### CenterPoint Energy Houston Electric, LLC

### **2013 Energy Efficiency Plan and Report**

### Substantive Rule § 25.181 and § 25.183

### April 1, 2013

Project No. 41196

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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 implements 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 goals through market-based standard offer programs (SOPs) and limited, targeted, market transformation programs (MTPs):

- 25 % reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2012 program year; and
- 30% reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2013 program year.
- 0.4% reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2014 program year.

The format used in the EEPR is consistent with the requirements outlined in § 25.181 (n). The EEPR presents the results of CenterPoint Houston's 2012 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 2013 and 2014 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 detail the planning section of the EEPR, while sections five through ten present energy efficiency report information. The final five sections address the Energy Efficiency Cost Recovery Factor (EECRF), the performance bonus achieved in 2012 and potential financial impacts of the current energy efficiency rulemaking, Project No. 39674. The three appendices provide a description of the acronyms used throughout the report, a 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 30% reduction in its annual growth in demand of residential and commercial customers by December 31, 2013, and a 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2014. 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 2013 and 2014 goals, projected savings, and projected budgets.

<b>Table 1: Summary of Annual</b>	Goals, Projected	Savings and I	Projected Budgets <sup>1</sup>
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	Calendar Year	Avg Growth in Demand	MW Goal	Demand (MW) Goal <sup>2</sup>	Energy (MWh) Goal <sup>3</sup>	Projected MW Savings⁴	Projected MWh Savings <sup>2,3</sup>	Projected Budget (in 000's)
Annual Goals	2013	196.6	30% of 5-yr average growth in demand	54.85	96,088.0	202.43	144,727.1	\$42,857
	2014	310.4	0.4% of peak demand	58.20	101,985.0	137.44	132,889.0	\$38,405

<sup>&</sup>lt;sup>1</sup> Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budget form 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> Industrial identification notices have not been factored in to the demand goal, therefore the goal will change slightly when these ESIID's are removed.

<sup>&</sup>lt;sup>3</sup> Calculated using a 20% capacity factor.

<sup>&</sup>lt;sup>4</sup> Peak demand reduction and energy savings 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. Large Commercial SOP
- 2. Texas SCORE MTP (Commercial MTP)
- 3. Large Commercial Load Management SOP
- 4. Retro-Commissioning MTP
- 5. Advanced Lighting Commercial
- 6. Sustainable Schools Pilot
- 7. ENERGY STAR<sup>®</sup> Homes MTP
- 8. Residential & SC SOP
- 9. Advanced Lighting Residential
- 10. A/C Distributor MTP
- 11. Home Performance with ENERGY STAR<sup>®</sup> MTP
- 12. Retail Electric Provider Pilot MTP (REP MTP)
- 13. Energy Wise Resource Action MTP
- 14. Hard-to-Reach SOP
- 15. Multi-Family Water & Space Heating (W&S Htg) MTP
- 16. Agencies in Action MTP

As detailed in this report, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory 25% energy efficiency savings goal. CenterPoint Houston's goals for 2012 were 39.2 MW in peak demand reduction and 68,693.8 MWh in energy savings. Actual achieved reductions in 2012 totaled 174.9 MW and 127,376.9 MWh. Although the total forecasted spending for 2012 was \$39.86 million, actual 2012 spending totaled \$34.81 million. Program manuals for these programs can be found on CenterPoint Houston's website <a href="https://www.centerpointefficiency.com">www.centerpointefficiency.com</a>

#### I. 2013 Programs

#### A. 2013 Program Portfolio

CenterPoint Houston plans to implement 14 programs in 2013. In addition, two pilot programs will be funded in 2013. 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.

Program	Target Market	Application
Large Commercial SOP	Large Commercial	Retrofit; New Construction
Texas SCORE MTP (Commercial MTP)	Large Commercial	Retrofit; New Construction
Large Commercial Load Management SOP	Large Commercial	Load Management
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
Advanced Lighting Commercial	Large Commercial	Retrofit; New Construction
Sustainable Schools Pilot	Large Commercial	Retrofit; New Construction
ENERGY STAR <sup>®</sup> Homes MTP	Residential	New Construction
Residential & SC SOP	Residential	Retrofit; New Construction
Advanced Lighting Residential	Residential	Retrofit; New Construction
A/C Distributor MTP	Residential	Retrofit
Home Performance with ENERGY STAR <sup>®</sup> MTP	Residential	Retrofit
Retail Electric Provider Pilot MTP	Residential	Load Management; Retrofit
Hard-to-Reach SOP	Hard-to-Reach	Retrofit
Multi-Family W&S Htg MTP	Residential / Hard-to- Reach	New Construction
Agencies in Action MTP	Hard-to-Reach	Retrofit
Energy Wise Resource Action MTP	Residential	Educational

Table 2: 2013 Energy Efficiency Program Portfolio

The programs listed in Table 2 are described further in sub-section B. CenterPoint Houston maintains a website<sup>5</sup> containing requirements for project participation and most of the forms required for project submission. The website is one method of communication used to provide project sponsors with program updates and information.

<sup>&</sup>lt;sup>5</sup> CenterPoint Houston energy efficiency website is <u>www.centerpointefficiency.com</u>

#### **B.** Existing Programs

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

#### Program design

The Commercial SOP targets commercial customers with a minimum demand of 100 kW, and small commercial customers with a demand not to exceed 100 kW. Incentives are paid to project sponsors on a first-come, first-served basis for a variety of measures installed in new or retrofit applications, which provide verifiable demand and energy savings. Large commercial customers must save at least 20 kW on installed measures, while small commercial customers may save less than 20 kW. For the first time in 2013, CenterPoint Energy's Commercial SOP program will include re-lamping measures, without the inclusion of ballast replacements. This will increase opportunities for interested companies to participate in the program on a smaller scale.

#### Implementation process

CenterPoint Houston will continue implementation of its Commercial SOP whereby any eligible project sponsor may submit an application for qualifying projects. Program information is provided on CenterPoint Houston's website.

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

CenterPoint Houston markets the availability of this program in the following manner:

- Maintains internet website with detailed project eligibility, end-use measures, incentives, procedures and application forms;
- Utilizes mass e-mail notifications to keep potential project sponsors interested and informed;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Participates in service area-wide outreach activities as may be available;
- Conduct workshops as necessary to explain elements such as, responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

# The Texas SCORE / City Smart MTP (Commercial Market Transformation Program (MTP))

#### Program design

The SCORE MTP targets K-12, higher education, cities, counties and state governmental agencies within the CenterPoint Houston service territory. Direct incentives are paid to school districts, cities, and municipalities for certain energy efficiency measures installed in new or retrofit applications that provide verifiable demand and energy savings. 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. In 2011 a new program, SCORE MTP Lite, was offered that provides higher incentives to those school districts that do not require the technical assistance or engineering analysis provided by the implementer. The SCORE MTP Lite program is a way to transition this market while continuing to provide segmented access to incentives. In 2012 incentives were aligned with the Commercial SOP and schools can now only participate in the SCORE or SCORE Lite.

In 2013, the program will include a healthcare component as CenterPoint Houston looks to engage the healthcare market. A third party program implementer will market to small and medium healthcare facilities throughout the service area. The implementer will provide technical assistance that will aid the facilities in deciding what measures to include in their projects. With the addition of the healthcare sector in 2013, the program name will change to *Commercial Market Transformation Program (MTP)* in 2014.

#### **Implementation process**

CenterPoint Houston will continue implementation of the SCORE / City Smart MTP whereby, providing funds are available, any eligible project meeting the minimum requirements from any participating school district, city, county, governmental agency, or healthcare facility may be submitted for incentive payment.

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

CenterPoint Houston markets the availability of this program in the following manner:

- 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;

- Participates in service area-wide outreach activities as may be available;
- Conducts workshops as necessary to explain elements such as responsibilities of the program requirements, incentive information, and the application and reporting process.

#### Large Commercial Load Management SOP

#### Program design

CenterPoint Houston will continue the Large Commercial Load Management SOP program in 2013. The Large Commercial Load Management SOP will be available to non-residential distribution customers, governmental customers, educational customers and non-profit customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an EEA2 emergency situation. Incentives will be paid to project sponsors for measured and verified kW reductions. Project sponsors must have a normal aggregate peak demand of 750 kW or more, and must be equipped with a CenterPoint Houston Interval Data Recorder (IDR) meter or Itron smart meter.

#### Implementation process

Implementation of this program will be through customers and third-party entities representing distribution level or other governmental, educational and non-profit customers within the CenterPoint Houston service territory. The 2013 program will continue to initiate a minimum of two curtailment calls and a maximum of five curtailment calls during the summer peak period. The first call is scheduled for June and will last from one to three hours. The remaining calls will last from one to four hours each.

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

CenterPoint Houston plans to market the availability of this program in the following manner:

- Maintains program information on the company website.
- 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 that identifies no-cost or low-cost measures 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 expert analysis to improve the performance of energy using systems throughout their facilities that will reduce electric demand and consumption. RCx Agents, typically consulting engineering firms, are used to deliver the program to customers. RCx Agents are paid at the completion of each of three phases: preliminary assessment phase, investigation phase and verification phase. Facility owners must implement enough of the identified measures to keep the project cost effective or the project will not move forward. Facility owners and RCx Agents can earn incentives if all schedules are maintained and savings are acceptable.

Studies are underway to increase the rates in 2013 (based on project square footage and savings) while maintaining program cost effectiveness. A new baseline study will also be considered.

As the 4th largest city in the country, Houston has a vast number of commercial buildings which provides the RCx program with a tremendous potential for growth over the next few years.

#### **Implementation process**

The program, both RCx Full and RCx Fast Track is implemented through selected RCx agents. Program information is provided on CenterPoint Houston's website.

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

CenterPoint Houston markets the availability of this program in the following manner:

- Contracts with a third-party program implementer
- Maintains internet website with detailed project eligibility, procedures and application forms;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Participates in service area-wide outreach activities as may be available;
- 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.

#### **Advanced Lighting Commercial MTP**

#### Program design

CenterPoint Houston will continue participation in the Advanced Lighting Commercial Pilot MTP in 2013. The program will target outdoor applications for LED lighting in commercial facilities (i.e., parking garages, parking lots, outdoor building lighting, landscape lighting, billboards, etc.). Fixtures approved in the Advanced Lighting Commercial MTP must be certified by ENERGY STAR<sup>®</sup> or the Design Lights Consortium. The program aims to breakdown market barriers and bring awareness about outdoor LED lighting to the commercial market in the CenterPoint Houston service territory.

#### Implementation process

The Advanced Lighting program will be implemented in the CenterPoint Houston service territory by a third-party program implementer.

