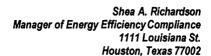


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June 1, 2021

Ms. Deven Reeves
Filing Clerk
Public Utility Commission of Texas
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711

RE: Project No. 51672 – Revision to CenterPoint Energy Houston Electric's 2021 Energy Plan and Report Pursuant to 16 TAC § 25.181(l)

Dear Ms. Reeves:

On April 1, 2021 CenterPoint Energy Houston Electric ("CEHE") filed its 2021 Energy Efficiency Plan and Report ("EEPR"). CEHE has revised the document to adjust demand reduction and energy savings consistent with the EM&V Contractor's review of project impacts. CEHE also identified an error with the administrative cost amounts reported for 2020, and program administrative costs have been corrected in the EEPR tables and text.

Please do not hesitate to contact the Company should you have any questions.

Shea A. Richardson

Energy Efficiency Compliance Manager

(713) 207-7465



CenterPoint Energy Houston Electric, LLC

2021 Energy Efficiency Plan and Report

Pursuant to 16 Tex. Admin. Code § 25.181(l) (Revised)

June 1, 2021

Project No. 51672

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Introduction

CenterPoint Energy Houston Electric, LLC (CenterPoint Houston or the Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Tex. Admin. Code (TAC) § 25.181, § 25.182 and §25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 and 16 TAC § 25.181 require that each investor-owned electric utility achieve the following savings goal through market-based standard offer programs (SOPs) and limited, targeted, market transformation programs (MTPs):

• 0.4% reduction of the electric utility's peak demand of residential and commercial customers for the 2020, 2021 and 2022 program years.

The format used herein is consistent with the requirements outlined in 16 TAC § 25.181(l) and the Company's Errata 2020 EEPR filing in July 2020 under Project 50666. The EEPR presents the results of CenterPoint Houston's 2020 energy efficiency programs and describes how the Company plans to achieve its goals and meet the requirements set forth in 16 TAC § 25.181. Planning information provided focuses on 2021 and 2022 projected savings and budgets, as well as information on programs to be offered, and discusses outreach, informational activities and workshops designed to encourage participation by energy service providers and retail electric providers (REPs).

EEPR Organization

This EEPR consists of an executive summary, fifteen sections, and three appendices. Sections one through four provide the Energy Efficiency Plan (The Plan), while sections five through eleven present energy efficiency report information. The final four sections address the Energy Efficiency Cost Recovery Factor (EECRF). The three appendices provide a description of the acronyms used throughout the report, give the location of the glossary of commonly used terms, and the demand and energy savings for each program by county.

Executive Summary

The Plan portion of this EEPR details CenterPoint Houston's plans to achieve a 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2021, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2022. The Plan also addresses the corresponding energy savings goal, which is calculated from the demand savings goal using a 20% capacity factor. The goals, budgets, and implementation plans that are included herein are determined by requirements of 16 TAC § 25.181 and the information gained from prior implementation of the selected programs. Table 1 presents a summary of 2021 and 2022 goals, projected savings, and projected budgets.

Table 1: Summary of Annual Goals, Projected Savings and Projected Budgets¹

	Calendar Year	Normalized Peak Demand	MW Goal	Demand (MW) Goal	Energy (MWh) Goal ²	Projected MW Savings	Projected MWh Savings ³	Projected Budget (in 000's)
Annual	2021	15,923	0.4% of peak demand	63.69	111,585	171.63	211,903	\$38,253
Goals	2022	16,219	0.4% of peak demand	64.88	113,670	183.46	214,129	\$37,714

¹ Peak Demand figures are from Table 4; Projected MW and MWh Savings from Table 5; Projected Budget from Table 6. All MW and MWh figures in this Table and throughout this EEPR are measured at the meter.

² Calculated using a 20% capacity factor.

Peak demand reduction and energy savings projections are for the current and following calendar year that CenterPoint Houston is planning and budgeting for in the EEPR. These projected savings reflect estimates based on information gained from prior implementation of the programs.

To reach the projected savings presented in Table 1, CenterPoint Houston will implement the following programs:

- 1. Commercial Standard Offer Program
- 2. Commercial MTP (SCORE, Healthcare, Data Center)
- 3. Commercial Load Management Standard Offer Program
- 4. Retro-Commissioning MTP
- 5. Retail Electric Provider MTP (Commercial CoolSaver)
- 6. Commercial High Efficiency Foodservice MTP (Pilot)
- 7. CenterPoint Energy High Efficiency Home MTP
- 8. Advanced Lighting MTP
- 9. Midstream MTP (HVAC and Pool Pump Distributor)
- 10. Retail Electric Provider MTP (Residential CoolSaver and Efficiency Connection)
- 11. Smart Thermostat Program
- 12. Multi-Family MTP Market Rate
- 13. Residential Load Management Standard Offer Program
- 14. Residential & Small Commercial Standard Offer Program
- 15. Smart Home Energy Management System (Pilot)
- 16. Hard-to-Reach Standard Offer Program
- 17. Multi-Family MTP Hard-to-Reach
- 18. Targeted Low Income MTP (Agencies in Action)

As detailed in this report, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory energy efficiency savings goal of 0.4% peak demand reduction. CenterPoint Houston's goals for 2020 were 62.82 MW in peak demand reduction and 110,061 MWh in energy savings. Actual achieved reductions in 2020 totaled 171.1 MW and 189,588 MWh respectively. The total forecasted spending for 2020 was \$37.82 million, and actual 2020 spending totaled \$36.001 million.

Energy Efficiency Plan

I. 2021 Programs

A. 2021 Program Portfolio

CenterPoint Houston plans to implement 18 programs in 2021. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Houston anticipates that targeted outreach to a broad range of service providers will be necessary to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

Table 2: 2021 Energy Efficiency Program Portfolio

Program	Target Market	Application
Commercial Standard Offer Program	Large Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare, Data Center)	Large Commercial	Retrofit; New Construction
Commercial Load Management Standard Offer Program	Large Commercial	Load Management
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
Retail Electric Provider (REP) MTP (Commercial CoolSaver)	Large Commercial	Retrofit
Commercial High Efficiency Foodservice MTP (Pilot)	Large Commercial	Retrofit; New Construction
CenterPoint Energy High Efficiency Home MTP	Residential	New Construction
Residential & Small Commercial Standard Offer Program	Residential & Commercial	Retrofit
Smart Thermostat Program	Residential	Retrofit; New Construction
Advanced Lighting MTP	Residential & Commercial	Retrofit; New Construction
Midstream MTP (HVAC and Pool Pump Distributor)	Residential & Commercial	Retrofit; New Construction
Retail Electric Provider (REP) MTP (Residential CoolSaver and Efficiency Connection)	Residential	Retrofit
Residential Load Management Standard Offer Program	Residential	Load Management
Multi-Family MTP Market Rate	Residential	New Construction
Smart Home Energy Management System (Pilot)	Residential	New Construction
Hard-to-Reach Standard Offer Program	Hard-to-Reach	Retrofit
Multi-Family MTP Hard-to-Reach	Hard-to-Reach	Retrofit; New Construction
Targeted Low Income MTP (Agencies in Action)	Hard-to-Reach	Retrofit

The programs listed in Table 2 are described further in sub-section B. CenterPoint Houston maintains two energy efficiency websites:⁴ one designed for the end user and one for project sponsors. The energy efficiency sponsor portal contains project participation requirements and forms required for project submission. These websites provide project sponsors with program updates and information.

B. Existing Programs

Commercial Standard Offer Program

Program Design

The Commercial SOP targets commercial customers by offering financial incentives for the installation of efficient measures in new or retrofit applications. Eligible measures include lighting, HVAC, chillers, motors, refrigeration, and other custom projects.

Implementation Process

CenterPoint Houston will continue implementation of its Commercial SOP where any eligible project sponsor may submit applications for qualifying projects.

Outreach and Research Activities

- Maintains internet website with program processes on how to register for participation, as well as
 how to input a viable project, detailed project eligibility, end-use measures, incentives,
 workbooks to assist with providing incentive estimates, as well as procedures and application
 forms;
- Collaborates with internal departments to leverage existing relationships with commercial customers, informing them of energy efficiency opportunities;
- Participates in appropriate industry-related meetings and events to generate awareness and interest:
- Utilizes a bi-annual e-newsletter that highlights program offerings and relevant commercial measure articles; and
- Conducts workshops as necessary to explain elements such as: responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

-

⁴ CenterPoint Houston's energy efficiency website is www.centerpointefficiency.com. CenterPoint Houston's sponsor portal is https://cnpsponsor.programprocessing.com/.

