# CenterPoint Energy Houston Electric, LLC

# **2017 Energy Plan and Report**

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

March 31, 2017

Project No. 46907

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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 2016, 2017 and 2018 program years.

The format used in the EEPR is consistent with the requirements outlined in § 25.181(n) and the Company's 2016 EEPR filing. The EEPR presents the results of CenterPoint Houston's 2016 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 2017 and 2018 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 sections, and three 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 2016. 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, 2017, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2018. 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 2017 and 2018 goals, projected savings, and projected budgets.

Table	1:	Summary	of	Annual	Goals.	Pro	iected	Savings	and	Proi	ected	Bud	pets <sup>1</sup>
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	Calendar Year	Normalized Peak Demand	MW Goal	Demand (MW) Goal	Energy (MWh) Goal <sup>2</sup>	Projected MW Savings	Projected MWh Savings <sup>3</sup>	Projected Budget (in 000's)
Annual Goals	2017	15,104	0.4% of peak demand	60.42	105,856	163.03	197,310	\$36,508
	2018	15,354	0.4% of peak demand	61.42	107,608	161.56	191,297	\$36,436

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Calculated using a 20% capacity factor

<sup>&</sup>lt;sup>3</sup> 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. Large Commercial Load Management (MTP)
- 3. Commercial Market Transformation Program; SCORE, Healthcare, Data Center Program
- 4. Retro-Commissioning MTP
- 5. Smart Pool Program Commercial
- 6. Sustainable Schools MTP
- 7. REP (Commercial CoolSaver)
- 8. CenterPoint Energy High Efficiency Homes MTP
- 9. Advanced Lighting Residential MTP
- 10. Residential A/C Distributor MTP
- 11. REP (Residential CoolSaver and Efficiency Connection)
- 12. Smart Pool Program Residential MTP
- 13. Multi-Family Market Rate MTP
- 14. Residential Demand Response SOP
- 15. Residential & Small Commercial (SC) SOP
- 16. Energy Wise Resource Action MTP
- 17. Hard-to-Reach SOP
- 18. Multi-Family MTP HTR
- 19. Targeted Low Income MTP (Agencies in Action)
- 20. REP (CoolSaver Income Qualified)

Program manuals for these programs can be found on CenterPoint Houston's sponsor portal <a href="https://centerpoint.anbetrack.com/">https://centerpoint.anbetrack.com/</a>

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 2016 were 59.58 MW in peak demand reduction and 104,384 MWh in energy savings. Actual achieved reductions in 2016 totaled 167.75 MW and 190,883 MWh. The total forecasted spending for 2016 was \$35.4 million, actual 2016 spending totaled \$33.1 million.

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# **Energy Efficiency Plan**

# I. 2017 Programs

# A. 2017 Program Portfolio

CenterPoint Houston plans to implement 20 programs in 2017. 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: 2017 Energy Efficiency Program Portfolio

Commercial SOP	Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare, Data Center)	Commercial	Retrofit; New Construction
Large Commercial Load Management SOP	Commercial	Load Management
Retro-Commissioning MTP	Commercial	Tune-up of existing facilities
Sustainable Schools Program	Commercial	Educational
REP (Commercial CoolSaver)	Commercial	Retrofit
REP (Residential CoolSaver & Efficiency Connection)	Residential	Retrofit
REP (CoolSaver Income Qualified)	Hard-to-Reach	Retrofit
Residential Demand Response SOP	Residential	Load Management
Smart Pool Program Commercial	Commercial	Retrofit; New Construction
CenterPoint Energy High Efficiency Homes MTP	Residential	New Construction
Residential & SC SOP	Residential & Small Commercial	Retrofit
Advanced Lighting Residential	Residential	Retrofit; New Construction
Residential A/C Distributor MTP	Residential & Small Commercial	Retrofit
Smart Pool Program Residential	Residential	Retrofit; New Construction
Energy Wise Resource Action MTP	Residential	Educational
Hard-to-Reach SOP	Hard-to-Reach	Retrofit
Multi-Family MTP	Residential	New Construction
Multi-Family MTP (HTR)	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 websites<sup>4</sup>: 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 are one method of communication used to provide project sponsors with program updates and information.

# **B. Existing Programs**

# **Commercial Standard Offer Program (SOP)**

# Program Design

The Commercial SOP targets commercial customers with 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 whereby any eligible project sponsor may submit an application for qualifying projects.

- 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.

<sup>&</sup>lt;sup>4</sup> CenterPoint Houston energy efficiency website is <u>www.centerpointefficiency.com</u>; CenterPoint Houston's sponsor portal is https://centerpoint.anbetrack.com/

# The Commercial Market Transformation Program (MTP)

#### Program Design

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, 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.

The 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.

The 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.

- 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 nonprofit 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.

- Maintains program information on 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.

Energy Efficiency Plan

# **Retro-Commissioning MTP (RCx)**

#### Program Design

RCx is an optimization program for existing buildings (50,000 square foot and larger) that identifies nocost 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 consulting engineering firms, are used to deliver the program to customers. The engineering analysis is comparable to an ASHRAE Level 2 audit.

- 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

Energy Efficiency Plan

#### Sustainable Schools MTP (SSP)

#### Program Design

The SSP is an energy education and conservation program that targets physical science high school and middle school students and teachers as well as school district energy managers. In the behavioral portion of the program, Sustainability Teams will be formed to promote awareness of energy conservation, set goals for reducing the school's energy consumption, and recommend behavioral changes. This will be accomplished by providing educational supplements, training teachers and students on the use of energy audit kits, and instructions on monitoring the school's energy consumption. Students will be expected to prepare an energy audit report of their findings and present the results to school administration. In the operational portion of the program, CenterPoint Energy and its program implementer will meet with participating district energy managers and facilities staff to target no-cost and low-cost measures that will reduce energy consumption.

#### **Implementation Process**

CenterPoint Houston will continue implementation of the SSP through the spring of 2017. Program activities after the spring of 2017 have not been finalized at this time, but may continue in some form thru other existing programs.

- Contracts with a third-party program implementer to implement outreach and planning activities
- Participates in appropriate industry-related meetings and events to generate awareness and interest
- Conducts meetings with potential participants to explain program requirements, potential incentives, and education opportunities.

#### **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 are able to participate in any or all of the following programs:

- CoolSaver A/C Tune-up Program Residential
- CoolSaver A/C Tune-up Program Commercial
- CoolSaver A/C Tune-up Program Income Qualified
- Efficiency Connection Electronic Marketplace LED Bulbs

#### CoolSaver A/C Tune-Up Program – Residential, Income Qualified and Commercial

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 Electronic Marketplace – LED Bulbs**

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 utilizes a third-party program participant or REP 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.

- 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 Energy'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

# **Smart Pool Program Commercial**

#### Program Design

In 2017, the Smart Pool Program provides incentives to registered contractors for the sale, installation, calibration, and reporting on the replacement of single speed pool pumps with ENERGY STAR<sup>®</sup> qualified variable speed pool pump installations in new or existing apartment complexes, multi-family developments, HOA and community pools, lodging, health clubs, and public pools.

