



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, 2024

VIA: ELECTRONIC MAIL

Ms. Elizabeth Draper, Director
Division of Economics
Florida Public Service Commission
Room 225E – Gerald L. Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
EDraper@psc.state.fl.us

Re: Tampa Electric Company's Summary of 2023 DSM Program Accomplishments

Dear Ms. Draper:

Enclosed for filing is Tampa Electric Company's Summary of 2023 Demand Side Management Program Accomplishments.

Thank you for your assistance in connection with this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Malcolm N. Means'.

Malcolm N. Means

MNM/bml
Enclosure

cc: Paula K. Brown (w/o enc.)
Ashley Sizemore (w/o enc.)
Michael Barrett (w/enc.) MBarrett@psc.state.fl.us

TAMPA ELECTRIC'S 2023

Demand Side Management Program Accomplishments Report



Executive Summary

Executive Summary:

In 2023, Tampa Electric achieved all of the annual and cumulative Residential and Commercial/Industrial (“Comm/Ind”) and combined Demand and Annual Energy (“AE”) DSM goals.

<u>2023 Residential Goals</u>		<u>Actual Residential DSM Achieved</u>	
SkW:	2.9 MW	SkW:	12.5 MW
WkW:	6.8 MW	WkW:	10.3 MW
AE:	6.3 GWh	AE:	29.6 GWh

<u>2023 Comm/Ind Goals</u>		<u>Actual Comm/Ind DSM Achieved</u>	
SkW:	3.5 MW	SkW:	8.1 MW
WkW:	1.8 MW	WkW:	7.2 MW
AE:	9.9 GWh	AE:	30.3 GWh

<u>2023 Combined Goals</u>		<u>Actual Combined DSM Achieved</u>	
SkW:	6.4 MW	SkW:	20.6 MW
WkW:	8.6 MW	WkW:	17.4 MW
AE:	16.2 GWh	AE:	59.9 GWh

This 2023 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.

2023 DSM Summary Highlights:

- Tampa Electric’s team members that facilitate the conservation related activities experienced zero injuries during 2023.
- The company performed 12,348 Walk-Through Energy Audits for Residential customers, including 4,090 as part of the Residential Walk-Through and Computer Assisted Energy Audit programs and 8,258 as a component of the company’s Neighborhood Weatherization program.
- 100,189 of the company’s customers took advantage of the Residential Customer Assisted Energy Audit (online).
- The company installed weatherization on 8,258 homes as part of the Neighborhood Weatherization program. This participation rate brings the overall penetration level of this program to approximately 44 percent for all qualifying customers.
- The company’s Program Support Team processed nearly 100 percent of the 7,796 energy efficiency rebates paid to customers within ten business days of receiving all the required documents for verification.

- Tampa Electric completed the third year of operational testing of the Integrated Renewable Energy System (“IRES”). A detailed summary report is included within this report.
- The company moved forward with the small to mid-size commercial battery Research and Development (R&D) project. A summary of these activities within this R&D project is included within this report.
- Tampa Electric completed the five-year Street and Outdoor Lighting conversion program as of April 2023. This complete program converted 209,821 luminaires to light emitting diode technology and achieved 29.860 MW of winter peak demand reduction and 127.141 GWh of ongoing annual energy savings.
- In 2023, the company continued collaborating with the other FEECA utilities to develop the Technical Potential Study that will serve as the basis for the DSM Goals that will be proposed for the 2025-2034 period and filed in the Spring of 2024.
- The image below is the company’s Senior Commercial Energy Analyst presenting the Commission’s Triple E award winner for the final quarter of 2022 to the Tampa Bay Historic History Center



Challenges:

In 2023, the only challenge involved working to meet the requirement to perform energy audits within 21 days of the request from the customer. Tampa Electric is very proud of the collaboration and teamwork that was performed by the Residential Energy Management Team to ensure the 21-day rule was met. The company monitors this metric on a weekly basis. Historically, the number of residential walk-through audit requests becomes higher, as expected, in the warmer summer months. In August, the company started getting close to this limit and all hands jumped on deck to perform the high-quality walk-through energy audits for the company’s residential customers. The company began performing extended days by offering energy audits from 7am to after-hours appointments and even had the Manager of the Residential Energy Management Team performing audits to ensure the company was being responsive to the customer’s requests. After the first full week of September, the Residential Team was able to get this day limit reduced due to their hard work and dedication to Tampa Electric’s customers.

For 2024:

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.

2023 Annual Report on DSM Program Accomplishments

Table of Contents

Historical Participation, Achievements, and Expenditures.....6
 Customer Participation.....7
 DSM Achievements.....9
 Expenditures.....10
Energy Audits.....12
 Residential Energy Audits.....13
 Commercial/Industrial Energy Audits.....14
Energy Education and Weatherization Activities.....18
 Energy Education.....19
 Energy Education Events.....20
 Agency Outreach.....24

Weatherization.....25
Pilot Programs and Research and Development.....27
 LED Street Light Conversion Program.....28
 Integrated Renewable Energy System.....28
 Commercial Battery Storage (R&D).....31
 Heat Pump Water Heater (R&D).....33
Program Achievements.....34

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:

