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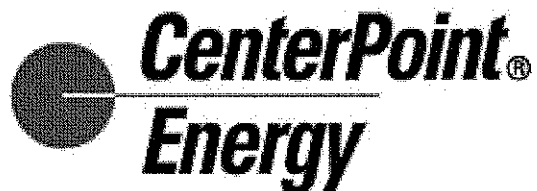
**CenterPoint Energy Houston Electric, LLC**  
**2011 Energy Efficiency Plan and Report**

**Substantive Rule § 25.181 and § 25.183**

**April 1, 2011**

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Project No. 39105



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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):

- 20 % reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2010 and 2011 program years; and
- 25 % reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2012 program year.

The format used in the EEPR primarily follows the one outlined in § 25.181 (m). The EEPR presents the results of CenterPoint Houston's 2010 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 2011 and 2012 projected savings and projected budgets. The planning information presents 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, fourteen sections and three appendices. Sections one through four detail the planning section of the EEPR, while sections five through nine present energy efficiency report information. The final five sections address the Energy Efficiency Cost Recovery Factor (EECRF) and the performance bonus achieved in 2010. 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 20% reduction in its annual growth in demand of residential and commercial customers by December 31, 2011, and a 25% reduction in its annual growth in demand of residential and commercial customers by December 31, 2012. 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 2011 and 2012 goals, projected savings, and projected budgets.

**Table 1: Summary of Annual Goals, Projected Savings and Projected Budgets<sup>1</sup>**

	Calendar Year	Avg Growth in Demand	MW Goal (% of Growth in Demand)	Demand (MW) Goal	Energy (MWh) Goal <sup>2</sup>	Projected MW Savings <sup>3</sup>	Projected MWh Savings <sup>2,3</sup>	Projected Budget (000's)
Annual Goals	2011	164	20%	39.2	68,693.8	127.85	151,796.0	\$30,784
	2012	203	25%	47.3	82,853.0	172.72	165,676.0	\$35,859

Note that the Company’s 2011 demand and energy goal is established pursuant to § 25.181(e)(3)(B) which states that a utility’s demand goal in any year shall not be lower than its goal for the prior year. Since the actual five-year average demand growth for 2011 is lower than in 2010, the goal is set at the 2010 level, 39.2 MW.

<sup>1</sup> Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budget from Table 6. All MW and MWh figures in this Table and throughout this EEPR are measured at the meter.

<sup>2</sup> Calculated using a 20% capacity factor.

<sup>3</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 CenterPoint Houston’s goals required by the Energy Efficiency Rule (Substantive Rule § 25.181).

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

1. Large Commercial SOP
2. Retro-Commissioning MTP
3. Large Commercial Load Management SOP
4. The Texas SCORE MTP
5. ENERGY STAR<sup>®</sup> Homes MTP
6. Residential SOP
7. A/C Distributor MTP
8. Hard-to-Reach SOP
9. Multi-Family Water & Space Heating MTP
10. Community Weatherization Program
11. Agencies in Action MTP
12. Low-Income Weatherization (SB-712)
13. Advanced Lighting Pilot MTP
14. Residential In-Home Display (IHD) Pilot MTP

As detailed in the 2010 Energy Efficiency Report contained in this document, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory 20% energy efficiency savings goal. CenterPoint Houston's goals for 2010 were 39.2 MW in peak demand reduction and 68,693.8 MWh in energy savings. Actual total achieved reductions in 2010 were 120.98 MW and 139,664.8 MWh. The total forecasted spending for 2010 was \$30.05 million. Actual 2010 spending totaled \$28.8 million.