#### Implementation process

The program will be implemented in the CenterPoint Houston service territory using a third-party program implementer. The third-party implementer will recruit and train pool professionals, and insure program goals are met.

- Attend appropriate industry-related meetings and seminars to generate awareness and interest
- Conduct workshops as necessary to explain program elements such as responsibilities of the participating contractors, project requirements, and reporting process

# **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% kWh savings better than the Texas Baseline Reference Home (TBRH). An additional bonus will be offered for those builders who build ENERGY STAR<sup>®</sup> 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 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<sup>®</sup> windows.

# Implementation Process

Any eligible 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**

• 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<sup>®</sup> 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.

#### 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.

# A/C Distributor MTP

# Program design

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

#### Implementation process

Any registered A/C distributor may submit an application for participation in the program. Program information is provided on CenterPoint Houston's website.

- 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

#### **Smart Pool Program Residential MTP**

#### Program Design

The Residential Smart Pool Program provides incentives to registered contractors for the successful sale, installation, calibration and reporting of ENERGY STAR<sup>®</sup> qualified variable speed swimming pool pumps for new or existing residential applications. After two years as a pilot program, the program transitions to MTP.

#### Implementation process

The program will be implemented using a third-party program implementer. The third-party implementer will recruit and train pool professionals.

#### **Outreach and Research activities**

- Attend appropriate industry-related meetings and seminars to generate awareness and interest
- Conduct workshops as necessary to explain program elements such as responsibilities of the participating contractors, project requirements, and reporting process
- Provide educational campaigns to the consumer about the benefits and payback for efficient pool operation

# **Energy Wise Educational Program**

#### Program design

This program is designed to show the benefits of energy efficiency through educational programs. The Energy Wise Program utilizes a school delivery format to provide take-home Resource Action Kits to sixth grade students.

#### Implementation process

The program uses a third-party program implementer that recruits teachers. Recruited teachers will receive program materials that include; a teacher and student workbook, kit of efficiency materials, a parent letter explaining the program and a survey.

#### **Outreach and Research activities**

• Utilize third party implementer (Resource Action) to recruit schools and teachers.

# 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, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR<sup>®</sup> 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 Multifamily New Construction MTP. Multi-family Space and Water 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.

# 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 Space and Water 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 and water saving measures and is only available to customers 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 3<sup>rd</sup> 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 by installing attic insulation, solar screens, lighting retrofits, water saving measures, ENERGY STAR<sup>®</sup> room air conditioners, central air conditioning systems, ENERGY STAR<sup>®</sup> 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, and 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.

- Partner with a 3<sup>rd</sup> party implementer
- Contact non-profit organizations for potential participation

Energy Efficiency Plan

# **Research and Development (R&D) Projects**

In 2017 CenterPoint Energy 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.

#### **Program: Water Energy Nexus**

In 2017, CenterPoint Energy will partner with Aiqueous, a water conservation organization to study potential energy efficiency opportunities that may be obtained through the 2017 State-wide water plan. The project will review what approved Region H (CenterPoint Energy territory) water plan projects will affect electric use and demand. In addition, the study will determine what technologies and strategies could drive energy efficiency improvements and how CenterPoint Energy could engage with the local water districts and utilities. This study will provide potential outreach opportunities for CenterPoint Energy.

#### **Program: Smart thermostat**

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. In order to create an energy efficiency program around smart thermostats it will be necessary to have supporting data and documentation to establish a deemed savings value. The R&D project scope currently entails a review of operational data from customers equipped with smart thermostats and will compare them against similar customers who do not have smart thermostats (control group). The comparison results should support a smart thermostat deemed savings value for demand and energy in the Greater Houston area. CenterPoint Energy will solicit a vendor to conduct the study in 2017.

# **Program: CenterPoint Portfolio Planning and Analysis**

CLEAResult's comprehensive approach to analyzing DSM portfolios will be used to aid CenterPoint in designing a portfolio of commercial energy efficiency programs that seamlessly incorporate high-level utility goals, while also meeting demand and energy savings targets. The collaborative approach creates realistic and achievable designs that work, and provides program managers with the necessary context to understand how implementation and program design are inherently connected. CenterPoint Energy will also be reviewing its database and Residential programs through 2017 and in to 2018 using the same approach. The vendor has not been selected for the second phase of this project.

#### **Program: Power Across Texas**

The Power Across Texas (PAT) launched a separate and independent initiative in 2016: the Texas Energy Poverty Research Institute (TEPRI). Its mission as a research institute is to acquire and share actionable data that helps meet the needs of the energy poor in Texas. CenterPoint Energy's contribution to Texas Energy Poverty Research Institute is funding work to access the poverty and energy nexus and how to bring more cost effective programs to that group of customers.

# C. New Programs for 2017

There are no new programs currently planned for program year 2017. Throughout the year we will be modifying our portfolio to consolidate and rebrand programs.

#### D. Potential New Programs for 2018

In 2018 we intend to launch a new portfolio of programs using existing measures. We are evaluating the possibility of implementing two new programs independently in 2018, which if successful would become part of more comprehensive programs.

#### **Program: Small Commercial Buildings Energy Efficiency Program**

A pilot study was completed in 2016, and evaluated potential energy efficiency programs to be marketed toward small commercial properties. The small commercial buildings sector, buildings less than 50,000 square feet, accounts for more than 50% of total U.S. commercial building space. This sector houses a majority of small businesses that are acknowledged to be major drivers of the US economy. These include buildings like food services, office buildings, strip malls, retail, lodging, mixed-use development and places of worship. This sector is diverse and fragmented in nature and a majority of buildings are owner managed but very few are actually occupied by the owner. Small building owners lack the time and capital to spend on energy efficiency measures and there are very few resources and tools available to invest in energy assessment at these facilities. Results of the study are still being evaluated for a potential program to be offered in 2018 or later.

# **Program: Smart Thermostat Pilot Program**

A pilot program to determine the feasibility of implementing a thermostat program aimed at energy savings from modifying schedules and optimizing HVAC set points.

Energy Efficiency Plan

# II. Customer Classes

Customer classes targeted by CenterPoint Houston's energy efficiency programs are 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 taking into account 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, respectively. 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	271,555
Residential	1,337,497
Hard to Reach <sup>5</sup>	792,276

<sup>5</sup> 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 2015 Annual Social and Economic Supplement, 37.2% 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 792,000. 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, CenterPoint Houston's demand goal for 2017 is specified as 0.4% of peak demand since the goal of 30% of its five-year average rate of growth in demand was satisfied in 2013. For the purposes of this report, the 2016 demand goal is based on the 5-year average of weather adjusted peak demand for 2011-2015 and the 2017 demand goal is based on the 5-year average of weather adjusted peak demand for 2012-2016. 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 2010-2016 and estimated peak demand for 2017 and 2018. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2017 and 2018. 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.

