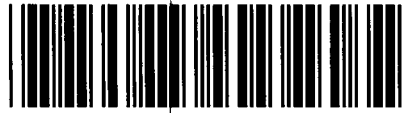




Control Number: 48146



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Addendum StartPage: 0



John R. Durland
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Houston, Texas 77002

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PUBLIC UTILITY COMMISSION
FILING CLERK

June 1, 2018

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

RE: Project No. 48146 – Revision to CenterPoint Energy Houston Electric’s 2018 Energy Plan and Report Pursuant to 16 TAC § 25.181(n)

Dear Ms. Reeves:

On March 30, 2018 CenterPoint Energy Houston Electric (“CEHE”) filed its 2018 Energy Efficiency Plan and Report (“EEPR”). Following the filing, CEHE identified certain minor grammatical errors and other areas in need of correction or clarification. Accordingly, CEHE has revised the document consistent with new EM&V vendor findings and updated the Bonus Calculation inputs to reflect the changes.

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

John R. Durland
Energy Efficiency Compliance Manager
(713) 207-3441

**CenterPoint Energy Houston Electric,
LLC**

2018 Energy Plan and Report

Pursuant to P.U.C. SUBST. R. § 25.181(n)

(Revised)

June 1, 2018

Project No. 48146

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Introduction

CenterPoint Energy Houston Electric, LLC (CenterPoint Houston) presents this Energy Efficiency Plan and Report (EEPR) to comply with Substantive Rules § 25.181 and § 25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 and Substantive Rule § 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 2017, 2018 and 2019 program years.

The format used in the EEPR is consistent with the requirements outlined in § 25.181(n) and the Company's 2017 EEPR filing. The EEPR presents the results of CenterPoint Houston's 2017 energy efficiency programs and describes how the company plans to achieve its goals and meet the requirements set forth in § 25.181. Planning information provided focuses on 2018 and 2019 projected savings and projected budgets, as well as information on programs to be offered, and discusses outreach and 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, sixteen (16) sections, and three (3) appendices. Sections one through four explain the planning section of the EEPR, while sections five through eleven present energy efficiency report information. The final five sections address the Energy Efficiency Cost Recovery Factor (EECRF) and the performance bonus achieved in 2017. 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 Energy Efficiency 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, 2018, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2019. 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 in this EEPR are determined by requirements of Rule § 25.181 and the information gained from prior implementation of the selected programs. Table 1 presents a summary of 2018 and 2019 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 Goals	2018	15,354	0.4% of peak demand	61.42	107,608	161.56	191,297	\$36,436
	2019	15,485	0.4% of peak demand	61.94	108,519	159.25	188,231	\$37,898

¹ Peak Demand figures are from Table 4; Projected 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

³ 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.

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

1. Commercial Standard Offer Program (SOP)
2. Commercial Market Transformation Program
3. Large Commercial Load Management (SOP)
4. Retro-Commissioning MTP (RCx)
5. REP (Commercial CoolSaver)
6. CenterPoint Energy High Efficiency Homes MTP
7. Advanced Lighting MTP
8. Residential A/C and Pool Pump Distributor MTP
9. REP (Residential CoolSaver and Efficiency Connection)
10. Smart Thermostat Program (pilot)
11. Multi-Family Market Rate MTP
12. Residential Demand Response SOP
13. Residential & Small Commercial (SC) SOP
14. Hard-to-Reach SOP
15. Multi-Family MTP HTR
16. Targeted Low Income MTP (Agencies in Action)

Where applicable, program manuals for these programs can be found on CenterPoint Houston's sponsor portal <https://centerpoint.anbetrack.com/>

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 2017 were 60.42 MW in peak demand reduction and 105,856 MWh in energy savings. Actual achieved reductions in 2017 totaled 188.424 MW and 183,438.841 MWh. The total forecasted spending for 2017 was \$36.508 million, actual 2017 spending totaled \$31.42 million.

Energy Efficiency Plan

I. 2018 Programs

A. 2018 Program Portfolio

CenterPoint Houston plans to implement 16 programs in 2018. 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 in order 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: 2018 Energy Efficiency Program Portfolio

Program	Target Market	Application
Large Commercial SOP	Large Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare , Data Center)	Large Commercial	Retrofit; New Construction
Commercial Load Management	Large Commercial	Load Management
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
REP (Commercial CoolSaver)	Large Commercial	Retrofit
REP (Residential CoolSaver & Efficiency Connection)	Residential	Retrofit
Residential Demand Response SOP	Residential	Load Management
CenterPoint Energy High Efficiency Homes MTP	Residential	New Construction
Residential & SC SOP	Residential & Commercial	Retrofit
Advanced Lighting Residential MTP	Residential & Commercial	Retrofit; New Construction
Distributor MTP (Residential Pool Pump & A/C)	Residential & Commercial	Retrofit
Smart Thermostat	Residential	Retrofit; New Construction
Hard-to-Reach SOP	Hard-to-Reach	Retrofit
Multi-Family MTP	Residential	New Construction
HTR Multi-Family MTP	Hard-to-Reach	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 websites⁴: one targeted to the end user and one for project sponsors. The energy efficiency sponsor portal contains requirements for project participation and most of the forms required for project submission. These websites provide project sponsors with program updates and information.

B. Existing Programs

Commercial Standard Offer Program (SOP)

Program Design

The Commercial SOP targets commercial customers by offering incentives paid for a variety of measures installed in new or retrofit applications including: lighting, HVAC, motors, or other custom measures.

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
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conduct 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 energy efficiency website is www.centerpointefficiency.com ; CenterPoint Houston's sponsor portal is <https://centerpoint.anbetrack.com/>

The Commercial Market Transformation Program (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)

SCORE/CitySmart targets public and private K-12 schools, public and private higher education, cities, counties, state governmental agencies, non-profit and faith-based organizations. A third-party program implementer provides technical assistance, engineering analysis, and performance benchmarking to program participants in order to help them make decisions about cost-effective investments. The SCORE Lite portion of the program provides higher incentives to participants that do not require the technical assistance or engineering analysis provided by the implementer.

HEEP provides technical support and incentives for implementing energy efficiency projects to eligible healthcare facilities including hospitals, doctors' offices, clinics, laboratories, medical office buildings (MOB), and assisted living/nursing care facilities.

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 for specialized IT-related equipment such as data storage, web hosting and telecommunications.

Implementation Process

Commercial Market Transformation Program uses third party implementers to help eligible participants identify energy efficiency 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 implement outreach and planning activities
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts workshops as necessary to explain elements of program requirements, incentive information, application and reporting processes.

Large Commercial Load Management SOP (CLM)

Program Design

The CLM program will be available to non-residential distribution, governmental, educational, and non-profit customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an EEA2 event or deems that an EEA2 event is imminent. Incentives will be paid to project sponsors for measured and verified kW reductions based on their average performance over all 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 CLM 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 2 test curtailments lasting 1 to 3 hours; and up to a maximum of 4 unscheduled events based on ERCOT EEA2 events lasting 1 to 4 hours each). A 30-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, project requirements, incentive information, and the application and reporting process
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

Retro-Commissioning MTP (RCx)

Program Design

RCx is an optimization program for existing buildings (50,000 square foot and larger) that identifies no-cost or low-cost measures (up to a 3-year simple payback) the customer can implement to reduce the demand and energy usage in commercial facilities. The program is designed to provide end-users with a free engineering analysis to improve the performance within their facilities that will reduce electric demand and consumption. Facility owners are required to implement all of the identified measures with simple payback of less than 1.5 years or pay towards the cost of the analysis. Customers do not receive capital improvement incentives in this program.