Commercial Market Transformation Program (Commercial MTP)

Program Design

The Commercial MTP includes the following three program offerings: SCORE/CitySmart, Healthcare Energy Efficiency Program (HEEP), and the Data Center Energy Efficiency Program (DCEEP).

The SCORE/CitySmart program targets public and private K-12 schools, public and private higher education, cities, counties, state governmental agencies, non-profit and faith-based organizations. Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make decisions about cost-effective investments.

HEEP provides technical support and financial incentives for implementing energy efficiency projects to eligible healthcare facilities including hospitals, doctors' offices, clinics, laboratories, medical office buildings, and assisted living/nursing care facilities. Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make informed decisions about installing cost-effective energy efficient measures.

DCEEP provides technical support and incentives for implementing energy efficiency projects to commercial customers that have a dedicated data center, server room or server closets. Program participants are incentivized for installing a variety of energy saving measures, e.g. data storage, web hosting and telecommunications.

Implementation Process

The Commercial MTP uses third party implementers to help eligible participants identify energy efficient measure upgrades in their facilities. The program pays incentives to participants for approved measures that result in both demand and energy savings.

Outreach and Research Activities

- Contracts with third-party program implementers to conduct outreach and planning activities;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Utilizes a bi-annual e-newsletter that highlights program offerings and relevant commercial measure articles; and
- Conducts workshops as necessary to explain elements of program requirements, incentive information, application and reporting processes.

Commercial Load Management Standard Offer Program

Program Design

The Commercial Load Management Standard Offer Program is available to non-residential distribution customers, as well as governmental, educational, and non-profit transmission customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an EEA2⁵ event or deems that an EEA2 event is imminent, or to support local system emergency situations. Incentives will be paid for measured and verified kW reductions to project sponsors based on average performance of all their events. Participating facilities must be equipped with an Interval Data Recorder (IDR) or smart meter and be able to curtail a minimum of 100 kW to be eligible.

Implementation Process

Implementation of this program will be through customers and third-party entities representing eligible facilities within the CenterPoint Houston service territory. The program will initiate up to a maximum of six events totaling 22 hours per year during the summer on peak period (up to a maximum of two test curtailments lasting one to three hours; and up to a maximum of four unscheduled events based on ERCOT EEA2 events lasting one to four hours each). A thirty-minute notice is given to all participants prior to each event.

Outreach and Research Activities

- Maintains program information in the program tracking database;
- Conducts workshops as necessary to explain elements such as responsibilities of the project participant, program requirements, incentive information, and the application and reporting process;
- Utilizes a bi-annual e-newsletter that highlights program offerings and relevant commercial measure articles; and
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

-

⁵ Energy Emergency Alert (EEA) 2 – ERCOT may issue an EEA level 2 when operating reserves are less than 1,750 MW and are not expected to recover within 30 minutes. ERCOT may reduce demand on the system by interrupting power from large industrial customers who have contractually agreed to have their electricity turned off during an emergency. ERCOT may also use demand response resources that have been procured to address tight operating conditions. Website: http://www.ercot.com

Retro-Commissioning MTP

Program Design

Retro-Commissioning MTP is an optimization program that identifies no cost or low-cost measures (up to a three-year simple payback) the customer can implement to reduce the demand and energy usage in existing commercial facilities. The program provides end-users with a free engineering analysis to identify measures that will improve the performance within their facilities by reducing electric demand and consumption. Facility owners are required to implement all identified measures with simple payback of less than one and a half years or pay the cost of the analysis. Customers are also eligible to receive incentives based on kWh savings and how quickly the low-cost or no-cost measures are implemented.

Implementation Process

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Houston's website. Retro-Commissioning Agents, typically engineering consulting firms, are used to deliver the program to customers. The engineering analysis is comparable to an ASHRAE Level 2 audit.⁶

Outreach and Research Activities

- Maintains internet website with detailed project eligibility, procedures, and application forms;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor and RCx Agents, program requirements, incentive information, and the application and reporting process;
- Utilizes a bi-annual e-newsletter that highlights program offerings and relevant commercial measure articles; and
- An optional Monitored Based Commissioning (MBCx) component was added in 2021. MBCx involves the use of hardware and software to commission buildings on a more frequent basis, using trend data to identify new energy savings opportunities and to evaluate underperforming measures to improve persistence of savings.

⁶American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Audit Level 2 - Energy Survey and Analysis: includes the ASHRAE Level 1 walk-through analysis, but adds detailed energy calculations and financial analysis of proposed energy efficiency measures. Website: http://www.ashrae.org/

Retail Electric Provider (REP) MTP

Program Design

This program offers energy saving products and services to end use residential and/or commercial customers through participating Retail Electric Providers (REPs). Participating REPs market energy saving measures and services to their customers in the CenterPoint Houston service territory. REPs can participate in the following programs:

- CoolSaver A/C Tune-up Program Residential
- CoolSaver A/C Tune-up Program Commercial
- Efficiency Connection Electronic Marketplace

CoolSaver A/C Tune-Up Program – Residential and Commercial

The CoolSaver A/C Tune-up program utilizes specially trained air conditioning contractors to perform comprehensive A/C tune-ups for residential and commercial customers. The program pays incentives to the A/C contractor to reduce the customer's upfront cost of system diagnosis and correction. It also provides participating trade allies with training on best practices and discounts on high quality diagnostic tools.

Efficiency Connection

Efficiency Connection is an online marketplace that enables customers to shop for discounted energy efficiency products. Through the program's third-party vendor, products are delivered directly to qualifying residential customers. Program marketing informs the customer of the importance of installing LED lighting in high use areas and replacing existing incandescent, fluorescent and halogen lamps to increase savings.

Implementation Process

The Retail Electric Provider program works with REPs to recruit and enroll customers. Incentives are paid to program service providers or contractors for the average verified demand and energy savings achieved through the program.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach and planning activities;
 and
- REPs market the program to existing customers via e-mail, social media, and direct mail.

Smart Thermostat Program

Program Design

The Smart Thermostat Program enables customers to receive discounts for the purchase of ENERGY STAR®⁷ Certified Smart Thermostats at online retail locations. The program was launched as a pilot in November 2018 to coincide with the holiday shopping season. 2019 was the first full year of program delivery.

Implementation Process

The program utilizes two methods for purchase, an online marketplace promoted by REPs and an internet portal that offers an instant coupon code and allows customers to shop for discounted energy efficiency products.

Outreach and Research Activities

- Contracts with third-party internet marketplace and online portals; and
- Implements in-store marketing materials with participating retailers.

Residential Load Management Standard Offer Program

Program Design

The Residential Load Management program provides demand reduction during the summer peak period, when ERCOT issues an EEA2 Energy Emergency Alert. Participants are randomly tested twice during the summer peak period and agree to be available for up to five additional demand response events. Events may last from one to four hours and may be initiated Monday through Friday between the hours of 1:00 pm and 7:00 pm. The program begins June 1 and ends on September 30.

Implementation Process

The Residential Load Management program sponsors utilize CenterPoint Houston's Vision DSM database to enroll customers who own a Wi-Fi enabled device that can provide curtailment during energy saving events.

⁷ ENERGY STAR® is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. Environmental Protection Agency (EPA) ensures that each product that earns the label is independently certified to deliver the quality, performance, and savings that consumers have come to expect. Website: https://www.energystar.gov/

Outreach and Research Activities

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors; and
- CenterPoint Houston works with aggregators and vendors to enroll customers who wish to participate.

CenterPoint Energy High Efficiency Home MTP

Program Design

The High Efficiency Home MTP incentivizes the construction of new ENERGY STAR® certified and other high efficiency qualified homes. To qualify for incentives, all homes at a minimum must achieve 10% or 750 more kWh savings over the 2015 IECC reference baseline home. Incentives can also be earned by meeting minimum prescriptive technology requirements such as high efficiency HVAC systems, and above code attic and wall insulation. An additional bonus will be offered for those builders who build ENERGY STAR® version 3.1 certified homes. Each home is reviewed for verifiable demand and energy savings.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach, training and technical assistance; and
- Advertise using a multitude of media, including, digital media, local TV, search engine
 optimization, online and targeted relocation publications, and local home builder association
 publications.

Residential & Small Commercial Standard Offer Program

Program Design

The Residential & Small Commercial SOP targets retrofit measures for residential and small commercial customers with incentives being paid to project sponsors for qualifying measures that provide verifiable demand and energy savings. The program is open to all qualifying energy efficiency measures, including, but not limited to, air conditioning, duct sealing, weatherization, ceiling insulation, water saving measures, solar photovoltaics, and ENERGY STAR® appliances.

Outreach and Research Activities

• Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, and application forms.

