AUSLEY MCMULLEN

Attorneys and Counselors at Law
123 South Calhoun Street
P.O. Box 391 32302
Tallahassee, FL 32301
P: (850) 224-9115
F: (850) 222-7560
ausley.com

March 1, 2023

VIA: ELECTRONIC MAIL

Ms. Judy Harlow, Director
Division of Economics
Florida Public Service Commission
Room 225E – Gerald L. Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Tampa Electric Company's Summary of 2022 DSM Program Accomplishments

Dear Ms. Harlow,

Enclosed for filing is Tampa Electric Company's Summary of 2022 Demand Side Management Program Accomplishments.

Thank you for your assistance in connection with this matter.

Sincerely,

Malcolm N. Means

MNM/bml
Enclosure

cc: Paula K. Brown (w/o enc.)
Mark Roche (w/o enc.)

TAMPA ELECTRIC COMPANY
UNDOCKETED
DSM ACCOMPLISHMENTS
FILED: MARCH 1, 2023

TAMPA ELECTRIC'S 2022

Demand Side Management Program Accomplishments Report

TECO
TAMPA ELECTRIC
AN EMERA COMPANY

Executive Summary

Executive Summary:

In 2022, Tampa Electric achieved all of the annual and cumulative Residential and Commercial/Industrial ("Comm/Ind") and combined Demand and Annual Energy ("AE") DSM goals.

2022 Residential Goals		Actual Residential DSM Achieved	
SkW:	3.0 MW	SkW:	11.1 MW
WkW:	7.4 MW	WkW:	9.5 MW
AE:	6.9 GWh	AE:	30.4 GWh

2022 Comm/Ind Goals		Actual Comm/Ind DSM Achieved	
SkW:	3.3 MW	SkW:	12.3 MW
WkW:	1.9 MW	WkW:	7.1 MW
AE:	10.2 GWh	AE:	26.6 GWh

2022 Combined Goals		Actual Combined DSM Achieved	
SkW:	6.3 MW	SkW:	23.4 MW
WkW:	9.3 MW	WkW:	16.6 MW
AE:	17.1 GWh	AE:	57.1 GWh

This 2022 DSM Annual Report provides the required DSM reporting information as required by the Commission, including providing updates on historical program accomplishments, challenges and highlights that occurred.

2022 DSM Summary Highlights:

- Tampa Electric's team members that facilitate the conservation related activities experienced zero injuries during 2022.

- The company performed 13,469 Walk-Through Energy Audits for Residential customers, including 4,310 as part of the Residential Walk-Through and Computer Assisted Energy Audit programs and 9,159 as a component of the company's Neighborhood Weatherization program.

- 109,802 of the company's customers took advantage of the Residential Customer Assisted Energy Audit (online) in 2022.

- The company installed weatherization on 9,159 homes as part of the Neighborhood Weatherization program. This participation rate brings the overall penetration level of this program to approximately 38 percent for all qualifying customers.

- The company's Program Support Team processed nearly 100 percent of the 8,293 energy efficiency rebates paid to customers within ten business days of receiving all the required documents for verification.

- Tampa Electric completed the first full year of operational testing of the Integrated Renewable Energy System ("IRES"). A summary detail report is included within this report.

- The company continued to perform research on potential small to mid-size commercial batteries that could be used as a specific Research and Development (R&D) project. A summary of this research is included within this report. The company plans to purchase and install batteries to be studied at customer facilities during 2023.

- Tampa Electric is close to completion of the Light Emitting Diode Street and Outdoor Lighting conversion program. The company estimates that the total conversion of 209,821 luminaires will be complete during the first part of 2023.

- Since the inception of offering Commission approved DSM programs through May 2022, the amount of customer funded dollars collected through the Energy Conservation Cost Recovery Clause on a cumulative basis exceeded one (1) Billion dollars.

- In 2022, the company began collaborating with the other FEECA utilities to begin developing the Technical Potential Study that will serve as the basis for the DSM Goals that will be proposed for the 2025-2034 period.

- The Residential Prime Time Plus program installed the equipment on its first customer in December 2022. This innovative DSM Program will leverage the company's Advanced Metering Infrastructure system to facilitate a direct control load management program through a smart thermostat and appliance relay switches. Below is a picture of the smart thermostat that customers will be provided that will facilitate the load control of the air conditioning equipment:

Challenges:

The largest challenge the company encountered in 2022 was the suspension of non-essential operations with customers that require face-to-face interactions (on-site) from Monday, January 3, 2022, through Sunday, January 30, 2022, due to the high infection rates that were seen in Florida from the Omicron Variant. During this time of suspension, Tampa Electric, as in the majority of 2020 and 2021, continued the many steps and efforts to mitigate the impacts to the company's Residential and Commercial/Industrial DSM programs and to provide customers special consideration during these challenging times. The company resumed normal operations once the severity of the Omicron variant was determined to be much less severe than previous variants of COVID-19.

For 2023:

Tampa Electric remains committed to offering DSM programs that advance the policy objectives of FEECA, are directly monitorable, yield measurable results and are cost-effective to deliver. The company will continue its advertising campaign of bill inserts, print media and television advertisements aimed at educating customers on opportunities to participate in programs to assist in meeting their energy efficiency requirements.

2022 Annual Report on DSM Program Accomplishments

Table of Contents

Historical Participation, Achievements, and Expenditures

Historical Participation, Achievements and Expenditures:

Tampa Electric has been offering cost-effective energy efficiency programs since September 1978, when the company started its first residential walk-through energy audit program, known as the Residential Conservation Service. Following the enactment of the Florida Energy Efficiency and Conservation Act ("FEECA"), the company began expanding its offering of Demand Side Management ("DSM") programs to include other energy efficiency and load management programs such as Heating and Air Conditioning, Storage Water Heating, Commercial Energy Audits, Efficiency Buildings, Residential Load Management, Commercial/Industrial Interruptible and Co-Generation. These programs were all designed to achieve the objectives of FEECA, including:

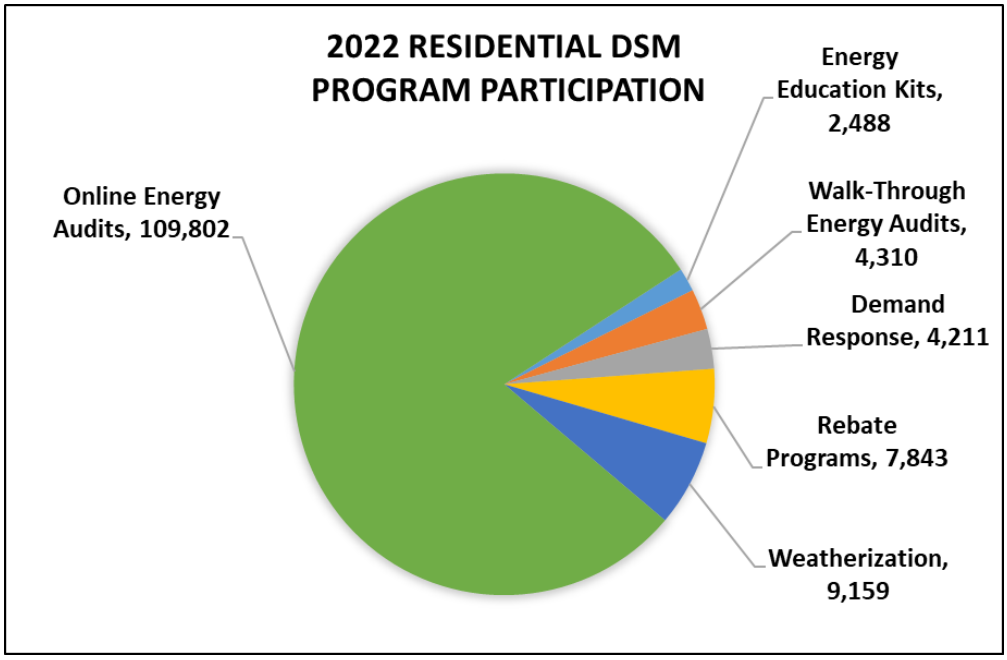
1. Reducing the growth rates of weather-sensitive peak demand and electricity usage.
2. Increasing the efficiency of the production and use of electricity and natural gas.
3. Encouraging demand-side renewable energy systems
4. Conserving expensive resources, particularly petroleum fuels

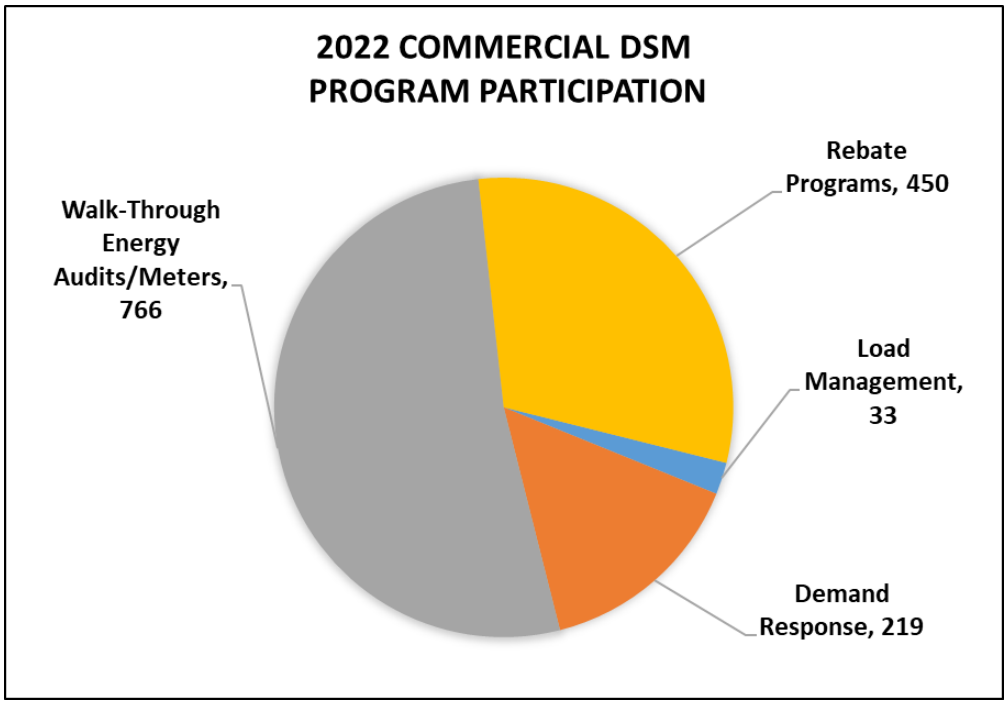
In 2022, Tampa Electric continued to provide the largest portfolio of residential and commercial/industrial energy and demand savings programs in the state of Florida through its Commission approved 2020-2029 DSM Plan. This comprehensive energy efficiency portfolio provides programs in which all customers can participate in and helps customers save energy, demand, money, and benefits all of the company's customers by reducing the company's need to purchase, produce, and deliver additional energy, in addition to reducing emissions to the environment.

Tampa Electric received approval of its 2020-2024 Demand Side Management ("DSM") goals in Order No. PSC-2019-0509-FOF-EG, issued on November 26, 2019, in Docket No. 20190021-EG. The company received approval of its 2020-2029 DSM Plan in Order No. PSC-2020-0274-PAA-EG, issued on August 3, 2020, in Docket No. 20200053-EG. Tampa Electric transitioned to the DSM programs within the 2020-2029 DSM Plan on November 2, 2020, pursuant to receiving final approval of the supporting DSM standards on September 8, 2020.