		Peak Demai	nd (MW)		Energy Consumption (GWh)				
Calendar	Total	System	Residential & Commercial		Total	System	Residential & Commercial		
Year	Actual <sup>6</sup>	Weather Adjusted <sup>7,8</sup>	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	NT/A9	16,236	N/A	92,593		76,652	N/A	
2018	18,732	IN/A	16,521	1N/FX	93,836	IN/A	77,828		

**Table 4: Annual Growth in Demand and Energy Consumption** 

2017 Goals

MW Goal =15,104 x 0.4% = 60.42MW

MWh Goal = 60.42MW x 8760 Hours x 20% Load Factor = 105,856MWh

2018 Goals

MW Goal = 15,354x 0.4% = 61.42MW

MWh Goal = 61.42MW x 8760 Hours x 20% Load Factor = 107,608MWh

<sup>&</sup>lt;sup>6</sup> 2017 and 2018 Calendar Year "Actual" values are forecasted.

<sup>&</sup>lt;sup>7</sup> "Actual Weather Adjusted" Peak Demand is "Actual" Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

<sup>&</sup>lt;sup>8</sup> Weather adjustment calculations are based on hourly weather data from NOAA's Quality Controlled Local Climatological Data (QCLCD).

<sup>&</sup>lt;sup>9</sup> 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)

	20	17	20	18
Program Goals by Customer Class	Projected	Projected	Projected	Projected
for 2017 and 2018	Savings	Savings	Savings	Savings
101 2017 and 2010	(MW) at	(MWh) at	(MW) at	(MWh) at
	Meter	Meter	Meter	Meter
Large Commercial	123.67	146,574.64	121.83	139,149.47
Large Commercial SOP	15.89	86,606.17	15.00	86,000.00
Commercial MTP (Texas Score & Healthcare, DCEEP)	4.38	25,938.38	7.00	38,000.00
Large Commercial Load Management SOP	98.41	590.47	98.00	590.00
Retro-Commissioning MTP	1.91	14,742.91	1.65	14,000.00
Sustainable Schools	0.67	2,127.64	0.00	0.00
REP (Commercial CoolSaver)	0.77	2,377.76	0.18	559.47
Smart Pool Program Commercial	0.25	1,710.38	0.00	0.00
Data Centers Program	1.40	12,480.94	0.00	0.00
Residential and Small Commercial	34.75	43,400.57	35.11	44,813.61
New Homes MTP	6.23	14,583.33	6.23	14,583.33
Residential & SC SOP	0.95	1,740.89	0.95	1,740.89
Smart Thermostat Program	0.00	0.00	0.25	1,200.00
Advanced Lighting Residential	2.56	10,755.79	2.84	11,950.87
Residential A/C Distributor MTP	0.88	2,138.14	0.93	2,263.91
REP (CoolSaver & Efficiency Connection)	3.30	10,023.50	3.30	10,000.00
Residential Demand Response Program	19.50	117.00	19.50	117.00
Multi-Family MTP MR	0.66	1,430.90	0.66	1,430.90
Smart Pool Program Residential	0.45	1,526.70	0.45	1,526.70
Energy Wise Resource Action MTP	0.22	1,084.32	0.00	0.00
Hard-to-Reach	4.61	7,334.89	4.61	7,334.22
Hard-to-Reach SOP Program	1.88	3,668.81	1.88	3,668.81
Multi-Family MTP (HTR)	1.52	1,476.20	1.52	1,476.20
Targeted Low Income MTP (Agencies in Action)	1.17	2,053.55	1.17	2,053.55
REP (Coolsaver Income Qualified)	0.05	136.33	0.05	135.65
TOTAL	163.03	197,310.10	161.56	191,297.30

# **IV. Program Budgets**

Table 6 presents total projected budget allocations required to achieve the projected demand and energy savings for calendar years 2017 and 2018. 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.

Deserves Enforced all and a the Contention Class		2017		2018			
for 2017 and 2018	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget	
Large Commercial	\$15,907,762	\$1,879,046	\$17,786,808	\$15,700,000	\$1,934,153	\$17,634,153	
Large Commercial SOP	\$6,500,000	\$898,475	\$7,398,475	\$6,500,000	\$914,243	\$7,414,243	
Commercial MTP (TX Score, HEEP, DCEEP)	\$3,432,762	\$393,912	\$3,826,674	\$5,000,000	\$583,823	\$5,583,823	
Large Commercial Load Management SOP	\$3,000,000	\$317,539	\$3,317,539	\$3,300,000	\$323,112	\$3,623,112	
Retro-Commissioning MTP	\$925,000	\$119,774	\$1,044,774	\$ 800,000	\$105,406	\$905,406	
Sustainable Schools	\$375,000	\$31,462	\$406,462	\$0	\$0	\$0	
REP (Commercial CoolSaver)	\$425,000	\$31,611	\$456,611	\$100,000	\$7,568	\$107,568	
Smart Pool Program Commercial	\$250,000	\$12,776	\$262,776	\$0	\$0	\$0	
Data Centers Program	\$1,000,000	\$73,497	\$1,073,497	\$0	\$0	\$0	
Residential and Small Commercial	\$11,350,000	\$1,259,991	\$12,609,991	\$11,300,000	\$1,300,641	\$12,600,641	
New Homes MTP	\$3,500,000	\$432,540	\$3,932,540	\$3,500,000	\$440,131	\$3,940,131	
Residential & SC SOP	\$500,000	\$92,692	\$592,692	\$500,000	\$94,319	\$594,319	
Smart Thermostat Program (Pilot)	\$0	\$0	\$0	\$250,000	\$47,500	\$297,500	
Advanced Lighting Residential	\$900,000	\$79,096	\$979,096	\$1,000,000	\$89,426	\$1,089,426	
Residential A/C Distributor MTP	\$1,700,000	\$259,410	\$1,959,410	\$1,800,000	\$279,490	\$2,079,490	
REP (CoolSaver & Eff. Connection)	\$2,200,000	\$172,652	\$2,372,652	\$2,200,000	\$175,682	\$2,375,682	
Residential Demand Response Program	\$900,000	\$71,544	\$971,544	\$900,000	\$72,800	\$972,800	
Multi-Family MTP	\$650,000	\$66,311	\$716,311	\$650,000	\$67,474	\$717,474	
Smart Pool Program Residential	\$500,000	\$33,235	\$533,235	\$500,000	\$33,819	\$533,819	
Energy Wise Resource Action MTP	\$500,000	\$52,512	\$552,512	\$0	\$0	\$0	
Hard-to-Reach	\$5,000,250	\$860,962	\$5,861,212	\$5,000,000	\$876,040	\$5,876,040	
Hard-to-Reach SOP Program	\$1,000,000	\$251,130	\$1,251,130	\$1,000,000	\$255,537	\$1,255,537	
Multi-Family MTP (HTR)	\$650,000	\$66,311	\$716,311	\$650,000	\$67,474	\$717,474	
Targeted Low Income MTP (Agencies in Action	\$3,300,000	\$537,178	\$3,837,178	\$3,300,000	\$546,606	\$3,846,606	
REP (Coolsaver Income Qualified)	\$50,250	\$6,344	\$56,594	\$50,000	\$6,423	\$56,423	
SUB TOTAL	\$32,258,012	\$4,000,000	\$36,258,012	\$32,000,000	\$4,110,834	\$36,110,834	
R&D	\$0	\$250,000	\$250,000	\$0	\$325,000	\$325,000	
PROGRAM TOTAL	\$32,258,012	\$4,250,000	\$36,508,012	\$32,000,000	\$4,435,834	\$36,435,834	
EM&V			\$0			\$1,062,776	
			#ac 500 010			# <b>2=</b> 400 -110	
LECKF PROGRAM TOTAL			\$36,508,012			\$37,498,610	