Advanced Lighting MTP

Program Design

This program offers point of purchase discounts to residential customers at participating retail stores for the purchase of qualified (i.e., ENERGY STAR® rated) high efficiency LED lighting products.

Implementation Process

The Advanced Lighting MTP is implemented by a third-party program implementer. Point of purchase discounts will be applied to residential customers at participating retailers, including Home Depot, Lowes, and Sam's Club. Five percent of the savings and cost associated with the Advanced Lighting MTP will be allocated to the commercial sector. The program is administered as a single program, but the savings and cost are detailed by segment throughout this document.

Outreach and Research Activities

- In-store promotions of the program via signage; and
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

Mid-Stream MTP

Program Design

The Mid-Stream MTP (HVAC and Pool Pump Distributor) provides incentives to air conditioning and pool pump distributors who agree to facilitate the installation of high-efficiency pool pumps, air conditioners, heat pumps, and smart thermostats in existing single-family and multi-family properties.

Implementation Process

Any registered A/C or pool pump distributor may apply for participation in the program. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach, marketing, and planning activities; and
- Conducts workshops as necessary to explain elements such as responsibilities of the distributors and contractors, program requirements, incentive information, and the application and reporting process.

Hard-To-Reach Standard Offer Program

Program Design

The Hard-to-Reach Standard Offer Program provides incentives to project sponsors for qualifying measures installed in retrofit applications which provide verifiable demand and energy savings to customers whose annual total household income is less than 200% of current federal poverty guidelines. Qualifying energy efficiency measures include, but are not limited to, air conditioning, AC tune-ups, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

Implementation Process

Any registered project sponsor may apply for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Maintain an internet website with detailed project eligibility, end-use measures, incentive structure, procedures, and application forms; and
- Conduct workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

Multi-Family MTP Market Rate

Program Design

The Multi-family MTP Market Rate encompasses two program elements: Multi-family Water and Space Heating and Multi-Family High Efficiency New Construction. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family High Efficiency New Construction incentivizes energy efficiency in new multi-family buildings.

Implementation Process

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Energy Houston's website.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach and planning; and
- Marketing materials including brochures, cut sheets and program guidebook provided to potential participating developers and property managers.

Multi-family MTP Hard-to-Reach

Program Design

The Multi-family MTP Hard-to-Reach encompasses three program elements: Multi-family Water and Space Heating, Multi-family High Efficiency New Construction, and Direct Install (DI). Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family High Efficiency New Construction incentivizes energy efficiency in new multi-family buildings. The Multi-Family Direct Install element offers property owners and managers a free visual audit of existing units to see if the property is eligible for energy efficient direct installation measures, which may include CFLs / LED lights and water saving measures. These three elements are only available to properties with tenants whose annual total household income is less than 200% of current federal poverty guidelines. In the DI element, applicable measures will be installed at no cost and include an educational component for those eligible.

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach and planning; and
- Marketing materials including brochures, cut sheets and program guidebook provided to potential participating developers and property managers.

Targeted Low-Income MTP (Agencies in Action)

Program Design

The Targeted Low-Income MTP facilitates the installation of energy efficiency upgrades for low-income residential customers in single family or multi-family homes. Local non-profit organizations and energy service companies provide comprehensive, whole-house retrofits that maximize electricity savings to

homes with a Savings to Investment Ratio (SIR) greater than one (1). This is accomplished by installing attic insulation, solar screens, lighting retrofits, water saving measures, ENERGY STAR® room air conditioners, central air conditioning systems, ENERGY STAR® refrigerators, and air infiltration control for participants that have an annual household income of less than 200% of the federal poverty guidelines. A maximum expenditure of \$7,541 is allowed per home.

Implementation Process

CenterPoint Houston contracts with a program implementer that has the responsibility of recruiting and overseeing the participating agencies and energy service companies. An energy audit using the National Energy Audit Assessment Tool (NEAT) is performed at the premise and the SIR score determines which projects are selected for renovation.

Outreach and Research Activities

- Partner with a third-party implementer; and
- Contact non-profit organizations for potential participation.

Smart Home Energy Management System (Pilot)

Program Design

CenterPoint Houston began implementing this pilot program in 2020 to determine the market potential and verifiable energy savings associated with Smart Home Energy Management Systems (SHEMs) and their related technologies. This pilot integrates hardware such as thermostats, plugs, lighting, and other controls with internet connectivity, new software, and advanced analytics to validate energy savings potential. More than 600 pieces of equipment have been installed at 22 homes in CenterPoint Energy's service territory and a total of 80 homes are expected to receive SHEMs by the close of 2021. CenterPoint Houston has not claimed energy savings for program year 2020 as analysis is still underway to determine savings impacts for homes that have participated in the pilot. This analysis will continue to be performed as additional SHEM's are deployed in 2021 and the Company expects that effort to provide verifiable impacts attributable to implementation of the pilot. 2021 is expected to be the last year of implementation for this pilot, and smart home measures with verified energy savings will be incorporated to the CenterPoint Energy High Efficiency Home MTP as part of the overall suite of incentives available to builders for residential new construction.

Implementation Process

CenterPoint Houston works with a third-party implementer to conduct program outreach, participant enrollment, equipment installation, and data collection.

Outreach and Research Activities

- Provides marketing materials through traditional and digital channels
- Program participants interviewed to determine the type of equipment and number of units applicable to each specific home.

Research and Development (R&D) Projects

In 2021, CenterPoint Houston plans to implement the following R&D activities. Additional projects may be implemented depending on research opportunities and the availability of budgeted R&D funds.

Commercial Smart Thermostat

CenterPoint Houston plans to continue evaluating the energy savings potential for ENERGY STAR® Smart Thermostats in commercial buildings. This R&D project focuses on building types that do not traditionally have Building Management or Automation Systems installed, such as convenience stores, converted residences, retail stores, and strip malls.

Commercial Food Service Measures

CenterPoint Houston plans to research new kitchen measures to be considered for submission to the Technical Reference Manual. The addition of food service equipment with verifiable energy savings would expand the measures available through the Company's Commercial Midstream Market Transformation Program.

C. New Programs for 2021

Commercial High Efficiency Foodservice MTP (Pilot)

In 2021, CenterPoint Houston is implementing the Commercial High Efficiency Foodservice Pilot, a midstream Market Transformation Program designed to influence and incentivize the adoption of energy-efficient commercial kitchen equipment measures recently approved in the TRM. This program targets small and mid-sized business segments including restaurants, schools, quick service restaurants, government facilities, and other customers that utilize commercial food service equipment.

D. Potential New Programs for 2022

Currently, CenterPoint Houston does not plan to implement any new programs in 2022.

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II. Customer Classes

CenterPoint Houston's energy efficiency programs target the Hard-to-Reach, Residential, and Commercial customer classes.

The annual MW savings goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and considering 16 TAC § 25.181(e)(3)(F) and (p), which respectively state that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers and no less than 10% of the energy efficiency budget is to be spent on targeted low-income programs. Table 3 summarizes the number of customers in each of the customer classes. It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace and the overriding objective of meeting legislative and Commission goals.

Table 3: Summary of Customer Classes

Customer Class	Number of Customers
Commercial	296,294
Residential	1,755,126
Hard to Reach ⁸	548,189

⁸ CenterPoint Houston does not require income information for electric service and no records are available to correlate revenue for the Hard-to-Reach customer class. However, according to the U.S. Census Bureau, Current Population Survey 2020 Annual Social and Economic Supplement, 23.8% of Texas families fall below 200% of the poverty threshold. Applying that percentage to CenterPoint Houston's residential customer totals, the number of HTR customers is estimated at 548,189. Program goals will be based on the requirement in the energy efficiency rule that no less than 5% of the total energy efficiency demand goal will be achieved through the programs in the Hard-to-Reach customer class.

III. Energy Efficiency Goals and Projected Savings

As prescribed by 16 TAC § 25.181, and because CenterPoint Houston satisfied its goal to meet 30% of its five-year average rate of growth in demand in 2013, CenterPoint Houston's demand goal for 2021 is 0.4% of peak demand. For the purposes of this report, the 2021 demand goal is based on the 5-year average of weather adjusted peak demand for 2015-2019, and the 2022 demand goal is based on the 5-year average of weather adjusted peak demand for 2016-2020. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the demand savings goals.

Table 4 presents historical annual peak demand for 2015-2020 and estimated peak demand for 2021 and 2022. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2021 and 2022. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. The MW and MWh values presented in Table 5 are at the customer meter and include line loss factors used in the latest CenterPoint Houston electric base rate case, Docket No. 49421.