Customer Participation:

In 2022, Tampa Electric facilitated the participation of 137,813 residential and 1,468 commercial/industrial customers in the company's DSM programs. The charts below provide the breakdown of how these customers participated in the company's DSM programs for the January through December 2022 period:





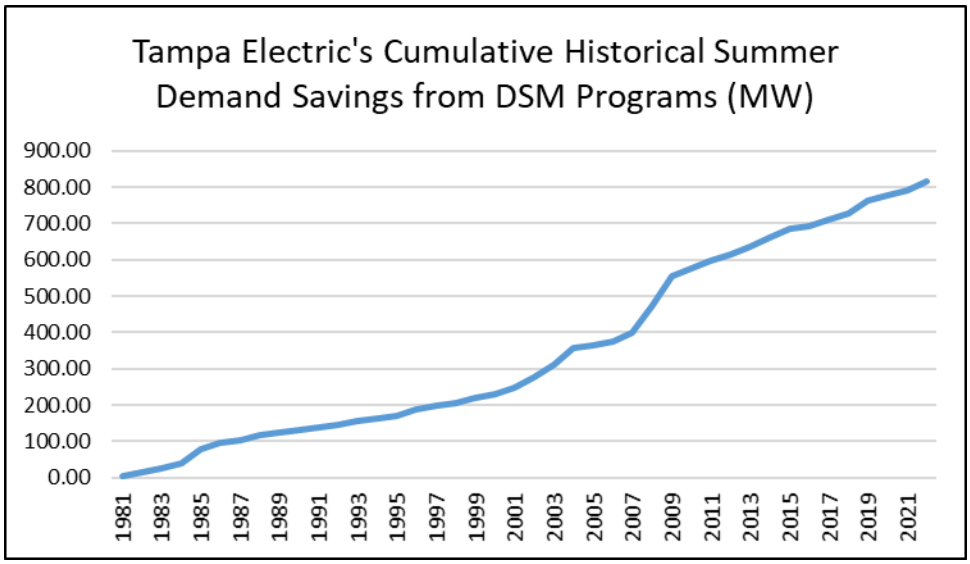
On an historical basis, as of the end of 2022, Tampa Electric has conducted 371,150 Residential and Commercial Walk-Through energy audits, provided 457,354 online, phone or mail in energy audits, paid 512,232 rebates for energy efficient upgrades, and has performed weatherization on 70,752 homes.

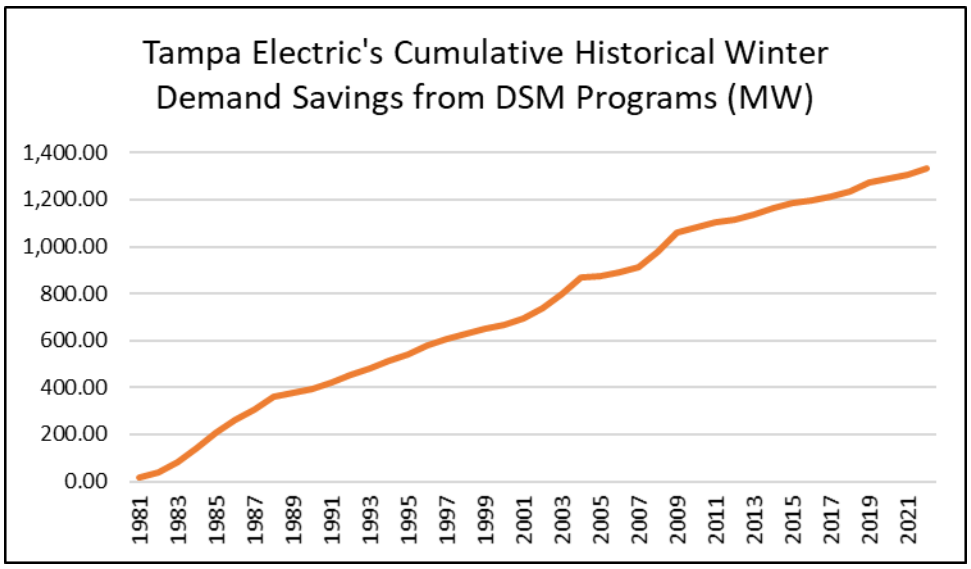
DSM Achievements:

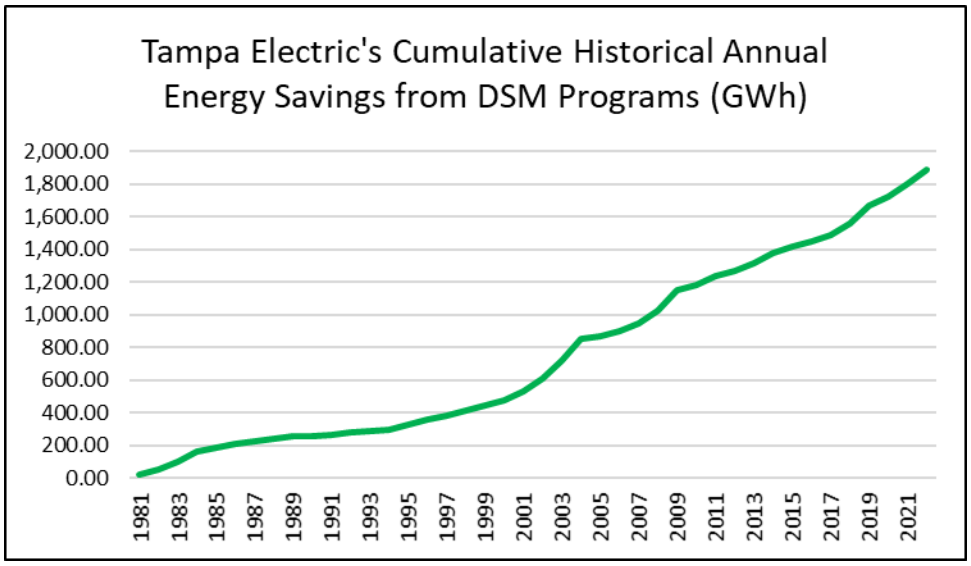
Since the establishment of FEECA and the end of 2022, the company's DSM program have achieved the following cumulative demand and energy savings:

Summer Demand Savings:	815.02 MW
Winter Demand Savings:	1,331.03 MW
Annual Energy Savings:	1,886.72 GWh

It is important to note that the annual energy savings documented for achievement includes only one year of energy savings from the participation in a given DSM program. These energy savings also do not include naturally occurring energy efficiency or savings that would occur from updated building codes or savings that would come from training events. The savings do include demand and energy savings that do not contribute toward the achievement of the annual DSM goals set forth by the Commission (such as behavioral savings quantified or savings from programs such as the LED Streetlight conversion program). These continued Demand Savings achievements have eliminated the need for over seven 180 MW power plants. The charts below show the cumulative demand and energy savings the company has achieved since 1981:

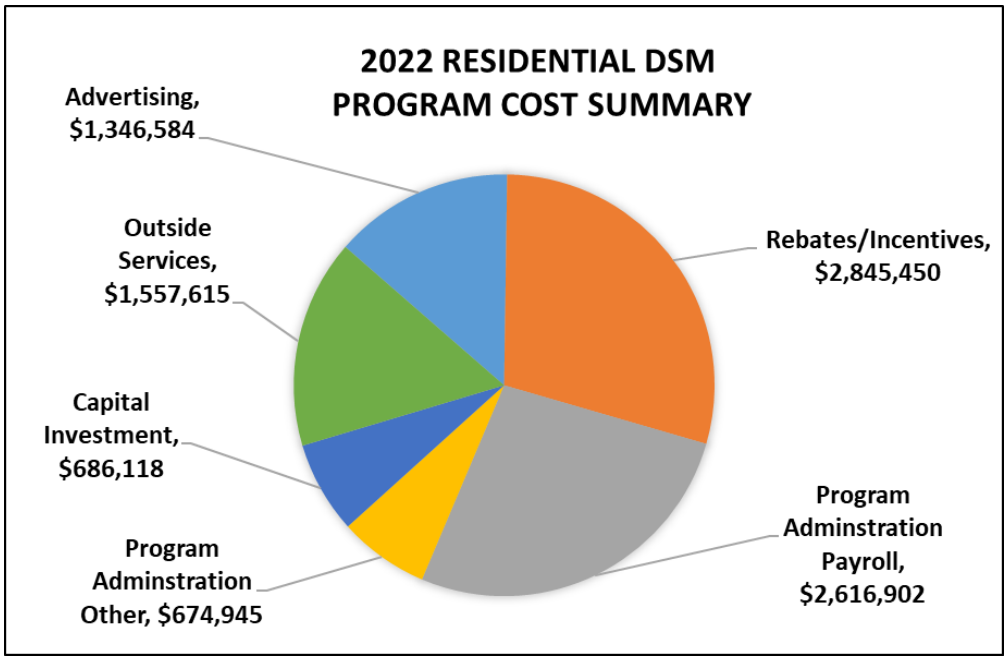


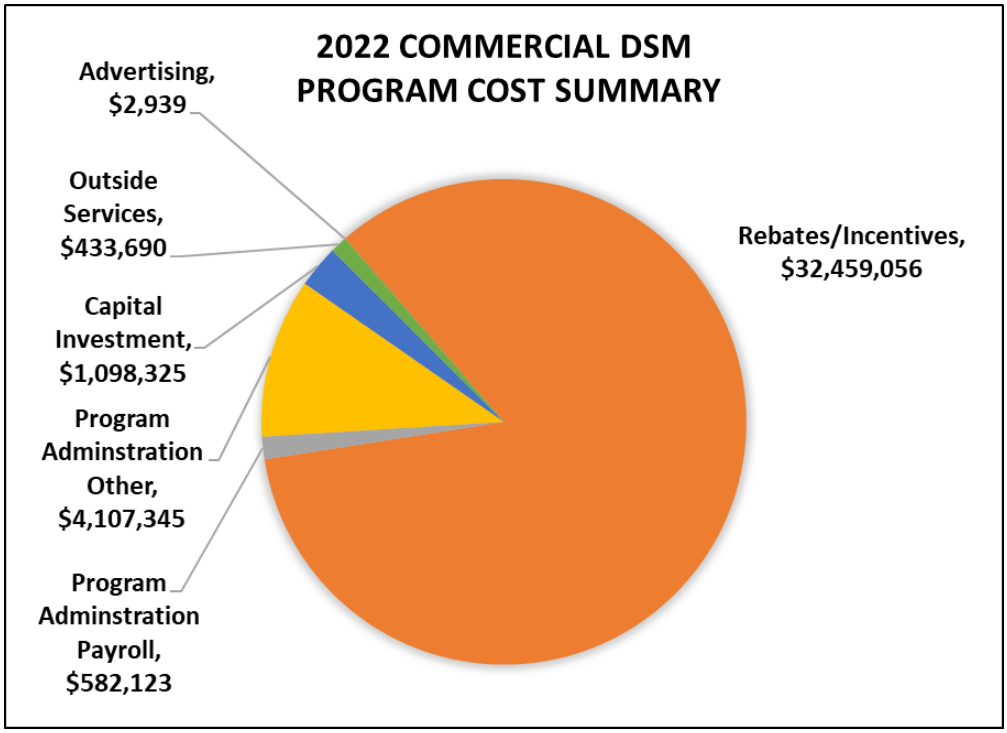




Expenditures:

In 2022, Tampa Electric facilitated the participation of 137,813 residential and 1,468 commercial/industrial customers in the company's DSM programs. The charts below provide the breakdown of the initial true-up costs that were incurred to fund their participation in the company's DSM programs for the January through December 2022 period:


2022 RESIDENTIAL DSM
PROGRAM COST SUMMARY
Advertising, $1,346,584
Outside Services, $1,557,615
Capital Investment, $686,118
Program Adminstration Other, $674,945
Rebates/Incentives, $2,845,450
Program Adminstration Payroll, $2,616,902


2022 COMMERCIAL DSM
PROGRAM COST SUMMARY
Advertising, $2,939
Outside Services, $433,690
Capital Investment, $1,098,325
Program Adminstration Other, $4,107,345
Program Adminstration Payroll, $582,123
Rebates/Incentives, $32,459,056

Energy Audits

Energy Audits:

Residential Energy Audits:

Tampa Electric facilitates four types of energy audits for residential customers. A walk-through energy audit, an online energy audit, a comprehensive energy audit, and a Building Energy-Efficiency Ratings Systems ("BERS") energy audit. The walk-through and online energy audit are free to take advantage of, while the comprehensive and BERS audit have a nominal additional fee to have these performed.