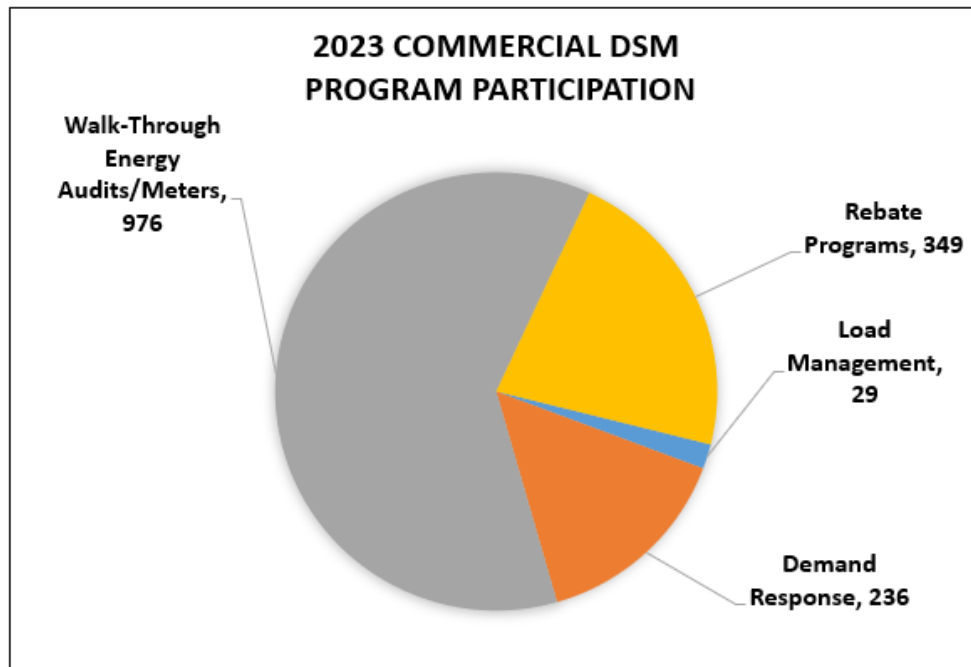
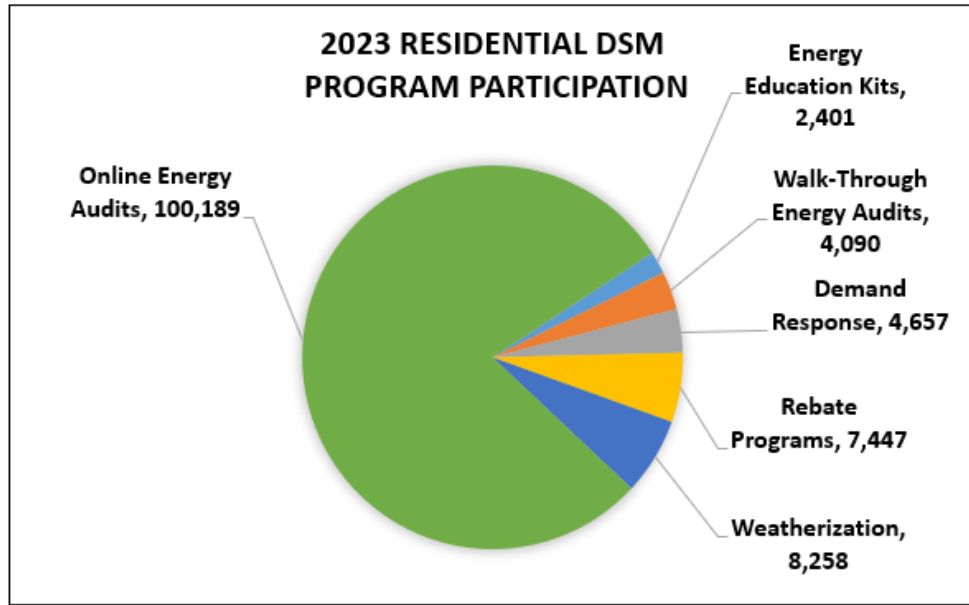
1. Reducing the growth rates of weather-sensitive peak demand and electricity usage.
2. Increasing the efficiency of the production and use of electricity and natural gas.
3. Encouraging demand-side renewable energy systems
4. Conserving expensive resources, particularly petroleum fuels

In 2023, 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 2023, Tampa Electric facilitated the participation of 127,042 residential and 1,590 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 2023 period:



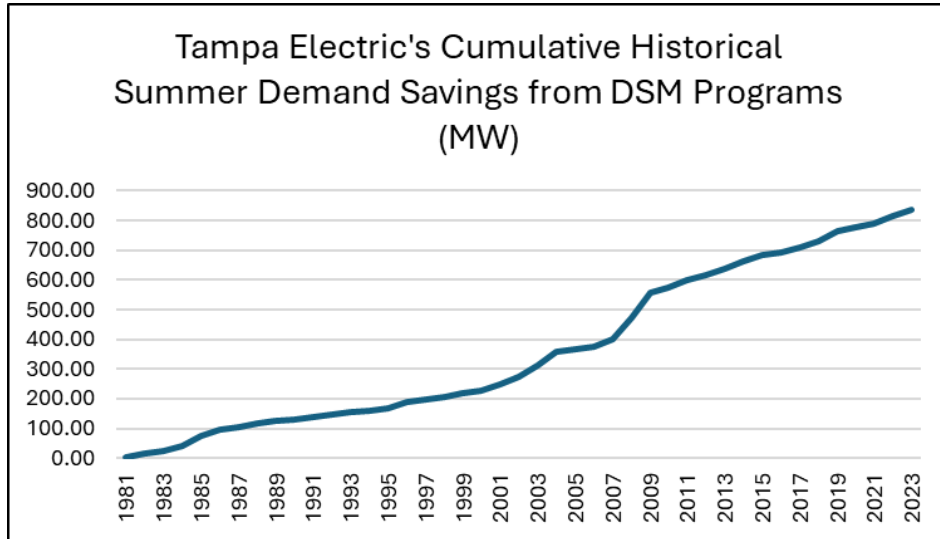
On an historical basis, as of the end of 2023, Tampa Electric has conducted 376,2221 Residential and Commercial Walk-Through energy audits, provided 557,543 online, phone or mail in energy audits, paid 523,896 rebates for energy efficient upgrades, and has performed weatherization on 79,010 homes.