Table 4: Annual Growth in Demand and Energy Consumption

,		Peak Deman	d (MW)		En	ergy Consu	mption (G	Wh)
Calendar	Tota	al System		ential & mercial	Total	System		ential & mercial
Year	Actual ⁹	Weather Adjusted ^{10,11}	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted
2015	18,056	17,768	15,960	15,672	88,232	88,326	71,013	71,107
2016	17,957	18,201	15,731 15,975		91,322	91,336	72,022	72,036
2017	18,364	18,611	16,236	15,665	92,593	93,480	76,652	72,449
2018	19,125	18,662	16,726	16,078	94,736	94,889	72,668	72,821
2019	18,915	19,684	16,525	16,226	94,654	93,787	71,644	70,777
2020	18,793	19,136	16,807	17,150	97,771	97,460	71,147	70,836
2021	19,963	16,905		N T/A	97,886		73,394	NT/A
2022	19,903 N/A ¹² 10,903 N/A 17,039 N/A] IN/A	98,538	N/A	72,849	N/A	

2021 Goals¹³

MW Goal = $15,923 \times 0.4\% = 63.69 \text{ MW}$

MWh Goal = 63.69MW x 8760 Hours x 20% Load Factor = 111,585 MWh

2022 Goals

MW Goal = $16,219 \times 0.4\% = 64.88 \text{ MW}$

MWh Goal = 64.88 MW x 8760 Hours x 20% Load Factor = 113,670 MWh

⁹ 2021 and 2022 Calendar Year "Actual" values are forecasted.

¹⁰ "Actual Weather Adjusted" Peak Demand is "Actual" Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

¹¹ Weather adjustment calculations are based on hourly weather data from NOAA's Quality Controlled Local Climatological Data (QCLCD).

¹² NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand.

¹³ Demand goals for 2021 and 2022 are provided at the meter level. Source level demand goals are 67.36 MW for 2021 and 68.62 MW for 2022. The source values were determined by applying a line loss factor of 5.76%

Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)

	20)21	20	22
Program Goals by Customer Class for 2021 and 2022	Projected Savings (KW) at Meter	Projected Savings (kWh) at Meter	Projected Savings (kW) at Meter	Projected Savings (kWh) at Meter
Large Commercial	128,077	140,455,616	131,813	118,611,411
Commercial Standard Offer Program	11,700	75,000,000	13,200	70,000,000
Commercial MTP (SCORE, Healthcare, Data Center)	7,300	47,500,000	6,100	34,000,000
Commercial Load Management Standard Offer Program	104,761	628,566	110,000	660,000
Retro-Commissioning MTP	3,100	10,800,000	1,378	7,092,000
REP MTP (Commercial CoolSaver)	550	1,400,000	375	979,194
Advanced Lighting Commercial MTP	196	1,044,835	250	1,500,000
Commercial High Efficiency Foodservice MTP (Pilot)	470	4,082,215	510	4,380,217
Residential and Small Commercial	37,975	62,358,700	45,514	84,984,379
REP MTP (Residential CoolSaver and Efficiency Connection)	2,600	7,000,000	2,807	7,470,079
Residential Load Management Standard Offer Program	17,550	105,300	22,000	66,000
Residential & Small Commercial Standard Offer Program	600	1,000,000	535	1,400,000
Smart Thermostat Program	-	3,800,000	-	6,556,000
Advanced Lighting Residential MTP	3,725	19,851,862	4,750	28,500,000
Midstream MTP (HVAC and Pool Pump Distributor)	3,500	9,855,000	3,500	9,855,000
Multi-Family MTP Market Rate	2,000	3,200,000	2,500	5,600,000
CenterPoint Energy High Efficiency Home MTP	8,000	17,500,000	9,422	25,537,300
Smart Home Energy Management System (Pilot)	-	46,538	-	-
Hard-to-Reach	5,578	9,088,598	6,129	10,533,400
Hard-to-Reach Standard Offer Program	876	915,251	875	1,000,000
Multi-Family MTP Hard-to-Reach	325	645,000	275	1,500,000
Targeted Low Income MTP (Agencies in Action)	4,377	7,528,347	4,979	8,033,400
TOTAL	171,630	211,902,914	183,456	214,129,190

IV. Program Budgets

Table 6 presents proposed budget allocations required to achieve the projected demand and energy savings for calendar years 2021 and 2022. The budget allocations are a result of the projected demand and energy savings presented in Table 5. The budget allocations presented in Table 6 include incentive and administration costs for each program and customer class.

Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class

Program Estimated Budget by Customer Class		2021		2022			
for 2021 and 2022	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget	
Large Commercial	\$17,167,250	\$2,040,350	\$19,207,600	\$17,290,030	\$1,896,369	\$19,186,399	
Commercial Standard Offer Program	\$5,000,000	\$703,264	\$5,703,264	\$6,200,000	\$872,047	\$7,072,047	
Commercial MTP (SCORE, Healthcare, Data Center)	\$6,700,000	\$782,324	\$7,482,324	\$5,900,000	\$551,130	\$6,451,130	
Commercial Load Management Standard Offer Program	\$3,300,000	\$323,112	\$3,623,112	\$3,300,000	\$274,645	\$3,574,645	
Retro-Commissioning MTP	\$1,200,000	\$158,109	\$1,358,109	\$900,000	\$118,582	\$1,018,582	
REP MTP (Commercial CoolSaver)	\$100,000	\$7,568	\$107,568	\$125,030	\$14,194	\$139,224	
Advanced Lighting Commercial MTP	\$52,250	\$4,673	\$56,923	\$50,000	\$4,471	\$54,471	
Commercial High Efficiency Foodservice MTP (Pilot)	\$815,000	\$61,300	\$876,300	\$815,000	\$61,300	\$876,300	
Residential and Small Commercial	\$11,392,750	\$1,299,975	\$12,692,725	\$11,208,674	\$1,191,997	\$12,400,671	
REP MTP (Residential CoolSaver and Efficiency Connection)	\$1,300,000	\$103,812	\$1,403,812	\$1,202,734	\$96,045	\$1,298,779	
Residential Load Management Standard Offer Program	\$900,000	\$72,800	\$972,800	\$900,000	\$72,800	\$972,800	
CenterPoint Energy High Efficiency Home MTP	\$3,600,000	\$452,706	\$4,052,706	\$4,000,000	\$477,856	\$4,477,856	
Residential & Small Commercial Standard Offer Program	\$300,000	\$56,591	\$356,591	\$300,000	\$56,591	\$356,591	
Advanced Lighting Residential MTP	\$992,750	\$88,778	\$1,081,528	\$950,000	\$84,955	\$1,034,955	
Midstream MTP (HVAC and Pool Pump Distributor)	\$2,500,000	\$340,553	\$2,840,553	\$2,500,000	\$272,443	\$2,772,443	
Multi-Family MTP Market Rate	\$1,000,000	\$51,903	\$1,051,903	\$800,000	\$41,523	\$841,523	
Smart Thermostat Program	\$500,000	\$95,000	\$595,000	\$555,940	\$89,784	\$645,724	
Smart Home Energy Management System (Pilot)	\$300,000	\$37,832	\$337,832	-	-		
Hard-to-Reach	\$5,000,000	\$852,260	\$5,852,260	\$4,900,000	\$726,923	\$5,626,923	
Hard-to-Reach Standard Offer Program	\$500,000	\$127,769	\$627,769	\$500,000	\$127,769	\$627,769	
Multi-Family MTP Hard-to-Reach	\$300,000	\$31,142	\$331,142	\$500,000	\$51,903	\$551,903	
Targeted Low Income MTP (Agencies in Action)	\$4,200,000	\$693,350	\$4,893,350	\$3,900,000	\$547,251	\$4,447,251	
SUB TOTAL	\$33,560,000	\$4,192,585	\$37,752,585	\$33,398,704	\$3,815,289	\$37,213,993	
Research and Development		\$500,000	\$500,000		\$500,000	\$500,000	
PROGRAM TOTAL	\$33,560,000	\$4,692,585	\$38,252,585	\$33,398,704	\$4,315,289	\$37,713,993	
EM&V			\$528,424			\$539,688	
EECRF PROGRAM TOTAL			\$38,781,009			\$38,253,681	

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Energy Efficiency Report

V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

Table 7 documents CenterPoint Houston's actual demand goals and energy targets for the previous five years (2016 - 2020). Each value was calculated using the methods outlined in 16 TAC § 25.181.