(Tampa Electric Residential Analyst explaining the operation and settings of a water heater)

All of Tampa Electric's Residential Energy Analysts that conduct energy audits are required to achieve and maintain a professional certification in energy auditing or energy management.

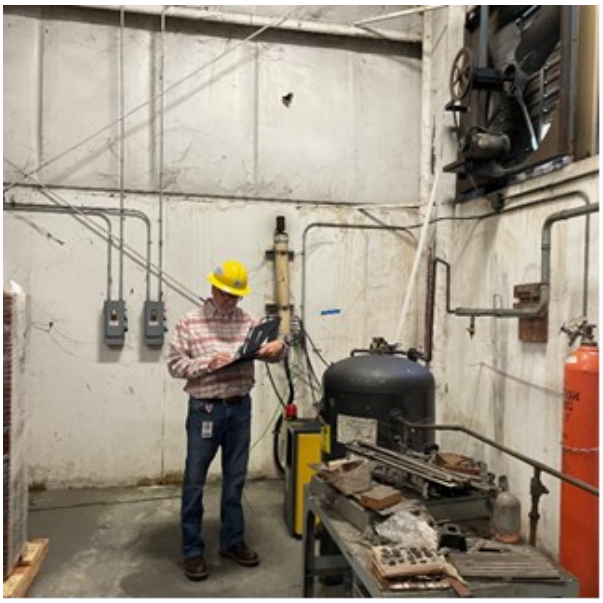
(Tampa Electric Residential Energy Analyst taking ceiling insulation depth measurements)

(Tampa Electric Residential Energy Analysts being trained on manufactured home construction)

Commercial Energy Audits:

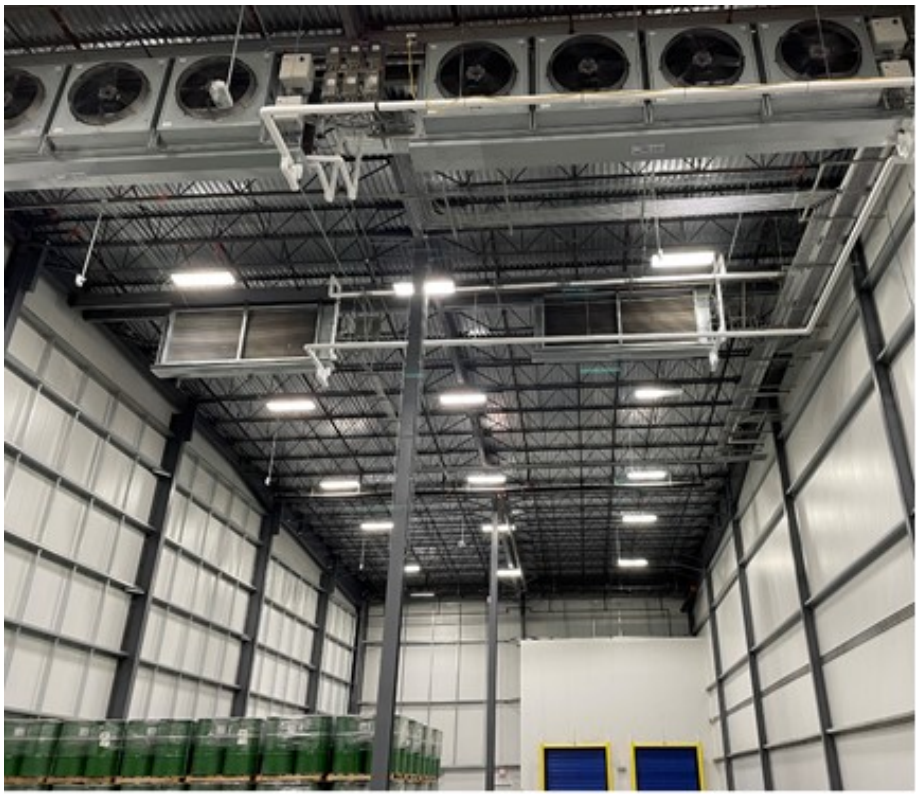
Tampa Electric facilitates two types of energy audits for commercial/industrial customers. A walk-through energy audit and a comprehensive energy audit. The walk-through energy audit is free to take advantage of, while the comprehensive energy audit has a nominal additional fee to have it performed.

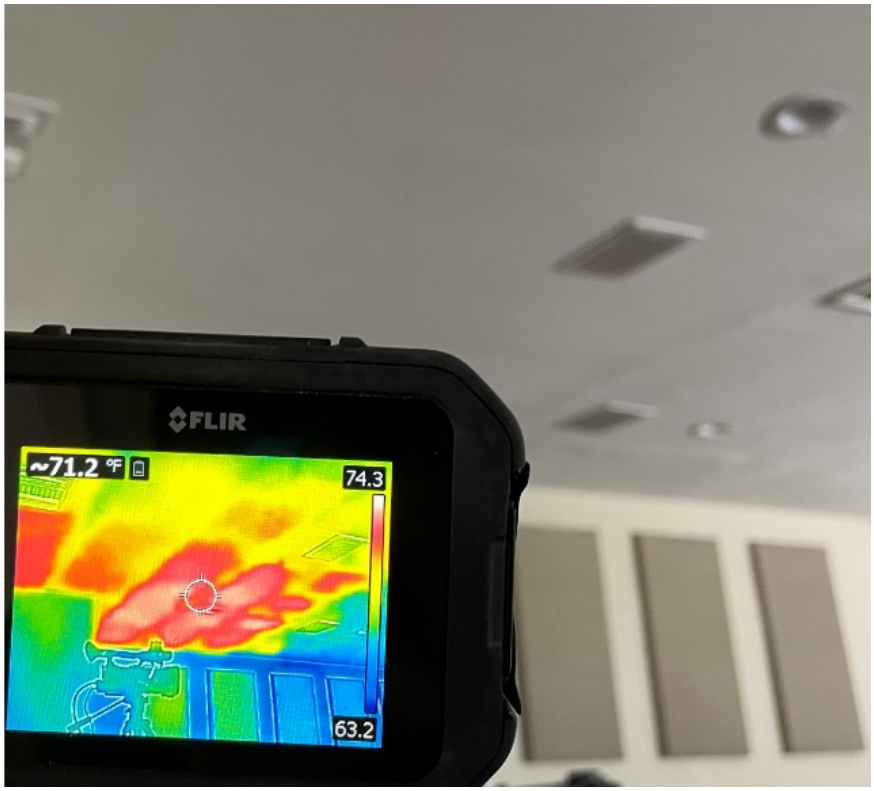
All of Tampa Electric's Commercial/Industrial Energy Analysts that conduct energy audits are required to achieve and maintain the Certified Energy Manager ("CEM") professional certification.



(Tampa Electric Commercial/Industrial Energy Analyst taking notes during their walk-through)

(Conducting a post installation lighting verification, facility was the Triple E Award nomination in the last quarter of 2022)





(Energy audit including the performance of thermal imaging to identify missing insulation above the ceiling)

(Energy audit of a commercial site with a thermal energy storage system)

The table below provides the summary detail of “audit information by type” for the Energy Audits performed by Tampa Electric in 2022.

Tampa Electric's 2022 Energy Audits Performed by Energy Audit Type				
	Walk-Through, BERS, and Computer Assisted	Online	Phone	Total
Residential	4,310	109,802	0	114,112
	Walk-Through and Comprehensive	Online	Phone	Total
Commercial	766	N/A	0	766

On an historical basis, as of the end of 2022, Tampa Electric has conducted 371,150 Residential and Commercial Walk-Through energy audits and provided 457,354 online, phone or mail in energy audits.

Energy Education and Weatherization Activities

Energy Education and Weatherization Activities:

Energy Education:

Tampa Electric's Energy and Renewable Education, Awareness and Agency Outreach program is comprised of three distinct initiatives:

1) Public energy and renewable education
2) Energy awareness
3) Agency outreach

This portion of the program is designed to establish opportunities for engaging groups of customers and students in energy-efficiency and renewable energy related discussions in an organized setting. Tampa Electric recognizes the importance of educating students and motivating customers through participation in its energy audits and raising awareness of energy conservation, energy efficiency and renewable energy efficiency. This program provides the opportunity to accomplish these initiatives for large groups in one setting.

Energy Education at
Excelsior Prep Charter

In 2022, Tampa Electric participated in over 17 designated energy education and awareness events across the company's service area. These events do not include the daily opportunities for energy education that Tampa Electric Team Members have with customers through email, phone calls, or one-on-one discussions nor the education customers receive when they participate in one of Tampa Electric's Commission

approved DSM programs. These events cover educating all ages, income classes and rate classes of customers on energy education and awareness. Several highlighted events include:

- Tampa Neighborhood Coffee Talk North Tampa
- City of Tampa Parks Recreation Barksdale
- New Homeowners Dare to Dream
- Tampa Neighborhood Coffee Talk Lake Ashton
- Strawberry Ridge Homeowners Association ("HOA")
- Waterview Rocky Point Community HOA
- Tampa and Brandon Lunch and Learn
- Great American Teach-In (several Elementary Schools)
- Lakeshore Villas HOA Lunch and Learn

Energy Education at Elementary School, with Lollipop, and the book Authored by Kristy Bright, "How to Reduce Your Carbon Paw Print"

Energy education with customer at
Tampa Bay Buccaneers Training facility

Tampa Electric commits to continue partnering with neighborhood service centers to ensure customers who need assistance in reducing their energy usage and associated cost will receive the appropriate energy education and guidance. Participants will be provided with an energy efficiency kit containing the following energy saving devices and supporting information appropriate for the audience.

- Four LED lamps
- HVAC filter whistle
- Two low flow faucet aerators
- Wall plate thermometer
- Water heating temperature check card for adjustment of the water heater
- Energy savings education handout

In 2022, Tampa Electric provided 2,488 of these energy efficiency kits to qualifying customers.

Additionally, as part of energy education and awareness, the program continues to focus on providing opportunities to encourage the conservation of energy and for the promotion of energy efficiency through local school systems by partnering with high schools' driver's education classes. This portion of the program will provide energy efficiency and electric vehicle ("EV") training curriculum and educational materials. In 2022, 556 student drivers participated in the EV education portion of this program and received the training and curriculum. Each student was

afforded an opportunity in their class to drive the EV at least three times. As compared to 2021, the slightly lower participation in 2022 was due to the school district looking at potentially redesigning their drivers' education program.

Tampa Electric continued to work on developing an effective platform that will provide quality information on Renewable Energy. The company has partnered with a vendor that provides a one-stop shop for customers that are considering solar energy and projects the addition of this education material to be available to customers during 2023.

Agency Outreach:

Tampa Electric is involved on many fronts with different agencies that provide assistance or guidance to ensure that low-income / vulnerable customers have an equitable access to the company's DSM programs. In 2022, these activities included partnerships with:

American Council for an Energy Efficient Economy ("ACEEE"). From 2019 through the beginning of 2022, the company participated in an energy equity committee through the ACEEE to assist in the development of city, state, and utility scorecards for measuring and benchmarking energy equity. In addition, annually the company provides a variety information regarding the company's DSM Programs to the ACEEE through several surveys throughout the year.