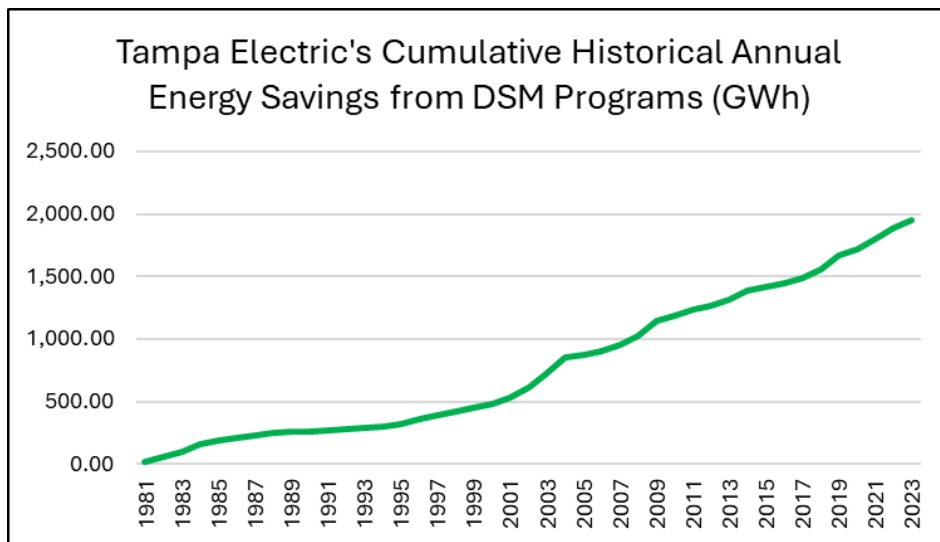
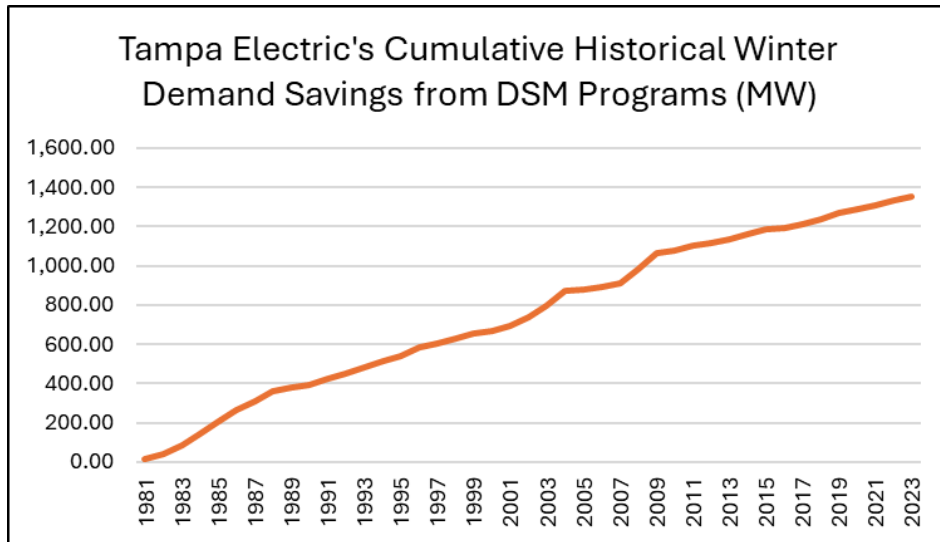
DSM Achievements:

Since the establishment of FEECA and the end of 2023, the company's DSM program have achieved the following cumulative demand and energy savings:

Summer Demand Savings:	835.42 MW
Winter Demand Savings:	1,349.83 MW
Annual Energy Savings:	1,950.12 GWh

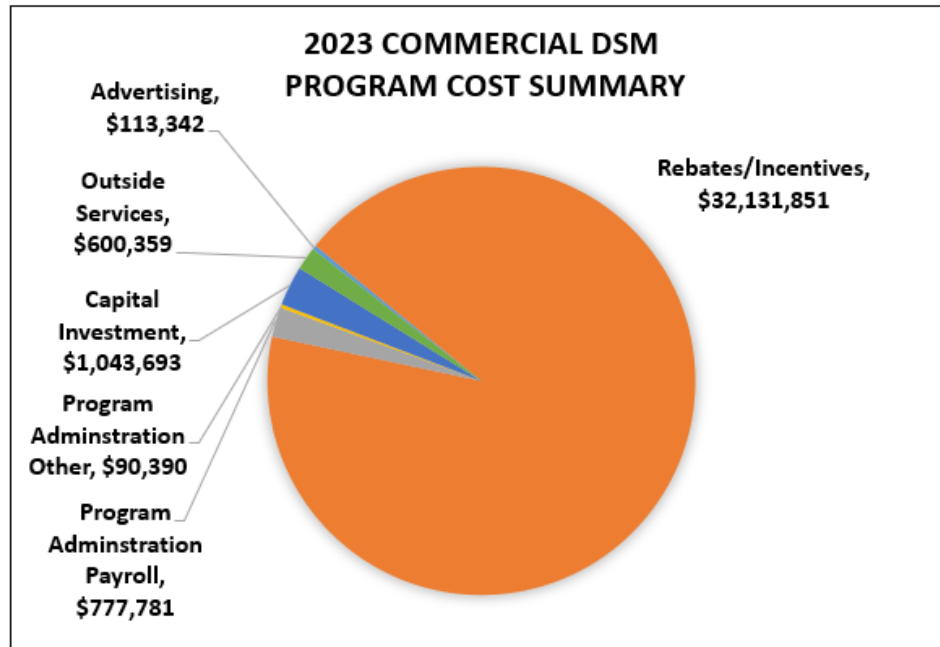
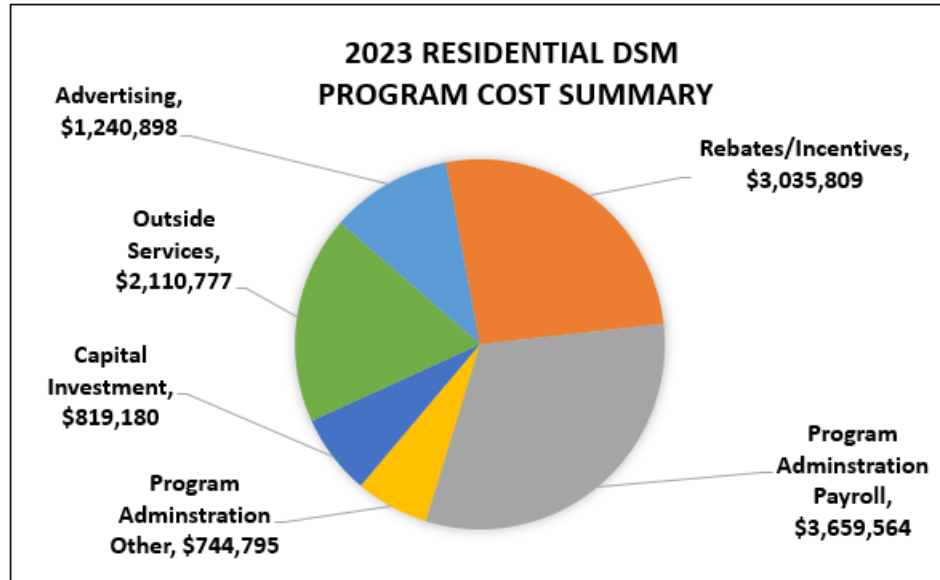
It is important to note that the annual energy savings documented for achievement includes only one year of energy savings from the participation in a given DSM program. These energy savings also do not include naturally occurring energy efficiency or savings that would occur from updated building codes 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 2023, Tampa Electric facilitated the participation of 127,042 residential and 1,590 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 2023 period:



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 Management Analysts discussing energy management with customers.



