section   Sect	2020 30518 Electrical Dist No3 Pinal County	AZ	WALC	57			387 - 1	w. 0.0			- 0.5	13		8,809	v.1 6			1	1 1		19/		161	- 4		10.		15.000 15.000
State   Stat	2020 SEOS-Great Lakes Energy Coop				5,026			3.6 3.5	5 .		7.8 13	1,536 45,23		177,775	3.6 3	.5		7.5 1,0	66 296		1,366 1,17	560	1,764 1,066	290		1,380 1,1	173 590	1,764 12.598 9.200
Column   C	2020 4005 Texas-New Mexico Power Co	TX	ERCO	0,64	7,941			5.2 2.3			7.5 19	9,009 134,90	4	234,033	4.9 1	1		6.6 2,6	1,454		4,097 401	540	549 2,643	1,454		4,000 4	140	
Column   C	2020 4021 Wabash Valley Power Assn, Inc. 2020 4021 Wabash Valley Power Assn Inc.	IL N	PJM	12	1,450	385 0 2.730 A	3.297		0.1	3 00	0.7	2.245 6.00	35.071	43.410	0.0	1 01	0.0	0.0	12 129	201 6	251 4:	70 75	190 13	189	49 201 0	251	43 70 75 28 49 49	710 23.492 13.551 13.211 120 23.655 13.061 12.815
Column   C	2020 4021 Wabash Valley Power Assn, Inc.	PK.	MISO	70	20,800	93,090 0	31,615	0.1 2.1	.1 1.1	1 0.0	23 1	1.577 273.60	126.103	420,35	0.1 2	1 13		2.3	93 829	815	1,727 171	200 250	695 93	829	815	1,72	170 200 250	695 23.565 13.546 13.596
Column   C	2020 4043 Smerald People's Utility Dist	OR OR	PACW	1.05	1,333	2,201 0 434 0	3,791	0.5 0.1	0.4	1 00	0.0	18,00	30,72	53,440	0.5 0	0.4	0.0	0.0	24 122 00 112	87 0 59 0	233 3: 771 58	41 40 10 27	112 24 0 629 500	122	87 0 59 0	230 771 5	27 41 46 50 10 27	11/2 23.492 13.500 13.501 620 15.930 12.550 12.000
The content of the	2020 40438 Columbia River Peoples Ut Diet	OR	\$PAT	62	190	450	1,275	0.1 0.0	.0.0	0	03 1	0,479 2,39	3,976	16,041	0.1 0	8 00		0.9 2	17 47	12	277 2	2 12	49 217	47	10	277	24 7 17	49 16.764 12.310 8.665
Column   C	2020 44377 Cricor Electric Delivery Company LLC	TX.	ERCO	103,10	112,06	- 1	295,160 G	53.6 25.4	0.0		89.2 2,00	3,505 1,691,5		3,765,015	27.1 12	0.0	0.0				29,893 2,74	2,00	4,740 26,144	13,753		39,89 2,3	74 2,00	4,746 11.430 15.280
Column   C	2020 S4910 NSTAR Electric Company 2020 SSTED City of Manager Visites - 000						620,045 5	00 00		1	104.1 60	6,924 9,256,3		9,863,315	19.3 80	5		104.0 90,0	129,538		223,163 31,63	25,13	56,770 93,627	129,530		223,165 31,1	63 25,13	54,770 4.850 18.730
Column   C	2020 55937 Entergy Texas Inc.	TX.	WISO	13,04	31,760		44,00	7.5 6.4	.4		13.5 23	1,300 369,00	×	600,309	7.5 6	4		13.5 3,1	02 2,500		5,734 41	210	722 3,160	2,500		5,734	641 210	753 17.725 16.616
Column   C	2020 50146Black Hills Colorado Electric, LLC 2020 50000Marin Clean Energy	CA CA	PSC0 CISO	8,19	9,763	411 6	17,959	1.5 2.1	11 00		26 6	6,393 100,0 1,250 11.71	236	255,210	1.5 2	1 60	9/	34 4	48 1,921 59 998	20 6	2,369 1,80 407 57	2,55 40 410	4,424 448 0 1,46 446	1,921	20 4	2,30 1,1 40 4	00 2,55 10 00 660	4.424 8.100 19.340 2.300 1.310 11.940 9.000