Table 6:	Proposed	Annual	<b>Budget Broken</b>	Out by	Program	for Each	Customer	Class
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\*EM&V cost were not captured in the EECRF for 2017.

# **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 (2012 - 2016). 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)
2016	59.40	104,314.00	167.75	190,882.95
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
2012	39.20	68,693.82	175.40	130,617.00

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

Table 8 breaks out the projected savings reported and verified demand energy savings by customer class for each program. The projected savings were reported in the Energy Efficiency Plan filed in April of 2016. The reported and verified savings are those savings that have been achieved and verified in 2016 calendar year.

#### Table 8: Projected Savings versus Reported and Verified Savings for 2016 (at Meter)

				2016		
	Project	ed Savings	Verifi	ed Savings	Reporte	d / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	116.5	97,955.1	126.1	102,549.9	126.1	102,549.9
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	22,933.5	4.0	22,933.5
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	0.0	570.4	0.0	570.4
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	80,620.7	35.8	80,620.7
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	1,823.7	0.5	1,823.7
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	5.8	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	190,882.9	167.7	190,882.9

			,	2015		
	Project	ed Savings	Verifi	ed Savings	Reporte	ed / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	135.13	105,613.46	125.22	113,510.94	125.22	113,510.94
Large Commercial SOP	12.02	71,051.78	11.57	76,024.92	11.57	76,024.92
Commercial MTP (TX Score & HEEP)	4.27	16,683.13	3.63	18,411.51	3.63	18,411.51
Large Commercial Load Management SOP	114.08	330.84	106.04	636.21	106.04	636.21
Retro-Commissioning MTP	1.40	5,400.00	0.96	3,690.76	0.96	3,690.76
Sustainable Schools	0.57	1,038.92	0.45	1,418.78	0.45	1,418.78
REP (Commercial CoolSaver)	1.34	1,616.07	1.65	5,115.98	1.65	5,115.98
Pool Pump Program Commercial	0.44	726.18	0.01	95.21	0.01	95.21
Data Centers Program	1.01	8,766.54	0.91	8,117.58	0.91	8,117.58
Residential and Small Commercial	20.38	53,787.18	37.53	66,473.86	37.53	66,473.86
ENERGY STAR <sup>®</sup> Homes MTP	10.49	27,453.30	13.59	31,821.15	13.59	31,821.15
Residential & SC SOP	0.85	1,809.06	0.50	1,054.29	0.50	1,054.29
Advanced Lighting Residential	0.62	6,691.74	2.43	10,619.03	2.43	10,619.03
Residential & SC A/C Distributor MTP	1.90	6,179.06	2.22	6,335.95	2.22	6,335.95
REP (CoolSaver, Eff. Connection & Demand Respons	3.34	4,040.18	16.90	10,632.62	16.90	10,632.62
Multi-Family MTP (RES & Energy Star MF Low Rise	1.13	2,847.08	0.80	2,257.24	0.80	2,257.24
Pool Pump Program Residential	1.52	2,498.91	0.71	2,395.29	0.71	2,395.29
Energy Wise Resource Action MTP	0.54	2,267.86	0.38	1,358.30	0.38	1,358.30
Hard-to-Reach	5.45	9,145.65	5.74	8,270.41	5.74	8,270.41
Hard-to-Reach SOP Program	1.51	2,913.21	1.29	2,636.71	1.29	2,636.71
Multi-Family MTP (HTR)	1.13	2,847.08	1.86	1,665.33	1.86	1,665.33
Targeted Low Income MTP (Agencies in Action)	2.81	3,385.35	2.55	3,843.40	2.55	3,843.40
REP (Cools aver Income Qualified)	N/A	N/A	0.04	124.98	0.04	124.98
TOTAL	160.96	168,546.29	168.49	188,255.21	168.49	188,255.21

# Table 9: Projected Savings versus Reported and Verified Savings for 2015 (at Meter)

# VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2011 - 2016) broken out by program for each customer class. Administrative costs do not include EM&V or rate case cost.