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)





(Members of the company's Commercial Energy Management Team discussing energy management at the Florida Building Maintenance trade show)



The table below provides the summary detail of “audit information by type” for the Energy Audits performed by Tampa Electric in 2023.

Tampa Electric's 2023 Energy Audits Performed by Energy Audit Type				
	Walk-Through, BERS, and Computer Assisted	Online	Phone	Total
Residential	4,095	100,189	0	104,284
	Walk-Through and Comprehensive	Online	Phone	Total
Commercial	976	N/A	0	976

On an historical basis, as of the end of 2023, Tampa Electric has conducted 376,221 Residential and Commercial Walk-Through energy audits and provided 557,543 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.



Junior Achievement work area which trains children to be energy auditors as they participate in this activity.

In addition, the children can play the Energy Snatchers game which helps them understand the conservation of energy through identifying energy wasters.

In 2023, Tampa Electric participated in over 40 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:

- Brandon Lions Club Members Event
- Community Lifestyles after 50 Event
- Martin Luther King Parade City of Tampa
- United Negro College Fund "UNCF" Walk for Education - Tampa
- Lake Fantasia Energy Fair
- Community Lifestyles after 50 Event
- Macfarlane Park Elementary School
- Agricultural and Labor program, Inc. "ALPI" Energy Fair – Lakeland
- ALPI Energy Fair – Haines City
- Tampa bay Buccaneers Energy Education Corner
- Tampa Housing Authority Community Event
- Tampa Housing Authority Energy Education
- Peoples Gas Lunch and Learn
- Pride Parade
- Tampa Bay Water Days and Energy Education
- Community Eggstravaganza
- Patel High School STEM FEST
- Tampa Bay Lighting Go Green
- Blythe Andrews High School Energy Story
- Bay Area Apartment Association
- Raymond James Earth Walk
- WEDU Be My Neighbor Day
- ECO FEST Learning Gate Community School
- East Tampa Public Health & Wellness
- East Tampa Partnership Energy Education Event
- Clean Air Fair
- 2023 Juneteenth Community Celebration
- Center for Economic Development
- East Tampa Community Revitalization Community
- Hillsborough Community College Education Center
- 7 Rivers Water Community Festival
- Homebuyer Energy Education Workshop

- Tampa Hispanic Expo
- South Tampa Chamber of Commerce
- American Heart Walk
- Plant City Pig Jam Community Event
- Town n Country Community Parade
- Great American Teach-In (several Elementary Schools)
- Association of Energy Engineers World Conference



Tampa Electric Energy Management Team Members providing energy education to residential and commercial/industrial customers at the Association of Energy Engineers (“AEE”) World conference in Orlando.



Energy Education for Family's at WEDU's annual sustainability event in Tampa.

These two images below are from the Bay Area Apartment Association ("BAAA") convention that was held at the Florida State Fairgrounds. This event brings Property Managers from all over the area for multifamily complexes which provides Tampa Electric an opportunity to promote energy education and awareness and weatherization programs.





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 2023, Tampa Electric provided 2,401 of these energy efficiency kits to qualifying customers.

Additionally, as part of energy education and awareness, the program has a component 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. In 2023, the company has been collaborating with the school district to reengage the energy efficiency and electric vehicle ("EV") training curriculum. The school

district has been working through the potential redesign of their drivers' education program. Because of this potential redesign, there were no students trained in 2023 for this part of the program.

Tampa Electric continued to work on developing an effective platform that will provide quality information on Renewable Energy and is projecting this platform to be available to customers in the early part of 2024.

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 2023, these activities included partnerships with:

American Council for an Energy Efficient Economy (“ACEEE”). The continues to participate in ACEEE's 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 2023, the company continued 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 2023, the company continue to be a sponsor of 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 2002, 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 2023, the company was able to educate 425 customers in addition to weatherizing their homes with energy efficiency measures including duct seal and insulation.

Tampa Housing Authority. In 2023, the company coordinated efforts with Tampa Housing Authority to for the delivery of Energy Education and Neighborhood Weatherization measures to three (3) different communities reaching approximately 800 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 2023, Tampa Electric provided 8,258 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 79,010 homes.

Pilot Programs and
Research and Development Updates

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

Tampa Electric completed the Light Emitting Diode (“LED”) Street and Outdoor Lighting conversion program. In 2023, the company converted the remaining 8,827 street and outdoor lighting luminaires to LED technology as part of this program.



The final luminaires were replaced by April 2023 and the company informed Commission Staff that the program was 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:

2023 Achievements		Total Program Achievements	
SkW:	0.000 MW	SkW:	0.000 MW
WkW:	1.256 MW	WkW:	29.860 MW
AE:	5.349 GWh	AE:	127.141 GWh

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

The Integrated Renewable Energy System (“IRES”) – Pilot Program continued to be studied 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 this year of operation:

- The company tested the ability of the batteries to charge and discharge using several different time based scenarios throughout the year. During these scenario changes, a repeated challenge for this system was experienced similar to last year. For reprogramming of the charging and discharging time, these changes required the company to go through the vendor which typically would take at least one day. This delay would make it very problematic as part of a DSM program for demand response or load management in Florida as these programs typically are not scheduled days in advance and can operate with little to no warning depending on the reason for the need to curtail load on the system. This feature may support other jurisdictions which give day ahead notices for curtailment. This would be a feature that would need to be addressed in the initial contract with the

battery manufacturer to ensure that the owner of this system has this control over charging or discharging times.