Consortium for Energy Efficiency ("CEE"). In 2022, the company started its participation in a three-year study for Energy Equity through the CEE. The purpose of this study is to convene broad participation from behavior professionals within the energy efficiency industry to build consensus on characterizing and defining hard to reach audiences, and to ensure that program administrators are equitably serving all their customers, including audiences such as income eligible, low-English proficient, rural residential, and small/medium sized businesses. Through this study, the company collaborates with other trusted and respected US and Canadian program administrators with both equity and behavior responsibilities. The study also provides member sponsors with the opportunity to learn successful approaches to engaging precisely defined underserved customers in both the electric and natural gas sectors.

Distributed Energy Financial Group's Executive Advisory Panel of the Equity in the Clean Energy Economy ("ECEE"). In 2022, the company began sponsoring the Collaborative which examines the impacts of distributed and renewable energy on the grid, the traditional utility business model, and customers, especially around affordability and access 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 (LIEIF).

Center of Economic Development Organization. In 2022, the company joined in a new partnership early with The Center of Economic Development Organization to create awareness and provide education to veterans, disabled customers, seniors, and low-income homeowners. This partnership allows the company to be in several communities working with other community volunteers to deliver energy education and installation of the weatherization program. Through this partnership for 2022, we were able to educate 300 customers in addition to weatherizing their homes with energy efficiency measures including duct seal and insulation. Some examples of the focused projects that support this partnership were the participation in the FIX MY BLOCK and Community Revitalization initiatives.

Tampa Housing Authority. In 2022, the company coordinated efforts with Tampa Housing Authority to for the delivery of Energy Education and Neighborhood Weatherization measures to 11 different communities reaching 1,200 customers.

Weatherization:

Tampa Electric's Neighborhood Weatherization program offers a comprehensive energy efficiency kit and increased energy education, with the addition of the walk-through energy audit that was added in the most recent DSM Plan, to assist low-income residential customers in becoming more energy efficient. The comprehensive energy efficiency kit includes the following 12 energy savings measures, in addition to ceiling insulation and/or duct sealing depending on the needs of the home:

- Six light emitting diode ("LED") lamps
- HVAC filter whistle
- Installation of up to three low flow faucet aerators
- Installation of up to two low flow shower heads
- Installation of a wall plate thermometer
- A water heating temperature check card for adjustment of the water heater
- Installation of hot water pipe insulation, if necessary
- Installation of weather stripping, if necessary
- Installation of caulking to seal windows, if necessary
- Installation of sealing foam to seal air infiltration issues, if necessary
- Refrigerator coil cleaning brush

- Installation of ceiling insulation, if needed
- Repair of duct seal, if needed
- Walk-Through Energy Audit
- Energy savings education handout

In 2022, Tampa Electric provided 9,159 customers with the weatherization of their homes. It is important to note that homes can be single family, manufactured, mobile or multi-family homes. For qualification, the company uses Florida Census Tract data to determine eligibility and the customer does not need to own the home. On a historical basis, Tampa Electric has performed weatherization on 70,752 homes.

Pilot Programs and Research and Development Updates

LED Street Light Conversion Program, five year program - update:

Tampa Electric is nearing the completion of the Light Emitting Diode ("LED") Street and Outdoor Lighting conversion program. In 2022, the company converted 41,992 street and outdoor lighting luminaires to LED technology as part of this program.

For 2023, there are 8,827 remaining luminaires to be converted to complete replacement of all 209,821 luminaires. The company projects that the remaining luminaires will be converted by April 2023. The company will inform Commission Staff when the program is complete. While this program does not supplement the company's conservation efforts toward achieving the Commission's annual demand and energy goals above, these luminaire replacements contributed the following additional annual and cumulative demand and energy savings at the generator:

2022 Achievements		Cumulative Program Achievements	
SkW:	0.000 MW	SkW:	0.000 MW
WkW:	5.976 MW	WkW:	28.603 MW
AE:	25.445 GWh	AE:	121.793 GWh

Integrated Renewable Energy System, five year pilot program – update:

The Integrated Renewable Energy System ("IRES") – Pilot Program completed its first full year of operation following its commissioning in 2021. The system consists of 862 kW photovoltaic system located on five carports, five commercial-sized powerpack 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. This pilot program has three main purposes: the first is to evaluate the ability to maximize the demand side management benefits from this integrated system, second is to determine the ideal operating parameters that a commercial or industrial customer would operate this type of system, and third, to use the installation and its associated operational information as an education platform for commercial and industrial customers seeking information on this type of system and its benefits, concerns, and capabilities.

(North end of IRES carport solar array, with commercial batteries)

The following details the lessons learned throughout the first full year of operation:

- Fully commission the system, which includes meetings prior to the completed design of the system that include the designer of the system, the prime vendor installing the system, and the company purchasing the system. Tampa Electric discovered that these systems are more flexible in the design phase versus testing ideas post-installation. If the stakeholders had met earlier and determined all of the different capabilities of the system, a complete commissioning test plan could have been developed to test and stress the system with the scheduled scenarios. The company also believes that it would have been easier to accommodate any identified scenarios as part of the initial design. Because this was not completely done, the company had to conduct its own validation and commissioning of the system with the vendor. This process required frequent shutdowns and scheduling changes were not fully

known upfront and would have been much more efficient if it was included as part of the initial design and commissioning.

- Electric vehicle ("EV") charging station fobs brand and type need to be specified with the initial contract. Tampa Electric anticipated being able to utilize the same fobs with the EV chargers that were being installed due to having fobs for this brand previously. The company discovered that the EV chargers that were installed, although the identical brand as others, require different brands of fobs than what were provided.

- Set strict communication guidelines, expectations, and documented procedures with third party vendors beforehand in the written contract. The company has found that third party vendors after the installation are less likely to follow communication procedures that are not included in the written purchase contracts. This may affect the operation of the system including impacting potential changes, updating schedules, testing, etc. In addition, early on all communication should include the prime contractor or O&M provider as applicable.

- Schedule regular inspections of the system. The company experienced fuses blowing frequently on a control circuit and inspected the system. The issue was found to be caused by a loose connection and an improperly sized fuse.

- Be aware of system communications and any internal IT requirements that may conflict. Most solar equipment requires two-way communication, including the batteries and inverters. This two-way communication is required for data acquisition, scheduling, reconfiguration, firmware upgrades, remote servicing, system alerts, etc. to support the integrated renewable system to perform effectively. Tampa Electric identified a significant obstacle with the inability to access the equipment from outside the company's internal communication system due to the company's Cyber Security Protocols. The company recommends that a stakeholder from the company's IT department be involved with this type of project from the inception to develop solutions for this communication.

- Be aware of where the system is being interrogated for communication. The company found that when the installation vendor was on-site, downstream of firewall security, they could see the inverters online just fine. However, when offsite and going through the internet or one of the other equipment vendors website portals, the ability to view the equipment operation is temporary or intermittent. Tampa Electric facilitated several meetings with the stakeholders to solve and correct this situation which came down to two issues. The first issue was identified as an internal firewall issue and the second was an incorrect algorithm with one of the equipment vendors website portals.

- Understand how scheduling changes of the battery will be implemented and which party will perform those changed. This is an important component of this pilot program to evaluate the ability to maximize the demand side management benefits. The company has learned that the battery vendor that was selected is the only entity that can change the battery charge/discharge schedule for this system. Tampa Electric identified a variety of scenarios to be conducted over the five-year pilot program to determine these benefits. The company met with the battery vendor to cover these scenarios and to identify how these schedule changes would be done. The vendor proposed using their autonomous site control software as an alternative to manually asking them to make the changes in order for the system to have the best discharge timings. Since the battery vendor lacks a single point of contact, such as a program manager, reaching out to the vendors is very time consuming. As a result, the company chose to move forward with the autonomous site control software. In advance of the system being operational, it would have been ideal to have clarity on the benefits of the company installing their own Modbus/SCADA system to interface with the batteries, allowing Tampa Electric to control the scheduling of the system.

- Understand what is included in the maintenance contract. Tampa Electric learned that services not related to equipment are not included in the equipment warranty. While the contract does include testing once or twice a year as needed, it does not include situations that involve the weather. Two of the solar panels were damaged due to Hurricane Ian. The company chose to leave these two panels off to see how the system would perform and have the panels reinstalled during the next annual maintenance to save on costs.

- Safety should be paramount. Tampa Electric placed safety precaution signage on every one of the system cabinets with the procedures to avoid any potential back feeding of the electrical system. This signage makes all team members and vendors who use the system aware of the potential safety hazards during proper system disconnection. Since this is a carport solar array, recognize that due to the construction of the array has required some asphalt to be replaced due to deterioration.

Commercial Battery Storage,
Research and Development - Update:

In the last quarter of 2016, Tampa Electric partnered with the University of South Florida ("USF") College of Engineering to assist in the performance of this Conservation Research and Development ("CRD") project to evaluate the feasibility of potentially offering a battery storage DSM program for

commercial/industrial customers. This CRD project will evaluate these 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. Tampa Electric specified the size of battery for this CRD project to be between 10 kW and 150 kW with the project from inception to completion lasting approximately three-years. The original timeline was to afford enough time to study these batteries and potentially justify a DSM program within the company's 2020-2029 DSM Plan if the results were positive. The original R&D project was projected to cost approximately $250,000 to achieve the following objectives:

- Evaluate the potential for battery storage for the use of load shifting on demand savings.
- Evaluate the efficiency of load shifting from a battery storage system and the associated control and monitoring system.
- Evaluate the impact on the total energy consumption of the battery and facility when used in a load shifting capacity (versus reliability).
- Evaluate and compare batteries based on performance and cycling tolerance when used in Florida's climate.
- Examine the associated costs from cradle to disposition of battery.
- Evaluate the load profile impact on power vs. capacity tradeoffs.

To achieve these objectives, the small to mid-size Commercial Battery Storage project was broken down into the following four main phases:

1. Battery selection
2. Identify commercial facilities
3. Battery vendor selection
4. Installation of storage system

Phase 1 was completed by USF in 2017. Tampa Electric included a copy of the battery research study in the company's annual DSM report that was filed with the Commission on March 1, 2018. In 2017, after completion of the initial portion of the CRD project, the company sought product availability and costs and found that the prices were greater than the allocation of funds allowed as an R&D program and placed the pursuit of this CRD project on hold until the prices of the batteries dropped to an acceptable level. The company's Commercial Energy Management Team ("CEMT") has continued to keep a pulse on the market and monitors the prices of the batteries to continue the CRD project. In addition to monitoring the prices of the batteries to continue the CRD project, Tampa Electric also filed for an increase in the allowable funds to be used for CRD in the company's most recently filed and Commission approved 2020-2029 DSM Plan. In the 2020-2029 DSM Plan, the program costs were increased on an annual basis from $200,000 per year to $400,000 per year and increased the five-year period total allowable costs from $1,000,000 to $2,000,000.

For 2022, the company has been monitoring the costs of applicable battery systems and believes the cost of these systems will enable the company to install

two systems, at separate customer locations, in 2023. Below are the specific items the company completed in 2022 in preparation of completing the three final phases of this CRD project.

- Tampa Electric continued to conduct interviews with battery storage vendors in 2022 to assess the state and cost of the technology. The CEMT contacted twelve suppliers. It was challenging to find the vendor with the right products and services, providing a turnkey solution with supportive analytic software.