Implementation Process

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

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, project requirements, incentive information, and the application and reporting process

Retail Electric Provider 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 the energy saving measures and services to their customers in the CenterPoint Energy Houston Electric (CEHE) service territory. REPs can participate in any or all 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 – Commercial and Residential

The CoolSaver A/C Tune-up program utilizes specially trained air conditioning contractors to perform comprehensive A/C tune-ups for residential, residential income qualified and commercial customers. The program provides incentives, paid 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's in high use areas and replacing existing incandescent, fluorescent and halogen lamps to increase savings.

Implementation Process

The Retail Electric Provider program work with local 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 implement outreach and planning activities
- REPs market the program to existing customers via e-mail, phone calls, social media and direct mail

Residential Demand Response (SOP)

Program Design

The Residential Demand Response program provides demand reduction during the summer peak period, when ERCOT issues an EEA2 emergency alert. Participants are tested twice during the summer peak period and are 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 31.

Implementation process

The Residential Demand Response program utilizes CenterPoint Houston's internal tracking database to enroll customers who own a Wi-Fi enabled device that can provide curtailment during energy saving events.

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
- CenterPoint Houston works with aggregators / vendors to enroll customers who wish to participate

CenterPoint Energy High Efficiency Home MTP

The High Efficiency Home MTP incentivizes the construction of efficient homes and educates consumers and contractors on energy efficient practices. To qualify for incentives all homes must achieve 10% more kWh savings than the Texas Baseline Reference Home (TBRH). An additional bonus will be offered for those builders who build ENERGY STAR® certified homes. Each home is reviewed for verifiable demand and energy savings.

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach, training and planning activities
- Advertise using a multitude of media, including billboards, radio, TV, point of purchase signage, online and targeted relocation publications, as well as supporting the local home builder association publications

Residential & SC Standard Offer Program (SOP)

Program Design

The Residential SOP targets retrofit measures for residential 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, and ENERGY STAR® windows.

Implementation Process

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

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

Advanced Lighting Residential 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 program 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. 5% of the savings and cost associated with the Advanced Lighting Program 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
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

Distributor MTP

Program design

The A/C and Pool Pump Distributor MTP provides incentives to air conditioning and pool pump distributors who agree to facilitate the installation of high-efficiency pool pumps, air conditioners and heat pumps in existing single-family and multi-family properties.

Implementation process

Any registered A/C distributor 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 implement outreach and planning activities
- Conduct 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 (HTR SOP)

Program Design

Incentives are paid 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 submit an application 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
- 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

Program Design

The Multi-family MTP encompasses two programs; Multi-family Water and Space Heating and Multi-Family New Construction MTP. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in new multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family buildings.

Multi-family HTR MTP

Program Design

The Multi-family HTR MTP encompasses three programs; Multi-family Water and Space Heating, Multi-family New Construction MTP, and Direct Install programs. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family New Construction MTP incentivizes energy efficiency in new multi-family buildings. The Multi-Family Direct Install Program offers property owners and managers a free visual

audit of existing units to see if the property is eligible for energy efficient direct install measures, which may include CFLs / LED lights and water saving measures, but is only available to properties that have tenants whose annual total household income is less than 200% of current federal poverty guidelines. If eligible, these measures will be installed at no cost and include an educational component.

Implementation Process

The Multi-family HTR and Multi-Family MTP programs are implemented by a 3rd party program implementer (Frontier Energy).

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach and planning
- Provide point of purchase materials including yard signs, marketing kits, and brochures to 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 an SIR greater than 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, duct efficiency improvement, 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 \$6,500 is allowed per home.

Implementation Process

CenterPoint Houston contracts with a program implementer (Frontier Energy) that has the responsibility of recruiting and overseeing the participating agencies and ESCOs. A NEAT audit and the SIR score determine which projects are selected for renovation.

Outreach and Research Activities

- Partner with a 3rd party implementer
- Contact non-profit organizations for potential participation

Research and Development (R&D) Projects

In 2018 CenterPoint Houston plans to implement the following R&D projects. Additional projects may be implemented depending on research opportunities and the availability of budgeted R&D funds.

Project Tracking System

The contract for our existing project tracking system, customer portal and energy efficiency database is set to expire in 2018. We will be undertaking an upgrade or a replacement of the system in 2018 through 2019.

Commercial Kitchen Measures

CenterPoint Houston will be conducting research on energy efficiency kitchen measures. Kitchen vent hoods and electric steam tables are examples of measures we expect to research in 2018/2019.

C. New Programs for 2018

Program: Smart thermostat pilot program

Smart thermostats or learning thermostats adjust temperature settings based on occupant behavior. The thermostat recognizes patterns of temperature settings and/or occupancy and adjusts the thermostat slightly to gain efficiencies. We leveraged research that was already being done on determining a savings methodology to develop a potential program for 2018. If successful, this program will become part of the SOP and the REP program offerings.

D. Potential New Programs for 2019

In 2019, we do not expect to add any new programs, however we will explore expanding our upstream and midstream program offerings through our existing distributor program and explore expanding our existing Commercial and Residential MTP program offerings. To reflect changes in our programs, we will continue to modify the titles of the programs.

CenterPoint Energy plans to partner with the City of Houston in program year 2019 to leverage the reach of their Complete Communities initiative to increase participation among low income residents. The program will follow the same guidelines as the existing AIA program, but focus on more cost-effective projects.

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 a customer class by examining historical program results, evaluating economic trends, and considering Substantive Rule § 25.181, which 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	280,030
Residential	1,478,062
Hard to Reach ⁵	686,011

⁵ 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 2016 Annual Social and Economic Supplement, 31.7% 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 686,011. 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 Substantive Rule § 25.181, and because CenterPoint Houston satisfied its goal to meet 30% of its five-year average rate of growth in demand in 2013, its demand goal for 2018 is 0.4% of peak demand. For the purposes of this report, the 2017 demand goal is based on the 5-year average of weather adjusted peak demand for 2012-2016 and the 2018 demand goal is based on the 5-year average of weather adjusted peak demand for 2013-2017. 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 2011-2017 and estimated peak demand for 2018 and 2019. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2018 and 2019. 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 values approved in the latest CenterPoint Energy Houston Electric rate case, Docket 38339.