	20	16	20	15	201	14	201	13	20	12
Historical Statutory Program Funding by Customer Class	Incentives	Admin								
Large Commercial	\$14,984,850	\$1,912,326	\$15,297,984	\$1,808,656	\$14,527,295	\$2,146,049	\$17,014,058	\$1,818,911	\$15,322,812	\$1,840,794
Large Commercial SOP	\$5,932,906	\$985,583	\$6,283,259	\$795,079	\$6,335,962	\$1,087,653	\$6,597,644	\$954,748	\$6,118,676	\$1,113,955
Retro-Commissioning MTP	\$451,417	\$54,462	\$464,977	\$48,338	\$260,367	\$43,365	\$924,415	\$98,467	\$728,186	\$98,953
Commercial MTP (Texas SCORE & Healthcare)	\$3,641,920	\$376,313	\$3,216,713	\$386,926	\$3,015,795	\$400,337	\$2,933,764	\$230,852	\$2,175,141	\$248,361
Large Commercial Load Management SOP	\$3,106,220	\$337,469	\$3,244,409	\$346,571	\$3,506,366	\$396,980	\$5,221,196	\$350,800	\$5,625,000	\$303,369
Sustainable Schools	\$334,782	\$29,858	\$357,537	\$49,264	\$319,547	\$55,048	\$209,070	\$31,015	\$74,196	\$10,803
Advanced Lighting Program	N/A	N/A	N/A	N/A	\$601,336	\$108,094	\$632,539	\$111,449	\$601,613	\$65,353
REP Program (Commercial CoolSaver)	\$400,300	\$31,236	\$397,350	\$45,679	\$487,922	\$54,572	\$495,429	\$41,581		
Pool Pump Program Commercial	\$119,576	\$12,467	\$100,247	\$11,489	N/A	N/A	N/A	N/A	N/A	N/A
Data Centers	\$997,729	\$84,938	\$1,233,493	\$125,310	N/A	N/A	N/A	N/A	N/A	N/A
Residential and Small Commercial	\$9,832,154	\$1,153,652	\$11,659,302	\$1,308,234	\$10,275,021	\$1,224,176	\$9,173,682	\$960,688	\$8,991,307	\$1,094,181
New Homes MTP	\$2,636,756	\$347,201	\$3,892,457	\$399,031	\$4,064,036	\$466,162	\$3,474,935	\$318,973	\$3,513,219	\$354,435
Residential SOP	\$79,596	\$31,843	\$300,720	\$61,320	\$254,477	\$41,964	\$387,886	\$70,664	\$500,874	\$83,866
Advanced Lighting Program	\$943,324	\$76,646	\$843,658	\$108,397	\$772,689	\$81,713	\$440,152	\$37,808	\$415,568	\$43,568
Multi-Family MTP (RES)	\$462,168	\$28,329	\$506,714	\$48,463	\$472,690	\$70,662	\$252,600	\$46,153	\$347,050	\$50,050
A/C Distributor Program	\$1,968,257	\$207,148	\$2,173,535	\$210,007	\$1,906,639	\$228,715	\$1,548,290	\$171,697	\$1,642,142	\$191,096
Pool Pump Program Residential	\$550,894	\$65,000	\$582,718	\$87,710	\$83,400	\$13,668	N/A	N/A	N/A	N/A
Energy Wise Resource Action MTP	\$502,515	\$105,757	\$657,801	\$89,390	\$666,317	\$78,607	\$749,997	\$47,823	\$538,740	\$47,476
REP (CoolSaver, Eff. Connection & Demand Response	\$2,688,643	\$291,728	\$2,701,700	\$303,916	\$1,951,523	\$218,283	\$1,568,860	\$131,673	\$1,384,156	\$254,125
Home Performance with ENERGY STAR®	N/A	N/A	N/A	N/A	\$103,250	\$24,402	\$750,962	\$135,897	\$649,558	\$69,565
Community Weatherization (RES)	N/A	N/A	NI/A	NI/A	NI/A	N/A	NI/A	N/A	N/A	NI/A
City of Houston Weatherization (RES)	IVA	IV/A	IV/A	IN/A	IN/A	IV/A	IN/A	IN/A	IN/A	IV/A
Hard-to-Reach	\$4,488,903	\$492,862	\$4,844,189	\$521,843	\$6,386,605	\$770,007	\$7,492,187	\$627,394	\$5,551,440	\$535,801
Hard-To-Reach SOP	\$245,907	\$112,309	\$971,292	\$160,463	\$606,341	\$118,105	\$933,114	\$173,248	\$1,702,481	\$195,053
Multi-Family MTP (HTR)	\$554,407	\$50,588	\$447,330	\$49,039	\$279,358	\$39,808	\$50,400	\$9,435	\$63,200	\$9,114
Res HTR - Afford. Home	N/A	N/A	\$3,529	\$312	\$20,295	\$3,591	\$62,400	\$13,040	\$49,985	\$5,727
Targeted Low Income MTP (Agencies in Action)	\$3,656,549	\$327,322	\$3,360,588	\$303,786	\$5,480,611	\$608,503	\$6,446,273	\$431,671	\$3,735,774	\$325,907
TDHCA Low-Income Weatherization (SB-712)										
Rebuilding Together Houston	N/A	N/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A
Community Weatherization (HTR)	IN/A	IN/A	IN/A	IN/A	IN/A	IVA	IN/A	IN/A	IN/A	IN/A
City of Houston Weatherization (HTR)										
REP (Coolsaver Income Qualified)	\$32,040	\$2,643	\$61,450	\$8,243	N/A	N/A	N/A	N/A	N/A	N/A
R&D		\$277,597		\$392,784	\$0	\$435,563	\$0	\$1,196,274	\$0	\$1,422,482
TOTAL	\$29,305,907	\$3,836,436	\$31,801,475	\$4,031,517	\$31,188,921	\$4,575,795	\$33,679,927	\$4,603,267	\$29,865,559	\$4,893,258

Table 10: Historical Program Incentive and Administrative Expenditures (2012 – 2016)<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> 2016 actual spending taken from Table 11 in the current EEPR; 2015, 2014, 2013, and 2012 actual spending from the 2016 EEPR filed under Project 45675.

# VIII. Program Funding for Calendar Year 2016

As shown on Table 11, CenterPoint Houston spent a total of \$33,142,343 on energy efficiency programs in 2016. This was less than the budgeted \$35,145,800. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Retro-Commissioning Market Transformation program was not fully subscribed in 2016 and several projects were either partially funded or moved to 2017 therefore it was 37% underrun.
- Commercial Pool Pump Pilot Program is still in early stages of development which proved the infrastructure was not yet in place to support the budget which had an under spend of 50%.
- The Residential New Home New Construction program experienced issues with the energy savings calculator provided by the program partner and aggressive targets set by the implementer. The program exceeded savings targets.
- Residential Standard Offer Program has seen a decline in spending due to certain measures having stricter requirements such as duct efficiency, this lead to an 81% 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 duct efficiency, this lead to a 71% underrun in budget.
- The A/C Distributor Program spent an additional 28%. The program was allocated additional funds from programs that were underspent.
- The Residential Demand Response portion of the REP program was underspent by 29% due to low enrollment. We are still optimistic that this program will succeed as thermostats with Wi-Fi capability are becoming widely adopted.
- The Multi-Family MTP spending was lower by 30% due to delays in construction projects for both market-rate and hard-to-reach. HTR was underspent by 13%.
- The residential pool pump program was more successful than anticipated and was oversubscribed by 18%