- The company has learned much more about battery technology to be used in commercial applications. Specifically, about lithium iron phosphate batteries (LiFePO4 or LFP), which have several advantages over other lithium batteries. Benefits include a longer lifespan, lower maintenance, exceptional safety, and light weight, as well as increased discharge and charge efficiency. One drawback of LiFePO4 batteries is they are not the most affordable on the market, although they do appear to have better lifespans and reduced ongoing maintenance costs.

- The limitations of the supply chain had an impact on battery storage, for example. The root reasons of the problems are well known, and they include COVID-19-related logistical constraints and escalating lithium battery raw material prices. Due to a lack of raw materials and inventory being shipped from outside the United States, most vendors currently have an availability window of nine months to a year.

- The costs of batteries still tend to vary greatly, including variation for batteries from outside the United States as compared to those vendors who have stock in the United States.

- A benefit of the ongoing monitoring of potential sites and batteries over the past couple of years is seeing the load changes at potential customer facilities. All of the potential customer sites the company has been monitoring have had substantial shifts in their load from pre-COVID to now post-COVID operations, which required the company to add more customer facilities to be examined for potential eligibility in this project.

- The company has identified that the warranties offered by battery vendors vary quite greatly in what they cover in respect to the equipment as well as performance.

- The company is seeing that customer facilities that install larger kW rated system, due to either capacity or voltage requirements, require the transformer supplying power to the facility/battery to be changed to a larger rating. In addition, due to the larger size, may require the battery to be housed outside in

the elements or in containers which could be a benefit or a drawback depending on availability of space.

Heat Pump Water Heater, Research and Development - Update:

Tampa Electric continues to have this CRD on hold due to the Energy Planner team members focusing on getting the new Prime Time Plus program implemented. This CRD was initially designed to evaluate the inclusion of residential heat pump water heaters/hybrid water heaters into the Energy Planner Program as an electric thermal storage device. In addition, with the company currently working on the development of the technical potential study that will support the 2025-2034 DSM goals for the company, this CRD project may be chosen to change direction or to abandon based upon the outcome of the study.

2022 DSM Program Achievements

The following pages present individual program participation levels and summaries that demonstrate the company achievements toward its annual residential, commercial, and combined DSM goals as described in Rule 25-17.0021(5), Florida Administrative Code.

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL ALTERNATE AUDIT (aka Walk-Thru Audit or EA Free)
Program Start Date: May 1981
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	8,400	8,400	1.3%	8,304	8,304	1.3%	(96)
2016	640,090	640,090	8,400	16,800	2.6%	6,902	15,206	2.4%	(1,594)
2017	651,770	651,770	7,800	24,600	3.8%	5,501	20,707	3.2%	(3,893)
2018	662,917	662,917	6,000	30,600	4.6%	7,667	28,374	4.3%	(2,226)
2019	677,922	677,922	6,500	37,100	5.5%	6,786	35,160	5.2%	(1,940)
2020	691,719	691,719	5,000	42,100	6.1%	1,514	36,674	5.3%	(5,426)
2021	704,770	704,770	3,700	45,800	6.5%	1,035	37,709	5.4%	(8,091)
2022	721,172	721,172	4,400	50,200	7.0%	4,308	42,017	5.8%	(8,183)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 4,308

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.10	0.10	413.57	443.76
Winter kW Reduction	0.13	0.14	547.12	587.06
Annual kWh Reduction	625	660	2,692,500	2,843,280

Annual Demand and Energy Savings, Note 1

Participants 4,308

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	413.57	443.76
Winter kW Reduction	547.12	587.06
Annual kWh Reduction	2,692,500	2,843,280

Utility Cost per Installation ($): 523
Total Program Cost of the Utility ($000): 2,254.7
Net Benefits of Measures Installed During Reporting Period ($000): (1,613.7)
Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL CUSTOMER ASSISTED AUDITS
Program Start Date: June 1996
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	1,390	1,390	0.2%	658	658	0.1%	(732)
2016	640,090	640,090	1,200	2,590	0.4%	1,017	1,675	0.3%	(915)
2017	651,770	651,770	500	3,090	0.5%	409	2,084	0.3%	(1,006)
2018	662,917	662,917	800	3,890	0.6%	27,734	29,818	4.5%	25,928
2019	677,922	677,922	35,000	38,890	5.7%	57,370	87,188	12.9%	48,298
2020	691,719	691,719	42,000	80,890	11.7%	59,766	146,954	21.2%	66,064
2021	704,770	704,770	60,000	140,890	20.0%	68,540	215,494	30.6%	74,604
2022	721,172	721,172	75,000	215,890	29.9%	109,802	325,296	45.1%	109,406
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 109,802

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.07	0.08	7,905.74	8,482.86
Winter kW Reduction	0.10	0.10	10,431.19	11,192.67
Annual kWh Reduction	469	495	51,497,138	54,380,978

Annual Demand and Energy Savings, Note 1 Participants 109,802

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	7,905.74	8,482.86
Winter kW Reduction	10,431.19	11,192.67
Annual kWh Reduction	51,497,138	54,380,978

Utility Cost per Installation ($): 3
Total Program Cost of the Utility ($000): 370.3
Net Benefits of Measures Installed During Reporting Period ($000): 204.0
Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL RCS AUDIT (Computer Assisted - Paid)
Program Start Date: January 1981
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	0	0	0.0%	5	5	0.0%	5
2016	640,090	640,090	4	4	0.0%	9	14	0.0%	10
2017	651,770	651,770	10	14	0.0%	4	18	0.0%	4
2018	662,917	662,917	10	24	0.0%	2	20	0.0%	(4)
2019	677,922	677,922	1	25	0.0%	1	21	0.0%	(4)
2020	691,719	691,719	1	26	0.0%	0	21	0.0%	(5)
2021	704,770	704,770	1	27	0.0%	0	21	0.0%	(6)
2022	721,172	721,172	4	31	0.0%	2	23	0.0%	(8)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 2

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.10	0.10	0.19	0.21
Winter kW Reduction	0.13	0.14	0.25	0.27
Annual kWh Reduction	625	660	1,250	1,320

Annual Demand and Energy Savings, Note 1

Participants 2

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.19	0.21
Winter kW Reduction	0.25	0.27
Annual kWh Reduction	1,250	1,320

Utility Cost per Installation ($):	455
Total Program Cost of the Utility ($000):	0.9
Net Benefits of Measures Installed During Reporting Period ($000):	(1.4)

Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL CEILING INSULATION
Program Start Date: November 1982
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	494,802	7,200	7,200	1.5%	3,057	3,057	0.6%	(4,143)
2016	640,090	491,745	2,760	9,960	2.0%	1,293	4,350	0.9%	(5,610)
2017	651,770	490,452	1,255	11,215	2.3%	945	5,295	1.1%	(5,920)
2018	662,917	489,507	1,300	12,515	2.6%	594	5,889	1.2%	(6,626)
2019	677,922	488,913	550	13,065	2.7%	595	6,484	1.3%	(6,581)
2020	691,719	488,318	450	13,515	2.8%	265	6,749	1.4%	(6,766)
2021	704,770	488,053	400	13,915	2.9%	382	7,131	1.5%	(6,784)
2022	721,172	487,671	475	14,390	3.0%	425	7,556	1.5%	(6,834)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 425

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.32	0.35	136.85	146.84
Winter kW Reduction	0.42	0.45	180.2	193.35
Annual kWh Reduction	673	711	286,025	302,042

Annual Demand and Energy Savings Participants 425

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	136.85	146.84
Winter kW Reduction	180.20	193.35
Annual kWh Reduction	286,025	302,042

Utility Cost per Installation ($):	399
Total Program Cost of the Utility ($000):	169.7
Net Benefits of Measures Installed During Reporting Period ($000):	55.2

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL DUCT REPAIR
Program Start Date: September 1992
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	480,750	1,680	1,680	0.3%	1,895	1,895	0.4%	215
2016	640,090	478,855	2,040	3,720	0.8%	1,293	3,188	0.7%	(532)
2017	651,770	477,562	1,530	5,250	1.1%	1,176	4,364	0.9%	(886)
2018	662,917	476,386	1,300	6,550	1.4%	1,997	6,361	1.3%	(189)
2019	677,922	474,389	1,000	7,550	1.6%	1,078	7,439	1.6%	(111)
2020	691,719	473,311	500	8,050	1.7%	251	7,690	1.6%	(360)
2021	704,770	473,060	385	8,435	1.8%	267	7,957	1.7%	(478)
2022	721,172	472,793	300	8,735	1.8%	420	8,377	1.8%	(358)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 420

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.20	0.21	83.58	89.68
Winter kW Reduction	0.33	0.36	139.86	150.07
Annual kWh Reduction	696	735	292,320	308,690

Annual Demand and Energy Savings

Participants 420

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	83.58	89.68
Winter kW Reduction	139.86	150.07
Annual kWh Reduction	292,320	308,690

Utility Cost per Installation ($):	213
Total Program Cost of the Utility ($000):	89.4
Net Benefits of Measures Installed During Reporting Period ($000):	27.7

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY AND RENEWABLE EDUCATION, AWARENESS AND AGENCY OUTREACH
Program Start Date: May 2011
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	2,000	2,000	0.3%	1,412	1,412	0.2%	(588)
2016	640,090	640,090	2,000	4,000	0.6%	461	1,873	0.3%	(2,127)
2017	651,770	651,770	500	4,500	0.7%	975	2,848	0.4%	(1,652)
2018	662,917	662,917	750	5,250	0.8%	806	3,654	0.6%	(1,596)
2019	677,922	677,922	700	5,950	0.9%	1,304	4,958	0.7%	(992)
2020	691,719	691,719	750	6,700	1.0%	445	5,403	0.8%	(1,297)
2021	704,770	704,770	1,400	8,100	1.1%	810	6,213	0.9%	(1,887)
2022	721,172	721,172	2,200	10,300	1.4%	2,488	8,701	1.2%	(1,599)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 2,488

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.04	0.04	102.01	109.45
Winter kW Reduction	0.05	0.05	124.40	133.48
Annual kWh Reduction	366	386	910,608	961,602

Annual Demand and Energy Savings Participants 2,488

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	102.01	109.45
Winter kW Reduction	124.40	133.48
Annual kWh Reduction	910,608	961,602

Utility Cost per Installation ($):	62
Total Program Cost of the Utility ($000):	153.9
Net Benefits of Measures Installed During Reporting Period ($000):	(263.8)

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY STAR for NEW MULTI-FAMILY RESIDENCES
Program Start Date: June 2017
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	0	0	0	0	0.0%	0	0	0.0%	0
2016	0	0	0	0	0.0%	0	0	0.0%	0
2017	201,074	3,820	600	600	15.7%	0	0	0.0%	(600)
2018	207,026	5,952	600	1,200	20.2%	0	0	0.0%	(1,200)
2019	210,907	3,881	250	1,450	37.4%	264	264	6.8%	(1,186)
2020	215,519	4,612	0	1,450	31.4%	0	264	5.7%	(1,186)
2021	236,621	6,025	0	1,450	24.1%	0	264	4.4%	(1,186)
2022	243,555	6,893	0	1,450	21.0%	0	264	3.8%	(1,186)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.44	0.47	0.00	0.00
Winter kW Reduction	0.30	0.32	0.00	0.00
Annual kWh Reduction	1,460	1,542	0	0

Annual Demand and Energy Savings

Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($):	0
Total Program Cost of the Utility ($000):	(0.1)
Net Benefits of Measures Installed During Reporting Period ($000):	1.4