Table 4: Annual Growth in Demand and Energy Consumption

Calendar Year	Peak Demand (MW)				Energy Consumption (GWh)			
	Total System		Residential & Commercial		Total System		Residential & Commercial	
	Actual ⁶	Weather Adjusted ^{7,8}	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted
2010	16,315	16,341	14,602	14,628	81,142	80,373	80,263	79,494
2011	17,284	16,688	15,321	14,725	84,354	81,635	83,385	80,666
2012	16,614	16,507	14,906	15,013	82,720	83,034	81,790	82,104
2013	17,012	16,925	14,894	14,981	84,431	84,616	83,533	83,718
2014	16,592	17,032	14,692	15,131	86,159	87,044	68,420	69,680
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	N/A ⁹	16,726	N/A	93,856	N/A	72,635	N/A
2019	19,394		16,984		97,175		74,134	

2018 Goals

MW Goal = $15,354 \times 0.4\% = 61.42\text{MW}$

MWh Goal = $61.42\text{MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 107,608\text{MWh}$

2019 Goals

MW Goal = $15,485 \times 0.4\% = 61.94\text{MW}$

MWh Goal = $61.94\text{MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 108,519\text{MWh}$

⁶ 2018 and 2019 Calendar Year "Actual" values are forecasted.

⁷ "Actual Weather Adjusted" Peak Demand is "Actual" Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

⁸ Weather adjustment calculations are based on hourly weather data from NOAA's Quality Controlled Local Climatological Data (QCLCD).

⁹ NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand

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

Program Goals by Customer Class for 2018 and 2019	2018		2019	
	Projected Savings (KW) at Meter	Projected Savings (kWh) at Meter	Projected Savings (kW) at Meter	Projected Savings (kWh) at Meter
Large Commercial	121,975	139,747,016	121,581	137,131,254
Large Commercial SOP	15,000	86,000,000	13,846	79,384,615
Commercial MTP (SCORE, Healthcare, Data Center)	7,000	38,000,000	7,700	41,800,000
Large Commercial Load Management SOP	98,000	590,000	98,000	590,000
Retro-Commissioning MTP	1,652	14,000,000	1,652	14,000,000
REP (Commercial CoolSaver)	181	559,472	226	699,341
Advanced Lighting Commercial	142	597,544	156	657,298
Residential and Small Commercial	35,015	44,351,721	33,053	43,536,833
REP (CoolSaver & Efficiency Connection)	3,344	10,135,652	2,280	6,910,672
Residential Demand Response Program	19,500	117,000	17,550	105,300
CenterPoint Energy High Efficiency Homes MTP	6,230	14,583,333	6,408	15,000,000
Residential & SC SOP	952	1,740,893	952	1,740,893
Advanced Lighting Residential	2,702	11,353,330	2,972	12,488,663
Residential Pool Pump & A/C Distributor MTP	1,379	3,790,617	1,379	3,790,617
Multi-Family MTP	658	1,430,896	1,012	1,100,689
Smart Thermostat Program (Pilot)	250	1,200,000	500	2,400,000
Hard-to-Reach	4,565	7,198,565	4,616	7,562,854
Hard-to-Reach SOP	1,876	3,668,810	1,876	3,668,810
Multi-Family MTP (HTR)	1,519	1,476,201	1,168	1,135,539
Targeted Low Income MTP (Agencies in Action)	1,170	2,053,554	1,572	2,758,505
TOTAL	161,555	191,297,302	159,250	188,230,942

IV. Program Budgets

Table 6 presents proposed budget allocations required to achieve the projected demand and energy savings for calendar years 2018 and 2019. 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 for 2018 and 2019	2018			2019		
	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget
Large Commercial	\$15,750,000	\$1,938,624	\$17,688,624	\$15,780,000	\$1,929,019	\$17,709,019
Large Commercial SOP	\$6,500,000	\$914,243	\$7,414,243	\$6,000,000	\$843,917	\$6,843,917
Commercial MTP (SCORE, Healthcare, Data Center)	\$5,000,000	\$583,823	\$5,583,823	\$5,500,000	\$642,206	\$6,142,206
Large Commercial Load Management SOP	\$3,300,000	\$323,112	\$3,623,112	\$3,300,000	\$323,112	\$3,623,112
Retro-Commissioning MTP	\$800,000	\$105,406	\$905,406	\$800,000	\$105,406	\$905,406
REP (Commercial CoolSaver)	\$100,000	\$7,568	\$107,568	\$125,000	\$9,461	\$134,461
Advanced Lighting Commercial	\$50,000	\$4,471	\$54,471	\$55,000	\$4,918	\$59,918
Residential and Small Commercial	\$11,250,000	\$1,296,170	\$12,546,170	\$11,345,000	\$1,293,271	\$12,638,271
REP (CoolSaver & Efficiency Connection)	\$2,200,000	\$175,682	\$2,375,682	\$1,500,000	\$119,783	\$1,619,783
Residential Demand Response Program	\$900,000	\$72,800	\$972,800	\$900,000	\$72,800	\$972,800
CenterPoint Energy High Efficiency Homes MTP	\$3,500,000	\$440,131	\$3,940,131	\$3,600,000	\$452,706	\$4,052,706
Residential & SC SOP	\$500,000	\$94,319	\$594,319	\$500,000	\$94,319	\$594,319
Advanced Lighting Residential	\$950,000	\$84,955	\$1,034,955	\$1,045,000	\$93,450	\$1,138,450
Residential Pool Pump & A/C Distributor MTP	\$2,300,000	\$313,309	\$2,613,309	\$2,300,000	\$313,309	\$2,613,309
Multi-Family MTP	\$650,000	\$67,474	\$717,474	\$1,000,000	\$51,903	\$1,051,903
Smart Thermostat Program (Pilot)	\$250,000	\$47,500	\$297,500	\$500,000	\$95,000	\$595,000
Hard-to-Reach	\$5,000,000	\$876,040	\$5,876,040	\$6,000,000	\$1,050,315	\$7,050,315
Hard-to-Reach SOP	\$1,000,000	\$255,537	\$1,255,537	\$1,000,000	\$255,537	\$1,255,537
Multi-Family MTP (HTR)	\$650,000	\$67,474	\$717,474	\$500,000	\$51,903	\$551,903
Targeted Low Income MTP (Agencies in Action)	\$3,350,000	\$553,029	\$3,903,029	\$4,500,000	\$742,875	\$5,242,875
SUB TOTAL	\$32,000,000	\$4,110,834	\$36,110,834	\$33,125,000	\$4,272,605	\$37,397,605
R&D	\$0	\$325,000	\$325,000		\$500,000	\$500,000
PROGRAM TOTAL	\$32,000,000	\$4,435,834	\$36,435,834	\$33,125,000	\$4,772,605	\$37,897,605
EM&V			\$1,063,413			\$541,294
EECRF PROGRAM TOTAL			\$37,499,247			\$38,438,899

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 (2013 – 2017). Each value was calculated using the methods outlined in Substantive Rule § 25.181.

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

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)
2017	60.42	105,855.84	188.42	183,438.84
2016	59.40	104,314.00	167.70	190,892.42
2015	58.83	103,069.00	168.49	188,255.21
2014	55.73	97,639.00	159.19	153,170.39
2013	54.85	96,088.00	195.97	160,106.74

VI. Projected Savings, Verified and Reported 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 Energy Efficiency Plan filed in April of 2017. The verified and reported savings are those savings that have been achieved and verified in 2017 calendar year.