Program Funding for Calendar Year 2016	Vumber of Customer Meters	Forecasted Budget	Actuals Funds Expended (Isovinsori)	b9bn9qxA sbnuA slew9A	(nimbA)	zbruf IstoT bəbnəqzA	Funds Committed (Not Expended)	gninisməA ebnuA (bəttimmoD toV)	Percentage Change From Budgeted/ Actual
Large Commercial	971	\$17,504,85	0 \$14,984,85	0 \$1,91	2,326	\$16,897,176	\$0	\$607,674	-3%
Large Commercial SOP	347	\$ 7,232,0	00 \$ 5,932,90	6 \$ 5	85,583	\$ 6,918,489	0\$	\$313,511	-4%
Commercial MTP (TX Score & Healthcare)	134	\$ 4,080,1	00 \$ 3,641,92	0 \$ 3	76,313	\$ 4,018,234	0\$	\$61,866	-2%
Large Commercial Load Management SOP	226	\$ 3,239,0	00 \$ 3,106,22	0 \$ 3	37,469	\$ 3,443,689	0\$	-\$204,689	6%
Retro-Commissioning MTP	40	\$ 802,2	50 \$ 451,41	7 \$	54,462	\$ 505,879	80	\$296,371	-37%
Sustainable Schools	6	\$ 396,5	00 \$ 334,78	2 \$	29,858	\$ 364,640	\$0	\$31,860	-8%
REP (Commercial CoolSaver)	187	\$ 445,2	50 \$ 400,30	0 \$	31,236	\$ 431,536	\$0	\$13,714	-3%
Pool Pump Program Commercial	21	\$ 263,0	00 \$ 119,57	6 \$	12,467	\$ 132,043	\$0	\$130,957	-50%
Data Centers Program	10	\$ 1,046,7	50 \$ 997,72	8 8	84,938	\$ 1,082,667	\$0	-\$35,917	3%
Residential and Small Commercial	45,433	\$12,023,40	0 \$9,832,15	\$1,15	3,652	\$ 10,985,805	\$0	\$1,037,595	-9%
New Homes MTP	11,260	\$ 3,842,0	00 \$ 2,636,75	6 \$ 3	47,201	\$ 2,983,957	\$0	\$858,043	-22%
Residential & SC SOP	261	\$ 580,3	00 \$ 79,59	6 \$	31,843	\$ 111,439	80	\$468,861	-81%
Advanced Lighting Residential	N/A	\$ 955,2	50 \$ 943,32	4 \$	76,646	\$ 1,019,970	\$0	-\$64,720	7%
A/C Distributor MTP	2,424	\$ 1,697,0	00 \$ 1,968,25	7 \$ 2	07,148	\$ 2,175,406	80	-\$478,406	28%
REP (CoolSaver & Efficiency Connection )	7,402	\$ 2,323,0	53 \$ 2,145,89	3 \$ 2	37,125	\$ 2,383,018	\$0	-\$59,964	3%
Multi-Family MTP (RES & Energy Star MF Low Rise)	2,098	\$ 699,2	50 \$ 462,16	8 \$	28,329	\$ 490,497	\$0	\$208,753	-30%
Residential Demand Response Program	10,875	\$ 844,7	47 \$ 542,75	0 \$	54,603	\$ 597,353	\$0	\$247,394	-29%
Pool Pump Program Residential	543	\$ 519,8	00 \$ 550,89	4 \$	65,000	\$ 615,894	\$0	-\$96,094	18%
Energy Wise Resource Action MTP	10,570	\$ 562,0	00 \$ 502,51	5 \$ 1	05,757	\$ 608,272	\$0	-\$46,272	8%
Hard-to-Reach	4,127	\$5,617,550	) \$4,488,903	\$492	2,862	\$ 4,981,765	\$0	\$635,785	-11%
Hard-to-Reach SOP Program	322	\$ 1,227,5	00 \$ 245,90	7 \$ 1	12,309	\$ 358,216	\$0	\$869,284	-71%
Multi-Family MTP (HTR)	2,157	\$ 697,6	50 \$ 554,40	7 \$	50,588	\$ 604,995	\$0	\$92,655	-13%
Targeted Low Income MTP (Agencies in Action)	1,550	\$ 3,692,4	00 \$ 3,656,54	9 \$ 3	27,322	\$ 3,983,871	\$0	-\$291,471	8%
REP (CoolSaver Income Qualified)	98	- \$	\$ 32,04	0 \$	2,643	\$ 34,683	\$0	-\$34,683	
SUB TOTAL	50,531	35,145,800	0 29,305,907	1 3,55	8,839	\$ 32,864,746	0	\$2,281,054	-6%
R&D	0	\$ 250,0	- \$ 00	\$	77,597	\$ 277,597	\$0	-\$27,597	11%
				•			4		
N TOTAL	50,531	35,395,8	00 29,305,00	7 3,8	36,430	33,142,343	0	2,253,457	-0 %0

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# IX. Market Transformation Program Results

# The Commercial MTP

# **SCORE/SCORE Lite/City Smart**

In 2016, the program paid incentives to a total of 32 separate customers, with savings impacting over 120 facilities or buildings. The customers served through this program include: 20 school districts, 3 private schools, 2 colleges/universities, 2 municipal governments, 4 county governments, and 1 faith-based organization. Lighting and HVAC measures represented a majority of the projects that were incentivized in 2016.

SCORE Lite program participation and impacts continue to grow as customers and contractors are becoming better equipped to be self-directed in the program. CenterPoint Energy 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.

The 2016 HEEP program completed 14 projects which yielded 932 kW and 7,046 MWh. The projects included HVAC replacements, lighting retrofits, window replacements and HVAC optimization projects. The healthcare facilities included hospitals, clinics, laboratories and medical office buildings.

# **Retro-Commissioning MTP (RCx)**

In 2016, CenterPoint Energy projected to acquire 1.1 MW and 4,050 MWh savings from this program. CenterPoint Energy verified and is reporting 488.93 kW and 2,306 MWh.

# Sustainable Schools Program (SSP)

In 2016, CenterPoint Energy projected to acquire 570 kW and 1,038,920 kWh savings from this program. CenterPoint Energy verified and is reporting 637.4 kW and 2,669,417 kWh.

# **Smart Pool Program - Commercial Pilot**

In 2016, CenterPoint Energy projected to acquire .44 MW and 726 MWh savings from this program. CenterPoint Energy verified and is reporting .464 MW and 571 MWh.

# **Data Centers MTP**

In 2016 CenterPoint Energy is reporting a savings of 1.01 MW and 8,275 MWh at a cost of \$1.1M for the Data Center program.

# **New Homes MTP**

In 2016, CenterPoint Energy is reporting 13.67 MW and 42,736 MWh for \$2.98M. This program drives builders to use energy efficient methods in design and construction.

# Advanced Lighting Residential MTP

In 2016, CenterPoint Energy projected to acquire 1.0 MW and 7,132 MWh from this program. CenterPoint Energy verified and is reporting 2.6 MW and 14,096 MWh.

# A/C Distributor MTP

In 2016, the program had 8 distributors that preformed over 2,400 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, for a savings of 2.32 MW and 6,308 MWh.

# **Smart Pool Program - Residential MTP**

In 2016, CenterPoint Energy projected to acquire 1.2 MW and 3,600 MWh savings from this program. CenterPoint Energy verified and is reporting 508.2 kW and 1,823,728 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 .28 MW and 1,000 MWh. This program is not in the plan for 2018, due to the decreasing savings and lower avoided cost.

# Targeted Low-Income MTP (Agencies in Action)

In 2016, the program reached 1,550 homes in the CenterPoint Energy electric territory. Of these homes, 1,339 were multi-family units and 211 were single family homes. Heat pumps were the leading measure installed in the multi-family units and made up the majority of incentives paid. Air infiltration, ceiling insulation, and AC replacements were just a few of the measures installed in single family homes.