The Advanced Lighting Commercial MTP program will pay incentives (based on \$220 per onpeak kW reduction and \$0.12 per annual kWh saved) to commercial customers installing qualifying LED products, in eligible applications. In 2013, new PUC rules added a Winter On-Peak period which allows all outdoor lighting to be eligible for both kW and kWh incentives. Prior to 2013, only parking garages were eligible for both kW and kWh incentives. All installations must be performed by a Qualified Installation Service Provider.

#### Outreach and Research activities

CenterPoint Houston plans to market the availability of this program in the following manner:

- Promotion of commercial LED applications through research and development projects;
- Contracts with a third-party program implementer to implement outreach and planning activities;
- Participates in regional outreach activities as may be available;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

#### **ENERGY STAR® Homes MTP**

#### Program design

The ENERGY STAR<sup>®</sup> New Homes MTP targets residential new construction. Incentives are paid to builders for the construction of Version 3 ENERGY STAR<sup>®</sup> certified homes as well as other high performance homes that meet certain requirements (0.27 SHGC, 14.5 SEER, and 50%)

high efficacy lighting) in the CenterPoint Houston service territory. The program is supported by training, education, and advertising components. The builders are selected through an application process and qualifying homes must be built to strict EPA standards or above. Version 3 began in 2012, moved away from a fixed Home Energy Ratings (HERS) index, and incorporated additional checklists for thermal enclosure and HVAC quality installation. In light of these strict requirements, the Company implemented program design changes in order to continue to encourage builders to build homes that are 15% above code. In 2011, CenterPoint Houston accepted non-ENERGY STAR<sup>®</sup> homes that met specific targets, such as high performance windows, increased ceiling insulation, high efficiency lighting, and a HERS index of 72 or below. Program incentives are based on demand and energy impacts rather than on a HERS index.

#### Implementation process

CenterPoint Houston will continue implementation of its ENERGY STAR<sup>®</sup> Homes MTP but any eligible home builder meeting the minimum requirements may submit an application for participation in the program. An additional incentive will be offered for those builders who move to the version 3 guidelines. Program information is provided on CenterPoint Houston's website.

#### Outreach and Research activities

CenterPoint Houston promotes the ENERGY STAR<sup>®</sup> Homes MTP in the following manner:

- Contracts with a third-party program implementer to implement outreach and planning activities
- Advertises using a multitude of news media, including billboards, radio and television announcements, and targeted relocation publications as well as supporting the local home builder association publications;
- Provides point of purchase materials including yard signs, door mats and brochures free to participating builders;
- Maintains internet website, www.HoustonEnergyStarHomes.com with detailed program information, links to participating builders websites, and the general features and benefits of ENERGY STAR<sup>®</sup> homes;
- Conducts various testing for all local raters or air conditioning contractors as needed ;
- Conducts training sessions for builders' sales staff throughout the year to increase the knowledge and awareness of the features and benefits of ENERGY STAR<sup>®</sup> homes;

- Participates in quarterly roundtables with the builder's home energy raters to discuss and exchange information concerning program issues;
- Attends appropriate industry-related meetings and seminars to generate awareness and interest;
- Participates in state-wide outreach activities
- Conducts builder workshops covering program requirements, incentive information, and the application and reporting process.

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

#### Program design

The Residential SOP targets residential customers with a maximum demand of less than 100 kW. Incentives are paid to project sponsors, for an array of measures installed in retrofit applications, which provide verifiable demand and energy savings. Sponsors submit applications for program participation and are awarded contracts on a first-come, first-served basis. CenterPoint Houston's Residential SOP will continue in the same format for 2013. The program is open to all qualifying energy efficiency measures, including, but not limited to air conditioning, duct sealing, weatherization, ceiling insulation, compact fluorescent lighting, water saving measures and ENERGY STAR<sup>®</sup> windows.

#### Implementation process

CenterPoint Houston will continue implementation of its Residential SOP whereby any eligible project sponsor may submit an application for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website. Beginning with the 2013 program year, the Residential SOP program will incorporate a new Duct Tool available to project sponsors who install this measure. In previous program years, program sponsors have been given the option to choose the duct leakage testing method. Beginning in the 2013 program year, program sponsors will be required to conduct the leakage-to-outside testing method.

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

CenterPoint Houston markets the availability of this program in the following manner:

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party project sponsors;
- Utilizes mass e-mail notifications to potential project sponsors to inform them of the program start date and informational meetings;

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

#### **Advanced Lighting Residential MTP**

#### Program design

CenterPoint Houston will continue participation in the Advanced Lighting Pilot MTP in 2013. The program will continue to offer 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 will be implemented in the CenterPoint Houston service territory by a third-party program implementer.

Point of purchase discounts will be applied to residential customers at participating retailers, including Home Depot, Lowes, Sam's Club, and Costco, throughout the CenterPoint Houston footprint. The discounted amount is \$10 or less per LED product purchased.

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

CenterPoint Houston plans to market the availability of this program in the following manner:

- In-store promotions of the program via signage;
- Contracts with a third-party program implementer to implement outreach and planning activities;
- Participates in regional outreach activities as may be available;
- 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 (>16 SEER/12 EER) air conditioners and heat pumps

(>8.2 HSPF) in existing single-family and multi-family homes within CenterPoint Houston's electric distribution service territory.

#### Implementation process

CenterPoint Houston will continue implementation of its A/C Distributor MTP whereby any eligible A/C distributor meeting the minimum requirements may submit an application for participation in the program. CenterPoint Houston will continue to verify installations, manage and allocate available incentive funds, process all claims for incentive payments and provide other oversight functions. Program information is provided on CenterPoint Houston's website.

#### Outreach and Research activities

CenterPoint Houston plans to market the availability of this program in the following manner:

- Contracts with a third-party program implementer to implement outreach and planning activities;
- Conducts workshops as necessary to explain elements such as responsibilities of the distributors and contractors, program requirements, incentive information, and the application and reporting process;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

#### Home Performance with ENERGY STAR<sup>®</sup> MTP

#### Program design

The Home Performance with ENERGY STAR<sup>®</sup> MTP targets existing residential homes. The program seeks to reduce energy use using a comprehensive, whole-house approach for a typically underserved residential market. Incentives are paid through the program implementer who pays the consumer, for measures installed, which provide verifiable demand and energy savings.

#### Implementation process

The program will be implemented in the CenterPoint Houston service territory using a thirdparty program implementer. The third-party implementer will recruit and train project sponsors and insure program goals are met. For 2012, a limited geographic area was targeted to test the program plan and develop the necessary contractors to implement the program across the service territory. For 2013 no changes were made to the program design, however all customers can participate.

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

CenterPoint Houston will promote the Home Performance with ENERGY STAR<sup>®</sup> MTP in the following manner:

- Advertisement and outreach will continue on a limited geographical area and will be conducted through community centers, faith based organizations, and other similar organizations;
- Attends appropriate industry-related meetings and seminars to generate awareness and interest;
- Participate in state-wide outreach activities;
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

#### **Retail Electric Provider Pilot MTP (REP MTP)**

#### Program design

CenterPoint Houston plans to continue the Retail Electric Provider Pilot MTP in 2013. REPs will be able to choose from a menu of methods on how they would provide verified demand and energy savings to the program. The initial program available to Retail Electric Providers is the CoolSaver A/C Tune-up program. Five REP's have agreed to participate in the 2013 CoolSaver A/C tune-up program. The program will utilize specially trained air conditioning contractors to perform A/C tune-ups for residential and small commercial customers in CenterPoint Houston's service territory.

In addition to the CoolSaver program REPs may also propose their own services or programs. Each service provider in the program will be limited to a maximum of 20% of the program incentive budget, similar to rules in other CenterPoint Houston energy efficiency programs.

#### Implementation process

The program will be implemented in the CenterPoint Houston service territory using a thirdparty program implementer. The third-party implementer will recruit REP's and insure program goals are met. Incentives will be paid to program service providers for verified demand and energy savings achieved through the program.

#### Outreach and Research activities

CenterPoint Houston plans to market the availability of this program in the following manner:

- Contracts with a third-party program implementer to implement outreach and planning activities;
- REPs will market the program to existing customers via e-mail, phone calls and direct mail.
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

#### Hard-To-Reach Standard Offer Program (HTR SOP)

#### Program design

The HTR SOP targets hard-to-reach residential customers. 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. Project sponsors are encouraged to install comprehensive measures and are paid based on the Public Utility Commission of Texas (PUCT) approved deemed savings values. Project funding is based on a first-come, first-served approach. Qualifying measures include those allowed in the Residential SOP as well as compact fluorescent lamps. Also included in the HTR SOP is the Affordable Single Family component. This segment pays incentives to not for profit agencies who build new homes to ENERGY STAR<sup>®</sup> standards for lower income families.

#### Implementation process

CenterPoint Houston will continue implementation of its HTR SOP whereby any eligible project sponsor may submit an application for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

For the 2013 program year, CenterPoint Houston has reduced the incentive payment for the attic insulation measure. CenterPoint Houston has also changed the testing and installation protocol for the duct efficiency improvement measure. In previous program years, program sponsors have been given the option to choose the duct leakage testing method. Beginning in the 2013 program year, program sponsors will be required to conduct the leakage-to-outside testing method.

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

CenterPoint Houston markets the availability of this program in the following manner:

- Utilizes mass e-mail notifications to potential project sponsors to inform them of the program start date and informational meetings;
- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures and application forms;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Participates in state-wide outreach activities as may be available;
- Conducts 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 Water & Space Heating MTP

#### Program design

The Multi-Family Water and Space Heating MTP promotes the installation of energy efficient non-electric water and space heating in multi-family housing projects. The program includes boiler systems as well as individual non-electric water and space heating units. Projects are funded based on qualifying measures, estimated completion date and available funds. To further enhance participation of multifamily developers, CenterPoint Houston implemented a new multifamily ENERGY STAR<sup>®</sup> program in conjunction with the Multi-Family Water and Space Heating program. Developers are selected through an application process and qualifying new multifamily homes must be built to ENERGY STAR<sup>®</sup> version 3.0 standards.

#### Implementation process

CenterPoint Houston will continue implementation of its Multi-Family Water and Space Heating and Multifamily ENERGY STAR<sup>®</sup> program whereby any eligible project sponsor or developer may submit an application for a project meeting the minimum requirements.

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

CenterPoint Houston markets the availability of this program in the following manner:

- Utilizes mass e-mail notifications to potential project sponsors and developers to inform them of the program start date and informational meetings;
- 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, project requirements, incentive information, and the application and reporting process.

- Contracts with a third-party program implementer to implement outreach and planning activities for the Multifamily ENERGY STAR<sup>®</sup> program.
- Provides point of purchase materials including yard signs, door mats and brochures free to participating builders for the Multifamily ENERGY STAR<sup>®</sup> program.