Table 8: Projected Savings versus Verified and Reported Savings for 2017 (at Meter)

	2017					
	Projected Savings		Verified Savings		Reported / Verified	
	kW	kWh	kW	kWh	kW	kWh
Large Commercial	123,798	147,112,428	138,822.9	86,424,405.2	138,822.9	86,424,405.2
Large Commercial SOP	16,135	88,316,545	7,339.5	44,918,996.1	7,339.5	44,918,996.1
Commercial MTP (SCORE, Healthcare)	4,378	25,938,380	4,427.3	29,649,147.0	4,427.3	29,649,147.0
Large Commercial Load Management SOP	98,412	590,472	125,559.9	751,942.9	125,559.9	751,942.9
Retro-Commissioning MTP	1,910	14,742,910	171.7	2,111,423.0	171.7	2,111,423.0
Sustainable Schools	667	2,127,636	466.0	3,661,656.0	466.0	3,661,656.0
REP (Commercial CoolSaver)	768	2,377,758	125.1	222,396.0	125.1	222,396.0
Advanced Lighting Commercial	128	537,789	189.3	947,499.2	189.3	947,499.2
Data Centers Program	1,400	12,480,939	544.1	4,161,345.0	544.1	4,161,345.0
Residential and Small Commercial	34,617	42,862,779	44,171.6	89,431,935.7	44,171.6	89,431,935.7
New Homes MTP	6,230	14,583,333	15,707.9	51,344,878.6	15,707.9	51,344,878.6
Residential & SC SOP	952	1,740,893	71.8	134,764.1	71.8	134,764.1
Advanced Lighting Residential	2,432	10,217,997	3,595.8	18,002,484.9	3,595.8	18,002,484.9
Residential & SC A/C Distributor MTP	879	2,138,140	2,937.2	7,700,016.7	2,937.2	7,700,016.7
REP (CoolSaver & Efficiency Connection)	3,299	10,023,497	1,852.5	5,292,181.2	1,852.5	5,292,181.2
Residential Demand Response Program	19,500	117,000	17,192.1	103,152.0	17,192.1	103,152.0
Multi-Family MTP	658	1,430,896	1,615.9	2,794,741.3	1,615.9	2,794,741.3
Smart Pool Program Residential	448	1,526,704	723.5	2,757,329.7	723.5	2,757,329.7
Energy Wise Resource Action MTP	219	1,084,319	475.0	1,302,387.2	475.0	1,302,387.2
Hard-to-Reach	4,611	7,334,895	5,430.4	7,582,499.9	5,430.4	7,582,499.9
Hard-to-Reach SOP Program	1,876	3,668,810	539.6	587,204.4	539.6	587,204.4
Multi-Family MTP (HTR)	1,519	1,476,201	1,035.3	991,265.3	1,035.3	991,265.3
Targeted Low Income MTP (Agencies in Action)	1,170	2,053,554	3,855.5	6,004,030.2	3,855.5	6,004,030.2
REP (CoolSaver Income Qualified)	46	136,330	0.0	0.0	0.0	0.0
TOTAL	163,026	197,310,102	188,424.8	183,438,840.8	188,424.8	183,438,840.8

Table 9: Projected Savings versus Reported and Verified Savings for 2016 (at Meter)

	2016						
	Projected Savings		Verified Savings		Reported / Verified		
	MW	MWh	MW	MWh	MW	MWh	
Large Commercial	116.5	97,955.1	126.0	102,523.5	126.0	102,523.5	
Large Commercial SOP	11.2	65,976.7	9.5	62,265.9	9.5	62,265.9	
Commercial MTP (TX Score & HEEP)	3.9	15,413.1	4.0	22,947.4	4.0	22,947.4	
Large Commercial Load Management SOP	96.9	266.6	109.1	654.7	109.1	654.7	
Retro-Commissioning MTP	1.1	4,050.0	0.5	2,306.2	0.5	2,306.2	
Sustainable Schools	0.6	1,038.9	0.6	2,669.4	0.6	2,669.4	
REP (Commercial CoolSaver)	1.4	1,717.1	1.3	2,875.0	1.3	2,875.0	
Pool Pump Program Commercial	0.4	726.2	0.06	530.1	0.1	530.1	
Data Centers Program	1.0	8,766.5	1.0	8,274.7	1.0	8,274.7	
Residential and Small Commercial	20.1	54,580.6	35.8	80,621.0	35.8	80,621.0	
New Homes MTP	10.5	27,453.3	13.7	42,736.6	13.7	42,736.6	
Residential & SC SOP	0.9	1,809.1	0.1	295.9	0.1	295.9	
Advanced Lighting Residential	1.0	7,132.3	2.6	14,095.8	2.6	14,095.8	
Residential & SC A/C Distributor MTP	1.7	5,452.1	2.3	6,308.9	2.3	6,308.9	
REP (CoolSaver & Efficiency Connection)	1.3	4,028.2	3.8	10,151.8	3.8	10,151.8	
Residential Demand Response Program	2.0	12.0	11.1	66.7	11.1	66.7	
Multi-Family MTP (RES & Energy Star MF Low Rise)	1.2	3,125.8	1.3	4,140.4	1.3	4,140.4	
Smart Pool Program Residential	1.2	3,600.0	0.5	1,824.0	0.5	1,824.0	
Energy Wise Resource Action MTP	0.4	1,967.9	0.3	1,001.0	0.3	1,001.0	
Hard-to-Reach	4.6	8,181.3	5.85	7,712.4	5.8	7,712.4	
Hard-to-Reach SOP Program	1.3	2,353.6	0.3	629.0	0.3	629.0	
Multi-Family MTP (HTR)	1.2	3,125.8	2.3	2,669.9	2.3	2,669.9	
Targeted Low Income MTP (Agencies in Action)	2.2	2,701.9	3.1	4,251.4	3.1	4,251.4	
REP (CoolSaver Income Qualified)	0.0	0.0	0.1	162.0	0.1	162.0	
TOTAL	141.2	160,716.9	167.7	190,857	167.7	190,856.8	

VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2013 – 2017) broken out by program for each customer class. Administrative costs do not include EM&V or rate case cost.