- The evaluation of the system's intelligence, aimed at assessing its ability to detect solar presence and adjust charging and discharging accordingly, proved to be unsuccessful. The batteries optimizer program, which is employed for this purpose, demonstrated less suitability for structured hours of discharge and charging, and exhibited erratic performance.
- The system was tested for performance in storm mode. This test was successful and validated the system's performance for a duration of four (4) hours in this mode.
- A new challenge with the battery vendor came from their restructuring of internal departments or changing their internal customer service supporting processes. During this year, the vendor transitioned to a service ticket system with new security protocols and the removal of a dedicated contact has removed the ability to get immediate response when experiencing an issue. In addition, access to the supporting service ticket software required non-disclosure agreements to be signed which further delayed testing or changes. This change also removed all of the vendor's experience and knowledge with this pilot program, while this is not a typical set up and thus made those responding to the tickets have no history of the scope of the project or what is trying to be accomplished. The clarity of the contracts for what goods and services are actually being provided would need to be in place to mitigate this issue.
- The company encountered issues with how the original batteries were programmed during the reconfiguration of the timing of charging and discharging scenarios. Understanding of how the batteries are programmed to operate is imperative for these systems, not just from a charging and discharging time, or depth of discharge perspectives but also what devices are allowed to charge the battery (i.e. – can the battery be only charged from the solar system only, from the electrical grid, or a combination of sources)
- The company completed testing to determine the maximum depth of discharge to maximize the performance of the battery and at the same time maximize the benefits for load shedding. These test scenarios revealed that discharging below 30 percent of the rating of the battery is not recommended.
- The PV portion of the system experienced one failed inverter on the PV system. The issue was caught during the annual maintenance of the system which places an importance on the warranty of these systems, in addition to reinforcing that these systems need ongoing maintenance to

ensure the benefits of the systems are realized. The inverter manufacturer is currently assessing the defective inverter to determine whether a complete replacement is necessary or if repairing the problematic module is a viable option.

- The system was adversely impacted by a lightning storm strike that impacted the firewall communications which turned off connectivity with the system for a period of time. While systems communications were impacted, increased site visits during this time confirmed that the system continued to operate.
- Annual maintenance was found to be effective on weekends. This timing, while at a premium rate for labor, resulted in no operational impacts to the overall integrated system.
- The company promoted this pilot program to commercial and industrial customers through Tampa Electric's Power Forward Blog, featuring articles on the system. The company's Commercial Energy Management Team's Supervisor also presented information on the operation and benefits of the system at the Building Owners and Managers Association ("BOMA") and the Florida Builders Maintenance Show ("FBMS"). The company anticipates that tours will occur in 2024 to see this system.

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.

Below are the specific items the company completed in 2023 in preparation of completing the three final phases of this CRD project.

- Site Selection: the company has been collaborating with two customers to implement the battery systems that were identified. The first customer is a not-for-profit training center for people with disabilities. The second customer identified was going to be a low-income community center but during the finalizing of the space requirements for the battery installation, the owner of the facility deemed that there was no suitable location for the container that would house the battery to be installed. The company started looking for another similar facility for the second location.
- The company collaborated with safety subject matter experts to conduct a Hazard and Operability Study (HAZOP). For the performance of this study,

A dedicated session involving battery experts, the risk team, and the safety team was held with the Company's Commercial Energy Management Team to thoroughly review the prospective projects. The outcome was a comprehensive plan and execution strategy, accompanied by assigned follow-up tasks.

- Site Considerations: the company conducted a comprehensive assessment of site requirements, considering factors such as available wall space, exterior conditions, age of the building, physical features that may need to be altered, and parking considerations. The company encountered a challenge with parking lot space due to enforcement laws governing handicapped (Accessible) spaces. This necessitated the inclusion of this identification in the design. In addition, due to the age of the facility made it necessary to test for lead and asbestos due to needing to remove a portion of a wall to support the battery installation (these environmental tests both came out with favorable results).
- The company has been working with the legal and procurement teams to initiate the development of required legal agreements to support this CRD project.
- Collaborated closely with the building owners to assess any electric design changes that would need to be performed to support the installation of the battery systems.
- Developed the necessary interconnection agreements applicable to this project.
- The company anticipates that the first customer will have the battery installed in the early part of 2024.

Heat Pump Water Heater, Research and Development - Update:

Tampa Electric is abandoning this potential CRD project due to the results received in the company's recent Technical Potential Study for residential heat pump water heaters.

2023 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 2023

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	736,127	736,127	4,050	54,250	7.4%	4,090	46,107	6.3%	(8,143)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.10	0.10	392.64	421.30
Winter kW Reduction	0.13	0.14	519.43	557.35
Annual kWh Reduction	625	660	2,556,250	2,699,400

Participants 4,090

Annual Demand and Energy Savings, Note 1

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	392.64	421.30
Winter kW Reduction	519.43	557.35
Annual kWh Reduction	2,556,250	2,699,400

Participants 4,090

Utility Cost per Installation (\$): 529
 Total Program Cost of the Utility (\$000): 2,162.1
 Net Benefits of Measures Installed During Reporting Period (\$000): (1,616.8)

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 2023

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	736,127	736,127	75,000	290,890	39.5%	100,189	425,485	57.8%	134,595
2024									

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			100,189
Summer kW Reduction	0.07	0.08	7,213.61	7,740.20
Winter kW Reduction	0.10	0.10	9,517.96	10,212.77
Annual kWh Reduction	469	495	46,988,641	49,620,005

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			100,189
Summer kW Reduction	7,213.61	7,740.20		
Winter kW Reduction	9,517.96	10,212.77		
Annual kWh Reduction	46,988,641	49,620,005		

Utility Cost per Installation (\$): 4
 Total Program Cost of the Utility (\$000): 401.6
 Net Benefits of Measures Installed During Reporting Period (\$000): 201.5

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 2023

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	736,127	736,127	4	35	0.0%	5	28	0.0%	(7)
2024									

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			5
Summer kW Reduction	0.10	0.10	0.48	0.52
Winter kW Reduction	0.13	0.14	0.64	0.68
Annual kWh Reduction	625	660	3,125	3,300

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			5
Summer kW Reduction	0.10	0.10	0.48	0.52
Winter kW Reduction	0.13	0.14	0.64	0.68
Annual kWh Reduction	625	660	3,125	3,300

Utility Cost per Installation (\$): 685
 Total Program Cost of the Utility (\$000): 3.4
 Net Benefits of Measures Installed During Reporting Period (\$000): (1.3)
 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 2023

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	736,127	487,246	480	14,870	3.1%	480	8,036	1.6%	(6,834)
2024									

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Summer kW Reduction	0.32	0.35	154.56
Winter kW Reduction	0.42	0.45	203.52	218.38
Annual kWh Reduction	673	711	323,040	341,130

	Program Total	
	@ Meter	@ Generator
	Summer kW Reduction	154.56
Winter kW Reduction	203.52	218.38
Annual kWh Reduction	323,040	341,130