#### **Agencies in Action MTP**

#### Program design

The Agencies in Action MTP provides funds for implementing energy efficiency improvement projects for eligible CenterPoint Houston low-income residential customers through non-profit organizations. CenterPoint Houston's goal is to solicit the participation of a sufficient number of non-profit organizations to provide comprehensive, whole-house retrofits that maximize electricity savings including attic insulation, solar screens, compact fluorescent lamps, water saving measures, ENERGY STAR<sup>®</sup> room air conditioners, central air conditioning systems, ENERGY STAR<sup>®</sup> ceiling fans, ENERGY STAR<sup>®</sup> refrigerators, duct efficiency improvement and air infiltration control. Program participants must 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

The program implementer has the responsibility of recruiting and overseeing the participating agencies. Local agencies may submit applications for funding provided they meet program participation requirements and funding is available. CenterPoint Houston will continue implementation of its Agencies in Action MTP in 2013 while adapting the program to meet the revised standards described by PURA § 39.905(f). Specifically, in 2013 CenterPoint Energy has implemented program design changes to comply with Senate Bill 1434 which requires that targeted low income programs comply with the same audit requirements as federal weatherization programs. All single family homes weatherized must have a NEAT (National Energy Audit Tool) audit conducted by qualified personnel to be eligible for the program.

#### Outreach and Research activities

CenterPoint Houston markets the availability of its programs in the following manner:

• Participates in appropriate industry-related meetings and events to generate awareness and interest;

- Promotes program participation in under-served areas of the CenterPoint Houston electric service territory;
- Contacts non-profit organizations and local housing authorities for potential participation;
- Conducts workshops as necessary to explain elements such as responsibilities of the agency, project requirements, incentive information, and the application and reporting process.

#### **Energy Wise Educational Program**

#### Program design

This program is designed to show the benefits of energy efficiency through educational type programs. The Energy Wise Program utilizes a school delivery format to provide take-home Resource Action Kits to sixth grade students. The kits contain energy efficiency devices, such as compact fluorescent light bulbs, and creative classroom and in-home education techniques that encourage families to adopt new resource usage habits. Lesson plans are provided to teachers that help educate the students on the benefits of using these energy saving devices on a daily basis.

#### Implementation process

The program will be implemented using a third-party program implementer that will recruit teachers in various targeted school districts throughout the service territory. Recruited teachers will receive program materials that include; a teacher and student workbook, kit of efficiency materials, and a parent letter explaining the program. The incentive budget covers the implementer costs as well as the cost for the kits.

#### Outreach and Research activities

CenterPoint Houston plans to market the availability of this program in the following manner:

• Utilize CenterPoint' Community Relations staff to help recruit schools and teachers.

#### C. New Programs for 2013

#### **Sustainable Schools Pilot Program**

#### Program design

The Sustainable Schools pilot program is a comprehensive energy education and conservation program that will target physical science high school students and teachers. Sustainability Teams will be formed to promote awareness of energy conservation, set goals for reducing the school's energy consumption, and recommend behavioral and operational changes to accomplish the set goals. This will be accomplished by providing energy conservation educational supplements, training teachers and students on the use of energy audit kits, and instructions on monitoring the school's energy consumption. The teachers and students will be responsible for promoting energy conservation awareness throughout the school and monitoring the energy consumption behavior patterns of the students and staff, as well as advocating improvement in those patterns. The teams will also be encouraged to organize events to promote energy conservation at school assemblies. Students will be expected to prepare an energy audit report of their findings and present the results to school administration. This pilot will assist in learning if behavioral type programs can provide peak demand and energy savings.

#### **Implementation process**

Implementation began in the fourth quarter of 2012 to establish program materials and guidelines for the full implementation in 2013. The program will be implemented using a third-party program implementer that will target public and private schools that are not currently enrolled in CenterPoint Houston's SCORE program. The goal is to target low-cost, no-cost measures involving behavioral, operational, or maintenance controls that will be developed by Sustainability Teams within the school. There is no financial obligation from the participants. *Outreach and Research activities* 

CenterPoint Houston markets the availability of this program in the following manner:

- 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 workshops as necessary to explain elements such as responsibilities of the program requirements, incentive information, and the application and reporting process.

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

In 2013 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: Electric Power Research Institute EPRI End-Use Efficiency and Demand Response Program (EPRI Project 170)

The End-Use Energy Efficiency and Demand Response project is focused on the assessment, testing, and demonstration of energy-efficient and smart end-use devices to accelerate market adoption, which can influence the progress of codes and standards and ultimately lead to market transformation. The program also develops analytical frameworks essential to industry application of energy efficiency, including assessment of resource potential, *characterization* of end-use load profiles, calculation of environmental impacts, and integration into utility resource planning.

This EPRI program provides the following:

- Objective, independent technical assessment, testing, and demonstration of emerging end-use technologies for energy efficiency and the enablement of demand response.
- A framework to evaluate the readiness of emerging end-use technologies for utility programs, along a continuum spanning technology scouting, assessment and lab testing, R&D field testing and demonstration, coordinated early deployment, and full program rollout.
- Multilevel assessment of enabling technologies for demand response: components and devices, home and building premise application, and program integration into retail and wholesale markets.
- Facilitates the use of behavioral programs to tap into new sources of savings potential by assessing the appropriateness of using a deemed savings approach for estimating savings.
- Evaluates new approaches to understanding customer diversity by building robust and reliable customer groupings and associations.

The research completed in 2012 in this program has helped manage risk mitigation and avoid costs of understanding and assessing emerging end-use technologies. The assessment, testing and demonstration of energy efficient technologies and demand response have assisted in the determination of their efficacy in utility pilots or programs prior to deployment and the synthesis of end-use load research results and techniques to provide predictive insights into electricity use forecasts. The program has also provided significant input into the standards development process, including use-case functional specifications of demand response–ready end use devices

through a multidisciplinary process involving utilities, equipment manufacturers, public agencies, and other industry stakeholders. A third area where results contributed significantly was in the understanding and assessing regulatory compliance through benchmarking and standardizations recommendations, including the establishment of national and regional benchmarks for energy efficiency and peak-demand reduction potential to inform discussions of state energy efficiency targets among members, policy makers, and other stakeholders. Activities planned for 2013 include:

- Expanding the scope and breadth of laboratory testing, to keep pace with new technologies and members' need to understand how the technologies work
- Consolidation of summary profiles of end-use technology categories into an updated comprehensive Energy Efficiency Technology Assessment Guide for convenient reference
- Development of methods for characterizing changes in household end use of electricity in a timely and cost-effective way
- Issuance of strategic technology briefs, industry briefs, workshops, and other practical knowledge transfer tools for members

#### Program: Residential Feedback Demonstration Program (EPRI Project 182)

This project will determine the feasibility of utilizing energy consumption feedback mechanisms to implement a residential energy efficiency program. CenterPoint Energy is partnering with EPRI to develop the program. The program has been segmented into two phases. In the initial phase, protocols have been developed to design an experiment that measures the behavioral impact of energy feedback for residential consumers, along with analysis methods for data collected. CenterPoint Energy collaborated with EPRI, Freeman & Sullivan, and other electric utilities to complete the research protocols and establish standards for data comparison. Key issues addressed in these protocols are methods of feedback, research gaps, and costs of studying feedback mechanisms. The second phase consists of CenterPoint Energy and EPRI using the results of Phase 1 to conduct an actual feedback research project in CenterPoint Energy's service territory with the goal of evaluating the effectiveness of feedback for residential customers. The CenterPoint Energy project is focused on providing energy consumption feedback to through the deployment of in-home display (IHD) devices that utilize the Advanced Metering System. The objectives of the CenterPoint Energy research pilot are as follows:

• Evaluate impacts upon which deemed savings estimates can be made.

- Test the IHD as a feedback mechanism, and assess how the technology works with the Advanced Metering System.
- Determine the scalability of an IHD pilot to a large energy efficiency program.
- Understand customer opinions of IHDs.

• Understand the specific behavior changes that occur as a result of the IHD deployment. Increased direct mail marketing efforts in the fourth quarter of 2012 and the first quarter of 2013 have accomplished the goal of 800 IHD deployments. The feedback devices were provided to enrolled customers via mail, requiring them to complete a software installation on their home PC to connect the equipment to the meter. EPRI is scheduled to deliver a preliminary report on the pilot by the end of the first quarter 2013.

#### Program: Residential Energy Efficiency and Demand Response (e5) Project

This project, in collaboration with an energy service provider integrated programmable controllable thermostats (PCT) equipped with Wi-Fi technology with weather and load forecasting models to develop predictable demand savings from residential demand response. The program utilized weather data, along with a residential home's thermal envelope to attempt to limit the temperature rise in a home during a demand response event.

The energy service provider conducted a marketing campaign through the spring and summer months of 2012 to the targeted 1,500 home owners who had purchased PCTs with Wi-Fi technology. Weather forecasts were closely monitored during 2012 on-peak months to simulate when an actual demand response would occur. The program initiated four curtailment events with 145 residents and a total of 205 thermostats. The average peak demand saving was 1.2044 kW.

This pilot is planned to be extended into 2013 to continue the study of forecasting and managing summer cooling load that is driven by weather conditions and cooling system technologies. The following objectives are identified for the 2013 pilot:

- Re-enroll the existing participants for the 2013 pilot
- Work with additional marketing partners and channels
- Increase pilot participation goal to 2,000 thermostats by June 2013
- Refine data collection and analysis supporting e5 residential demand response

#### Program: Plug-In Electric Vehicle (PEV) Smart Charging Demonstration Project

This project is being conducted in partnership with EPRI as a tailored collaboration (TC) project to demonstrate the technology integration of plug-in electric vehicles (PEVs) into the smart grid, as well as researching customer charging behavior and evaluating associated PEV load and infrastructure impacts. The demonstration will control PEV charging requirements under a simulated and real-time grid environment with potential load management consideration from off-peak smart charging technology as well as the capability to accept demand response signals.

The smart charging platform was jointly developed by utility and automotive industries. The platform is standards based and is able to utilize existing CenterPoint Energy's fleet PEVs or future CenterPoint Energy's purchased PEVs. Project demonstration and testing began in mid-2010 and has been extended until the end-of-year 2014 when the Smart-Grid project is scheduled for completion. The extension of time in this project is due to delays in technology development by original equipment manufacturers of batteries and the utility's electric grid to efficiently integrate PEVs with the development of intelligent grids.

#### Program: Renewable Energy Integration with Smart Grid Project

Discovery at Spring Trails (DST) subdivision is a master-planned gated community north of Houston that is currently under construction. The developer, Land Tejas, is requiring builders to use ultra-high energy efficient construction and appliances, plus a minimum of 1 kW of rooftop solar photovoltaic (PV). Land Tejas estimates that this combination will reduce energy consumption by about 40% over comparable new code-built homes. Also, a 250 kW solar farm will be constructed to offset an estimated 15% to 20% of the overall community infrastructure including water and sewage treatment, lighting, recreation and community pools and buildings.