Table 10: Historical Program Incentive and Administrative Expenditures (2013 – 2017)¹⁰

Historical Statutory Program Funding by Customer Class	2017		2016		2015		2014		2013	
	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
Large Commercial	\$13,090,927	\$1,621,148	\$14,984,848	\$1,874,746	\$15,297,984	\$1,808,656	\$14,527,295	\$2,146,049	\$17,014,058	\$1,818,911
Large Commercial SOP	\$4,239,883	\$846,554	\$5,932,906	\$973,862	\$6,283,259	\$795,079	\$6,335,962	\$1,087,653	\$6,597,644	\$954,748
Retro-Commissioning MTP	\$298,214	\$46,658	\$451,417	\$52,715	\$464,977	\$48,338	\$260,367	\$43,365	\$924,415	\$98,467
Commercial MTP (SCORE, Healthcare)	\$4,229,468	\$304,518	\$3,641,919	\$366,294	\$3,216,713	\$386,926	\$3,015,795	\$400,337	\$2,933,764	\$230,852
Large Commercial Load Management SOP	\$3,027,561	\$261,179	\$3,106,220	\$327,570	\$3,244,409	\$346,571	\$3,506,366	\$396,980	\$5,221,196	\$350,800
Sustainable Schools	\$344,898	\$22,450	\$334,782	\$28,914	\$357,537	\$49,264	\$319,547	\$55,048	\$209,070	\$31,015
Advanced Lighting Commercial	\$46,267	\$2,438	N/A	N/A	N/A	N/A	\$601,336	\$108,094	\$632,539	\$111,449
REP (Commercial CoolSaver)	\$75,000	\$44,342	\$400,300	\$30,474	\$397,350	\$45,679	\$487,922	\$54,572	\$495,429	\$41,581
Pool Pump Program Commercial	N/A	N/A	\$119,576	\$12,377	\$100,247	\$11,489	N/A	N/A	N/A	N/A
Data Centers Program	\$829,634	\$93,008	\$997,729	\$82,540	\$1,233,493	\$125,310	N/A	N/A	N/A	N/A
Residential and Small Commercial	\$10,820,380	\$1,022,888	\$9,832,154	\$1,126,186	\$11,659,302	\$1,308,234	\$10,275,021	\$1,224,176	\$9,173,682	\$960,688
New Homes MTP	\$3,677,205	\$277,696	\$2,636,756	\$339,312	\$3,892,457	\$399,031	\$4,064,036	\$466,162	\$3,474,935	\$318,973
Residential & SC SOP	\$35,832	\$107,863	\$79,596	\$31,791	\$300,720	\$61,320	\$254,477	\$41,964	\$387,886	\$70,664
Advanced Lighting Residential	\$879,069	\$46,330	\$943,324	\$74,665	\$843,658	\$108,397	\$772,649	\$81,713	\$440,152	\$37,808
Multi-Family MTP	\$443,524	\$95,973	\$462,168	\$28,541	\$506,714	\$48,463	\$472,690	\$70,662	\$252,600	\$46,153
Residential & SC A/C Distributor MTP	\$2,144,829	\$168,246	\$1,968,257	\$201,245	\$2,173,535	\$210,007	\$1,906,639	\$228,715	\$1,548,290	\$171,697
Smart Pool Program Residential	\$682,501	\$25,149	\$550,894	\$63,589	\$582,718	\$87,710	\$83,400	\$13,668	N/A	N/A
Energy Wise Resource Action MTP	\$499,992	\$31,293	\$502,515	\$103,808	\$657,801	\$89,390	\$666,317	\$78,607	\$749,997	\$47,823
REP (CoolSaver, Eff. Connection & Demand Response)	\$2,457,428	\$270,339	\$2,688,643	\$283,236	\$2,701,700	\$303,916	\$1,951,523	\$218,283	\$1,568,860	\$131,673
Home Performance with ENERGY STAR®	N/A	N/A	N/A	N/A	N/A	N/A	\$103,250	\$24,402	\$750,962	\$135,897
Community Weatherization (RES)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of Houston Weatherization (RES)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hard-to-Reach	\$4,265,535	\$477,199	\$4,488,903	\$481,142	\$4,844,189	\$521,843	\$6,386,605	\$770,007	\$7,492,187	\$627,394
Hard-To-Reach SOP	\$320,078	\$129,723	\$245,907	\$111,156	\$971,292	\$160,463	\$606,341	\$118,105	\$933,114	\$173,248
Multi-Family MTP (HTR)	\$286,980	\$88,796	\$554,407	\$48,936	\$447,330	\$49,039	\$279,358	\$39,808	\$50,400	\$9,435
Res HTR - Afford. Home	N/A	N/A	N/A	N/A	\$3,529	\$312	\$20,295	\$3,591	\$62,400	\$13,040
Targeted Low Income MTP (Agencies in Action)	\$3,658,477	\$258,680	\$3,656,549	\$318,396	\$3,360,588	\$303,786	\$5,480,611	\$608,503	\$6,446,273	\$431,671
TDHCA Low-Income Weatherization (SB-712)										
Rebuilding Together Houston	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Community Weatherization (HTR)										
City of Houston Weatherization (HTR)										
REP (CoolSaver Income Qualified)	\$0	\$0	\$32,040	\$2,655	\$61,450	\$8,243	N/A	N/A	N/A	N/A
R&D		\$122,775		\$322,930		\$392,784	\$0	\$435,563	\$0	\$1,196,274
TOTAL	\$28,176,841.77	\$3,244,010.23	\$29,305,905	\$3,805,004	\$31,801,475	\$4,031,517	\$31,188,921	\$4,575,795	\$33,679,927	\$4,603,267

¹⁰ 2017 actual spending taken from Table 11 in the current EEPR; 2016, 2015, 2014, and 2013 actual spending from the 2017 EEPR filed under Project 46907.

VIII. Program Funding for Calendar Year 2017

As shown on Table 11, CenterPoint Houston spent a total of \$31,420,852 on energy efficiency programs in 2017. This was less than the budgeted \$36,508,012. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Commercial Standard Offer Program was 34% underspent. We believe weather and the elimination of “plug and play” lighting eligibility were contributing factors to lower participation in 2017.
- The Commercial MTP was able to allocate some of the unspent CSOP funding program to schools participating in SCORE
- The Retro-Commissioning Market Transformation program was not fully subscribed in 2017 and several projects were either partially funded or moved to 2018 therefore it was 67% underrun.
- The Commercial CoolSaver program was under spent by 74%. CenterPoint Houston is working with REPs and the implementer to lower barriers to entry to this program.
- The Residential CoolSaver program was underspent by 21% due to lower participation.
- The Data Centers Program was 14% under spent in 2017. Projects that we anticipated capturing in 2017 were moved to 2018 program year.
- Residential Standard Offer Program has seen a decline in spending due to certain measures having stricter requirements such as HVAC measures, this lead to an 76% underrun in budget. The excess money was moved to other programs.
- Residential Hard to Reach (SOP) has seen a decline in spending due to certain measures having stricter requirements such as HVAC measures, this lead to a 64% underrun in budget.
- The A/C Distributor Program spent an additional 18%. The program was allocated additional funds from programs that were underspent.
- The Residential Demand Response portion of the REP program was underspent by 12%. We are optimistic that this program will succeed as thermostats with Wi-Fi capability are becoming widely adopted.