Utility Cost per Installation (\$): 391
 Total Program Cost of the Utility (\$000): 187.6
 Net Benefits of Measures Installed During Reporting Period (\$000): 51.0

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: RESIDENTIAL DUCT REPAIR
 Program Start Date: September 1992
 Reporting Period: Annual 2023

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	736,127	472,373	400	9,135	1.9%	315	8,692	1.8%	(443)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Participants 315	
	@ Meter	@ Generator	Program Total	
			@ Meter	@ Generator
Summer kW Reduction	0.20	0.21	62.69	67.26
Winter kW Reduction	0.33	0.36	104.90	112.55
Annual kWh Reduction	696	735	219,240	231,517

Annual Demand and Energy Savings

	Participants 315	
	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	62.69	67.26
Winter kW Reduction	104.90	112.55
Annual kWh Reduction	219,240	231,517

Utility Cost per Installation (\$): 218
 Total Program Cost of the Utility (\$000): 68.7
 Net Benefits of Measures Installed During Reporting Period (\$000): 25.4

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 2023

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	736,127	736,127	2,000	12,300	1.7%	2,401	11,102	1.5%	(1,198)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			2,401
Summer kW Reduction	0.04	0.04	98.44	105.63
Winter kW Reduction	0.05	0.05	120.05	128.81
Annual kWh Reduction	366	386	878,766	927,977

Annual Demand and Energy Savings	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	98.44	105.63
Winter kW Reduction	120.05	128.81
Annual kWh Reduction	878,766	927,977
Utility Cost per Installation (\$):		110
Total Program Cost of the Utility (\$000):		264.9
Net Benefits of Measures Installed During Reporting Period (\$000):		(290.7)

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 2023

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	247,955	5,207	0	1,450	27.8%	0	264	5.1%	(1,186)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Participants	
	@ 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	
	@ 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): 1.2

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 2023

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	736,127	7,699	600	10,080	130.9%	770	8,551	111.1%	(1,529)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Participants 770 Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Summer kW Reduction	1.98	2.12	1,524.60
Winter kW Reduction	0.60	0.64	462.77	496.55
Annual kWh Reduction	5,378	5,679	4,141,060	4,372,959

Annual Demand and Energy Savings

	Participants 770 Program Total	
	@ Meter	@ Generator
	Summer kW Reduction	1,524.60
Winter kW Reduction	462.77	496.55
Annual kWh Reduction	4,141,060	4,372,959

Utility Cost per Installation (\$): 1,025
 Total Program Cost of the Utility (\$000): 789.4
 Net Benefits of Measures Installed During Reporting Period (\$000): 2,009.9

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: ENERGY STAR POOL PUMPS
 Program Start Date: November 2020
 Reporting Period: Annual 2023

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	513	0.1%	628	638	0.1%	125
2022	721,172	484,551	900	1,413	0.3%	1,193	1,831	0.4%	418
2023	736,127	492,572	1,150	2,563	0.5%	1,460	3,291	0.7%	728
2024									

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			1,460
Summer kW Reduction	1.72	1.84	2,508.28	2,691.38
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	3,162	3,339	4,616,520	4,875,045

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	2,508.28	2,691.38
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	4,616,520	4,875,045

Utility Cost per Installation (\$): 367
 Total Program Cost of the Utility (\$000): 536.4
 Net Benefits of Measures Installed During Reporting Period (\$000): 158.0

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: ENERGY STAR THERMOSTATS
 Program Start Date: November 2020
 Reporting Period: Annual 2023

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	1,005	0.1%	950	992	0.1%	(13)
2022	721,172	721,172	1,040	2,045	0.3%	1,403	2,395	0.3%	350
2023	736,127	736,127	1,300	3,345	0.5%	1,505	3,900	0.5%	555
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.24	0.25	355.18	381.11
Winter kW Reduction	0.00	0.00	0.00	0.00
Annual kWh Reduction	262	277	394,310	416,391

Annual Demand and Energy Savings

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	355.18	381.11
Winter kW Reduction	0.00	0.00
Annual kWh Reduction	394,310	416,391

Utility Cost per Installation (\$): 78
 Total Program Cost of the Utility (\$000): 117.4
 Net Benefits of Measures Installed During Reporting Period (\$000): 53.7

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: RESIDENTIAL HEATING AND COOLING
 Program Start Date: July 2000
 Reporting Period: Annual 2023

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	736,127	736,127	1,800	30,380	4.1%	1,681	29,998	4.1%	(382)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.20	0.21	327.80	351.72
Winter kW Reduction	0.21	0.22	347.97	373.37
Annual kWh Reduction	394	416	662,314	699,404

Participants 1,681

Annual Demand and Energy Savings

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	327.80	351.72
Winter kW Reduction	347.97	373.37
Annual kWh Reduction	662,314	699,404

Participants 1,681

Utility Cost per Installation (\$): 175
 Total Program Cost of the Utility (\$000): 294.7
 Net Benefits of Measures Installed During Reporting Period (\$000): 35.6

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: NEIGHBORHOOD WEATHERIZATION
 Program Start Date: March 2008
 Reporting Period: Annual 2023

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	736,127	128,511	7,800	62,390	48.5%	8,258	56,186	43.7%	(6,204)
2024									

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			8,258
Summer kW Reduction	0.53	0.57	4,409.77	4,731.69
Winter kW Reduction	0.64	0.69	5,309.89	5,697.52
Annual kWh Reduction	1,932	2,040	15,954,456	16,847,906

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	4,409.77	4,731.69
Winter kW Reduction	5,309.89	5,697.52
Annual kWh Reduction	15,954,456	16,847,906

Utility Cost per Installation (\$): 253
 Total Program Cost of the Utility (\$000): 2,087.1
 Net Benefits of Measures Installed During Reporting Period (\$000): (10,229.3)

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: ENERGY PLANNER
 Program Start Date: September 2007
 Reporting Period: Annual 2023

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	736,127	736,127	700	8,250	1.1%	480	5,273	0.7%	(2,977)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

Participants 480

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	2.01	2.15	963.36	1,033.69
Winter kW Reduction	3.13	3.36	1,504.32	1,614.14
Annual kWh Reduction	1,156	1,221	554,880	585,953

Annual Demand and Energy Savings, Note 1

Participants 480

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	963.36	1,033.69
Winter kW Reduction	1,504.32	1,614.14
Annual kWh Reduction	554,880	585,953