Table 7: Historical Demand and Energy Savings Goals (at Meter)¹⁴

Calendar Year	Actual Weather Adjusted Demand Goal at Meter (MW)	Actual Weather Adjusted Energy Goals at Meter (MWh)	Actual Demand Savings at Meter (MW)	Actual Weather Adjusted Energy Savings at Meter (MWh)
2020	62.82	110,061.00	171.19	189,587.89
2019	61.94	108,519.00	194.83	215,619.87
2018	61.42	107,608.00	176.36	162,439.61
2017	60.42	105,855.84	188.42	183,438.84
2016	59.40	104,314.00	167.70	190,892.42

¹⁴ 2020 Portfolio demand savings at the source level total 181.04 MW. The line loss values calculated for each rate class Docket 42491 were weighted according to 2020 program participation to arrive at a final line loss value of 5.76%. This value was applied to the meter level portfolio demand savings to determine savings at the source level.

VI. Projected Savings, Reported and Verified Demand and Energy Savings

Table 8 breaks out the projected savings verified and reported demand energy savings by customer class for each program. The projected savings were reported in the Errata Energy Efficiency Plan and Report filed in July of 2020. The verified and reported savings are those savings that have been achieved and verified in the 2020 calendar year.

Table 8: Projected Savings versus Verified and Reported Savings for 2020 (at Meter)

				2020		
	Project	ed Savings	Verific	ed Savings	Reporte	d / Verified
	kW	kWh	kW	kWh	kW	kWh
Large Commercial	120,275	127,713,774	119,005.3	92,258,072.7	119,005.3	92,258,072.7
Commercial Standard Offer Program	11,700	75,000,000	11,118.9	52,856,003.0	11,118.9	52,856,003.0
Commercial MTP (SCORE, Healthcare, Data Center)	7,100	40,000,000	6,448.5	29,989,757.0	6,448.5	29,989,757.0
Commercial Load Management Standard Offer Program	98,000	590,000	99,493.2	596,959.0	99,493.2	596,959.0
Retro-Commissioning MTP	3,100	10,800,000	1,128.9	6,460,231.4	1,128.9	6,460,231.4
REP MTP (Commercial CoolSaver)	226	699,341	509.1	644,644.0	509.1	644,644.0
Advanced Lighting Commercial MTP	149	624,433	306.7	1,710,478.2	306.7	1,710,478.2
Residential and Small Commercial	35,632	52,855,638	46,327.6	87,542,763.9	46,327.6	87,542,763.9
REP MTP (Residential CoolSaver and Efficiency Connection)	1,900	5,900,000	1,088.5	3,388,349.3	1,088.5	3,388,349.3
Residential Load Management Standard Offer Program	17,550	105,300	20,552.0	123,311.7	20,552.0	123,311.7
Residential & Small Commercial Standard Offer Program	660	1,200,000	480.4	1,286,821.8	480.4	1,286,821.8
Smart Thermostat Program	-	4,470,000	-	2,741,600.0	-	2,741,600.0
Advanced Lighting Residential MTP	2,823	11,864,230	5,827.8	32,499,086.5	5,827.8	32,499,086.5
Midstream MTP (HVAC and Pool Pump Distributor)	3,500	9,855,000	3,516.1	10,308,960.8	3,516.1	10,308,960.8
Multi-Family MTP Market Rate	1,199	1,914,570	3,842.7	7,324,459.8	3,842.7	7,324,459.8
CenterPoint Energy High Efficiency Home MTP	8,000	17,500,000	11,020.1	29,870,174.0	11,020.1	29,870,174.0
Smart Home Energy Management System (Pilot)	-	46,538	-		-	-
Hard-to-Reach	5,850	8,912,129	5,853.6	9,787,057.6	5,853.6	9,787,057.6
Hard-to-Reach Standard Offer Program	876	97,700	862.9	1,022,188.5	862.9	1,022,188.5
Multi-Family MTP Hard-to-Reach	597	1,286,082	172.5	990,290.3	172.5	990,290.3
Targeted Low Income MTP (Agencies in Action)	4,377	7,528,347	4,818.3	7,774,578.8	4,818.3	7,774,578.8
TOTAL	161,757	189,481,541	171,187	189,587,894	171,187	189,587,894

Table 9: Projected Savings versus Reported and Verified Savings for 2019 (at Meter)

				2019		
	Project	ed Savings	Verific	ed Savings	Reporte	d / Verified
	kW	kWh	kW	kWh	kW	kWh
Large Commercial	121,581	137,131,254	144,030	126,737,286	144,030	126,737,286
Commercial Standard Offer Program	13,846	79,384,615	8,998	55,504,537	8,998	55,504,537
Commercial MTP (SCORE, Healthcare, Data Center)	7,700	41,800,000	9,670	63,217,039	9,670	63,217,039
Commercial Load Management Standard Offer Program	98,000	590,000	123,670	742,022	123,670	742,022
Retro-Commissioning MTP	1,652	14,000,000	861	4,458,399	861	4,458,399
REP MTP (Commercial CoolSaver)	226	699,341	584	1,467,968	584	1,467,968
Advanced Lighting Commercial MTP	156	657,298	246	1,347,321	246	1,347,321
Residential and Small Commercial	33,053	43,536,833	44,724	79,397,057	44,724	79,397,057
REP MTP (Residential CoolSaver and Efficiency Connection)	2,280	6,910,672	3,509	9,349,133	3,509	9,349,133
Residential Load Management Standard Offer Program	17,550	105,300	17,817	106,905	17,817	106,905
Residential & Small Commercial Standard Offer Program	952	1,740,893	396	1,329,658	396	1,329,658
Smart Thermostat Program	500	2,400,000	-	2,389,960		2,389,960
Advanced Lighting Residential MTP	2,972	12,488,663	4,683	25,599,104	4,683	25,599,104
Midstream MTP (HVAC and Pool Pump Distributor)	1,379	3,790,617	3,471	9,950,514	3,471	9,950,514
Multi-Family MTP Market Rate	1,012	1,100,689	849	2,391,384	849	2,391,384
CenterPoint Energy High Efficiency Home MTP	6,408	15,000,000	13,999	28,280,400	13,999	28,280,400
Hard-to-Reach	4,616	7,562,854	6,075	9,485,530	6,075	9,485,530
Hard-to-Reach Standard Offer Program	1,876	3,668,810	1,357	1,940,952	1,357	1,940,952
Multi-Family MTP Hard-to-Reach	1,168	1,135,539	388	834,145	388	834,145
Targeted Low Income MTP (Agencies in Action)	1,572	2,758,505	4,329	6,710,433	4,329	6,710,433
TOTAL	159,250	188,230,942	194,829	215,619,873	194,829	215,619,873

VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2016 - 2020) broken out by program for each customer class. Administrative costs do not include Evaluation Measurement and Verification (EM&V) or rate case expenses.

Table 10: Historical Program Incentive and Administrative Expenditures (2016 - 2020)¹⁵