- The Multi-Family MTP spending was lower by 25% due to delays in construction projects for both market-rate and hard-to-reach. HTR was underspent by 48%.
- The HTR REP CoolSaver program was eliminated due to cost effectiveness.
- The residential pool pump program was more successful than anticipated and was oversubscribed by 33%

Table 11: Program Funding for Calendar Year 2017

Program Funding for Calendar Year 2017	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	311	\$ 17,835,763	\$ 13,090,927	\$ 1,621,148	\$ 14,712,075	\$ -	\$ (3,123,688)	82%
Large Commercial SOP	123	\$ 7,661,251	\$ 4,239,883	\$ 846,554	\$ 5,086,438	\$ -	\$ (2,574,813)	66%
Commercial MTP (SCORE, Healthcare)	73	\$ 3,826,674	\$ 4,229,468	\$ 304,518	\$ 4,533,986	\$ -	\$ 707,312	118%
Large Commercial Load Management SOP	74	\$ 3,317,539	\$ 3,027,561	\$ 261,179	\$ 3,288,740	\$ -	\$ (28,799)	99%
Retro-Commissioning MTP	4	\$ 1,044,774	\$ 298,214	\$ 46,658	\$ 344,872	\$ -	\$ (699,902)	33%
Sustainable Schools	N/A	\$ 406,462	\$ 344,898	\$ 22,450	\$ 367,349	\$ -	\$ (39,113)	90%
REP (Commercial CoolSaver)	32	\$ 456,611	\$ 75,000	\$ 44,342	\$ 119,342	\$ -	\$ (337,269)	26%
Advanced Lighting Commercial	N/A	\$ 48,955	\$ 46,267	\$ 2,438	\$ 48,705	\$ -	\$ (250)	99%
Data Centers Program	5	\$ 1,073,497	\$ 829,634	\$ 93,008	\$ 922,643	\$ -	\$ (150,855)	86%
Residential and Small Commercial	51,106	\$ 12,561,036	\$ 10,820,380	\$ 1,022,888	\$ 11,843,268	\$ -	\$ (717,769)	94%
New Homes MTP	12,606	\$ 3,932,540	\$ 3,677,205	\$ 277,696	\$ 3,954,901	\$ -	\$ 22,362	101%
Residential & SC SOP	164	\$ 592,692	\$ 35,832	\$ 107,863	\$ 143,695	\$ -	\$ (448,997)	24%
Advanced Lighting Residential	N/A	\$ 930,141	\$ 879,069	\$ 46,330	\$ 925,398	\$ -	\$ (4,743)	99%
Residential & SC A/C Distributor MTP	2,405	\$ 1,959,410	\$ 2,144,829	\$ 168,246	\$ 2,313,075	\$ -	\$ 353,665	118%
REP (CoolSaver & Efficiency Connection)	6,402	\$ 2,372,652	\$ 1,678,490	\$ 197,396	\$ 1,875,886	\$ -	\$ (496,766)	79%
Residential Demand Response Program	13,856	\$ 971,544	\$ 778,937	\$ 72,943	\$ 851,881	\$ -	\$ (119,664)	88%
Multi-Family MTP	1,609	\$ 716,311	\$ 443,524	\$ 95,973	\$ 539,497	\$ -	\$ (176,814)	75%
Smart Pool Program Residential	784	\$ 533,235	\$ 682,501	\$ 25,149	\$ 707,650	\$ -	\$ 174,414	133%
Energy Wise Resource Action MTP	13,280	\$ 552,512	\$ 499,992	\$ 31,293	\$ 531,285	\$ -	\$ (21,227)	96%
Hard-to-Reach	3,255	\$ 5,861,212	\$ 4,265,535	\$ 477,199	\$ 4,742,734	\$ -	\$ (1,118,479)	81%
Hard-to-Reach SOP Program	406	\$ 1,251,130	\$ 320,078	\$ 129,723	\$ 449,801	\$ -	\$ (801,329)	36.0%
Multi-Family MTP (HTR)	882	\$ 716,311	\$ 286,980	\$ 88,796	\$ 375,776	\$ -	\$ (340,534)	52%
Targeted Low Income MTP (Agencies in Action)	1,966	\$ 3,837,178	\$ 3,658,477	\$ 258,680	\$ 3,917,157	\$ -	\$ 79,979	102%
REP (CoolSaver Income Qualified)	1	\$ 56,594	\$ -	\$ -	\$ -	\$ -	\$ (56,594)	0%
SUB TOTAL	54,672	\$ 36,258,012	\$ 28,176,842	\$ 3,121,235	\$ 31,298,077	\$ -	\$ (4,959,935)	86%
R&D		\$ 250,000	\$ -	\$ 122,775	\$ 122,775	\$ -	\$ (127,225)	N/A
TOTAL	54,672	\$ 36,508,012	\$ 28,176,842	\$ 3,244,010	\$ 31,420,852	\$ -	\$ (5,087,160)	86%

IX. Market Transformation Program Results

The Commercial MTP

The Commercial MTP

SCORE/HEEP

In 2017, CenterPoint Houston projected to acquire 4,378 kW and 25,938,380 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 4,443 kW and 29,783,612 kWh.

The program paid incentives to school districts, colleges/universities, municipal governments, county governments, faith-based organizations, hospitals, clinics, outpatient surgery centers, and medical office buildings reaching a total of 73 customers. Lighting and HVAC measures represented most of the projects that were incentivized in 2017.

SCORE Lite program participation and impacts continue to grow as customers and contractors become better equipped to be self-directed in the program. CenterPoint Houston and the program implementer will continue to promote greater self-reliance for SCORE Lite participants. The program will also focus additional outreach efforts to customer segments that have not participated as heavily in the SCORE/CitySmart program, namely local governments, faith-based organizations, and non-profits.

Retro-Commissioning MTP (RCx)

In 2017, CenterPoint Houston projected to acquire 1,910 kW and 14,742,910 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 172 kW and 2,111,423 kWh.

Sustainable Schools Program (SSP)

In 2017, CenterPoint Houston projected to acquire 667 kW and 2,127,636 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 466 kW and 3,661,656 kWh. The Sustainable Schools Program was eliminated as a standalone program for 2018.

Data Centers MTP

In 2017, CenterPoint Houston projected to acquire 1,400 kW and 12,480,939 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 544 kW and 4,161,345 kWh.

New Homes MTP

In 2017, CenterPoint Houston projected to acquire 6,230 kW and 14,583,333 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 15,708 kW and 51,344,879 kWh. This program drives builders to use energy efficient methods in design and construction.

Advanced Lighting Residential MTP

In 2017, CenterPoint Houston projected to acquire 2,432 kW and 10,217,997 kWh from this program. CenterPoint Houston verified and is reporting a savings of 3,596 kW and 18,002,485 kWh.

A/C Distributor MTP

In 2017, the program had 8 distributors that preformed over 2,800 HVAC and heat pump change outs. Incentives were increased to encourage sales of 17 SEER and higher, and incentives were reduced for the 16 SEER. CenterPoint Houston verified and is reporting a savings of 2,937 kW and 7,700,017 kWh.

Smart Pool Program - Residential MTP

In 2017, CenterPoint Houston projected to acquire 448 kW and 1,526,704 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 723 kW and 2,757,330 kWh.

Energy Wise Resource Action MTP

The Energy Wise program uses kits to teach school children about energy efficiency. The education and kits are believed to have a lasting impact. This program provided 475 kW and 1,302,387 kWh. Due to the decreasing savings and lower avoided cost, this program is not included in the 2018 plan.

Targeted Low-Income MTP (Agencies in Action)

In 2017, the program reached 1,966 homes in the CenterPoint Houston electric territory. Of these homes, 1,840 were multi-family units and 126 were single family homes. Heat pumps were the leading measure installed and made up most of incentives paid. Other measures installed include: air infiltration, attic insulation, central AC, refrigerator replacement, solar screen, wall insulation, and window AC.