## **Energy Efficiency Plan**

### **I. 2011 Programs**

#### ***A. 2011 Program Portfolio***

CenterPoint Houston plans to implement thirteen programs in 2011. In addition, one pilot programs will be funded in 2011. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Houston anticipates that targeted outreach to a broad range of service providers will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

**Table 2: 2011 Energy Efficiency Program Portfolio**

<b>Program</b>	<b>Target Market</b>	<b>Application</b>
Large Commercial SOP	Large Commercial	Retrofit; New Construction
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
Large Commercial Load Management SOP	Large Commercial	Load Management
Texas SCORE MTP	Large and Small Commercial (K-12 public schools & City facilities)	Retrofit; New Construction
ENERGY STAR® Homes MTP	Residential	New Construction
Residential SOP	Residential	Retrofit; New Construction
A/C Distributor MTP	Residential and Small Commercial	Retrofit
Advanced Lighting Pilot MTP	Residential/Commercial	Retrofit, New Construction
Hard-to-Reach SOP	Hard-to-Reach Residential	Retrofit
Multi-Family Water & Space Heating MTP	Residential / Hard-to-Reach Residential	New Construction
Community Weatherization Program	Residential / Hard-to-Reach Residential	Retrofit
Agencies in Action MTP	Hard-to-Reach Residential	Retrofit
TDHCA Low Income Weatherization (SB-712)	Hard-to-Reach Residential	Retrofit
<b>New Programs for 2011</b>		
Residential In-Home Display (IHD) Pilot MTP	Residential	Retrofit

The programs listed in Table 2 are described further in sub-sections B and C. CenterPoint Houston maintains a website<sup>4</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>4</sup> CenterPoint Houston energy efficiency website is [www.centerpointefficiency.com](http://www.centerpointefficiency.com).



## ***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.

#### ***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;
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

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

#### ***Program design***

The RCx is an existing building tune-up program that targets no-cost or low-cost measures to reduce the demand and energy usage in commercial facilities. The program is designed to provide energy end-users with an expert analysis to improve the performance of energy using systems in order to reduce peak demand and annual energy usage. RCx Agents, typically engineering firms, are used to deliver the program to customers. RCx Agents are paid at the completion of each of

three phases: planning phase, investigation phase and verification phase. Facility owners must be willing to invest a minimum of \$10,000 to upgrade their facilities. Facility owners and RCx Agents can earn incentives if all schedules are maintained and savings are acceptable. In 2011, the RCx program was expanded to accept smaller facilities so that customers that do not meet the minimum eligibility requirements (facilities larger than 400,000 square feet of conditioned space) can participate in the program. The RCx process and incentives for these smaller facilities are scaled down to ensure the project remains cost effective. This new component is titled Retro-Commissioning Fast Track. It is designed for facilities between 150,000 and 400,000 square feet while the RCx Full Program will continue as before, with facilities over 400,000 square feet. All incentives are based on the same energy and demand savings, but have different incentive caps; the RCx Full Program has an incentive cap of \$10,000 and the RCx Fast Track Program has an incentive cap of \$5,000. In the RCx Fast Track Program, the Planning phase has been eliminated for the RCx Agent and potential projects will be pre-screened by the Program Administrator to reduce the scope of work and to speed up the process.

Also, in 2011 CenterPoint Houston is offering a free certified energy audit for qualifying commercial facilities in partnership with the City of Houston. The Houston Green Office Challenge's Energy Efficiency Incentive Program (EEIP) (funded by federal stimulus funds), will offer up to 20% of the project costs for qualifying participants. The facility owner must spend a minimum of \$100,000 in project costs in order to receive incentives from the program. Interested parties must submit an application, a fully refundable deposit and meet certain eligibility requirements. CenterPoint Houston will commission and fund a third party comprehensive energy audit at no cost to the participant, intended to identify energy efficiency measures that the customer can implement at their facility, and receive EEIP incentives. The energy audit is provided as part of the Retro-Commissioning Program and the savings achieved will be counted towards the RCx total savings.