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY STAR for NEW HOMES (formerly RESIDENTIAL NEW CONSTRUCTION)
Program Start Date: Closed New Construction and opened ENERGY STAR November 2015
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	4,361	2,400	2,400	55.0%	2,494	2,494	57.2%	94
2016	640,090	3,870	1,200	3,600	93.0%	403	2,897	74.9%	(703)
2017	651,770	2,953	1,000	4,600	155.8%	640	3,537	119.8%	(1,063)
2018	662,917	9,544	1,000	5,600	58.7%	823	4,360	45.7%	(1,240)
2019	677,922	9,929	1,000	6,600	66.5%	849	5,209	52.5%	(1,391)
2020	691,719	9,798	1,000	7,600	77.6%	858	6,067	61.9%	(1,533)
2021	704,770	9,931	1,160	8,760	88.2%	1,006	7,073	71.2%	(1,687)
2022	721,172	8,706	720	9,480	108.9%	708	7,781	89.4%	(1,699)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 708

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.98	2.12	1,401.84	1,504.17
Winter kW Reduction	0.60	0.64	425.51	456.57
Annual kWh Reduction	5,378	5,679	3,807,624	4,020,851

Annual Demand and Energy Savings

Participants 708

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	1,401.84	1,504.17
Winter kW Reduction	425.51	456.57
Annual kWh Reduction	3,807,624	4,020,851

Utility Cost per Installation ($):	1,022
Total Program Cost of the Utility ($000):	723.3
Net Benefits of Measures Installed During Reporting Period ($000):	2,330.0

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY STAR POOL PUMPS
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020	691,719	480,812	3	3	0.0%	10	10	0.0%	7
2021	704,770	489,251	510	510	0.1%	628	628	0.1%	118
2022	721,172	484,551	900	900	0.2%	1,193	1,193	0.2%	293
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 1,193

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.72	1.84	2,049.57	2,199.19
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	3,162	3,339	3,772,266	3,983,513

Annual Demand and Energy Savings Participants 1,193

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	2,049.57	2,199.19
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	3,772,266	3,983,513

Utility Cost per Installation ($):	386
Total Program Cost of the Utility ($000):	459.9
Net Benefits of Measures Installed During Reporting Period ($000):	76.4

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY STAR THERMOSTATS
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020	691,719	691,719	5	5	0.0%	42	42	0.0%	37
2021	704,770	704,770	1,000	1,000	0.1%	950	950	0.1%	(50)
2022	721,172	721,172	1,040	1,040	0.1%	1,403	1,403	0.2%	363
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 1,403

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.24	0.25	331.11	355.28
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	262	277	367,586	388,171

Annual Demand and Energy Savings Participants 1,403

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	331.11	355.28
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	367,586	388,171

Utility Cost per Installation ($):	100
Total Program Cost of the Utility ($000):	140.2
Net Benefits of Measures Installed During Reporting Period ($000):	29.0

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL HEATING AND COOLING
Program Start Date: July 2000
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	3,840	3,840	0.6%	5,214	5,214	0.8%	1,374
2016	640,090	640,090	3,480	7,320	1.1%	3,693	8,907	1.4%	1,587
2017	651,770	651,770	4,200	11,520	1.8%	3,341	12,248	1.9%	728
2018	662,917	662,917	4,000	15,520	2.3%	3,371	15,619	2.4%	99
2019	677,922	677,922	3,500	19,020	2.8%	3,638	19,257	2.8%	237
2020	691,719	691,719	3,400	22,420	3.2%	3,578	22,835	3.3%	415
2021	704,770	704,770	3,230	25,650	3.6%	2,839	25,674	3.6%	24
2022	721,172	721,172	2,930	28,580	4.0%	2,643	28,317	3.9%	(263)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 2,643

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.20	0.21	515.39	553.01
Winter kW Reduction	0.21	0.22	547.10	587.04
Annual kWh Reduction	394	416	1,041,342	1,099,657

Annual Demand and Energy Savings

Participants 2,643

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	515.39	553.01
Winter kW Reduction	547.10	587.04
Annual kWh Reduction	1,041,342	1,099,657

Utility Cost per Installation ($):	157
Total Program Cost of the Utility ($000):	414.6
Net Benefits of Measures Installed During Reporting Period ($000):	36.2

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: NEIGHBORHOOD WEATHERIZATION
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	109,703	6,600	6,600	6.0%	7,912	7,912	7.2%	1,312
2016	640,090	111,745	7,250	13,850	12.4%	5,495	13,407	12.0%	(443)
2017	651,770	113,784	6,250	20,100	17.7%	6,550	19,957	17.5%	(143)
2018	662,917	115,730	7,000	27,100	23.4%	7,389	27,346	23.6%	246
2019	677,922	118,350	7,000	34,100	28.8%	6,740	34,086	28.8%	(14)
2020	691,719	120,758	6,500	40,600	33.6%	1,760	35,846	29.7%	(4,754)
2021	704,770	123,037	6,050	46,650	37.9%	2,923	38,769	31.5%	(7,881)
2022	721,172	125,900	7,940	54,590	43.4%	9,159	47,928	38.1%	(6,662)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 9,159

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.53	0.57	4,890.91	5,247.94
Winter kW Reduction	0.64	0.69	5,889.24	6,319.15
Annual kWh Reduction	1,932	2,040	17,695,188	18,686,119

Annual Demand and Energy Savings

Participants 9,159

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	4,890.91	5,247.94
Winter kW Reduction	5,889.24	6,319.15
Annual kWh Reduction	17,695,188	18,686,119

Utility Cost per Installation ($):	191
Total Program Cost of the Utility ($000):	1,746.0
Net Benefits of Measures Installed During Reporting Period ($000):	(9,854.6)

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: ENERGY PLANNER
Program Start Date: September 2007
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	628,392	1,000	1,000	0.2%	1,088	1,088	0.2%	88
2016	640,090	640,090	1,000	2,000	0.3%	910	1,998	0.3%	(2)
2017	651,770	651,770	1,000	3,000	0.5%	574	2,572	0.4%	(428)
2018	662,917	662,917	1,000	4,000	0.6%	747	3,319	0.5%	(681)
2019	677,922	677,922	1,250	5,250	0.8%	897	4,216	0.6%	(1,034)
2020	691,719	691,719	750	6,000	0.9%	138	4,354	0.6%	(1,646)
2021	704,770	704,770	900	6,900	1.0%	98	4,452	0.6%	(2,448)
2022	721,172	721,172	650	7,550	1.0%	341	4,793	0.7%	(2,757)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 341

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	2.01	2.15	684.39	734.35
Winter kW Reduction	3.13	3.36	1,068.69	1,146.71
Annual kWh Reduction	1,156	1,221	394,196	416,271

Annual Demand and Energy Savings, Note 1 Participants 341

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	684.39	734.35
Winter kW Reduction	1,068.69	1,146.71
Annual kWh Reduction	394,196	416,271

Utility Cost per Installation ($) Note 1:	657
Total Program Cost of the Utility ($000):	2,765.1
Net Benefits of Measures Installed During Reporting Period ($000):	3,232.5

Note 1: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL PRIME TIME PLUS (Residential Load Management)
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020									
2021				First customer was brought onto Program in December 2022					
2022	721,172	721,172	15	15	0.0%	1	1	0.0%	(14)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 1

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.93	2.07	1.93	2.07
Winter kW Reduction	1.89	2.03	1.89	2.03
Annual kWh Reduction	0	0	0	0

Annual Demand and Energy Savings, Note 1 Participants 1

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	1.93	2.07
Winter kW Reduction	1.89	2.03
Annual kWh Reduction	0	0

Utility Cost per Installation ($) Note 1:	221,131
Total Program Cost of the Utility ($000):	221.1
Net Benefits of Measures Installed During Reporting Period ($000):	0.1

Note 1: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: RESIDENTIAL WINDOW REPLACEMENT
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	628,392	619,895	1,608	1,608	0.3%	1,811	1,811	0.3%	203
2016	640,090	629,783	1,584	3,192	0.5%	1,417	3,228	0.5%	36
2017	651,770	640,046	1,800	4,992	0.8%	1,482	4,710	0.7%	(282)
2018	662,917	649,710	1,600	6,592	1.0%	1,817	6,527	1.0%	(65)
2019	677,922	662,898	1,800	8,392	1.3%	1,878	8,405	1.3%	13
2020	691,719	674,817	1,775	10,167	1.5%	1,875	10,280	1.5%	113
2021	704,770	685,993	1,400	11,567	1.7%	1,176	11,456	1.7%	(111)
2022	721,172	701,219	1,100	12,667	1.8%	1,051	12,507	1.8%	(160)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 1,051

	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Summer kW Reduction	0.13	0.14	140.83	151.11
Winter kW Reduction	0.41	0.44	435.11	466.88
Annual kWh Reduction	235	248	246,985	260,816

Annual Demand and Energy Savings

Participants 1,051

	Program Total @ Meter	Program Total @ Generator
Summer kW Reduction	140.83	151.11
Winter kW Reduction	435.11	466.88
Annual kWh Reduction	246,985	260,816

Utility Cost per Installation ($):	188
Total Program Cost of the Utility ($000):	197.2
Net Benefits of Measures Installed During Reporting Period ($000):	56.9

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: FREE COMMERCIAL/INDUSTRIAL AUDIT
Program Start Date: July 1983
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	888	888	1.1%	913	913	1.1%	25
2016	80,875	80,875	860	1,748	2.2%	764	1,677	2.1%	(71)
2017	81,532	81,532	870	2,618	3.2%	1,211	2,888	3.5%	270
2018	81,740	81,740	1,200	3,818	4.7%	797	3,685	4.5%	(133)
2019	82,359	82,359	800	4,618	5.6%	866	4,551	5.5%	(67)
2020	83,332	83,332	500	5,118	6.1%	238	4,789	5.7%	(329)
2021	84,093	84,093	400	5,518	6.6%	101	4,890	5.8%	(628)
2022	89,415	89,415	700	6,218	7.0%	766	5,656	6.3%	(562)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 766

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.09	0.10	71.24	76.22
Winter kW Reduction	0.09	0.10	72.00	77.04
Annual kWh Reduction	817	859	625,822	658,365

Annual Demand and Energy Savings, Note 1

Participants 766

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	71.24	76.22
Winter kW Reduction	72.00	77.04
Annual kWh Reduction	625,822	658,365

Utility Cost per Installation ($): 405
Total Program Cost of the Utility ($000): 310.5
Net Benefits of Measures Installed During Reporting Period ($000): (139.8)
Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMPREHENSIVE COMMERCIAL/INDUSTRIAL AUDIT
Program Start Date: May 1981
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	6	6	0.0%	1	1	0.0%	(5)
2016	80,875	80,875	10	16	0.0%	4	5	0.0%	(11)
2017	81,532	81,532	8	24	0.0%	0	5	0.0%	(19)
2018	81,740	81,740	4	28	0.0%	1	6	0.0%	(22)
2019	82,359	82,359	2	30	0.0%	1	7	0.0%	(23)
2020	83,332	83,332	1	31	0.0%	0	7	0.0%	(24)
2021	84,093	84,093	1	32	0.0%	0	7	0.0%	(25)
2022	89,415	89,415	1	33	0.0%	0	7	0.0%	(26)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.09	0.10	0.00	0.00
Winter kW Reduction	0.09	0.10	0.00	0.00
Annual kWh Reduction	817	859	0	0

Annual Demand and Energy Savings, Note 1

Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($): 0
Total Program Cost of the Utility ($000): 0.0
Net Benefits of Measures Installed During Reporting Period ($000): (1.8)
Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL CHILLERS
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	7,733	10	10	0.1%	7	7	0.1%	(3)
2016	80,875	8,851	10	20	0.2%	5	12	0.1%	(8)
2017	81,532	8,887	11	31	0.3%	7	19	0.2%	(12)
2018	81,740	9,023	8	39	0.4%	1	20	0.2%	(19)
2019	82,359	9,119	9	48	0.5%	5	25	0.3%	(23)
2020	83,332	9,089	2	50	0.6%	1	26	0.3%	(24)
2021	84,093	9,174	1	51	0.6%	0	26	0.3%	(25)
2022	89,415	9,365	3	54	0.6%	0	26	0.3%	(28)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	6.16	6.59	0.00	0.00
Winter kW Reduction	2.48	2.65	0.00	0.00
Annual kWh Reduction	17,863	18,792	0	0