Column   C	2020 5666 Ameren Binols Company	4	WISO	124,89	244.95		303,540 5	19.8 25.2	2			7.827 3.009.0	4	4,136,900	19.0 20	3		55.1 17,2	37,791		55,040 23,49	19,76	43,261 17,251	37,791		55,042 23,	49 19,76	43.201 10.300 13.200
Column   C	2020 ST20 Snergy Trust of Oregon	OR OR	PGE	23,21 69.88	523,961		780,196 I	14.0 22.0	10 19.0	0			3,195,13 1,664,976	11,402,938 4,533,016	12.0 19	0 17.0				13,172	115,020 31,82 80,357 18.05	22,634 8,333 33,12 15,023	62,792 57,902 66,199 22,431	43,943	13,172	115,028 31,1 80,35 18,1	05 23,12 15,02	
Column   C	2020 57346@fficiency Maine Trust	UE.	SAE	82,49	50,433		122,930 5	12.2 8.5			21.8 1,00	0,23 669,13		1,009,464	13.3	5		21.5 17,5	12,224		29,831 6,46	3,580	12,040 17,507	12,224		29,831 6,4	461 3,581	10,540 12.120 13.664
Column   C	2020 57348 Focus on Energy Investment Corporation	WII	MISO	294.04	62,155 247,658	199,130	730,831 3	27.3 27.4	4 26.3		101.0 4.64	1,970 3,589.2	3,090,67	11,331,863	37.3 33	4 26.1		101.0 24.7	17,001	13,140	22,660 7,33 55,469 14.30	10,874 8,273	23,33 24,722	17,601	13,146	22,683 7,3 55,409 14.3	11,374	23,233 16.350 14.460 15.564
Comparison of the Comparison	2020 57483 berly USBies	CA	ciso	42	329		759 0	0.3 0.1	d .			1,271 4,64	9	8,914	0.3 0	.1		0.4	67 19		86 11	30	152 67	19		80 1	114 30	152 9.760 14.100
19   19   19   19   19   19   19   19	2020 S8127 Cape Light Compact	MA	SNE	15.47	21,170		36,657	25 25	2		56 8	3,543 270.31		390,222	0.6 1			2.1 22.3	130 5,925		28,258 8.65	3,33	11,991 22,333	5,905		28,254 8.6	15 3,330	11,991 5.800 12.770
Column   C	2020 S8128 DC Sustainable Energy Utility	00	PJM	35,04	77,83		112,070 0	6.9 10.0			17.6 40	6,031 868,73	S\$ .	1,274,787	6.9 10			17.6 2,6	3,000			1,220	2,031 2,633	3,000		5,633	TCE 1,32K	2,031 11.590 11.160
Col.   Set Office 1 of Antonic Col.   Set	2000 S8850-tawaii Energy Efficiency Program	14	NA	75,76	15,1E 84,331		190,000 11	16.1 13.0			29.9 50	5,529 1,466,9		2,002,449	16.1 13			29.9 11,2	120 12,413		23,650 7,02	7,35	4,000 14,385 11,237	12,413		23,650 7,0	22 7,350	14,300 7,900 17,400
Col.   Text	2020 59013PUD No 1 of Jefferson County 2020 5911BU Clean Energy Program	WA.	8PAT PJM	500 AI	289 00		715 0 792.393 44	6.0 593		1	92.5 7.90	0.019 4.29744		11,575	46.8 53	· T	F	99.5 69.0	23 10		333 544,646 45 55	1172	27.277 #60.011	75,414		330 144,640 45 4	55 11.72	21.300 12.000 0.000 27.27 14.730 14.820
THY - MARK IT THE PROPERTY.	2020 60631 Upper Michigan Energy Resources Corp.	. MI	MISO								- 7,2							- 40,			12,00							
	en - sana is red Meaningss.																											