Utility Cost per Installation (\$) Note 1: 719
 Total Program Cost of the Utility (\$000): 2,960.6
 Net Benefits of Measures Installed During Reporting Period (\$000): 3,171.8
 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 2023

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									
2020									
2021									
2022	721,172	721,172	15	15	0.0%	1	1	0.0%	(14)
2023	736,127	736,127	450	465	0.1%	537	538	0.1%	73
2024									

Program was started on November 2, 2020

First customer was brought onto Program in December 2022

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			537
Summer kW Reduction	1.93	2.07	1,038.02	1,113.80
Winter kW Reduction	1.89	2.03	1,014.93	1,089.02
Annual kWh Reduction	0	0	0	0

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	1,038.02	1,113.80
Winter kW Reduction	1,014.93	1,089.02
Annual kWh Reduction	0	0

Utility Cost per Installation (\$) Note 1: 2,649
 Total Program Cost of the Utility (\$000): 1,425.0
 Net Benefits of Measures Installed During Reporting Period (\$000): 20.4
 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 2023

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	736,127	715,123	1,350	14,017	2.0%	1,236	13,743	1.9%	(274)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.13	0.14	165.62	177.71
Winter kW Reduction	0.41	0.44	511.70	549.06
Annual kWh Reduction	235	248	290,460	306,726

Participants 1,236

Annual Demand and Energy Savings

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	165.62	177.71
Winter kW Reduction	511.70	549.06
Annual kWh Reduction	290,460	306,726

Participants 1,236

Utility Cost per Installation (\$): 202
 Total Program Cost of the Utility (\$000): 250.2
 Net Benefits of Measures Installed During Reporting Period (\$000): 52.9

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: FREE COMMERCIAL/INDUSTRIAL AUDIT
 Program Start Date: July 1983
 Reporting Period: Annual 2023

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	90,567	90,567	950	7,168	7.9%	976	6,632	7.3%	(536)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			976
Summer kW Reduction	0.09	0.10	90.77	97.12
Winter kW Reduction	0.09	0.10	91.74	98.17
Annual kWh Reduction	817	859	797,392	838,856

Annual Demand and Energy Savings, Note 1

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	90.77	97.12
Winter kW Reduction	91.74	98.17
Annual kWh Reduction	797,392	838,856

Utility Cost per Installation (\$): 573
 Total Program Cost of the Utility (\$000): 559.5
 Net Benefits of Measures Installed During Reporting Period (\$000): (145.0)
 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 2023

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	90,567	90,567	1	34	0.0%	0	7	0.0%	(27)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	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

	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): (1.6)
 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 2023

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	90,567	9,831	6	60	0.6%	3	29	0.3%	(31)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan				Participants 3	
Per Installation				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	6.16	6.59	18.49	19.78	
Winter kW Reduction	2.48	2.65	7.43	7.94	
Annual kWh Reduction	17,863	18,792	53,589	56,376	

Annual Demand and Energy Savings, Note 1				Participants 3	
				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	18.49	19.78			
Winter kW Reduction	7.43	7.94			
Annual kWh Reduction	53,589	56,376			

Utility Cost per Installation (\$): 2,071
 Total Program Cost of the Utility (\$000): 6.2
 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 2023

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	90,567	90,567	1	17	0.0%	0	6	0.0%	(11)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total		Participants
	@ Meter	@ Generator	@ Meter	@ Generator	0
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

	Program Total		Participants
	@ Meter	@ Generator	0
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): 0.4
 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 2023

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	90,567	90,567	80	433	0.5%	174	571	0.6%	138
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan				Participants	174
Per Installation				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	0.98	1.05	170.52	182.46	
Winter kW Reduction	0.00	0.00	0.00	0.00	
Annual kWh Reduction	1,717	1,806	298,758	314,293	

Annual Demand and Energy Savings, Note 1				Participants	174
				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction			170.52	182.46	
Winter kW Reduction			0.00	0.00	
Annual kWh Reduction			298,758	314,293	

Utility Cost per Installation (\$): 198
 Total Program Cost of the Utility (\$000): 34.4
 Net Benefits of Measures Installed During Reporting Period (\$000): 1.1
 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 2023

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	90,567	15,294	1	9	0.1%	0	5	0.0%	(4)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	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

	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: 37,377
 Total Program Cost of the Utility (\$000): 3,849.9
 Net Benefits of Measures Installed During Reporting Period (\$000): 278.9

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 2023

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	4	0.0%	2	2	200.0%	(2)
2022	89,415	89,415	4	8	0.0%	2	4	400.0%	(4)
2023	90,567	90,567	60	68	0.1%	26	30	3000.0%	(38)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			26
Summer kW Reduction	15.64	16.73	406.64	435.10
Winter kW Reduction	2.32	2.48	60.32	64.54
Annual kWh Reduction	607,467	639,055	15,794,142	16,615,437

Annual Demand and Energy Savings, Note 1

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	406.64	435.10
Winter kW Reduction	60.32	64.54
Annual kWh Reduction	15,794,142	16,615,437

Utility Cost per Installation (\$): 23,857
 Total Program Cost of the Utility (\$000): 620.3
 Net Benefits of Measures Installed During Reporting Period (\$000): 43.5
 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 2023

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	90,567	839	0	1	0.1%	0	3	0.4%	2
2024									

	Per Installation		Participants	
			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

	Participants	
	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: 784,878
 Total Program Cost of the Utility (\$000): 22,761.4
 Net Benefits of Measures Installed During Reporting Period (\$000): 1,186.0

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: COMMERCIAL STREET AND OUTDOOR LIGHTING CONVERSION
 Program Start Date: February 2018
 Reporting Period: Annual 2023

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	209,821	8,827	8,827	205,761	2331.0%	8,827	209,821	2377.0%	4,060
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan				Participants	8,827
Per Installation				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	0.00	0.00	0.00	0.00	0.00
Winter kW Reduction	0.13	0.14	1,173.99	1,256.17	
Annual kWh Reduction	576	606	5,084,352	5,348,738	

Annual Demand and Energy Savings, Note 1				Participants	8,827
				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction			0.00	0.00	
Winter kW Reduction			1,173.99	1,256.17	
Annual kWh Reduction			5,084,352	5,348,738	

Utility Cost per Installation (\$): 1
 Total Program Cost of the Utility (\$000): 12.6
 Net Benefits of Measures Installed During Reporting Period (\$000): 13,420.0
 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 2023