Annual Demand and Energy Savings, Note 1 Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($):	0
Total Program Cost of the Utility ($000):	0.1
Net Benefits of Measures Installed During Reporting Period ($000):	3.9

Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: CONSERVATION VALUE
Program Start Date: April 1991
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	4	4	0.0%	4	4	0.0%	0
2016	80,875	80,875	4	8	0.0%	2	6	0.0%	(2)
2017	81,532	81,532	3	11	0.0%	0	6	0.0%	(5)
2018	81,740	81,740	2	13	0.0%	0	6	0.0%	(7)
2019	82,359	82,359	1	14	0.0%	0	6	0.0%	(8)
2020	83,332	83,332	1	15	0.0%	0	6	0.0%	(9)
2021	84,093	84,093	0	15	0.0%	0	6	0.0%	(9)
2022	89,415	89,415	1	16	0.0%	0	6	0.0%	(10)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	185.40	198.38	0.00	0.00
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	19,244	20,245	0	0

Annual Demand and Energy Savings, Note 1 Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($): 0
Total Program Cost of the Utility ($000): 0.3
Net Benefits of Measures Installed During Reporting Period ($000): 0.5
Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL COOLING - DX
Program Start Date: July 2000
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	127	127	0.2%	234	234	0.3%	107
2016	80,875	80,875	130	257	0.3%	9	243	0.3%	(14)
2017	81,532	81,532	16	273	0.3%	0	243	0.3%	(30)
2018	81,740	81,740	5	278	0.3%	25	268	0.3%	(10)
2019	82,359	82,359	5	283	0.3%	15	283	0.3%	0
2020	83,332	83,332	15	298	0.4%	14	297	0.4%	(1)
2021	84,093	84,093	15	313	0.4%	44	341	0.4%	28
2022	89,415	89,415	40	353	0.4%	56	397	0.4%	44
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 56

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.32	1.42	74.09	79.27
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	3,090	3,250	173,013	182,010

Annual Demand and Energy Savings, Note 1

Participants 56

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	74.09	79.27
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	173,013	182,010

Utility Cost per Installation ($):	226
Total Program Cost of the Utility ($000):	12.6
Net Benefits of Measures Installed During Reporting Period ($000):	0.7

Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL DEMAND RESPONSE
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	12,302	1	1	0.0%	4	4	0.0%	3
2016	80,875	12,937	1	2	0.0%	0	4	0.0%	2
2017	81,532	13,383	1	3	0.0%	0	4	0.0%	1
2018	81,740	13,730	1	4	0.0%	1	5	0.0%	1
2019	82,359	13,804	1	5	0.0%	0	5	0.0%	0
2020	83,332	14,079	1	6	0.0%	0	5	0.0%	(1)
2021	84,093	14,561	1	7	0.0%	0	5	0.0%	(2)
2022	89,415	15,066	1	8	0.1%	0	5	0.0%	(3)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	404.04	432.32	0.00	0.00
Winter kW Reduction	404.04	432.32	0.00	0.00
Annual kWh Reduction	30,298	31,873	0	0

Annual Demand and Energy Savings, Note 1

Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($), Note 2: 32,562
Total Program Cost of the Utility ($000): 3,386.4
Net Benefits of Measures Installed During Reporting Period ($000): 313.8
Note 1: Savings from measured data
Note 2: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: FACILITY ENERGY MANAGEMENT SYSTEM
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020	83,332	83,332	2	2	0.0%	0	0	0.0%	(2)
2021	84,093	84,093	2	2	0.0%	2	2	200.0%	0
2022	89,415	89,415	4	4	0.0%	2	4	400.0%	0
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 2

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	9.31	9.96	18.61	19.91
Winter kW Reduction	1.79	1.91	3.57	3.82
Annual kWh Reduction	301,689	317,377	603,379	634,755

Annual Demand and Energy Savings, Note 1

Participants 2

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	18.61	19.91
Winter kW Reduction	3.57	3.82
Annual kWh Reduction	603,379	634,755

Utility Cost per Installation ($):	23,620
Total Program Cost of the Utility ($000):	47.2
Net Benefits of Measures Installed During Reporting Period ($000):	7.7

Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: INDUSTRIAL LOAD MANAGEMENT
Program Start Date: September 1999
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
#REF!	79,457	820	0	0	0.0%	0	0	0.0%	0
2016	80,875	848	0	0	0.0%	0	0	0.0%	0
2017	81,532	816	0	0	0.0%	0	0	0.0%	0
2018	81,740	954	0	0	0.0%	1	1	0.1%	1
2019	82,359	981	0	0	0.0%	1	2	0.2%	2
2020	83,332	840	1	1	0.1%	1	3	0.4%	2
2021	84,093	850	0	1	0.1%	0	3	0.4%	2
2022	89,415	856	0	1	0.1%	0	3	0.4%	2
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	5,060.00	5,414.20	0.00	0.00
Winter kW Reduction	4,757.00	5,089.99	0.00	0.00
Annual kWh Reduction	1,184,085	1,245,657	0	0

Annual Demand and Energy Savings, Note 1 Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($), Note 2:	806,596
Total Program Cost of the Utility ($000):	23,391.3
Net Benefits of Measures Installed During Reporting Period ($000):	1,334.3

Note 1: Savings from measured data
Note 2: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL STREET AND OUTDOOR LIGHTING CONVERSION
Program Start Date: February 2018
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017					Program was started in February 2018				
2018	209,821	209,821	42,115	42,115	20.1%	31,936	31,936	15.2%	(10,179)
2019	209,821	177,885	40,000	82,115	46.2%	32,366	64,302	36.1%	(17,813)
2020	209,821	145,519	40,000	122,115	83.9%	25,469	89,771	61.7%	(32,344)
2021	209,821	120,050	24,000	146,115	121.7%	69,231	159,002	132.4%	12,887
2022	209,821	50,819	50,819	196,934	387.5%	41,992	200,994	395.5%	4,060
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 41,992

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00	0.00	0.00
Winter kW Reduction	0.13	0.14	5,584.94	5,975.88
Annual kWh Reduction	576	606	24,187,392	25,445,136

Annual Demand and Energy Savings, Note 1

Participants 41,992

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	5,584.94	5,975.88
Annual kWh Reduction	24,187,392	25,445,136

Utility Cost per Installation ($): 97
Total Program Cost of the Utility ($000): 4,052.3
Net Benefits of Measures Installed During Reporting Period ($000): 12,855.4
Note 1: Demand and energy savings not included in achievements

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL LIGHTING - CONDITIONED SPACE
Program Start Date: January 1991
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	6	6	0.0%	86	86	0.1%	80
2016	80,875	80,875	57	63	0.1%	159	245	0.3%	182
2017	81,532	81,532	75	138	0.2%	228	473	0.6%	335
2018	81,740	81,740	110	248	0.3%	193	666	0.8%	418
2019	82,359	82,359	475	723	0.9%	421	1,087	1.3%	364
2020	83,332	83,332	200	923	1.1%	186	1,273	1.5%	350
2021	84,093	84,093	150	1,073	1.3%	143	1,416	1.7%	343
2022	89,415	89,415	115	1,188	1.3%	131	1,547	1.7%	359
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 131

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	29.15	31.19	3,818.78	4,086.10
Winter kW Reduction	22.70	24.29	2,973.31	3,181.44
Annual kWh Reduction	74,436	78,306	9,751,079	10,258,136

Annual Demand and Energy Savings, Note 1

Participants 131

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	3,818.78	4,086.10
Winter kW Reduction	2,973.31	3,181.44
Annual kWh Reduction	9,751,079	10,258,136

Utility Cost per Installation ($): 5,940
Total Program Cost of the Utility ($000): 778.1
Net Benefits of Measures Installed During Reporting Period ($000): 4,943.4
Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL LIGHTING - UNCONDITIONED SPACE
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	2	2	0.0%	16	16	0.0%	14
2016	80,875	80,875	13	15	0.0%	60	76	0.1%	61
2017	81,532	81,532	50	65	0.1%	338	414	0.5%	349
2018	81,740	81,740	50	115	0.1%	246	660	0.8%	545
2019	82,359	82,359	200	315	0.4%	132	792	1.0%	477
2020	83,332	83,332	70	385	0.5%	93	885	1.1%	500
2021	84,093	84,093	115	500	0.6%	101	986	1.2%	486
2022	89,415	89,415	85	585	0.7%	100	1,086	1.2%	501
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 100

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	10.03	10.73	1,003.20	1,073.42
Winter kW Reduction	10.03	10.73	1,003.20	1,073.42
Annual kWh Reduction	47,835	50,323	4,783,511	5,032,254

Annual Demand and Energy Savings, Note 1

Participants 100

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	1,003.20	1,073.42
Winter kW Reduction	1,003.20	1,073.42
Annual kWh Reduction	4,783,511	5,032,254

Utility Cost per Installation ($): 2,342
Total Program Cost of the Utility ($000): 234.2
Net Benefits of Measures Installed During Reporting Period ($000): 3,902.9
Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL OCCUPANCY SENSORS
Program Start Date: March 2008
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	20	20	0.0%	2	2	0.0%	(18)
2016	80,875	80,875	15	35	0.0%	12	14	0.0%	(21)
2017	81,532	81,532	15	50	0.1%	4	18	0.0%	(32)
2018	81,740	81,740	12	62	0.1%	7	25	0.0%	(37)
2019	82,359	82,359	5	67	0.1%	3	28	0.0%	(39)
2020	83,332	83,332	6	73	0.1%	4	32	0.0%	(41)
2021	84,093	84,093	7	80	0.1%	4	36	0.0%	(44)
2022	89,415	89,415	7	87	0.1%	3	39	0.0%	(48)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 3

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	117.58	125.81	352.74	377.43
Winter kW Reduction	94.07	100.65	282.21	301.96
Annual kWh Reduction	233,533	245,677	700,599	737,030

Annual Demand and Energy Savings, Note 1 Participants 3

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	352.74	377.43
Winter kW Reduction	282.21	301.96
Annual kWh Reduction	700,599	737,030

Utility Cost per Installation ($):	8,074
Total Program Cost of the Utility ($000):	24.2
Net Benefits of Measures Installed During Reporting Period ($000):	22.8

Note 1: Savings from measured data

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL LOAD MANAGEMENT- CYCLIC
Program Start Date: January 1988
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	0	0	0.0%	0	0	0.0%	0
2016	80,875	80,875	0	0	0.0%	0	0	0.0%	0
2017	81,532	81,532	0	0	0.0%	0	0	0.0%	0
2018	81,740	81,740	0	0	0.0%	0	0	0.0%	0
2019	82,359	82,359	0	0	0.0%	0	0	0.0%	0
2020	83,332	83,332	0	0	0.0%	0	0	0.0%	0
2021	84,093	84,093	0	0	0.0%	0	0	0.0%	0
2022	89,415	89,415	0	0	0.0%	0	0	0.0%	0
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	13.20	14.12	0.00	0.00
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	0	0	0	0

Annual Demand and Energy Savings, Note 1 Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($), Note 1:	1,648
Total Program Cost of the Utility ($000):	6.6
Net Benefits of Measures Installed During Reporting Period ($000):	0.0