A DOE stimulus grant application submitted by the Center for Commercialization of Electric Technologies (CCET) on behalf of this projects was approved by the DOE in November 2009 Phase 2 includes:

- Enhancing the use of Synchrophasor measurement to monitor conditions on the Texas power transmission backbone
- Demonstrating direct load control utilizing the Smart Meter Texas Portal (SMTP)
- Developing the infrastructure of Discovery at Spring Trails community as well as integrate the community with the Electric Reliability Council of Texas (ERCOT) wind energy system as a Smart Grid demonstration project

Phase 3 which includes project implementation and data collection was scheduled to begin and end in 2012. CenterPoint Houston is funding this R&D project to assess the performance and impact of the ultra-high energy efficient homes with solar and energy efficiency systems on CenterPoint Energy's distribution system and measure demand and energy reductions.

CCET held a kick-off meeting on January 10, 2010. Since third party access to SMTP direct load control capabilities were delayed and the development of the Discovery of Spring Trails community has not progressed as expected, CCET currently plans to integrate Discovery at Spring Trails load control devices with the SMTP through a third party load management system solution in 2013 and subsequently implement pilot testing and data collection. Energy Efficiency R&D funds were committed to pay for energy efficiency incentives on participant demand reductions tested during on-peak months which will most likely now occur in 2014.

#### Program: In-Home Display Energy Savings Study

A consultant has been contracted to perform an energy savings study on In-Home Display (IHD) devices. In order to collect sufficient 15 minute interval data before and after IHD devices were installed, IHD devices provisioned through the Smart Meter Texas (SMT) portal in CenterPoint Energy's service territory as of August 2011 were selected for the analysis. This included 1827 IHD devices installed by CenterPoint Energy as well as Retail Energy Providers. A report presenting the results of the study was completed in the first quarter of 2013. The regression models utilized by the consultant estimated an energy savings of 0.5% for the IHD devices.

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

The Green Proving Ground Program (GPG) leverages the GSA's real estate portfolio and utility R&D fund 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.

The preliminary goals of the collaboration are as follows:

- Identify practical technologies that can be incorporated into utility-sponsored programs
- Use third-party test results to support the development of stipulated deemed savings or M&V protocols for innovative technologies
- Use the rigorous R&D process to support and justify the integration of new technologies in utility-sponsored programs
- Demonstrate a strong return on investment for R&D based on new technologies that are identified through the collaboration and incorporated into utility sponsored programs

The R&D project will be implemented during the 2013 program year.

#### **D.** New Programs for 2014

#### **Pool Pump Pilot Program**

#### Program design

The Pool Pump Pilot Program will focus on residential in-ground swimming pools, which is an under-served end use for the residential customer. The program will focus on retrofitting existing single-speed pump motors with variable-speed motors as well as installing pump control devices. Incentives will be offered through direct incentives for the purchase of eligible variable-speed pumps, along with incentives to participating contractors for the sale, installation and commissioning of the more efficient pumps.

#### Implementation process

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

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

CenterPoint Houston will promote the program in the following manner:

- Attend appropriate industry-related meetings and seminars to generate awareness and interest;
- Conducts 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.

#### **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 and Senate Bill 1434, 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	256,000
Residential	1,154,000
Hard to Reach <sup>6</sup>	789,000

<sup>&</sup>lt;sup>6</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 2011 Annual Social and Economic Supplement, 40.6% 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 789,000. 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 is specified as the lesser of 30% of its five-year average rate of growth in demand or 0.4% of peak demand. The annual growth in demand for each year during the planning period is based on a combination of actual historical system peak demand and forecasted peak demand. As an example, the average annual growth in demand defined for the December 31, 2013 goal reflects the growth in actual peak demand from 2008 to 2012. For the purposes of this report, the 2014 goal will be based on the same historical load growth data from 2009 to 2012, plus an estimated load growth for 2013, and estimated peak demand for 2013. Once actual weather adjusted load data is obtained for the 2013 calendar year, the 2014 goal will be adjusted based on actual peak demand from 2009 to 2013. The demand savings goals are based on meeting 30% of the electric utility's annual growth in demand of residential and commercial customers by December 31, 2013 and on meeting 0.4% of the electric utility's peak demand of residential and commercial and commercial and commercial and commercial and commercial customers by December 31, 2014. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the demand savings goals.

Table 4 presents historical annual growth in demand for 2008-2012 and estimated annual growth for 2013 and 2014. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2013 and 2014. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. All of the MW and MWh values presented in tables 4 and 5 are at the customer meter. To derive values at the source, or power plant level, the values shown in the tables should be increased by 7% to account for line losses.

		Peak Dema	nd (MW)		En	Energy Consumption (MWh)				Average	
Calendar Year	Total System		Residential & Commercial		Total System		Residential & Commercial		Growth (MW)	Growth (MW) <sup>7</sup>	
Tear	Actual <sup>8</sup>	Weather Adjusted <sup>9,10</sup>	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted	Weather Adjusted	Weather Adjusted	
2008	15,484	15,845	13,735	14,096	63,113	64,312	62,143	63,342	56.0		
2009	16,240	16,057	14,373	14,190	64,419	63,217	63,449	62,247	94.0		
2010	16,315	16,341	14,602	14,628	65,750	63,732	64,780	62,762	438.0	N/A	
2011	17,284	16,688	15,321	14,725	69,115	65,357	68,145	64,387	97.0		
2012	16,614	16,721	14,916	15,023	67,913	67,387	66,943	66,417	298.0		
2013	17,402	N/A11	15,648	N/A	68,350	N/A	67,380	67,380	N/A	625.0	196.6
2014	17,765		16,010	1N/A	69,350	1N/A	68,380	1N/A	362.0	310.40	

Table 4: Annual Growth in Demand and Energy Consumption

Table 4 shows the annual growth in Demand and Energy over the past five years. The average growth over the previous five years multiplied by the PUCT stated annual goal reduction percentage gives the annual MW and MWh goal shown in Table 1.

#### 2013 Goals

MW Goal = 196.6 x 30% x (100% - 7%) = 54.85 MW MWh Goal = 54.84 MW x 8760 Hours x 20% Load Factor = 96,088 MWh

#### 2014 Goals<sup>12</sup>

MW Goal = 310 x 30% x (100%-7%) = 86.63MW MW Goal = 15,648 x 0.4% x (100% - 7%) = 58.20 MW MWh Goal = 58.21 MW x 8760 Hours x 20% Load Factor = 101,985 MWh

Consistent with Substantive Rule § 25.181, CenterPoint Houston's demand reduction goal for 2014 will be 58.21 MW and 101,985 MWh.

<sup>&</sup>lt;sup>7</sup> "Average Growth" for previous 5 years. NA = Not Applicable: Averages from 2007-2011 are not applicable to any of the calculations or forecasts in this EEPR.

<sup>&</sup>lt;sup>8</sup> 2013 and 2014 Calendar Year "Actual" values are forecasted.

<sup>&</sup>lt;sup>9</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>10</sup> Weather adjustment calculations are based on hourly weather data from NOAA's Quality Controlled Local Climatological Data (QCLCD).

<sup>&</sup>lt;sup>11</sup> NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand, so non weather adjusted "actual" forecasts are not applicable.

<sup>&</sup>lt;sup>12</sup> Industrial identification notices have not been factored in to the demand goal, therefore the goal will change slightly when these ESIID's are removed.

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

	2	2013	20	)14
Program Goals by Customer Class for 2013 and 2014	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter
Large Commercial	185.30	100,407.03	118.94	88,947.00
Large Commercial SOP	11.17	58,726.00	11.2	58,726.0
Texas SCORE MTP (Commercial MTP)	9.14	30,431.00	5.8	19,191.0
Large Commercial Load Management SOP	162.86	651.43	100.0	400.0
Retro-Commissioning MTP	1.52	6,658.00	1.5	6,658.0
Advanced Lighting Commercial	0.19	2,100.60	0.1	2,132.0
Sustainable Schools Pilot	0.42	1,840.00	0.4	1,840.0
<b>Residential and Small Commercial</b>	14.14	35,473.02	15.3	34,234.0
ENERGY STAR <sup>®</sup> Homes MTP	6.54	17,195.00	7.6	20,061.0
Residential & SC SOP	0.69	1,200.00	0.7	1,200.0
Advanced Lighting Residential	0.13	1,400.40	0.2	2,101.0
A/C Distributor MTP	1.58	4,988.00	1.6	4,988.0
Home Performance with ENERGY STAR <sup>®</sup> MTP	0.50	876.00	0.5	876.0
Retail Electric Provider Pilot MTP	4.05	7,984.62	4.0	3,179.0
Pool Pump Pilot	0.00	0.0	0.0	0.0
Energy Wise Resource Action MTP	0.65	1,829.00	0.7	1,829.0
Hard-to-Reach	2.99	8,847.00	3.2	9,708.0
Hard-to-Reach SOP Program	1.66	3,391.00	1.9	3,876.0
Multi-Family Water & Space Htg MTP	0.36	1,731.00	0.7	3,462.0
Agencies in Action MTP	0.97	3,725.00	0.6	2,370.0
TOTAL	202.43	144,727.05	137.44	132,889.00

#### **IV. Program Budgets**

Table 6 presents total projected budget allocations require to achieve the projected demand and energy savings for calendar years 2013 and 2014. 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.