Historical Statutory Program Funding by Customer Class	202	0	20	19	201	18	20	17	20	16
rustorical Statutory Program Funding by Customer Class	Incentives	Admin								
Large Commercial	\$15,780,391	\$1,910,090	\$15,567,811	\$1,943,656	\$13,339,628	\$1,825,309	\$13,090,927	\$1,621,148	\$14,984,848	\$1,874,746
Commercial Standard Offer Program	\$5,904,584	\$923,090	\$4,633,580	\$901,274	\$3,353,840	\$897,987	\$4,239,883	\$846,554	\$5,932,906	\$973,862
Retro-Commissioning MTP	\$823,754	\$186,399	\$835,326	\$206,837	\$997,678	\$161,328	\$298,214	\$46,658	\$451,417	\$52,715
Commercial MTP (SCORE, Healthcare, Data Center)	\$5,598,306	\$518,241	\$6,631,359	\$550,456	\$5,474,005	\$469,118	\$5,059,102	\$397,526	\$4,639,648	\$448,834
Commercial Load Management Standard Offer Program	\$3,291,908	\$250,426	\$3,300,000	\$251,352	\$3,346,334	\$264,402	\$3,027,561	\$261,179	\$3,106,220	\$327,570
Sustainable Schools	N/A	N/A	N/A	N/A	N/A	N/A	\$344,898	\$22,450	\$334,782	\$28,914
Advanced Lighting Commercial MTP	\$49,799	\$5,199	\$54,229	\$5,387	\$54,134	\$5,265	\$46,267	\$2,438	N/A	N/A
REP MTP (Commercial CoolSaver)	\$112,041	\$26,734	\$113,317	\$28,350	\$113,636	\$27,209	\$75,000	\$44,342	\$400,300	\$30,474
Pool Pump Program Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$119,576	\$12,377
Residential and Small Commercial	\$11,756,271	\$1,154,513	\$11,336,554	\$1,174,011	\$8,942,381	\$1,082,326	\$10,820,380	\$1,022,888	\$9,832,154	\$1,126,186
CenterPoint Energy High Efficiency Home MTP	\$4,678,666	\$398,218	\$4,531,218	\$404,251	\$3,519,955	\$361,655	\$3,677,205	\$277,696	\$2,636,756	\$339,312
Residential & Small Commercial Standard Offer Program	\$269,497	\$78,462	\$236,247	\$84,224	\$271,258	\$82,472	\$35,832	\$107,863	\$79,596	\$ 31, 7 91
Advanced Lighting Residential MTP	\$946,188	\$98,786	\$1,030,358	\$102,362	\$1,028,549	\$100,040	\$879,069	\$46,330	\$943,324	\$74,665
Multi-Family MTP Market Rate	\$1,083,072	\$100,274	\$524,312	\$90,294	\$405,322	\$80,251	\$443,524	\$95,973	\$462,168	\$28,541
Midstream MTP (HVAC and Pool Pump Distributor)	\$2,596,986	\$186,571	\$2,304,126	\$173,374	\$1,667,306	\$179,571	\$2,827,330	\$193,395	\$2,519,151	\$264,834
Smart Thermostat Program	\$336,000	\$62,636	\$419,235	\$66,684	\$159,256	\$43,485	N/A	N/A	N/A	N/A
Residential Load Management Standard Offer Program	\$835,751	\$101,045	\$833,982	\$108,931	\$838,260	\$100,999	\$778,937	\$72,943	\$542,750	\$52,766
Energy Wise Resource Action MTP	N/A	N/A	N/A	N/A	N/A	N/A	\$499,992	\$31,293	\$502,515	\$103,808
REP MTP (Residential CoolSaver and Efficiency Connection)	\$710,111	\$121,195	\$1,457,075	\$143,891	\$1,052,474	\$133,852	\$1,678,490	\$197,396	\$2,145,893	\$230,470
Smart Home Energy Management System (Pilot)	\$300,000	\$7,327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hard-to-Reach	\$4,605,597	\$476,152	\$4,865,369	\$498,312	\$4,861,962	\$457,654	\$4,265,535	\$477,199	\$4,488,903	\$481,142
Hard-to-Reach Standard Offer Program	\$498,979	\$99,869	\$1,060,339	\$114,277	\$1,075,289	\$109,943	\$320,078	\$129,723	\$245,907	\$111,156
Multi-Family MTP Hard-to-Reach	\$332,249	\$84,773	\$245,422	\$92,884	\$313,017	\$80,245	\$286,980	\$88,796	\$554,407	\$48,936
Targeted Low Income MTP (Agencies in Action)	\$3,774,369	\$291,509	\$3,559,609	\$291,151	\$3,473,656	\$267,466	\$3,658,477	\$258,680	\$3,656,549	\$318,396
REP (Coolsaver Income Qualified)	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0	\$32,040	\$2,655
Research and Development		\$318,228		\$393,134		\$0		\$122,775		\$322,930
TOTAL	\$32,142,258	\$3,858,983	\$31,769,734	\$4,009,113	\$27,143,970	\$3,365,289	\$28,176,842	\$3,244,010	\$29,305,905	\$3,805,004

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¹⁵ 2020 actual spending taken from Table 11 in the current EEPR; 2019, 2018, 2017, and 2016 actual spending from the Errata 2020 EEPR filed in July 2020 under Project 50666.

VIII. Program Funding for Calendar Year 2020

As shown on Table 11, CenterPoint Houston spent a total of \$36,001,242 on energy efficiency programs in 2020. This was less than the budgeted \$37,820,991. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Commercial Standard Offer Program spent an additional 20% in 2020. Following two program years in which spending was less than projected, 2020 proved to be a strong year for program impacts and spending. The Commercial Standard Offer program experienced a solid pipeline of project opportunities in 2020, and the Company worked with program participants to secure these projects and capture cost-effective energy and demand savings. Unspent funding from the Retro Commissioning MTP and the SCORE and DCEEP components of the Commercial MTP were shifted to the Commercial Standard Offer Program.
- The Commercial MTP spent less than expected in HEEP and DCEEP program components, and spending was 24% less than budgeted in 2020. Unspent funding from the Commercial MTP was utilized in the Commercial Standard Offer Program. Hospital participation was negatively impacted as several energy efficiency projects were canceled or postponed due to COVID-19 issues, and data centers experienced shortages of materials due to the pandemic
- The Retro-Commissioning MTP spent 26% less than budgeted in 2020 due to COVID-19 related issues that delayed completion of several projects until 2021. The program did produce an increase in participation, kW reduction, and energy savings from the 2019 program year. Funding not utilized in the Retro-Commissioning Market Transformation Program was shifted to the Commercial Standard Offer Program.
- Residential & Small Commercial Standard Offer Program has seen a decline in spending due to
 more stringent requirements for certain measures such as duct efficiency and weatherization, as
 well as a lack of interest from ceiling insulation contractors. This led to an 16% underrun in
 budget, and the excess funding was moved to other programs.
- The High Efficiency Home MTP spent an additional 25% in 2020 and was able to leverage funds not utilized in other residential programs.

- The Multi-Family HTR MTP spent 24% less than budgeted for 2020 due to a lack of opportunities for multi-family water and space heating and high efficiency new construction projects.
- The Multi-Family Market Rate MTP saw an increase in projects in 2020. Funds from underspent programs were leveraged to support these projects allowing the program to spend an additional 87% over budget plan.
- The Smart Thermostat Program did not experience the increase in participation and spending that
 was expected in 2020, and program spending was 33% under budget. REP participation was
 negatively affected because of COVID-19 issues, and the lack of REP marketing reduced
 customer participation.
- Participation in the REP MTP (Residential Coolsaver and Efficiency Connection) was lower than
 expected in 2020, and spending was 41% less than projected. REP participation was negatively
 affected because of COVID-19 issues, and the lack of REP marketing reduced enrollments and
 customer participation.
- In 2020, the Targeted Low Income MTP (Agencies in Action) spent 17% less than budgeted, but the program saw increases in participation, savings impacts, and spending compared to 2019. The program did spend the required 10% of the Company's energy efficiency budget for 2020.

Table 11: Program Funding for Calendar Year 2020

Program Funding for Calendar Year 2020	Number of Customer Meters	Forecasted Budget	Actuals Funds Expended (Incentives)	Actuals Funds Expended (Admin)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)	Percentage Change From Budgeted/ Actual
Large Commercial	816	\$ 18,916,574	\$ 15,780,391	\$ 1,910,090	\$ 17,690,481	\$ -	\$ (1,226,093)	-6%
Commercial Standard Offer Program	297	\$ 5,703,264	\$ 5,904,584	\$ 923,090	\$ 6,827,674	\$ -	\$ 1,124,410	20%
Commercial MTP (SCORE, Healthcare, Data Center)	144	\$ 8,040,706	\$ 5,598,306	\$ 518,241	\$ 6,116,546	\$ -	\$ (1,924,160)	-24%
Commercial Load Management Standard Offer Program	302	\$ 3,623,112	\$ 3,291,908	\$ 250,426	\$ 3,542,334	\$ -	\$ (80,778)	-2%
Retro-Commissioning MTP	27	\$ 1,358,109	\$ 823,754	\$ 186,399	\$ 1,010,153	\$ -	\$ (347,956)	-26%
REP MTP (Commercial CoolSaver)	46	\$ 134,461	\$ 112,041	\$ 26,734	\$ 138,775	\$ -	\$ 4,315	3%
Advanced Lighting Commercial MTP	N/A	\$ 56,923	\$ 49,799	\$ 5,199	\$ 54,999	\$ -	\$ (1,924)	-3%
Residential and Small Commercial	44,956	\$ 12,331,396	\$11,756,271	\$ 1,154,513	\$ 12,910,784	\$ -	\$ 579,388	5%
CenterPoint Energy High Efficiency Home MTP	12,800	\$ 4,052,706	\$ 4,678,666	\$ 398,218	\$ 5,076,883	\$ -	\$ 1,024,177	25%
Residential & Small Commercial Standard Offer Program	393	\$ 416,023	\$ 269,497	\$ 78,462	\$ 347,959	\$ -	\$ (68,064)	-16%
Advanced Lighting Residential MTP	N/A	\$ 1,081,528	\$ 946,188	\$ 98,786	\$ 1,044,974	\$ -	\$ (36,554)	-3%
Midstream MTP (HVAC and Pool Pump Distributor)	3,492	\$ 2,840,553	\$ 2,596,986	\$ 186,571	\$ 2,783,557	\$ -	\$ (56,996)	-2%
REP MTP (Residential CoolSaver and Efficiency Connection)	2,871	\$ 1,403,812	\$ 710,111	\$ 121,195	\$ 831,306	\$ -	\$ (572,506)	-41%
Residential Load M anagement Standard Offer Program	18,790	\$ 972,800	\$ 835,751	\$ 101,045	\$ 936,795	\$ -	\$ (36,005)	-4%
Multi-Family MTP Market Rate	4,342	\$ 631,142	\$ 1,083,072	\$ 100,274	\$ 1,183,346	\$ -	\$ 552,204	87%
Smart Thermostat Program	2,268	\$ 595,000	\$ 336,000	\$ 62,636	\$ 398,636	\$ -	\$ (196,364)	-33%
Smart Home Energy Management System (Pilot)		\$ 337,832	\$ 300,000	\$ 7,327	\$ 307,327	\$ -	\$ (30,504)	-9%
Hard-to-Reach	5,430	\$ 6,073,021	\$ 4,605,597	\$ 476,152	\$ 5,081,748	\$ -	\$ (991,273)	-16%
Hard-to-Reach Standard Offer Program	477	\$ 627,769	\$ 498,979	\$ 99,869	\$ 598,848	\$ -	\$ (28,920)	-5%
Multi-Family MTP Hard-to-Reach	3,245	\$ 551,903	\$ 332,249	\$ 84,773	\$ 417,022	\$ -	\$ (134,881)	-24%
Targeted Low Income MTP (Agencies in Action)	1,708	\$ 4,893,350	\$ 3,774,369	\$ 291,509	\$ 4,065,878	\$ -	\$ (827,472)	-17%
SUB TOTAL	51,202	\$ 37,320,991	\$ 32,142,258	\$ 3,540,755	\$ 35,683,014	\$ -	\$ (1,637,978)	-4%
Research and Development		\$ 500,000	\$ -	\$ 318,228	\$ 318,228	\$ -	\$ (181,772)	-36%
TOTAL	51,202	\$ 37,820,991	\$ 32,142,258	\$ 3,858,983	\$ 36,001,242	\$ -	\$ (1,819,750)	-5%