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	90,567	90,567	115	1,303	1.4%	79	1,626	1.8%	323
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			79
Summer kW Reduction	15.51	16.60	1,225.29	1,311.06
Winter kW Reduction	12.08	12.93	954.32	1,021.12
Annual kWh Reduction	76,757	80,748	6,063,803	6,379,121

Annual Demand and Energy Savings, Note 1

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	1,225.29	1,311.06
Winter kW Reduction	954.32	1,021.12
Annual kWh Reduction	6,063,803	6,379,121

Utility Cost per Installation (\$): 3,846
 Total Program Cost of the Utility (\$000): 303.8
 Net Benefits of Measures Installed During Reporting Period (\$000): 4,233.6
 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 2023

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	90,567	90,567	50	635	0.7%	38	1,124	1.2%	489
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan				Participants	38
Per Installation				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction	23.83	25.50	905.54	968.93	
Winter kW Reduction	23.83	25.50	905.54	968.93	
Annual kWh Reduction	138,004	145,180	5,244,152	5,516,848	

Annual Demand and Energy Savings, Note 1				Participants	38
				Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator	
Summer kW Reduction			905.54	968.93	
Winter kW Reduction			905.54	968.93	
Annual kWh Reduction			5,244,152	5,516,848	

Utility Cost per Installation (\$): 5,927
 Total Program Cost of the Utility (\$000): 225.2
 Net Benefits of Measures Installed During Reporting Period (\$000): 3,089.0
 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 2023

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	90,567	90,567	7	94	0.1%	6	45	0.0%	(49)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			6
Summer kW Reduction	39.29	42.04	235.74	252.24
Winter kW Reduction	31.43	33.63	188.58	201.78
Annual kWh Reduction	98,486	103,607	590,916	621,644

Annual Demand and Energy Savings, Note 1

	Program Total	
	@ Meter	@ Generator
	Participants	
Summer kW Reduction	235.74	252.24
Winter kW Reduction	188.58	201.78
Annual kWh Reduction	590,916	621,644

Utility Cost per Installation (\$): 4,995
 Total Program Cost of the Utility (\$000): 30.0
 Net Benefits of Measures Installed During Reporting Period (\$000): 23.3
 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 2023

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	90,567	90,567	0	0	0.0%	0	0	0.0%	0
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	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

	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: 2,177
 Total Program Cost of the Utility (\$000): 6.5
 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 2023

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	90,567	90,567	0	0	0.0%	0	0	0.0%	0
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	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

	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 2023

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	55	0.1%	2	2	0.0%	(53)
2022	89,415	89,415	180	235	0.3%	137	139	0.2%	(96)
2023	90,567	90,567	15	250	0.3%	7	146	0.2%	(104)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	11.13	11.91	77.91	83.36
Winter kW Reduction	4.06	4.34	28.42	30.41
Annual kWh Reduction	14,600	15,359	102,200	107,514

Annual Demand and Energy Savings

	Program Total	
	@ Meter	@ Generator
Summer kW Reduction	77.91	83.36
Winter kW Reduction	28.42	30.41
Annual kWh Reduction	102,200	107,514

Utility Cost per Installation (\$): 3,600
 Total Program Cost of the Utility (\$000): 25.2
 Net Benefits of Measures Installed During Reporting Period (\$000): 80.3

Demand Side Management Annual Report

Utility: Tampa Electric Company
 Program Name: STANDBY GENERATOR
 Program Start Date: January 1991
 Reporting Period: Annual 2023

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	90,567	2,585	13	44	1.7%	17	59	2.3%	15
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Participants 17 Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Summer kW Reduction	263.94	282.42	4,486.98
Winter kW Reduction	263.94	282.42	4,486.98	4,801.07
Annual kWh Reduction	26,394	27,766	448,698	472,030

Annual Demand and Energy Savings, Note 1

	Participants 17 Program Total	
	@ Meter	@ Generator
	Summer kW Reduction	4,486.98
Winter kW Reduction	4,486.98	4,801.07
Annual kWh Reduction	448,698	472,030

Utility Cost per Installation (\$), Note 2: 39,645
 Total Program Cost of the Utility (\$000): 5,153.8
 Net Benefits of Measures Installed During Reporting Period (\$000): 6,188.4

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 2023

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	4	0.0%	1	1	0.0%	(3)
2022	89,415	89,415	7	11	0.0%	21	22	0.0%	11
2023	90,567	90,567	20	31	0.0%	16	38	0.0%	7
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Summer kW Reduction	4.09	4.38	65.44
Winter kW Reduction	4.09	4.38	65.44	70.02
Annual kWh Reduction	10,251	10,784	164,016	172,545

Annual Demand and Energy Savings, Note 1	Program Total	
	@ Meter	@ Generator
	Summer kW Reduction	65.44
Winter kW Reduction	65.44	70.02
Annual kWh Reduction	164,016	172,545

Utility Cost per Installation (\$): 1,481
 Total Program Cost of the Utility (\$000): 23.7
 Net Benefits of Measures Installed During Reporting Period (\$000): 26.8

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	90,567	90,567	1	11	0.0%	0	0	0.0%	(11)
2024									

Annual Demand and Energy Savings - 2020-2029 DSM Plan

	Per Installation		Program Total	
	@ Meter	@ Generator	@ Meter	@ Generator
	Participants			0
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

	Program Total	
	@ Meter	@ Generator
	Participants	
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): 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									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	10.3	6.8	151.2%	12.5	2.9	429.5%	29.6	6.3	469.9%
2024									
Commercial/Industrial									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	7.2	1.8	398.1%	8.1	3.5	232.1%	30.3	9.9	305.6%
2024									
Combined									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	17.4	8.6	202.9%	20.6	6.4	321.6%	59.9	16.2	369.5%
2024									

Comparison of Cumulative Achieved kW and kWh Reductions with Public Service Commission Established Goals Savings at the Generator									
Utility: TAMPA ELECTRIC COMPANY									
Residential									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	70.8	55.8	126.9%	64.4	23.2	277.6%	168.5	51.4	327.9%
2024									
Commercial/Industrial									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	85.1	14.7	578.7%	108.5	27.4	396.0%	272.1	77.8	349.8%
2024									
Combined									
Year	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
	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	155.9	70.5	221.1%	172.9	50.6	341.8%	440.7	129.2	341.1%
2024									