Retail Electric Provider Market Transformation Program

CoolSaver - The CoolSaver portion of the REP MTP program provided free comprehensive air conditioning tune-ups to residential, small commercial and income qualified residential customers in the CenterPoint Houston service territory. The program was marketed by seventeen (17) participating REPs. The tune-ups were performed by thirty-one (31) specially trained A/C contractor companies. Participating REPs included: Ambit Energy, Amigo Energy, Bounce Energy, Brilliant Energy, Champion Energy Services, Direct Energy, Entrust Energy, Frontier Utilities, Gexa Energy, Hudson Energy, Infinite Energy, Just Energy, Spark Energy, Star Tex Power, Tara Energy, TriEagle Energy and Veteran Energy. As a result, 3,640 residential A/C tune-ups and 250 commercial A/C tune-ups were performed in 2017.

Efficiency Connection - In 2017, 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 twelve (12) participating REPs and yielded 58,191 Energy Star rated LED bulbs. Participating Retail Electric Providers included: Amigo Energy, Bounce Energy, Champion Energy Services, Direct Energy, First Choice Power, Infinite Energy, Just Energy, Reliant Energy, Spark Energy, Star Tex Power, Tara Energy, and TriEagle Energy.

Residential Demand Response - During the summer peak period of 2017, two, three-hour demand response test events were initiated by CenterPoint Houston Distribution Dispatch personnel. Six (6) company Sponsors, including Energy Hub, Whisker Labs, Comcast, Reliant Energy, Eco Factor, and Ecobee, took part in the Residential Demand Response program enrolling a total of 13,947 customers with Wi-Fi enabled programmable thermostats in their home to participate.

Multi-Family MTP Program & Multi-Family HTR MTP Program

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 2017, it

paid incentives on five apartment complexes with a total of 1,337 units in the CenterPoint Houston service area. Of these units, 200 were classified as Hard-To-Reach and 1,137 were classified as Market Rate.

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 2017, it paid incentives on ten apartment complexes with a total of 682 units in the CenterPoint Houston service area, all classified as Hard-To-Reach.

High Efficiency New Construction - The High Efficiency New Construction program expands the participation to include both low-and mid-rise projects, and to incorporate greater flexibility in estimating and documenting above-code energy savings via additional RESNET accredited energy modeling software tools, and tools that can perform hourly analyses. It incentivized the construction of four market rate properties, with a total of 472 units. Two of these four properties also participated in the Water & Space Heating Program, providing additional savings to customers.

To plan more effectively for the Multi-family portfolio, developers, architects and builders were invited to attend a Market Transformation 2017 Program kickoff meeting that included information on the Multi-Family Water & Space Heating, Multi-Family Direct Install, and Multi-Family High Efficiency New Construction programs.

Interest in these programs continues to be favorable. A 2018 Program kickoff meeting was held in January to prepare for the several prospective projects. The 2018 Program will largely represent a continuation of the existing Multi-Family Water & Space Heating, Direct Install, and High Efficiency New Construction program elements.

X. Research and Development Results

In 2017, CenterPoint Houston implemented the following R&D projects to help meet its energy efficiency goals.:

Program: Water Energy Nexus

CenterPoint Houston partnered with Aqueous, a water conservation organization to find potential energy efficiency opportunities in the 2017 statewide water plan. The project analyzed the potential of various large projects that could impact our SOP or MTP programs if implemented.

Program: Smart thermostat

CenterPoint Houston leveraged an external vendor and existing efforts to develop a program plan for a Smart Thermostat Pilot in 2018.

Program: CenterPoint Portfolio Planning and Analysis

CenterPoint Houston performed a deep dive analysis of its portfolio structure, the results of which have been used to reduce barriers to entry for participants. Our program offerings menu has been consolidated from 23 to 15 program offerings, however our program measures remain broad and allow for clearer participation channels for our vendors and participants.

Program: Power Across Texas

The Power Across Texas (PAT) launched a separate and independent initiative in 2017: the Texas Energy Poverty Research Institute (TEPRI). Its mission is to acquire and share actionable data that helps meet the needs of the energy poor in Texas. CenterPoint Houston funds Texas Energy Poverty Research Institute's work to access the poverty and energy nexus and how to bring more cost-effective programs to that group of customers.

XI. Administrative Funds Expended

In 2017, CenterPoint Houston incurred administrative costs on categories such as continued development of its energy efficiency tracking database (eTrack), 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 Substantive Rule 25.181(i)(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 the portfolio.

XII. Current Energy Efficiency Cost Recovery Factor (EECRF)

CenterPoint Houston's 2018 EECRF was approved by the Public Utility Commission of Texas in Docket No. 47232 on November 2, 2017 for the amount of \$46,321,856.

"CenterPoint Houston's 2018 EECRF is approved in the amount of \$46,321,856 through its 2018 EECRF, which is composed of: (a) estimated 2018 energy-efficiency program costs of \$36,435,834; (b) a performance bonus for 2016 program achievements of \$11,035,335; (c) \$73,821 in 2016 EECRF rate-case expenses; (d) \$1,063,413 in EM&V costs for 2017 and 2018; (e) a credit of \$2,210,578 for the over-recovery of 2016 program costs; and (f) an additional reduction of \$75,969 to CenterPoint Houston's original request through its September 15, 2017, errata"

XIII. Revenue Collected Through EECRF

In 2017, CenterPoint Houston collected a total of \$46,110,757 in energy efficiency program costs through the EECRF Rider.

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

In Docket No. 46014, the PUC approved energy efficiency costs to be recovered in 2017 of \$45,492,241 consisting of:

\$36,508,012	2017 Forecasted Program Costs
\$10,608,015	2015 Bonus
-\$ 1,328,468	2015 Over-Recovery
\$0	2017 Forecasted EM&V Expenses
-\$ 67,000	2015 Historical Admin Adjustment
-264,197	2016 Over-recovery Docket 42359
<u>\$ 35,879</u>	2015 Rate Case Expense
\$ 45,492,241	Total EECRF Costs

In 2017, actual program costs were \$31,420,852 and actual EM&V costs were \$531,335 and total energy efficiency related costs were \$40,936,416. Total revenues collected through the EECRF Rider were \$46,110,757, resulting in overall over-recovery of \$5,174,341. EM&V costs were not recovered in 2017 and are part of the 2018 EECRF.

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 2017. 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 experienced in 2017 through the company's energy efficiency programs.

XVI. Performance Bonus Calculation

In 2017, CenterPoint Houston's total spending on the implementation of Energy Efficiency Programs was \$31,420,852. Per Substantive Rule § 25.181, the calculation of performance bonus is 10% of Net Benefits. Therefore, CenterPoint Houston will request a performance bonus of \$9,491,299 as part of the 2018 EECRF filing.