Program Estimated Budget by Customer		2013		2014			
Class for 2013 and 2014	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget	
Large Commercial	\$20,580,000	\$1,833,300	\$22,413,300	\$16,330,000	\$2,089,400	\$18,419,400	
Large Commercial SOP	\$7,000,000	\$833,500	\$7,833,500	\$7,000,000	\$1,191,000	\$8,191,000	
Texas SCORE MTP (Commercial MTP)	\$5,550,000	\$298,000	\$5,848,000	\$3,500,000	\$330,400	\$3,830,400	
Large Commercial Load Management SOP	\$5,700,000	\$409,000	\$6,109,000	\$3,500,000	\$311,000	\$3,811,000	
Retro-Commissioning MTP	\$1,100,000	\$143,000	\$1,243,000	\$1,100,000	\$132,000	\$1,232,000	
Advanced Lighting Commercial	\$600,000	\$82,800	\$682,800	\$600,000	\$96,000	\$696,000	
Sustainable Schools Pilot	\$630,000	\$67,000	\$697,000	\$630,000	\$29,000	\$659,000	
<b>Residential and Small Commercial</b>	\$10,050,000	\$984,200	\$11,034,200	\$11,350,000	\$1,325,800	\$12,675,800	
ENERGY STAR <sup>®</sup> Homes MTP	\$3,000,000	\$376,000	\$3,376,000	\$3,500,000	\$443,000	\$3,943,000	
Residential & SC SOP	\$500,000	\$63,000	\$563,000	\$500,000	\$87,800	\$587,800	
Advanced Lighting Residential	\$400,000	\$55,200	\$455,200	\$600,000	\$61,000	\$661,000	
A/C Distributor MTP	\$1,500,000	\$181,000	\$1,681,000	\$1,500,000	\$237,000	\$1,737,000	
Home Performance with ENERGY STAR <sup>®</sup> MTP	\$1,500,000	\$129,500	\$1,629,500	\$1,500,000	\$122,000	\$1,622,000	
Retail Electric Provider MTP	\$2,400,000	\$112,500	\$2,512,500	\$2,500,000	\$283,000	\$2,783,000	
Pool Pump Pilot	\$0	\$0	\$0	\$500,000	\$24,000	\$524,000	
Energy Wise Resource Action MTP	\$750,000	\$67,000	\$817,000	\$750,000	\$68,000	\$818,000	
Hard-to-Reach	\$7,650,000	\$589,500	\$8,239,500	\$6,300,000	\$759,900	\$7,059,900	
Hard-to-Reach SOP	\$1,750,000	\$231,000	\$1,981,000	\$2,000,000	\$255,000	\$2,255,000	
Multi-Family Water & Space Heating MTP	\$400,000	\$58,000	\$458,000	\$800,000	\$85,000	\$885,000	
Agencies in Action MTP	\$5,500,000	\$300,500	\$5,800,500	\$3,500,000	\$419,900	\$3,919,900	
SUB TOTAL	\$38,280,000	\$3,407,000	\$41,687,000	\$33,980,000	\$4,175,100	\$38,155,100	
R&D	\$0	\$1,170,000	\$1,170,000	\$0	\$250,000	\$250,000	
PROGRAM TOTAL	\$38,280,000	\$4,577,000	\$42,857,000	\$33,980,000	\$4,425,100	\$38,405,100	
EM&V <sup>13</sup>			\$0			\$1,704,390	
EECRF PROGRAM TOTAL			\$42,857,000			\$40,109,490	

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

<sup>&</sup>lt;sup>13</sup> EM&V Costs as specified by PUC Staff. Costs are not subject to the cost caps, but will be applied to the cost effectiveness calculation in 2014.

# **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 (2008 – 2012). 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)
201214	39.20	68,693.82	257.60	154,602.00
<b>2011</b> <sup>15</sup>	39.21	68,694.00	110.24	146,092.00
<b>2010</b> <sup>16</sup>	39.21	68,694.00	120.98	139,665.00
2009 <sup>17</sup>	34.09	59,732.00	76.11	125,427.00
2008 <sup>18</sup>	25.31	N/A	68.11	177,220.00

<sup>&</sup>lt;sup>14</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Plan (EEP) filed in April of 2012 under Project No. 40194.

<sup>&</sup>lt;sup>15</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Report (EER) filed in April of 2011 under Project No. 39105.

<sup>&</sup>lt;sup>16</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Report (EER) filed in April of 2010 under Project No. 37982. <sup>17</sup> Actual weather-adjusted numbers from EER, Project No. 36689.

<sup>&</sup>lt;sup>18</sup> Actual weather-adjusted numbers from EER, Project No. 36689.

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

Table 8 breaks out the projected savings, verified savings, and reported and verified savings by customer class for each program. The projected savings were reported in the Energy Efficiency Plan filed in April of 2012. The reported and verified savings are those savings that have been achieved and verified in 2012 calendar year.

				2012		
Programs by Customer Class for 2012	Project	ted Savings	Verifi	ed Savings	Reporte	ed / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	235.02	97,284.80	157.63	84,386.55	157.63	84,386.55
Large Commercial SOP	12.76	61,251.00	12.06	63,825.27	12.06	63,825.27
Texas SCORE MTP (Commercial MTP)	6.94	16,657.00	3.36	11,206.86	3.36	11,206.86
Large Commercial Load Management SOP	212.50	850.00	140.54	421.62	140.54	421.62
Retro-Commissioning MTP	2.00	10,572.00	1.61	6,403.98	1.61	6,403.98
Advanced Lighting Commercial	0.82	7,954.80	0.06	2,528.82	0.06	2,528.82
Sustainable Schools Pilot18	N/A	N/A	0.00	0.00	0.00	0.00
<b>Residential and Small Commercial</b>	18.99	43,816.20	14.49	37,357.94	14.49	37,357.94
ENERGY STAR <sup>®</sup> Homes MTP	10.35	22,435.00	10.14	26,565.60	10.14	26,565.60
Residential & SC SOP	0.94	2,355.00	0.84	1,495.55	0.84	1,495.55
Advanced Lighting Residential	0.55	5,303.20	0.14	1,554.28	0.14	1,554.28
A/C Distributor MTP	1.99	6,366.00	1.98	6,326.55	1.98	6,326.55
Home Performance with ENERGY STAR <sup>® MTP19</sup>	1.54	4,043.00	0.00	2.96	0.00	2.96
Retail Electric Provider Pilot MTP	3.44	1,506.00	0.88	1.76	0.88	1.76
Energy Wise Resource Action MTP	0.19	1,808.00	0.51	1,411.24	0.51	1,411.24
Hard-to-Reach	3.59	13,501.00	3.13	8,888.80	3.13	8,888.80
Hard-to-Reach SOP	1.90	5,018.00	1.97	4,018.91	1.97	4,018.91
Multi-Family Water & Space Heating MTP	0.44	4,454.00	0.46	2,197.51	0.46	2,197.51
Agencies in Action MTP	1.25	4,029.00	0.70	2,672.38	0.70	2,672.38
TOTAL	257.60	154,602.00	175.26	130,633.30	175.26	130,633.30

#### Table 8: Projected Savings versus Reported and Verified Savings for 2012 (at Meter)

<sup>&</sup>lt;sup>19</sup> The Sustainable Schools program was started late in 2012, so the majority of the funds spent went toward school recruitment and program development.

<sup>&</sup>lt;sup>20</sup> The Home Performance with ENERGY STAR<sup>®</sup> 2012 program start was delayed due to changes in original program designs, including Best Buy not being able to participate after the cancellation of the Geek Squad. The majority of funds were spent on program sponsor recruitment, advertising materials, and program development.

				2011		
Programs by Customer Class for 2011	Project	ted Savings	Verifi	ed Savings	Report	ed / Verified
	MW	MWh	MW	MWh	MW	MWh
Large Commercial	105.65	83,816.00	91.26	93,190.90	91.26	93,190.80
Large Commercial SOP	11.53	55,371.00	13.31	73,400.60	13.31	73,400.50
The Texas Score MTP	6.94	16,657.00	5.57	13,983.40	5.57	13,983.40
Large Commercial Load Management SOP	85.00	255.00	71.22	183.90	71.22	183.90
Retro-Commissioning MTP	2.18	11,533.00	1.16	5,623.00	1.16	5,623.00
<b>Residential and Small Commercial</b>	17.72	52,984.00	15.75	41,778.60	15.75	41,778.60
Energy Star MTP	12.07	26,174.00	12.82	32,193.10	12.82	32,193.10
A/C Distributor Program	2.27	7,275.00	1.80	5,734.50	1.80	5,734.50
Residential SOP	1.13	2,826.00	0.94	1,940.70	0.94	1,940.70
Advanced Lighting	1.64	15,909.00	0.11	1,435.80	0.11	1,435.80
Residential In-Home Display Pilot	0.61	800.00	0.00	0.00	0.00	0.00
Multi-Family Water & Space Htg - MTP (RES)	0.00	0.00	0.03	303.40	0.03	303.40
Energy Wise Resource Action MTP	0.00	0.00	0.00	0.00	0.00	0.00
Community Weatherization (RES)	0.00	0.00	0.01	20.20	0.01	20.20
City of Houston Weatherization (RES)	0.00	0.00	0.04	150.90	0.04	150.90
Hard-to-Reach	4.46	14,848.70	3.24	11,122.30	3.24	11,122.30
Hard-to-Reach SOP Program	1.79	4,731.00	1.78	4,154.90	1.78	4,154.90
Multi-Family Water & Space Htg MTP	0.43	4,454.00	0.34	3,167.10	0.34	3,167.10
Res HTR - Afford. Home	0.00	0.00	0.06	54.30	0.06	54.30
Agencies in Action MTP	0.67	2,168.00	0.68	2,556.50	0.68	2,556.50
TDHCA Low-Income Weatherization (SB-712)	0.17	413.70	0.07	252.40	0.07	252.40
Community Weatherization (HTR)	1.40	3,082.00	0.07	145.90	0.07	145.90
City of Houston Weatherization (HTR)	0.00	0.00	0.24	791.20	0.24	791.20
Sub Total	127.83	151,648.70	110.25	146,091.80	110.25	146,091.70

 Table 9: Projected Savings versus Reported and Verified Savings for 2011 (at Meter)

# VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2008 - 2012) broken out by program for each customer class.

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Historical Statutory Program Funding by	2012	2	201	11	2010	0	2009	6	2008	~
Customer Class	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
Large Commercial	\$15,376,789	\$1,840,794	\$13,470,138	\$1,371,096	\$11,343,328	\$1,196,594	\$8,287,710	\$1,074,257	\$8,721,467	\$923,989
Large Commercial SOP	\$6,172,653	\$1,113,955	\$7,135,658	\$827,522	\$5,134,285	\$650,943	\$4,643,677	\$658,909	\$5,716,190	\$609,591
Retro-Commissioning MTP	\$728,186	\$98,953	\$911,694	\$197,955	\$940,596	\$110,454	\$912,365	\$126,804	\$899,366	\$72,522
Texas SCORE MTP (Commercial MTP)	\$2,175,141	\$248,361	\$2,573,968	\$173,145	\$2,328,447	\$232,255	\$1,408,282	\$134,974	\$1,498,540	\$131,402
Large Commercial Load Management SOP	\$5,625,000	\$303,369	\$2,848,818	\$172,474	\$2,940,000	\$202,942	\$1,323,386	\$153,570	\$607,371	\$110,474
Sustainable Schools	\$74,196	\$10,803	N1/ N	A 1 A	NIA	NI/A	N1/ A	NTA	N1/ A	NT/A
Advanced Lighting Program	\$601,613	\$65,353	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Residential and Small Commercial</b>	\$8,991,307	\$1,094,181	\$6,987,624	\$1,323,648	\$6,326,842	\$576,141	\$4,875,287	\$532,318	\$4,816,184	\$381,288
ENERGY STAR® Homes MTP	\$3,513,219	\$354,435	\$4,291,355	\$253,960	\$3,475,535	\$315,323	\$3,332,636	\$293,626	\$3,602,391	\$255,098
CCET Residential Demand Response Pilot	V/N	N/A	N/A	V/N	N/A	N/A	N/A	V/N	80	\$32,902
Residential SOP	\$500,874	\$83,866	\$492,083	\$208,782	\$355,817	\$55,643	\$364,490	\$92,261	\$390,915	\$65,109
Advanced Lighting Program	\$415,568	\$43,568	\$565,282	\$89,277	\$506,617	\$64,903	\$490,095	\$56,180	\$707,821	\$14,097
Multi-Family Water & Space Htg - MTP (RES)	\$347,050	\$50,050	\$15,200	\$2,825	\$18,600	\$2,552	\$175,200	\$21,367	\$80,220	\$12,187
A/C Distributor Program	\$1,642,142	\$191,096	\$1,586,152	\$151,498	\$1,780,779	\$116,152	\$345,952	\$42,211	N/A	N/A
Energy Wise Resource Action MTP	\$538,740	\$47,476	\$0	\$602,370						
Retail Electric Provider Pilot MTP	\$1,384,156	\$254,125	N1/ A	V / V	N1 / N	N1/ A	N1/ A	NI/A	N1/ A	NI/A
Home Performance with ENERGY STAR®	\$649,558	\$69,565	N/A	N/A	N/A	N/A	N/A	N/A	V/N	A/M
Community Weatherization (RES)	NI/A	N/A	\$6,664	\$3,975						
City of Houston Weatherization (RES)		E / N	\$30,888	\$10,961	\$189,494	\$21,567	\$166,914	\$26,673	\$34,837	\$1,895
Hard-to-Reach	\$5,551,440	\$535,801	\$6,411,548	\$699,293	\$7,383,333	\$771,337	\$9,184,238	\$875,066	\$8,325,707	\$625,210
Hard-To-Reach SOP	\$1,702,481	\$195,053	\$1,714,238	\$278,988	\$1,647,077	\$200,539	\$2,341,131	\$208,718	\$1,656,645	\$166,052
Multi-Family Water & Space Htg MTP (HTR)	\$63,200	\$9,114	\$341,650	\$63,507	\$181,200	\$24,865	\$284,850	\$34,740	\$414,450	\$62,964
Res HTR - Afford. Home	\$49,985	\$5,727	\$41,248	0\$	\$56,153	\$8,781	\$31,607	\$8,000	\$9,734	\$1,621
Agencies in Action MTP	\$3,735,774	\$325,907	\$3,612,188	\$146,179	\$3,282,998	\$284,018	\$4,240,000	\$287,758	\$2,826,550	\$129,740
TDHCA Low-Income Weatherization (SB-712)			\$360,440	\$74,381	\$364,098	\$49,228	\$360,000	\$47,241	\$1,147,649	\$60,402
Rebuilding Together Houston	NI/A	NI/A	N/A	N/A	\$957,927	\$102,171	\$1,052,339	\$148,895	\$713,351	\$119,710
Community Weatherization (HTR)	<b>W</b> /M		\$61,890	\$36,915	N/A	N/A	N/A	N/A	N/A	N/A
City of Houston Weatherization (HTR)			\$279,895	\$99,322	\$893,880	\$101,735	\$874,311	\$139,714	\$1,557,328	\$84,721
R&D	\$0	\$1,422,482	\$0	\$1,402,351	\$0	\$1,282,626	\$0	\$516,596	\$0	\$340,989

Table 10: Historical Program Incentive and Administrative Expenditures (2008 – 2012)<sup>21</sup>

\$2,271,476

\$21,863,358

\$22,347,235 \$2,998,238

\$25.053.503 \$3,826,698

\$4,796,388

\$26,869,310

\$4,893,258

\$29,919,536

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<sup>&</sup>lt;sup>21</sup> 2012 actual spending taken from Table 11 in the current EEPR; 2011 actual spending from the 2011 EEPR filed under Project No. 40194; 2010 actual spending from the EER filed under Project. No. 37982; 2008 actual spending from the EER filed under Project. No. 37982; 2008 actual spending from EER filed under Project No. 36689

## VIII. Program Funding for Calendar Year 2012

As shown on Table 11, CenterPoint Houston spent a total of \$34,812,794 on energy efficiency programs in 2012. This was \$5,045,906 less than the Company's adjusted budget of \$39,858,700. The original 2012 budget as filed in Project No. 40194 was increased by \$4,000,000 to accommodate an additional 100MW in the Commercial Load Management Program per the request of PUC and ERCOT. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

The SCORE MTP spending decreased 11% as a result of limited projects being submitted in the 2012 program. The Company's spending on Load Management was 33% less than projected, primarily because the projection was based on a request by ERCOT and the PUCT to increase their load management program due to resource adequacy concerns. The request came in the first quarter of 2012, which gave the company a late start in trying to acquire the agreed upon 100 additional MW. Retro-Commissioning MTP spending decreased 32% due to project completion dates being extended and reallocation of funding to other commercial programs. The new Sustainable Schools Program was launched to address a market need and to utilize funding not expended by other commercial programs. The ENERGY STAR® MTP spending increased 16% due to increased program demand and reallocation of funds from residential programs that were not meeting target projections. The Home Performance with ENERGY STAR® Pilot MTP showed a decrease of 35% primarily due to difficulties in identifying and training contractors for participation in the program. The REP Pilot Program spending decreased 43% due to lack of participation from the various local REPs. Several different types of programs were offered to the REP's for implementation but only one program, a residential load management program was implemented. The Energy Wise Resource Action Program showed a 13% increase in spending due to high demand from school districts for the take-home kits.

# Table 11: Program Funding for Calendar Year 2012

Program Funding for Calendar Year 2012	Number of Customers	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	657	\$20,444,720	\$15,006,026	\$1,840,794	\$16,846,820	\$370,763	-\$3,227,137	84%
Large Commercial SOP	209	\$6,921,100	\$5,901,468	\$1,113,955	\$6,744,238	\$271,185	-\$176,862	101%
Texas SCORE MTP (Commercial MTP)	34	\$2,734,100	\$2,075,563	\$248,361	\$2,224,346	\$99,578	-\$509,754	85%
Large Commercial Load Management SOP	339	\$8,895,500	\$5,625,000	\$303,369	\$5,928,369	\$0	-\$2,967,131	67%
Retro-Commissioning MTP	29	\$1,222,500	\$728,186	\$98,953	\$827,139	\$0	-\$395,361	68%
Advanced Lighting	46	\$671,520	\$601,613	\$65,353	\$666,966	\$0	-\$4,554	99%
Sustainable Schools	0	\$0	\$74,196	\$10,803	\$84,999	\$0	\$84,999	N/A
Residential and Small Commercial	30,460	\$11,735,567	\$8,991,307	\$1,094,181	\$10,085,488	\$0	-\$1,650,079	86%
ENERGY STAR® Homes MTP	9,652	\$3,330,100	\$3,513,219	\$354,435	\$3,867,654	\$0	\$537,554	116%
Residential SOP	1,208	\$558,700	\$500,874	\$83,866	\$584,740	\$0	\$26,040	105%
Advanced Lighting	n/a	\$447,680	\$415,568	\$43,568	\$459,136	\$0	\$11,456	103%
A/C Distributor Program	2,229	\$1,911,000	\$1,642,142	\$191,096	\$1,833,238	\$0	-\$77,762	96%
Home Performance with ENERGY STAR®	1	\$1,114,400	\$649,558	\$69,565	\$719,123	\$0	-\$395,277	65%
Retail Electric Provider Pilot MTP	1,026	\$2,866,200	\$1,384,156	\$254,125	\$1,638,281	\$0	-\$1,227,919	57%
Energy Wise Resource Action Program	16,028	\$518,100	\$538,740	\$47,476	\$586,216	\$0	\$68,116	113%
Energy Ambassador Program	0	\$596,700	\$0	\$0	\$0	\$0	-\$596,700	N/A
Multi-Family Water & Space Htg MTP (RES)	316	\$392,687	\$347,050	\$50,050	\$397,100	\$0	\$4,413	101%
Hard-to-Reach	4,378	\$6,040,911	\$5,551,440	\$535,801	\$6,087,241	\$0	\$46,331	101%
Hard-to-Reach SOP Program	2,510	\$1,957,700	\$1,752,466	\$200,780	\$1,953,246	\$0	-\$4,454	100%
Multi-Family Water & Space Htg MTP (HTR)	794	\$71,511	\$63,200	\$9,114	\$72,314	\$0	\$804	101%
Agencies in Action MTP	1,074	\$4,011,700	\$3,735,774	\$325,907	\$4,061,681	\$0	\$49,981	101%
SUB TOTAL	35,495	\$38,221,198	\$29,548,773	\$3,470,776	\$33,019,549	\$0	-\$5,201,649	86%
R&D	0	\$1,649,100	\$0	\$1,422,482	\$1,422,482	\$0	-\$226,618	86%
TOTAL	35,495	\$39,870,298	\$29,548,773	\$4,893,258	\$34,442,031	\$370,763	-\$5,057,504	86%

## IX. Market Transformation Program Results

## The Texas SCORE / CitySmart MTP

The mission of the SCORE/City Smart MTP is to provide viable energy efficiency and demand reduction solutions for K-12, higher education, cities and counties and state governmental agencies to minimize the impacts of volatile energy costs, ease budget pressures, provide infrastructure improvements, and optimize learning/working environments in their buildings.

In 2012, the SCORE/City Smart MTP paid out \$890,000 in direct incentives to achieve 3,364 kW and 11,206,857 kWh. Participation was spread among various entities throughout the CenterPoint Houston footprint; including 22 school districts, 4 private schools, 2 higher education facilities, 3 cities, one county, and 2 state agencies. In 2011, SCORE Lite was offered for those participants that no longer needed the assistance of the implementer in identifying measures. An additional benefit to the program participant of SCORE Lite is that higher incentives per measure are paid than in the full SCORE/City Smart MTP.

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

The RCx program offers commercial customers the opportunity to make operational performance improvements in their facilities based on low cost / no cost measures identified by engineering analysis. In 2004, CenterPoint Houston completed a baseline study to determine the amount of retro-commissioning currently taking place in the service area. The study concluded that less than 4% of these customer classes had undertaken retro-commissioning activities. Since the program started about 70 projects have been completed.

In 2012, the RCx program was expanded to accept smaller facilities so that customers that did not meet the minimum eligibility requirements can now participate in the program. The RCx process and incentives for these smaller facilities (known as RCx Fast Track) was scaled down to ensure the project remains cost effective. RCx Fast Track is designed for facilities less than 400,000 square feet while the RCx Full Program will continue to accept facilities over 400,000 square feet. In the RCx Fast Track Program, potential projects will be pre-screened by the program implementer to reduce the scope of work and to speed up the process.

The interest in RCx continues to increase each year as several new firms have been added to the list of qualified RCx Agents, bringing the total to 20 in 2012. The substantial increase in attendance at the 2012 and 2013 annual kick-off meetings by building owners, management companies, and potential new RCx Agents points to a growing interest in this program. With the new lower requirements of the RCx Program, many more facilities are now eligible to participate in the program.