Note 1: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL LOAD MANAGEMENT- EXTENDED
Program Start Date: January 1988
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	0	0	0.0%	0	0	0.0%	0
2016	80,875	80,875	0	0	0.0%	0	0	0.0%	0
2017	81,532	81,532	0	0	0.0%	0	0	0.0%	0
2018	81,740	81,740	0	0	0.0%	0	0	0.0%	0
2019	82,359	82,359	0	0	0.0%	0	0	0.0%	0
2020	83,332	83,332	0	0	0.0%	0	0	0.0%	0
2021	84,093	84,093	0	0	0.0%	0	0	0.0%	0
2022	89,415	89,415	0	0	0.0%	0	0	0.0%	0
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 0

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	92.00	98.44	0.00	0.00
Winter kW Reduction	60.00	64.20	0.00	0.00
Annual kWh Reduction	0	0	0	0

Annual Demand and Energy Savings Participants 0

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($): 0
Total Program Cost of the Utility ($000): 0.0
Net Benefits of Measures Installed During Reporting Period ($000): 0.0

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL SMART THERMOSTATS
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020	83,332	83,332	5	5	0.0%	0	0	0.0%	(5)
2021	84,093	84,093	50	50	0.1%	2	2	0.0%	(48)
2022	89,415	89,415	180	180	0.2%	137	137	0.2%	(43)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 137

	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Summer kW Reduction	43.59	46.64	5,971.83	6,389.86
Winter kW Reduction	15.89	17.00	2,176.25	2,328.58
Annual kWh Reduction	66,908	70,387	9,166,333	9,642,982

Annual Demand and Energy Savings

Participants 137

	Program Total @ Meter	Program Total @ Generator	For DSM Fore
Summer kW Reduction	5,971.83	6,389.86	43.590
Winter kW Reduction	2,176.25	2,328.58	15.885
Annual kWh Reduction	9,166,333	9,642,982	66,908

Utility Cost per Installation ($):	2,947
Total Program Cost of the Utility ($000):	403.8
Net Benefits of Measures Installed During Reporting Period ($000):	100.5

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: STANDBY GENERATOR
Program Start Date: January 1991
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	2,304	0	0	0.0%	4	4	0.2%	4
2016	80,875	2,449	1	1	0.0%	0	4	0.2%	3
2017	81,532	2,430	1	2	0.1%	6	10	0.4%	8
2018	81,740	2,486	1	3	0.1%	1	11	0.4%	8
2019	82,359	2,608	7	10	0.4%	9	20	0.8%	10
2020	83,332	2,490	6	16	0.6%	14	34	1.4%	18
2021	84,093	2,515	5	21	0.8%	6	40	1.6%	19
2022	89,415	2,527	10	31	1.2%	2	42	1.7%	11
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 2

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	107.00	114.49	214.00	228.98
Winter kW Reduction	107.00	114.49	214.00	228.98
Annual kWh Reduction	10,700	11,256	21,400	22,513

Annual Demand and Energy Savings, Note 1 Participants 2

	Program Total		
	@ Meter	@ Generator	For DSM Fore
Summer kW Reduction	214.00	228.98	107.000
Winter kW Reduction	214.00	228.98	107.000
Annual kWh Reduction	21,400	22,513	10,700

Utility Cost per Installation ($), Note 2: 42,486
Total Program Cost of the Utility ($000): 4,885.9
Net Benefits of Measures Installed During Reporting Period ($000): 4,956.0
Note 1: Savings from measured data
Note 2: Utility costs based upon total program costs and total participation

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: VARIABLE FREQUENCY DRIVE CONTROL FOR COMPRESSORS
Program Start Date: November 2020
Reporting Period: Annual 2022

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015									
2016									
2017									
2018									
2019				Program was started on November 2, 2020					
2020	83,332	83,332	2	2	0.0%	0	0	0.0%	(2)
2021	84,093	84,093	2	2	0.0%	1	1	0.0%	(1)
2022	89,415	89,415	7	7	0.0%	21	21	0.0%	14
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan Participants 21

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.16	1.24	24.28	25.98
Winter kW Reduction	1.16	1.24	24.28	25.98
Annual kWh Reduction	6,093	6,410	127,961	134,615

Annual Demand and Energy Savings, Note 1 Participants 21

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	24.28	25.98
Winter kW Reduction	24.28	25.98
Annual kWh Reduction	127,961	134,615

Utility Cost per Installation ($):	1,067
Total Program Cost of the Utility ($000):	22.4
Net Benefits of Measures Installed During Reporting Period ($000):	23.1

Demand Side Management Annual Report

Utility: Tampa Electric Company
Program Name: COMMERCIAL WATER HEATING
Program Start Date: March 2008
Reporting Period: Annual 2020

a	b	c	d	e	f	g	h	i	j
Year	Total Number of Customers	Total Number of Eligible Customers	Total Number of Projected Participants	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % [(e/c)x100]	Actual Annual Number of Program Participants	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % [(h/c)x100]	Actual Participation Over (Under) Projected Participants (h-e)
2015	80,277	80,277	1	1	0.0%	0	0	0.0%	(1)
2016	80,875	80,875	1	2	0.0%	0	0	0.0%	(2)
2017	81,532	81,532	3	5	0.0%	0	0	0.0%	(5)
2018	81,740	81,740	3	8	0.0%	0	0	0.0%	(8)
2019	82,359	82,359	1	9	0.0%	0	0	0.0%	(9)
2020	83,332	83,332	0	9	0.0%	0	0	0.0%	(9)
2021	84,093	84,093	0	9	0.0%	0	0	0.0%	(9)
2022	89,415	89,415	1	10	0.0%	0	0	0.0%	(10)
2023									
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 0

	Per Installation @ Meter	Per Installation @ Generator	Program Total @ Meter	Program Total @ Generator
Summer kW Reduction	0.87	0.93	0.00	0.00
Winter kW Reduction	0.58	0.62	0.00	0.00
Annual kWh Reduction	5,128	5,395	0	0

Annual Demand and Energy Savings - Combined

Participants 0

	Program Total @ Meter	Program Total @ Generator
Summer kW Reduction	0.00	0.00
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	0	0

Utility Cost per Installation ($):	0
Total Program Cost of the Utility ($000):	0.0
Net Benefits of Measures Installed During Reporting Period ($000):	0.0

Comparison of Annual Achieved kW and kWh Reductions
with Public Service Commission Established Goals
Savings at the Generator

Utility: TAMPA ELECTRIC COMPANY

Residential

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	12.3	2.6	473.1%	10.8	1.1	981.8%	21.2	1.8	1,177.8%
2016	7.7	4.1	187.8%	5.1	1.6	318.8%	13.2	3.5	377.1%
2017	6.9	5.2	132.7%	4.7	2.2	213.6%	14.9	4.8	310.4%
2018	8.0	6.5	123.0%	5.6	2.7	205.7%	17.1	6.1	280.3%
2019	8.3	7.6	108.8%	5.7	3.1	184.5%	16.8	6.9	243.2%
2020	3.5	7.6	45.5%	2.6	3.3	78.2%	8.9	7.4	120.3%
2021	4.5	8.0	55.8%	6.4	3.3	194.2%	16.4	7.7	213.1%
2022	9.5	7.4	127.8%	11.1	3.0	369.8%	30.4	6.9	441.0%
2023									
2024									

Commercial/Industrial

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	8.1	1.2	675.0%	11.7	1.7	688.2%	12.5	3.9	320.5%
2016	2.9	1.3	223.1%	4.4	2.5	176.0%	17.8	6.0	296.7%
2017	9.2	1.6	575.0%	10.4	2.7	385.2%	30.2	8.0	377.5%
2018	13.0	1.7	767.1%	15.0	3.3	453.6%	33.7	9.2	365.9%
2019	22.4	1.6	1401.9%	29.2	3.3	885.9%	74.6	9.9	753.4%
2020	10.4	1.7	612.5%	11.8	3.5	336.0%	26.1	10.3	253.3%
2021	4.7	1.9	246.2%	5.6	3.6	156.8%	20.4	10.4	196.1%
2022	7.1	1.9	376.0%	12.3	3.3	372.2%	26.6	10.2	261.2%
2023									
2024									

Combined

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	20.4	3.8	536.8%	22.5	2.8	803.6%	33.7	5.7	591.2%
2016	10.6	5.4	196.3%	9.5	4.1	231.7%	31.0	9.5	326.3%
2017	16.1	6.8	236.8%	15.1	4.9	308.2%	45.1	12.8	352.3%
2018	21.0	8.2	256.5%	20.5	6.0	342.1%	50.8	15.3	331.8%
2019	30.7	9.2	333.7%	35.0	6.4	546.2%	91.4	16.8	543.9%
2020	13.9	9.3	149.1%	14.3	6.8	210.9%	35.0	17.7	197.7%
2021	9.1	9.9	92.3%	12.1	6.9	174.7%	36.8	18.1	203.3%
2022	16.6	9.3	178.5%	23.4	6.3	371.0%	57.1	17.1	333.8%
2023									
2024									

Comparison of Cumulative Achieved kW and kWh Reductions
with Public Service Commission Established Goals
Savings at the Generator

Utility: TAMPA ELECTRIC COMPANY

Residential

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	12.3	2.6	473.1%	10.8	1.1	981.8%	21.2	1.8	1,177.8%
2016	20.0	6.7	298.5%	15.9	2.7	588.9%	34.4	5.3	649.1%
2017	26.9	11.9	226.1%	20.6	4.9	420.4%	49.3	10.1	488.1%
2018	34.9	18.4	189.6%	26.2	7.6	344.1%	66.4	16.2	409.9%
2019	43.2	26.0	166.0%	31.9	10.7	297.9%	83.2	23.1	360.1%
2020	46.6	33.6	138.7%	34.5	14.0	246.1%	92.1	30.5	301.9%
2021	51.1	41.6	122.8%	40.9	17.3	236.2%	108.5	38.2	284.0%
2022	60.5	49.0	123.5%	52.0	20.3	256.0%	138.9	45.1	308.0%
2023									
2024									

Commercial/Industrial

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	8.1	1.2	675.0%	11.7	1.7	688.2%	12.5	3.9	320.5%
2016	11.0	2.5	440.0%	16.1	4.2	383.3%	30.3	9.9	306.1%
2017	20.2	4.1	492.7%	26.5	6.9	384.1%	60.5	17.9	338.0%
2018	33.2	5.8	573.1%	41.5	10.2	406.6%	94.2	27.1	347.5%
2019	55.7	7.4	752.3%	70.7	13.5	523.7%	168.7	37.0	456.1%
2020	66.1	9.1	726.2%	82.5	17.0	485.1%	194.8	47.3	411.9%
2021	70.8	11.0	643.3%	88.1	20.6	427.7%	215.2	57.7	373.0%
2022	77.9	12.9	603.9%	100.4	23.9	420.0%	241.9	67.9	356.2%
2023									
2024									

Combined

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
Year	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance	Total Achieved	Commission Approved Goal	% Variance
2015	20.4	3.8	536.8%	22.5	2.8	803.6%	33.7	5.7	591.2%
2016	31.0	9.2	337.0%	32.0	6.9	463.8%	64.7	15.2	425.7%
2017	47.1	16.0	294.4%	47.1	11.8	399.2%	109.8	28.0	392.1%
2018	68.1	24.2	281.6%	67.6	17.8	379.9%	160.6	43.3	370.8%
2019	98.8	33.4	295.9%	102.6	24.2	423.9%	251.9	60.1	419.2%
2020	112.7	42.7	263.9%	116.9	31.0	377.2%	286.9	77.8	368.8%
2021	121.8	52.6	231.6%	129.0	37.9	340.3%	323.7	95.9	337.6%
2022	138.4	61.9	223.7%	152.3	44.2	344.7%	380.8	113.0	337.0%
2023									
2024									