Table 12 shows the performance bonus calculation for CenterPoint Houston for 2017

		kW	kWh
2017 Program Goals		60,420	105,855,840
2017 Program Savings		188,425	183,438,841
	<i>Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs < or > 10 years)</i>	188,425	183,438,841
	<i>Reported/Verified Hard-to-Reach</i>	5,430	7,582,500
Avoided Cost			
	<i>per kW</i>		\$80
	<i>per kWh</i>		\$0.03989
	<i>Inflation Rate</i>		2.0%
	<i>Discount Rate</i>		8.21%
Total Avoided Cost¹¹		\$	126,525,075
2017 Program Costs¹²		\$	31,612,083
Net Benefits = Total Avoided Cost - Total Program Cost			
Net Benefits		\$	94,912,992
Bonus Based on 10% Net Benefits		\$	9,491,299

¹¹Complete avoided cost savings table will be provided in the June 1 filing of the EECRF.

¹² Total Program Costs is inclusive of 2017 total spending for implementation of Energy Efficiency Programs, 2017 EM&V Expenses, and 2017 Rate Case Expenses.

Appendix A: Acronyms

CCET	Center for the Commercialization of Electric Technologies
CLM	Commercial Load Management
DR	Demand Response
DSM	Demand Side Management
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
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
SSP	Sustainable Schools Program

Appendix B: Glossary

Please refer to the glossary defined in Substantive Rule § 25.181.

Appendix C
CenterPoint Energy Houston Electric, LLC Efficiency Programs
Energy Efficiency Programs
2017 Demand (kW) and Energy (kWh) Savings at Meter By County

Programs		C O U N T I E S											Total
		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	
Large Commercial SOP	kW		128.2	531.7	814.9	113.8	5,664.1			22.4		64.3	7,339.5
	kWh		804,854.0	2,417,459.0	5,318,028.0	752,072.0	35,127,422.1			95,424.0		403,737.0	44,918,996.1
Commercial MTP - Score	kW	57.5	444.6		394.8	232.9	2,707.4			3.2		37.8	3,878.2
	kWh	97,047.0	2,360,387.0		1,721,132.0	1,220,619.0	17,332,496.0			21,358.0		242,957.0	22,995,996.0
Commercial MTP - Healthcare	kW						549.2						549.2
	kWh						6,653,151.0						6,653,151.0
Large Commercial Load Management SOP	kW		4,148.2	927.5	4,700.7	599.2	114,889.2			140.9	154.1		125,559.9
	kWh		24,889.2	5,565.0	28,204.4	3,595.2	687,919.1			845.4	924.6		751,942.9
Retro-Commissioning MTP	kW				16.5		155.2						171.7
	kWh				462,665.0		1,648,758.0						2,111,423.0
REP (Commercial Coolsaver)	kW		1.4		78.6		45.1						125.1
	kWh		2,892.0		136,114.0		83,390.0						222,396.0
Sustainable Schools	kW						466.0						466.0
	kWh						3,661,656.0						3,661,656.0
Advanced Lighting Commercial	kW		9.3		29.9	11.4	132.7			6.0			189.3
	kWh		46,667.1		149,672.5	56,897.8	664,101.3			30,160.5			947,499.2
Data Centers Program	kW						544.1						544.1
	kWh						4,161,345.0						4,161,345.0
New Homes MTP	kW		1,066.1	147.7	5,244.1	142.3	8,354.7			732.5	20.5		15,707.9
	kWh		3,527,860.0	515,312.5	16,729,222.7	491,152.3	27,615,929.8			2,399,275.7	66,125.7		51,344,878.6
Residential & SC SOP	kW	2.1	1.7	0.3	11.2	4.2	50.9			1.1		0.4	71.8
	kWh	5,196.0	4,492.0	521.4	20,588.1	11,604.2	90,063.4			1,744.2		555.0	134,764.1
Advanced Lighting Residential	kW		177.1		567.3	216.2	2,520.7			114.4			3,595.8
	kWh		886,674.1		2,843,778.0	1,081,057.7	12,617,925.4			573,049.7			18,002,484.9
Residential & SC A/C Distributor MTP	kW	1.8	185.5	9.0	719.2	30.9	1,915.1			66.7	9.0		2,937.2
	kWh	5,317.4	477,154.6	24,529.0	1,889,245.9	79,811.0	5,019,462.1			179,853.1	24,643.7		7,700,016.7
REP (Residential Coolsaver)	kW	1.5	82.3	4.6	394.6	24.1	1,047.7			66.1	3.2	0.8	1,624.9
	kWh	3,720.0	209,161.0	11,766.0	1,005,210.0	63,050.0	2,664,695.0			168,765.0	8,184.0	2,106.0	4,136,657.0
REP (Efficiency Connection)	kW	0.3	10.6	0.6	28.5	4.7	170.9	0.2	0.0	9.6	1.3	0.6	227.5
	kWh	1,625.8	53,818.6	3,182.8	145,011.2	24,034.4	868,343.6	809.2	89.9	48,637.0	6,671.5	3,300.2	1,155,524.2
Residential Demand Response Program	kW	9.4	1,248.8	172.3	2,985.1	253.2	11,656.7	0.0		836.8	28.1	1.7	17,192.1
	kWh	56.4	7,492.9	1,033.5	17,910.5	1,518.9	69,940.1	-0.1		5,020.9	168.8	10.1	103,152.0
Multi-Family High Efficiency New Construction	kW				28.5		116.0			88.7			233.3
	kWh				48,387.8		530,999.1			268,644.0			848,030.9
Multi-Family Water & Space Heating MTP (RES)	kW				149.4		1,182.9			50.3			1,382.6
	kWh				361,424.7		1,463,610.5			121,675.2			1,946,710.4
Smart Pool Program Residential	kW	0.6	24.4	4.8	100.1	7.2	520.2			64.6	1.6		723.5
	kWh	2,470.2	78,142.8	16,808.6	412,569.0	26,961.7	1,966,166.7			247,759.0	6,451.7		2,757,329.7
Energy Wise Resource Action MTP	kW		94.0		134.2	67.1	179.7						475.0
	kWh		130,227.7		290,432.6	79,974.9	801,752.1						1,302,387.2
Hard-to-Reach SOP Program	kW				45.9		486.7				2.1	4.8	539.6
	kWh				58,430.2		522,539.3				1,909.2	4,325.7	587,204.4
Multi-Family Water & Space Heating MTP (HTR)	kW		238.4				755.0						993.4
	kWh		201,476.2				638,007.8						839,484.0
Multi-Family Direct Install	kW				0.3		20.8						21.1
	kWh				2,069.4		101,282.2						103,351.6
Multi-Family High Efficiency New Construction (HTR)	kW						20.8						20.8
	kWh						48,429.7						48,429.7
Targeted Low Income MTP (Agencies in Action)	kW		0.4		14.1		3,841.0						3,855.5
	kWh		545.1		18,987.9		5,984,497.2						6,004,030.2
REP (Coolsaver Income Qualified)	kW				1.2								
	kWh				2,958.0								
Programs - TOTAL													
Total kW Savings		73.3	7,861.0	1,798.5	16,458.0	1,707.2	157,992.9	0.1	0.0	2,203.3	220.0	110.4	188,424.8
Total kWh Savings		115,433	8,816,734	2,996,178	31,659,084	3,892,349	131,023,882	809	90	4,162,212	115,079	656,991	183,438,841