IX. Market Transformation Program Results

Commercial MTP

In 2020, CenterPoint Houston projected to acquire 7,100 kW and 40,000,000 kWh savings from the SCORE, HEEP, and DCEEP program offerings included in the Commercial MTP. CenterPoint Houston verified and is reporting a savings of 6,449 kW and 29,989,757 kWh.

SCORE - The SCORE program paid incentives to school districts, colleges/universities, municipal governments, county governments, and faith-based organizations. The program produced savings of 5,224 kW and 20,364,40 kWh reaching a total of 120 customers through 162 projects. Lighting, Chillers, and Roofing represented most of the projects incentivized in 2020.

HEEP - In 2020, HEEP produced a total of 15 projects including LED lighting retrofits, HVAC projects, window installation and food service measures. The program delivered savings of 826 kW and 5,971,385 kWh.

DCEEP - In 2020, DCEEP delivered savings of 398 kW and 3,654,332 kWh through the implementation of seven projects. The program is comprised of new construction and retrofit applications, with incentivized measures including immersion cooling, LED lighting, cooling equipment, and uninterruptable power supply.

Retro-Commissioning MTP

In 2020, CenterPoint Houston projected to acquire 3,100 kW and 10,800,000 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 1,129 kW and 6,460,231 kWh.

High Efficiency Home MTP

In 2020, CenterPoint Houston projected to acquire 8,000 kW and 17,500,000 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 11,020 kW and 29,870,174 kWh. This program drives builders to use energy efficient methods in design and construction for new single-family homes.

Advanced Lighting MTP

In 2020, CenterPoint Houston projected to acquire 2,972 kW and 12,488,663 kWh from this program. CenterPoint Houston verified and is reporting residential savings of 5,828 kW and 32,499,087 kWh, and commercial savings of 307 kW and 1,710,478 kWh.

Mid-Stream MTP

In 2020, the program included twelve HVAC distributors that performed over 3,000 HVAC and heat pump replacements and installed 457 thermostats. Six pool pump distributors participated and performed 910 variable speed pool pump changeouts. CenterPoint Houston projected to acquire 3,500 kW and 9,855,000 kWh from this program, and reporting verified savings of 3,516 kW and 10,308,961 kWh.

Targeted Low-Income MTP (Agencies in Action)

In 2020, the program reached 1,710 homes in the CenterPoint Houston electric territory. Of these homes, 1,427 were multi-family units and 167 were single family homes. Heat pumps were the leading measure installed and made up most of incentives paid. Other measures installed included: air infiltration, attic insulation, central AC, refrigerator replacement, solar screen, wall insulation, and window AC. In 2020, CenterPoint Houston projected to acquire 4,377 kW and 7,528,347 kWh from this program. 2020 verified and reporting savings totaled 4,818 kW and 7,774,579 kWh.

Retail Electric Provider MTP

CoolSaver - The CoolSaver portion of the REP MTP program provided free comprehensive air conditioning tune-ups to residential and small commercial customers in the CenterPoint Houston Electric service territory. The program was marketed by 14 retail electric providers, and tune-ups were performed by eighteen specially trained A/C contractors. As a result, 1,191 residential A/C tune-ups and 461 commercial A/C tune-ups were performed in 2020

Efficiency Connection - In 2020, CenterPoint Houston continued the online Efficiency Connection website to promote and deliver energy efficient LED bulbs at a reduced price. The program was marketed by retail electric providers and yielded more than 58,000 Energy Star certified LED bulbs.

In 2020, the Company projected to capture a combined savings total of 2,126 kw and 6,599,341 kwh for the Residential and Commercial segments of the program. CenterPoint Houston verified and is reporting residential savings of 1,089 kW and 3,388,349 kWh, and commercial savings of 509 kW and 644,644 kWh.

Smart Thermostat Program

In 2020, CenterPoint Houston continued offering incentives for Energy Star Certified Smart Thermostats. Thermostats were made available to customers via an online marketplace and at participating retail stores. Customers were able to receive a cash discount by downloading an electronic coupon code for redemption at the register. In 2020, CenterPoint Houston projected savings of 4,470,000 kWh, and the program yielded savings of 2,741,600 kWh. 2,300 thermostats were incentivized through the 2020 program.

Multi-Family MTP Market Rate & Multi-Family MTP Hard to Reach

Water & Space Heating – The Water & Space Heating portion of the Multi-Family Program promotes the installation of energy efficient non-electric water heating and space heating in housing projects. In 2020, it paid incentives on ten market-rate apartment complexes with a total of 3,372 units in the CenterPoint Houston service area. These projects resulted in verified savings of 3,647 kW and 6,374,094 kWh.

Direct Install - The Direct Install portion of the Multi-Family Program promotes the installation of energy efficient measures at no cost to the developer, property owner, and tenants. In 2020, it paid incentives on nine apartment complexes with a total of 3,245 units in the CenterPoint Houston service area, all classified as Hard-To-Reach. These direct install measures produced verified savings of 173kW and 990,290 kWh.

High Efficiency New Construction - The High Efficiency New Construction program includes both low-and mid-rise projects to expand participation and to incorporate greater flexibility in estimating and documenting above-code energy savings. In 2020, the program incentivized the construction of four market rate properties, with a total of 970 units. These projects produced verified savings of 196 kW and 950,365 kWh.

In 2020, the Company projected to capture Multi-Family MTP savings of 1,199 kW and 1,914,570 kWh for market rate projects. Verified savings for market rate projects totaled 3,843 kW and 7,324,460 kWh.

X. Research and Development Results

Energy Efficiency Database

CenterPoint Houston's updated energy efficiency tracking system went live in 2020, and the Company continued to work with its vendor to configure this tool for each program in its energy efficiency portfolio.

Commercial Smart Thermostat

In 2020, CenterPoint Houston began an R&D initiative to target ENERGY STAR® Smart Thermostat installations in commercial businesses such as convenience stores, strip malls, converted residences, and retail stores. The objective of this initiative is to evaluate the energy savings potential of Smart Thermostats in commercial buildings and pursue a deemed savings methodology that can be included in the Technical Reference Manual. In 2020, participation in this project was very limited (partially due to the onset of the COVID-19 pandemic) but a total of seventeen thermostats were installed at six small commercial sites. The Company plans to continue this R&D initiative in 2021 and capture enough participants to assess the viability of commercial Smart Thermostat savings.

XI. Administrative Funds Expended

In 2020, CenterPoint Houston incurred administrative costs on categories such as continued support of its energy efficiency tracking database, employees' salaries, training, and travel, purchase of supplies, and other activities necessary and appropriate for successful program implementation. These costs meet the definition of administration costs as defined by the energy efficiency rule under 16 TAC § 25.181(g)(1) that states these type of costs "include all reasonable and necessary costs incurred by the utility in carrying out its responsibilities..." The spending in these cost categories is monitored throughout the year and mid-course corrections are made as necessary to ensure the success of our portfolio.