## **ENERGY STAR<sup>®</sup> New Homes MTP**

The primary objective of this program is to achieve peak demand reductions and/or energy savings through increased sales of ENERGY STAR<sup>®</sup> homes and products. Additionally, the program is designed to condition the market so that consumers are aware of and request ENERGY STAR<sup>®</sup> homes and products. Many additional "high performance" home programs have been created that directly compete with the ENERGY STAR<sup>®</sup> brand and many program participants have recently moved to building homes to these requirements instead of ENERGY STAR<sup>®</sup>. CenterPoint has continued to market and support the ENERGY STAR<sup>®</sup> brand and help builders with extra incentives and program support in order to offset the costs of building an ENERGY STAR<sup>®</sup> home.

In 2012, the Houston housing market rose 27% from 2011 with approximately 23,480 home starts for the year. The number of homes certified, labeled and incentivized through CenterPoint Houston's ENERGY STAR<sup>®</sup> New Home MTP rose from 8,914 in 2011 to 9,652 in 2012. The program requirements continued to be based on kW and kWh savings per home and for a home to be eligible for the 2012 program, it had to be certified as a Version 3 ENERGY STAR<sup>®</sup> home or achieve 72 HERS index or below. In order to continue market transformation and help builders with the increased cost of building an ENERGY STAR<sup>®</sup> home, an additional incentive was given to homes that were built according to Version 3 requirements. CenterPoint and the program implementer also offered sales trainings to Version 3 builders to educate their sales staff on how to sell an ENERGY STAR<sup>®</sup> home. The average savings per home in 2012 was 1.05 kW and 2,759 kWh which was lower than average savings in 2011 due to increased code requirements.

The Predictive Savings Tool (PST) used to determine the savings achieved in the ENERGY STAR<sup>®</sup> homes was updated to reflect the following:

- City of Houston energy code updates, and expected statewide changes.
- Position the CenterPoint Houston ENERGY STAR<sup>®</sup> New Homes MTP for continued high performance should local builders end their affiliation with the EPA ENERGY STAR<sup>®</sup> New Homes MTP.
- Decouple the PST analysis from the Residential Energy Services Network (RESNET) HERS Index as the primary evaluation driver.
- Reflect improving baseline standards throughout the local market area.
- Redesign incentives structure to pay for performance by focusing on the higher impact efficiency measures.

These updates do not fundamentally alter the methodology used to calculate estimated energy and demand savings for new homes.

## A/C Distributor MTP

The A/C Distributor MTP provides incentives to air conditioning distributors who agree to facilitate the installation of high-efficiency (>16 SEER/12 EER) air conditioners and heat pumps in single-family and multi-family homes within CenterPoint Houston's electric distribution service territory.

CenterPoint Houston and a third party implementer held A/C dealer training sessions with each distributor in order to educate various A/C dealers on how to participate with their distributors. The A/C system baseline is currently a 13 SEER and A/C dealers who try to sell a higher efficiency product (>16 SEER), have trouble upselling when the baseline product is much cheaper. The dealer training sessions provide a separate presentation on marketing high efficiency units and how to find the best market segment for potential buyers to help participating dealers sell units above the current baseline. CenterPoint began the 2012 program year with the same requirements for the 2011 program year (>16 SEER/12 EER). Each distributor was asked for their sales history in 2011 and their sales prediction for 2012 broken out by SEER level in order to accurately distribute funds throughout the program. Once the results

were in, the same requirements for the 2011 program year were still viable for the 2012 program year.

The 2012 program had 8 participating A/C Distributors and four of the eight distributors exceeded their original contract amount. This verified the decision made to keep the 2011 requirements in place and continue to aid in transforming the market to higher efficiency A/C units. In 2012, the A/C Distributor MTP participants installed 2,603 systems resulting in 1,980 kW savings and 6,326,545 kWh savings.

# Home Performance with ENERGY STAR<sup>®</sup> MTP

The Home Performance with ENERGY STAR<sup>®</sup> program offers residential customers a comprehensive whole house approach to improve energy efficiency and comfort in their home. Third party contractors are recruited and trained to utilize diagnostic equipment to assess a home's condition and identify potential improvements. Energy analysis software combines the results of the consultation and inspection to provide the homeowner with a detailed report that includes recommended improvements, implementation costs, expected utility savings and expected rebates if measures are completed. The program implementer pays the homeowner incentives, up to \$5,000 based upon at least three measures being installed.

CenterPoint Houston began offering the program in 2012 to a limited geographic area to ensure program processes were in place and to develop the necessary contractors to implement the program across the service territory. Due to a late start and the training requirements for identified contractors the program completed only one home that yielded 0.64 kW and 2,962 kWh of demand and energy savings, respectively.

## Multi-Family Water & Space Heating MTP Program

The Multi-Family Water/ Space Heating MTP promotes the installation of energy efficient nonelectric water heating and space heating in multi-family housing projects.

In 2012, the Multi-family Water and Space Heating MTP paid incentives on 1,110 apartment units in the CenterPoint Houston service area. Of these units, 794 were classified as Hard-To-

Reach and 316 units were classified as Market Rate residential complexes. Two apartment complexes installed gas boiler systems and the remaining six projects installed individual gas hot water heaters.

The multi-family gas market continues to improve in spite of economic pressures and interest in the program continues to be favorable. CenterPoint Houston received seven applications for the 2013 Multi-family Water & Space Heating Program which represents an estimated total incentive payment of \$409,000. Developers, architects and builders will be invited to attend a Multi-family Water & Space Heating 2014 Program kickoff meeting in 2013.

## **Agencies in Action MTP**

The Agencies in Action program involves partnerships with a number of community action agencies in the CenterPoint Houston service area that can provide energy efficiency services to low-income customers. This program is designed to cost-effectively reduce the energy consumption and energy costs of CenterPoint Houston's low-income customers. Appropriate weatherization measures and basic on-site energy education will be provided to eligible residential energy consumers. Funds are made available annually to non-profit community agencies that can provide or arrange to provide energy efficiency measures such as attic and wall insulation, energy-efficient lighting, ENERGY STAR<sup>®</sup> appliances and other home improvements that can have a significant impact on energy bills.

In 2012 the program implementer contracted with eight different agencies throughout the CenterPoint Houston service area. These agencies are Baytown Resource and Assistance Center, Chinese Community Center, Vietnamese Teamwork, Sheltering Arms Senior Services, Fort Bend Corps, Antioch Baptist Church, City of Houston, and Houston Works. The Agencies in Action program served 1,074 participants in 2012 with savings of 696 kW and 2,672,376kWh. In addition to single family homes, 46 units in a Houston apartment complex were retrofitted with high efficiency heat pumps, as well as other measures such as attic insulation, refrigerator replacements, and air-infiltration control.

In 2013 the program design changed to comply with Federal weatherization programs. This will require that all single-family homes weatherized must have a National Energy Audit Tool

(NEAT) audit conducted by a qualified assessor. In addition, CenterPoint Houston is looking to build on the success of the multi-family projects conducted in recent program years to increase the number of energy efficiency retrofits conducted on low-income apartment complexes.

#### **Advanced Lighting Residential MTP**

The residential program provides a point-of-sale discount applied to the purchase of qualified LED products at all Houston area Home Depots, Lowe's, Costco, and Sam's Club stores. Discounts are approximately \$10 off the retail price per item purchased. Sales data is provided by the manufacturers, so the customer is not bothered by any rebate forms. Only selected ENERGY STAR<sup>®</sup> products are eligible, available in numerous sizes, styles and manufacturers. In 2012, approximately 29,000 LED units were sold in over 70 stores. The residential program will continue in 2013 and will offer a larger selection of LED product, as the technology continues to improve and spreads into more applications.

#### **Advanced Lighting Commercial MTP**

The commercial program provides customer incentives based on energy and demand savings from the installation of outdoor LED lighting fixtures in parking garages, parking lots, and other outdoor locations. All LED products in the program must be certified by Design Lights Consortium (DLC is an industry standard used by manufacturers to list those products that have passed the rigorous tests necessary to receive DLC certification). In 2012, 46 sites installed LEDs. For 2013, the program continues strong, with the program being completely sold out by early March. In 2013, the incentive rate was lowered in order to stretch the budget for the additional incentives resulting from the new PUC rules. The new rules created a Winter On-Peak and opened the door for outdoor lighting demand savings that did not exist prior to January 1, 2013. The commercial program will continue in 2014, and will look to expand on the success of 2013.

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#### Sustainable Schools MTP

The Sustainable Schools pilot MT program is a comprehensive energy education and conservation program that will target physical science high school students and teachers. The program was launched in late 2012 to determine if behavioral type programs can provide peak demand and energy savings. A third party implementer will conduct outreach and provide technical assistance to identified public and private schools. The technical assistance includes training teachers and students on energy conservation, the use of energy auditing tools and instructions on monitoring the school's energy consumption. Funding in 2012 focused on program development of materials and outreach to potential schools.

#### **Energy Wise Resource Action MTP**

The EnergyWise MT Program utilizes a take-home kit that contains energy efficiency devices which encourage families to adopt new resource usage habits. A third-party implementer recruits sixth grade teachers in various targeted school districts in the CenterPoint Energy electric footprint. Results from a take home survey provide projected savings for the installation of CFL's and A/C filter alarms. The incentive budget covers the implementer costs as well as the cost of the kits. In 2011, over 14,000 students received kits and in 2012, 16,208 kits went out to nineteen school districts. The Watt Monster Program is an additional component that was added to the kits in 2012. This program addition allows students to take home a watt meter that will monitor household appliance meter usage. This component was funded by CenterPoint Houston's Community Relations department.

#### **REP Pilot MTP**

See Section X, *Program: Residential Direct Load Control Demonstration Phase II Pilot and REP Pilot Program* for the 2012 results for this program.

## X. Research and Development Results

In 2012, CenterPoint Energy implemented the following R&D projects.

# Program: Residential Direct Load Control Demonstration Phase II Pilot and REP Pilot Program

While the 2011 Smart Partners demonstration project was successful in proving the effectiveness of the Advanced Meter System (AMS) as a communication network, CenterPoint Energy needed to understand how the Retail Electric Providers (REPs) would embrace a broader based demand response program. Two main goals were identified for the 2012 Smart Partners demonstration project: determine if REPs would fully support a broad-based rollout of residential demand response and develop a "deemed savings" of kW reduction for a typical residential home. The load control switches that were selected were manufactured by Cooper Power Systems and managed through Cooper's "Yukon" head-end software suite.