### ***Implementation process***

The program, both full and 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:

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

## **Large Commercial Load Management SOP**

### ***Program design***

CenterPoint Houston will implement a similar load management program in 2011 as was implemented in 2010. The Large Commercial Load Management SOP will be available to non-residential distribution customers, governmental customers, educational customers and non-profit customers. The call for curtailment will be initiated when Electric Reliability Council of Texas ERCOT reaches its EEA2B emergency conditions. Incentives will be paid to project sponsors for each kW they curtail during emergency conditions. 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.

### ***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 2011 program will continue to initiate a minimum of two curtailment calls and a maximum of five curtailment calls. The first call is scheduled for June and will last two 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 cities, project requirements, incentive information, and the application and reporting process;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

## **The Texas SCORE / City Smart MTP (SCORE 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 school administrators and city planners to help them make decisions about cost effective investments. In 2011 a new program, SCORE MTP Lite, is being 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.

### ***Implementation process***

CenterPoint Houston will continue implementation of the SCORE MTP whereby, providing funds are available, any eligible project meeting the minimum requirements from any participating school district, city, county, or governmental agency 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 project sponsor 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 project sponsor, project requirements, incentive information, and the application and reporting process.

## **ENERGY STAR® Homes MTP**

### ***Program design***

The ENERGY STAR® New Homes MTP targets residential new construction. Incentives are paid to builders for the construction of ENERGY STAR® certified homes 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. In 2011, the EPA is implementing version 2.5 and version 3 in 2012, which moves away from a fixed Home Energy Ratings (HERS) index and incorporates additional checklists for thermal enclosure and HVAC quality installation. These strict requirements may have builders leaving the ENERGY STAR® program. However, program design changes in 2010 positioned CenterPoint to accept non-ENERGY STAR® homes in 2011 that meet specific targets, such as high performance windows, tight air distribution systems and increased insulation levels in the ceiling and walls. Program incentives are based on demand and energy impacts rather than on a HERS index. These program changes will continue to encourage builders to build homes that are 15% above code.

### ***Implementation process***

CenterPoint Houston will continue implementation of its ENERGY STAR® Homes MTP whereby any eligible home builder meeting the minimum requirements may submit an application for participation in the program. Program information is provided on CenterPoint Houston's website.

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

CenterPoint Houston promotes the ENERGY STAR® Homes MTP in the following manner:

- 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](http://www.HoustonEnergyStarHomes.com) with detailed program information, links to participating builders websites, and the general features and benefits of ENERGY STAR® homes;
- Conducts various energy rater testing for all local raters annually;
- Conducts training sessions for builders' sales staff throughout the year to increase the knowledge and awareness of the features and benefits of ENERGY STAR® 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**

### ***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 new or retrofit applications, which provide verifiable demand and energy savings. Sponsors submit applications for measures installed in households and are awarded contracts on a first-come, first-served basis. Also included in the Residential SOP program is the Affordable Single Family component. This segment pays incentives to not for profit agencies who build new homes to ENERGY STAR® standards for lower income families. CenterPoint Houston's Residential SOP will continue in the same format for 2011. 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® 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.

### ***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 and application forms;
- 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.

## **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 in single-family homes, multi-family homes and small commercial businesses 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. In addition, CenterPoint Houston will provide incentives for third-party contractor tune-ups based on approved deemed savings values. 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 project implementer to implement outreach and planning activities;
- Conducts workshops as necessary to explain elements such as responsibilities of the sponsors, program requirements, incentive information, and the application and reporting process;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

## **Advanced Lighting Pilot MTP**

### ***Program design***

In 2011, CenterPoint Houston will continue participation in the Advanced Lighting Pilot MTP. The program will continue to offer point of purchase discounts to Residential customers at participating retail stores for the purchase of high efficiency lighting, LED bulbs only, and will discontinue offering rebates for all CFLs. The program will expand to include a new Commercial LED Lighting Program in 2011. This program will target outdoor Commercial applications for LED lighting (i.e., parking garages, parking lots, outdoor building lighting, landscape lighting,

billboards, etc.). Fixtures approved in the Commercial LED Lighting Program must be certified by Energy Star or the Design Lights Consortium. The goal of the program is to attack market barriers and bring awareness about outdoor LED lighting to the commercial market in the CenterPoint Houston service territory.