#### **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 retail electric providers. The tune-ups were performed by twenty-eight (28) specially trained A/C contractor companies. The participating Retail Electric Providers included Ambit Energy, Amigo Energy, Brilliant Energy, Champion Energy Services, Direct Energy, Entrust Energy, Frontier Utilities, Gexa Energy, Hudson Energy, Infinite Energy, Just Energy, Reliant Energy, Spark Energy, Star Tex Power, Tara Energy, TriEagle Energy and Veteran Energy. As a result, 7,293 residential A/C tune-ups were completed, 116 residential low-income tune-ups were completed and 1,302 commercial A/C tune-ups were performed in 2016.

**Efficiency Connection** - In 2016, CenterPoint Energy Houston Electric continued the online Efficiency Connection website to promote and deliver energy efficient LED bulbs at a reduced price. The program was marketed by 16 participating REPs and yielded 33,997 Energy Star rated LED bulbs. The participating Retail Electric Providers included Ambit Energy, Amigo Energy, Bounce Energy, Champion Energy Services, CPL Energy, Direct Energy, Entrust Energy, First Choice Power, Frontier Utilities, Infinite Energy, Just Energy, Reliant Energy, Spark Energy, Star Tex Power, Tara Energy, and TriEagle Energy.

**Residential Demand Response -** During the summer of 2016, four companies including Energy Hub, Reliant Energy, Just Energy and Earth Networks, participated in CNP's Residential Demand Response BYOD (Bring your own device) program. The Sponsors enrolled customers with Wi-Fi enabled programmable thermostats in their home. Energy Hub enrolled 4,340 customers, Reliant Energy enrolled 1,320 customers, Just Energy enrolled 2,724 customers and Earth Networks enrolled 2,344 customers, for a total of 10,728 customers. Two, three-hour demand response test events were initiated by CenterPoint Energy Distribution Dispatch personnel during the summer peak period.

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

The Multi-Family Water & Space Heating MTP promotes the installation of energy efficient non-electric water heating and space heating in housing projects. In 2016, the Multi-Family Water and Space Heating MTP paid incentives on seven apartment complexes with a total of 1,395 units in the CenterPoint Houston service area. Of these units, 434 were classified as Hard-To-Reach and 961 units were classified as Market Rate complexes. Three of these complexes installed gas boiler systems, two installed individual water heaters and three complexes installed combination gas heating systems. The Direct Install program reached 1,724 Hard-To-Reach units. The ENERGY STAR<sup>®</sup> program incentivized the construction of 1,139 market rate units. Interest in these programs continues to be favorable. There are several potential projects for the 2017 program year. To plan more effectively for the Multi-family portfolio, developers, architects and builders were invited to attend a Market Transformation 2016 Program kickoff meeting that included information on the Multi-Family Water & Space Heating, Multi-Family Direct Install, and Multi-Family ENERGY STAR programs.

A similar kickoff meeting is planned for the 2017 program. 2017 will largely represent a continuation of the Multi-Family Water & Space Heating and Direct Install program elements. The new High Efficiency New Construction program element is proposed to expand participation eligibility 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 are capable of performing hourly analyses per AHRAE 90.1.

# X. Research and Development Results

In 2016, CenterPoint Houston implemented the following R&D projects:

# **Program: Mini-Split Heat Pumps**

The Mini-Split Heat Pump project continued from 2014, with CenterPoint Energy Houston partnering with Frontier Associates and Mitsubishi Electric to implement a ducted and ductless mini-split heat pump study within a garden style multi-family complex located in Houston. The study encompassed 28 Mitsubishi Mr. Slim mini-split systems equipped with inverter compressors and 28 traditional unitary Carrier split system heat pumps. CenterPoint Energy is currently working with vendors and external consultants to interpret the findings and determine how to incorporate them in to a program.

# **Program: Green Proving Ground - Collaborative Study with General Services Administration (GSA) and Oncor**

The Green Proving Ground Program (GPG) partnership with utilities began in 2013. The basis of the program is to leverage the GSA's real estate portfolio and utility R&D funds to evaluate innovative sustainable building technologies. Evaluations, performed in association with independent researchers and the Department of Energy (DOE), are used to support the development of GSA performance specification and inform decision making within GSA, other federal agencies, and the real estate industry. Only those parts of the GPG program that align with utility goals will be funded from utility R&D funds. Installations for two Houston sites were underway by close of 2015; Houston Customs House and Bob Casey Courthouse. The technology is a HVAC Load Reduction (HLR) system, which is intended to solve the major cause of HVAC energy waste in commercial buildings. Installations are scheduled for measurement and verification during 2016. It is anticipated that the efforts with the collaborative will end in 2017.

# Program: Small Commercial Buildings Energy Efficiency Pilot Study

The Houston Advanced Research Center (HARC) has been contracted to design a small commercial energy efficiency R&D project to analyze the cost effectiveness and to determine the potential of a full program. The project design will look at three alternate program types: a conventional direct install approach and two separate energy manager style programs. CenterPoint Energy is evaluating a Small Commercial buildings energy efficiency program or measure list.

# **Program: Power Across Texas**

The Power Across Texas (PAT) launched a separate and independent initiative in 2016: the Texas Energy Poverty Research Institute (TEPRI). Its mission as a research institute is to acquire and share actionable data that helps meet the needs of the energy poor in Texas. TEPRI has its roots in one of PAT's signature programs that in 2013 brought together academia, industry and government to address access to electricity in South Texas. CenterPoint Energy's contribution to Texas Energy Poverty Research Institute is funding 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 2016, CenterPoint Houston incurred administrative costs on categories such as continued development of its energy efficiency tracking database (eTrack), employees' salaries, employees' training, employees' 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..." We monitor the spending in these cost categories throughout the year and make mid-course corrections as necessary to ensure the success of our portfolio of energy efficiency and demand response programs.

# XII. Current Energy Efficiency Cost Recovery Factor (EECRF)

CenterPoint Houston's 2017 EECRF was approved by the Public Utility Commission of Texas in Docket No. 46014 on November 2, 2016 for the amount of \$45,492,241. EM&V cost were not included in the 2017 EECRF. Per Docket No. 46014, ordering paragraph 2,

"CenterPoint's 2017 EECRF is approved in the amount of \$45,492,241 through its 2017 EECRF; which is composed of (a) estimated 2017 energy-efficiency program costs of \$36,508,012, (b) a performance incentive for 2015 program achievements of \$10,608,015, (c) a credit of \$1,328,468 related to-the over-recover of 2015 program costs, (d) an adjustment of \$67,000 to exclude certain historical administrative costs, (e) \$35,879 in 2015 EECRF proceeding expenses, and (f) a credit of \$264,197 related to the over-recovery of the surcharge approved in Docket No. 42359."

# XIII. Revenue Collected Through EECRF

In 2016, CenterPoint Houston collected a total of \$37,571,561 in energy efficiency program costs through the EECRF Rider.