For the four targeted REPs, a minimum customer base was estimated to be in the range of 100,000-140,000; however, only two REPs chose to participate. The customer base of those REP's totaled 28,229 customers. Over the course of the 2012 summer pilot, three marketing efforts were made. The first marketing drop was a customized direct mail piece made on behalf of both REPs participating in the pilot. The initial response to the first direct mail campaign was only 294 customer responses. The second marketing drop included less program information but included a \$50 incentive. As part of this second campaign, one of the two REPs participated in an additional email blast. This combination approach for the second REP proved to be very successful with a total of 575 customers responding to this second effort. A third and final marketing push recruited 154 additional customers but were limited to a response time of less than a month due to the need to begin curtailment testing during the expiring on-peak summer period.

A final report was prepared by the energy efficiency service provider and presented to CenterPoint Houston on October 11, 2012. A total of 1,379 direct load control (DLC) switches on 1,026 customers' A/C units were installed. Demand reduction data was collected through the installation of 476 HOBO meters on 314 M&V participants and presented in the pilot final

report. After an assessment of the pilot findings, a deemed savings petition is planned to be submitted to the PUCT in the second quarter of 2013 that would provide the basis for a demand response program structured for REP participation. Assuming an average day at 96 degrees and 1.5 A/C units per home, a deemed savings estimate of 0.86 kW per home for DLC switches will be included in the petition document to the PUCT.

#### Program: City of Houston Dashboard Project

This project was initiated in 2009 to evaluate the energy saving potential of a commercial dashboard product that allows commercial customers to better monitor and manage facility energy usage. The project was a partnership with the City of Houston and involved the monitoring of a limited number of fire stations with smart meters during the initial Advanced Meter System (AMS) deployment in the spring of 2009. The dashboard design for monitoring smart meters for the selected ten fire stations was completed in October 2009 and the proof of concept for this AMS-facilitated solution was successfully demonstrated in November 2009 to City officials.

Subsequent meetings with City officials resulted in the request for dashboard design enhancements such as an automated meter data link to more effectively monitor the fire stations and to include waste water treatment plants (WWTP). A high-end interval data recorder (IDR) meter with remote interrogation capabilities was successfully tested at CenterPoint Houston's meter test lab in May 2010 and installed at the Chocolate Bayou WWTP at 9600 Martin Luther King in April 2010. After completion of CenterPoint Energy's AMS meter deployment project in 2012, City officials may now go forward with the full development and implementation of the enhanced dashboard design once the necessary funding has been addressed within the City's planning and budgeting process.

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

CenterPoint Houston's 2013 EECRF was approved by the Public Utility Commission of Texas in Docket No. 39363 in December 2012 for the amount of \$48,572,043.

# XII. Revenue Collected Through EECRF

In 2012, CenterPoint Houston collected a total of \$42,210,458 in energy efficiency program costs through the EECRF Rider.

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

In Docket No. 39363, the PUC approved energy efficiency costs to be recovered in 2012 of \$40,013,223 consisting of:

\$35,858,700 F	Program Costs
\$ 3,628,680	Bonus
<u>\$ 525,843</u>	Under-Recovery 2010 Costs
\$ 40,013,223	Total

In 2012, actual program costs were \$34,812,794 for total energy efficiency related costs of \$38,967,317. Total revenues collected through the EECRF Rider were \$42,210,458, resulting in overall over-recovery of \$3,243,141.

## **XIV. 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 2012. 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 2012 through the company's energy efficiency programs.

## XV. Performance Bonus Calculation

In 2012, CenterPoint Houston's total spending on the implementation of Energy Efficiency Programs was \$34,812,794.

Per Substantive Rule § 25.181, the calculation of performance bonus is 10% of Net Benefits. Therefore, CenterPoint Houston will request a performance bonus of \$9,091,056 as part of the 2013 EECRF filing.

Table 12 shows the performance bonus calculation for CenterPoint Houston for 2012.

## Table 12: Performance Incentive Calculation

Performance Incentive for Calendar Year 2012	kW	kWh
2012 Program Goals	39,209	68,693,818
2012 Program Savings	175,260	130,633,301
Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs < or > 10 years)	175,260	130,633,301
Reported/Verified Hard-to-Reach	3,126	8,888,801
Avoided Cost		
per kW		\$80
per kWh		\$0.064
Inflation Rate		2.0%
Discount Rate		8.21%
Total Avoided Cost <sup>22</sup>	\$	125,723,349
2012 Program Costs	\$	34,812,794
Net Benefits = Total Avoided Cost - Total Program Cost		
Net Benefits	\$	90,910,555
Bonus Based on 10% Net Benefits	\$	9,091,056

 $<sup>^{22}</sup>$  Complete avoided cost savings table will be provided in the June 1 filing of the EECRF.

**Appendix A: Acronyms** 

## Acronyms

CCET	Center for the Commercialization of Electric Technologies
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

# **Appendix B: Glossary**

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

**Appendix C: Reported Demand and Energy Reduction by County** 

Energy Efficiency Report

# Appendix C CenterPoint Energy Houston Electric, LLC Efficiency Programs Energy Efficiency Programs 2012 Demand (kW) and Energy (kWh) Savings at Meter By County

Duccussion							COUN'	TIES					
r rograms		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	Total
I among Common Common	kW	120.4	51.4		1,032.9		10,856.1			1.0			12,061.8
Large Commercial SOF	kWh	1,352,558.0	380,082.0		6,089,032.0		55,998,506.0			5,096.0			63,825,274.0
Large Comnercial Load	kW	952.5	1,445.5	1,096.5	8,512.5	2,931.0	124,788.5	0.0	0.0	113.0	0.0	703.5	140,543.0
Management SOP	кWh	2,857.5	4,336.5	3,289.5	25,537.5	8,793.0	374,365.5	0.0	0.0	339.0	0.0	2,110.5	421,629.0
Dotto Commissionine	kW		8.0		286.0	114.0	1,138.0			61.0			1,607.0
Retro-Commissioning	kWh		30,925.0		539,226.0	964,441.0	4,549,987.0			319,401.0			6,403,980.0
TTM COLOR DE LA COLOR	κw	0.0	6.66	2.5	524.8	56.1	2,339.2	0.0	0.0	4.8	0.0	336.4	3,363.68
LEXAS SCOLE IN LL	кWh	0.0	296,444.0	14,907.0	1,952,186.0	460,113.0	7,350,767.0	0.0	0.0	21,316.0	0.0	1,111,124.0	11,206,857.0
Suctoinchlo Cohools	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustaillable Schools	кWh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Lighting Program	κw	0.0	0.0		0.0	0.0	61.0			0.0			61.0
Commercial	кWh	15,353.0	174,560.0		434,061.0	22,577.0	1,853,037.0			29,227.0			2,528,815.0
Advanced Lighting Program	kW		2.7		4.9	0.1	130.3						138.0
(Residential)	кWh		30,817.0		55,856.4	1,904.3	1,465,697.3						1,554,275.0
8	ΜX	0.0	384.9	53.7	4,616.1	25.8	4,452.2	0.0	0.0	610.1	1.4	0.7	10,144.9
ENERGY STAR MTP	kWh	0.0	1,026,678.3	159,167.9	11,934,140.7	72,418.6	11,795,637.8	0.0	0.0	1,573,740.2	2,823.4	993.6	26,565,600.5
	kW	2.3	32.3	2.0	71.9	40.9	678.9			13.1	0.1	1.6	843.1
Kesiden ual SOF	kWh	6,119.0	62,410.0	2,416.0	162,755.0	91,082.0	1,154,699.0			12,903.0	130.0	3,040.0	1,495,554.0
	kW	3.9	130.5	9.7	460.5	18.9	1,306.6	0.0	0.0	35.8	7.0	6.8	1,979.8
A/C DISUIDUUU FIOGIAIII	кWh	12,663.0	414,647.0	33,698.0	1,471,057.0	61,024.0	4,170,766.0	0.0	0.0	115,206.0	23,809.0	23,675.0	6,326,545.0
Home Performance w/ ENERGY	kW	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
$\mathrm{STAR}^{\oplus}$	кWh	0.0	0.0	0.0	2,961.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,961.7
Retail Electric Provider Pilot	kW	0.0	0.0	0.0	0.0	0.0	882.0	0.0	0.0	0.0	0.0	0.0	882.0
Program	kWh	0.0	0.0	0.0	0.0	0.0	1,764.7	0.0	0.0	0.0	0.0	0.0	1,764.7
Decourse Action Decourse	kW	0.0	25.4	0.0	41.6	8.4	432.7	0.0	0.0	0.0	0.0	0.0	508.0
	kWh	0.0	70,615.0	0.0	115,431.8	23,244.9	1,201,952.3	0.0	0.0	0.0	0.0	0.0	1,411,244.0
Multi-Family Water & Space	kW	0.0	0.0	0.0	0.0	0.0	132.7	0.0	0.0	0.0	0.0	0.0	132.7
Heating MTP (RES)	кWh	0.0	0.0	0.0	0.0	0.0	610,512.0	0.0	0.0	0.0	0.0	0.0	610,512.0
Multi-Family Water & Space	kW	0.0	0.0	0.0	33.6	0.0	297.8	0.0	0.0	0.0	0.0	0.0	331.4
Heating MTP (HTR)	кWh	0.0	0.0	0.0	154,560.0	0.0	1,432,440.0	0.0	0.0	0.0	0.0	0.0	1,587,000.0
Thank To Barrie COB	kW	0.2	35.7	1.5	187.3	65.0	1,584.5	1.2	0.0	17.0	0.0	1.6	1,893.8
	kWh	970.0	72,782.0	3,230.0	513,206.0	157,825.0	3,162,206.0	4,194.0	0.0	28,664.0	0.0	6,689.0	3,949,766.0
A ffordable Sincle Eamily Homee	kW	0.0	0.0	0.0	0.0	0.0	72.3	0.0	0.0	0.0	0.0	0.0	72.3
Autonable Suigle Failing Homes	kWh	0.0	0.0	0.0	0.0	0.0	69,146.0	0.0	0.0	0.0	0.0	0.0	69,146.0
A cancias in Action	kW	0.0	6.5	0.0	120.4	7.2	561.9	0.0	0.0	0.0	0.0	0.0	696.0
	kWh	0.0	31,184.9	0.0	542,576.3	30,930.3	2,067,685.5	0.0	0.0	0.0	0.0	0.0	2,672,376.9
Programs - TOTAL													
Total kW Savings		1,079.4	2,222.8	1,166.0	15,893.1	3,267.4	149,714.6	1.2	0.0	855.8	8.5	1,050.5	175,259.2
Total kWh Savings		1,390,520.5 2,595,481.7	2,595,481.7	216,708.4	23,992,587.4	1,894,353.1	97,259,169.1	4,194.0	0.0	2,105,892.2	26,762.4	1,147,632.1	130,633,301

CenterPoint Energy Houston Electric, LLC

2013 Energy Efficiency Plan and Report