XII. Current Energy Efficiency Cost Recovery Factor (EECRF)

CenterPoint Houston's 2021 EECRF was approved by the Public Utility Commission of Texas in Docket No. 50908 on October 16, 2020 in the amount of \$48,796,013.

"The Commission approves CenterPoint Houston's 2021 EECRF in the amount of \$48,796,013, which is comprised of the following:

- a. CenterPoint Houston's forecasted energy-efficiency program costs of \$38,252,585 in program year 2021;
- b. EM&V expenses of \$541,294 for the evaluation of program year 2020;
- c. an adjustment of \$715,400 for the total over-recovery, including interest, of program year 2019 energy-efficiency costs;
- d. a performance bonus of \$11,435,654;
- e. rate-case expenses in the amounts of \$24,846 incurred by CenterPoint Houston and \$7,033 incurred by Cities in Docket No. 49583; and
- f. an adjustment to lower the EECRF revenue requirement by \$750,000."

XIII. Revenue Collected Through EECRF

In 2020, CenterPoint Houston collected a total of \$34,351,554 in energy efficiency program costs through the EECRF Rider.

XIV. Over or Under-Recovery of Energy Efficiency Program Costs

In Docket No. 49583, the PUCT approved CenterPoint Houston's 2020 EECRF in the amount of \$35,401,638 consisting of:

\$37,820,991	2020 Forecasted Program Costs
\$6,738,428	2018 Bonus
-\$6,101,507	2018 Over-Recovery
\$550,514	2020 Forecasted EM&V Expenses
-\$3,700,000	Adjustment/Lower EECRF Revenue Requirement
\$93,211	2018 EECRF Proceeding Expenses
\$35,401,638	Total EECRF Costs

In 2020, total energy efficiency related costs were \$37,281,888 which include program expenditures of \$36,001,242, EM&V costs of \$550,514, a prior period over-recovery of \$6,101,507, a program year 2018 performance bonus of \$6,738,428, and 2018 EECRF Proceeding expenses of \$93,211. Total revenues collected through the EECRF Rider were \$34,351,554, resulting in overall under-recovery of \$2,930,333.

XV. Under Served Counties

There were no counties within the CenterPoint Houston service territory that were under-served by the Company's energy efficiency programs in 2020. CenterPoint Houston's energy efficiency programs were accessible to all counties within the Company's electric service area. Appendix C lists the counties served by CenterPoint Houston and the amount of savings each county achieved in 2020 through the Company's energy efficiency programs.

Appendix A: Acronyms

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers

CCET Center for the Commercialization of Electric Technologies

CLM Commercial Load Management

DR Demand Response

DSM Demand Side Management

EEA Energy Emergency Alert

EECRF Energy Efficiency Cost Recovery Factor

EEP Energy Efficiency Plan, which was filed as a separate document prior to April 2008

EEPR Energy Efficiency Plan and Report

EER Energy Efficiency Report, which was filed as a separate document prior to April 2008

ERCOT Electric Reliability Council of Texas

HERS Home Energy Ratings

HTR Hard-To-Reach

IECC International Energy Conservation Code

MTP Market Transformation Program

PUCT Public Utility Commission of Texas

RCx Retro-Commissioning

REP Retail Electrical Provider

RES Residential

RESNET Residential Energy Services Network

SCORE Schools Conserving Resources

SOP Standard Offer Program

SHEM Smart Home Energy Management System

Appendix B: Glossary

Please refer to the glossary defined in 16 TAC § 25.181.

Appendix C: Reported Demand and Energy Reduction by County

Programs		COUNTIES											
Programs		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris		Matagorda	Montgomery	Waller	Wharton	Total
Commercial Standard Offer Program	kW kWh	12	244	419	929	95	9,214	0	0	100	93		11,119
Commercial Standard Offer Program		39,976	1,510,588	2,336,079	4,348,500	397,600	42,785,827	0	0	764,014	584,897	88,522	52,856,003
SCORE	kW	1	0	0	773	15	4,408	0	0	0	0	27	5,225
	kWh	5,499	0	0	2,879,511	55,117	17,074,673	0	0	0	0	349,240	20,364,040
Healthcare	kW	0	0	0	37	0	766	0	0	23	0	0	826
	kWh	0	0	0	273,405	0	5,616,219	0	0	81,761	0	0	5,971,385
Data Centers Program	kW	0	0	0	0	0	398	0	0	0	0	0	398
	kWh	0	0	0	0	0	3,654,332	0	0	0	0	0	3,654,332
Commercial Load Management Standard Offer Program	kW	59	3,554	0	7,592	206	85,919	1,086	0	200	878	0	99,493
	kWh	352	21,324	0	45,549	1,234	515,511	6,514	0	1,203	5,271	0	596,959
Retro-Commissioning MTP	kW	0	90	13	0	13	1,013	0	0	0	0	0	1,129
	kWh	0	122,549	35,143	0	66,320	6,236,219	0	0	0	0	0	6,460,231
REP MTP (Commercial CoolSaver)	kW	8	27	0	90	11	311	0	0	58	0	4	509
	kWh	6,704	24,175	0	85,060	9,557	464,148	0	0	51,304	0	3,696	644,644
	kW	0	12	0	38	9	239	0	0	9	0	0	307
Advanced Lighting Commercial MTP	kWh	0	64,292	0	211,705	52,669	1,330,856	0	0	50,956	0	0	1,710,478
	kW	0	561	114	3,870	87	5,548	0	0	632	206	1	11,020
CenterPoint Energy High Efficiency Home MTP	kWh	0	1,672,949	385,881	10,423,192	244,476	14,782,130	0	0	1,798,907	558,114	4,525	29,870,174
Residential & Small Commercial Standard Offer Program	kW	19	16	0	32	15	386	0	0	9	3	0	480
	kWh	38,464	52,956	0	136,891	41,449	973,700	0	0	35,654	7,143	563	1,286,822
Smart Thermostat Program	kW	0	0	0	0	0	0	0	0	0	0	0	0
	kWh	4,768	165,688	14,304	487,528	76,288	1,878,592	1,192	1,192	101,320	8,344	2,384	2,741,600
Advanced Lighting Residential MTP	kW	0	219	0	721	179	4,534	0	0	174	0	0	5,828
	kWh	0	1,221,554	0	4,022,389	1,000,719	25,286,258	0	0	968,166	0	0	32,499,087
Midstream MTP (HVAC and Pool Pump Distributor)	kW	0	246	39	691	55	2,339	0	0	139	7	0	3,516
	kWh	0	659,698	99,655	2,004,207	137,143	6,916,363	0	0	468,826	23,069	0	10,308,961
REP MTP (Residential CoolSaver and Efficiency Connection)	kW	2	51	6	228	11	743	0	0	41	4	1	1,089
	kWh	7,353	165,557	18,038	687,038	43,068	2,316,997	2,500	0	130,628	12,278	4,892	3,388,349
Residential Load Management SOP	kW	19	1,219	141	4,183	212	13,811	7	0	858	96	6	20,552
	kWh	116	7,315	844	25,101	1,270	82,866	42	0	5,149	575	33	123,312
	kW	0	21	0	0	0	3,626	0	0	196	0	0	3,843
Multi-Family MTP Market Rate	kWh	0	81,695	0	0	0	6,566,147	0	0	676,618	0	0	7,324,460
Smart Home Energy Management System (Pilot)	kW	0	0	0	0	0	0	0	0	0	0	0	0
	kWh	0	0	0	0	0	0	0	0	0	0	0	0
	kW	0	2	0	0	0	862	0	0	0	0	0	864
Hard-to-Reach Standard Offer Program		0	2,138	0	0	0	1,020,050	0	0	0	0	0	1,022,189
	kW	0	0	0	0	0	171	0	0	0	0	0	171
Multi-Family MTP Hard-to-Reach		0	0	0	0	0	990,290	0	0	0	0	0	990,290
	kW	0	0	0	32	0	4,786	0	0	0	0	0	4,818
Targeted Low Income MTP (Agencies in Action)		0	0	0	48,254	0	7,726,325		0	0	0	0	7,774,579
Programs - TOTAL	kWh			Service of the servic						Na Page 1	Marie Control		
Total kW Savings		120	6,263	732	19,217	908	139,073	1,093	0	2,440	1,288	52	171,187
Total kWh Savings		103,233	5,772,480		25,678,329	2,126,912					1,199,691		