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

In Docket No. 44783, the PUC approved energy efficiency costs to be recovered in 2016 of \$37,645,874 consisting of:

\$35,395,800	2016 Forecasted Program Costs
\$ 6,640,550	2014 Bonus
-\$ 5,020,922	2014 Over-Recovery
\$ 549,065	2016 Forecasted EM&V Expenses
-\$ 85,500	2014 Historical Admin Adjustment
<u>\$ 166,881</u>	2014 Rate Case Expense
\$ 37,645,874	4 Total EECRF Costs

In 2016, actual program costs were \$33,142,343 and actual EM&V costs were \$549,065 for total energy efficiency related costs of \$35,392,416. Total revenues collected through the EECRF Rider were \$37,571,561, resulting in overall over-recovery of \$2,179,145.

# 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 2016. All of the 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 2016 through the company's energy efficiency programs.

# **XVI.** Performance Bonus Calculation

In 2016, CenterPoint Houston's total spending on the implementation of Energy Efficiency Programs was \$33,142,343. Per Substantive Rule § 25.181, the calculation of performance bonus is 10% of Net Benefits. Therefore, CenterPoint Houston will request a performance bonus of \$11,039,376 as part of the 2017 EECRF filing.

、	kW	k Wh
2016 Program Goals	59,400	104,314,000
2016 Program Savings	167,745	190,882,946
Reported/Verified Total (including HTR,		
measures with 10yr EUL, and measures with EULs $<$		
<i>or</i> > 10 <i>years</i> )	167,745	190,882,946
Reported/Verified Hard-to-Reach	5,847	7,712,402
Avoided Cost		
per kW		\$80
per k Wh		\$0.051
Inflation Rate		2.0%
Discount Rate		8.21%
Total Avoided Cost <sup>11</sup>	\$	144,128,826
2016 Program Costs <sup>12</sup>	\$	33,735,064
Net Benefits = Total Avoided Cost - Total Program Cost		
Net Benefits	\$	110,393,762
Bonus Based on 10% Net Benefits	\$	11,039,376

Table 12 sh	ows the ne	rformance h	onus calcu	lation for (	CenterPoint	Houston	for	2016	ć
Table 12 Sh	ows the pe	riormance D	onus carcu	nation for y	Centerronnt	nousion	IOF .	2010	,

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

<sup>12</sup> Total Program Costs is inclusive of 2016 total spending for implementation of Energy Efficiency Programs, 2016 EM&V Expenses, and 2016 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
МТР	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 2016 Demand (kW) and Energy (kWh) Savings at Meter By County

Programs			-		, ; ;		c 0	UNTIES					
)	1-417	Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	Total
Commercial SOP	KW		180	/1/	\$14 51.5	C/ I	106'0			411	00		104,6
	kWh		2,539,751	3,961,239	4,354,645	828,758	47,908,172			2,305,887	367,492		62,265,944
	kW		197	7	58	862	1,660			0	248	65	3,098
Commercial MILY - Score	kWh		1.183.538	38.696	346.221	4.076.697	8.522.306			2.869	1.377.790	339.052	15.887.169
	kW				336		596						932
Commercial MLLF - realmoare	kWh				2,236,863		4,809,430						7,046,293
Large Commercial Load	kW		3,606	1,094	5,457	175	98,695			5	87		109,119
Management SOP	kWh		21,638	6,563	32,740	1,050	592,170			29	522		654,712
Doteo Commissi mine	kW			9			483						489
Neu o-commissioning	kWh			46,736			2,259,451						2,306,187
	kW				0		637						637
KEP (COMMERCIAL COOLSAVER)	kWh				26,986		2,642,431						2,669,417
Cunterine Martine	kW		18		333		915			68		7	1,341
Sustainable Schools	kWh		40,955		729,330		1,903,296			190,952		10,470	2,875,003
	kW				10		34			1	1		46
Pool Fump Frogram Commercial	kWh				122,485		420,510			15,516	11,938		570,449
Date Contana	kW						971						971
Data Centers	kWh						8,274,684						8,274,684
Constant Street Mark	kW		938	104	5,294	135	6,421			758	21		13,671
Ellergy Star WILF	kWh		2,879,825	345,230	16,297,234	430,879	20,366,010			2,355,464	61,976		42,736,617
Bacidantial COD	kW	5	11	13		13	81				2		125
INCSTRUCTURED SOL	kWh	11,356	25,343	35,723		32,264	186,735				4,447		295,868
Advanced Lighting Program	kW		115		422	134	1,888			87			2,645
(Residential)	kWh		613,710		2,246,114	715,261	10,058,683			461,988			14,095,756
	kW	8	175	2	543	27	1,502			51	11	4	2,322
A/C DISURDING FF09Falli	kWh	25,533	467,277	5,220	1,449,946	83,353	4,095,525			140,395	30,996	10,618	6,308,863
RFD (Residential Coolsam)	kW	4	153	15	842	31	2,439	1	1	142	14	7	3,649
	kWh	10,632	387,704	38,158	2,142,884	79,876	6,204,573	2,730	1,434	362,003	35,045	17,070	9,282,109
RFP (Ffficiency Connection)	kW	1	8	1	22	4	126			7	1	1	171
	kWh	2,611	40,118	5,421	114,281	21,690	641,454			38,046	2,815	3,228	869,663
REP (Residential Demand Response)	kW	10	879	138	1,983	193	7,426	0	0	474	19	7	11,129
	kWh	60	5,270	826	11,881	1,158	44,501	-	0	2,840	117	39	66,692
Energy Star Multi-Family Low Rise	kW				203		94			230			528
MIP	kWh				1,186,332		510,858			1,182,317			2,879,507
Multi-Family Water & Space	kW						10001						782
reaung witte (KES)	1.437		00	-	60	1	C16,007,1			16	¢		1,200,913
Pool Pump Program Residential	kWh		79.570	4.060	390.973	39.420	1.242.094			62.848	4.763		1.823.729
Energy Wise Resource Action	kW		56		80	40	107			h.			283
Program	kWh		100,089		223,217	61,466	616,200						1,000,971
Hand-To-Dearch SOP	kW				124		215						338
THUR TO WORK BOT	kWh				259,136		369,859						628,995
Multi-Family MTP (HTP)	kW				86		1,983						2,069
	kWh				327,058		1,382,181						1,709,239
Multi-Family Direct Install	kW				50		212						262
	kWh				179,311		781,396						960,707
Energy Star Multi-Family Low Rise	kW												0
MIP (HIK)	kWh												0
Targeted Low Income (Agencies in	kW		0		11		3,043						3,114
Action MIP)	kWh		26		126,468		4,124,943						4,251,437
REP (Residential Coolsaver -Income	kW		7		15		42						64
Qualified)	kWh		17,284		39,219		105,521	I				1	162,024
Programs - 101AL Total FW Socience	1-11	24	6 573	2002	16 924	1 60.7	127 607	-	-	1751	767	00	34 7 7 31
Total LWh Southors	L-Wh	50 102	0 AD2 007	1 1017 011	27 843 374	2001 C 371 871	100,101	2 731	1 134	7 1 7 1 154	1 807 001	360 476	100 987 046
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