***Implementation process***

The program will be implemented in the Houston area in 2011 with ECOS Consulting working as the program implementer. The point of purchase discounts (up to \$10 per LED lamp) will be offered to residential customers at participating retailers, including Home Depot, Ace Hardware, and True Value Hardware, throughout the CenterPoint Houston footprint. The new Commercial LED program will pay incentives (based on \$230 per on-peak kW reduction and \$0.14 per annual kWh saved) to customers installing qualifying LED products in eligible applications. 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:

- In-store promotions of the program via signage;
- Promotion of commercial LED applications through research and development projects;
- Contracts with a third-party project 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.



## **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 on the basis of “deemed” savings as approved by the PUCT. 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.

### ***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.

### ***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 heating and space heating in multi-family housing projects. The program also includes boiler systems as well as individual non-electric water and space heating units. The

program is based on a PUCT-approved template and projects are funded based on qualifying measures, estimated completion date and available funds.

### ***Implementation process***

CenterPoint Houston will continue implementation of its Multi-Family Water and Space Heating MTP whereby any eligible project sponsor may submit an application for review 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 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.

## **Community Weatherization**

### ***Program design***

The Community Weatherization Program targets both hard-to-reach and non hard-to-reach residential customers and follows the HTR SOP program parameters. Incentives are paid to project sponsors for certain measures installed in retrofit applications that provide verifiable demand and energy savings. While CenterPoint Houston does not contract directly with the City of Houston, the Community Weatherization Program sponsors are contractors affiliated with the City. These contractors work with City of Houston personnel to identify low-income areas and weatherize homes through CenterPoint Houston's energy efficiency programs, or the City of Houston's own Residential Energy Efficiency Program (REEP). The Community Weatherization program's hard-to-reach participants are determined as having an annual total household income of less than 200% of the federal poverty guidelines. The program is based on a PUCT- approved Hard-To-Reach template and projects are funded based on qualifying measures and available funds. Qualifying measures include air conditioning duct sealing, central air conditioning systems, air infiltration control, ceiling insulation, compact fluorescent lamps, and water saving measures.

### ***Implementation process***

The program is implemented through contractors affiliated with the City of Houston.

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

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

- Opens the program for participation from the City of Houston's weatherization contractors;
- Participates in periodic meetings with the City of Houston and its contractors to assess program progress and program needs;
- Participates in service area-wide outreach activities as may be available.

### **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® room air conditioners, central air conditioning systems, ENERGY STAR® ceiling fans, ENERGY STAR® 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***

Frontier Associates acts as the program implementer with 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 2011.

#### ***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.

**Low Income Weatherization (SB-712)**

This program is identical to the Agencies in Action program. See above.

## ***C. New Programs for 2011***

### **Residential In-Home Display (IHD) Pilot MTP**

#### ***Program design***

In 2011, CenterPoint Houston plans to utilize the results from the *Residential Feedback Demonstration Research and Development Program* to implement a pilot program in which IHD devices will be installed in residential homes equipped with new advanced meters. The IHD devices will allow residents to monitor and/or adjust their energy usage by providing near-real time energy usage data on a continuous basis. The pilot program will utilize Retail Electric Providers (REPs) as the energy efficiency service providers. The REPs will be the main conduit to getting the IHDs in the homes of residential customers. 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 third-party as the program implementer. The third-party implementer will recruit service providers and insure program goals are met. Incentives will be paid to program service providers for each IHD that is installed and verified as connected to a CenterPoint Houston advanced meter.

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

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

- Contracts with a third-party project implementer to implement outreach and planning activities;
- Advertises using a multitude of news media, possibly including, but not limited to billboards, print, radio and television;
- Program participant advertising, as well as educational materials provided to residents;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

**Research and Development (R&D) Projects*****Program: Smart Partners- Residential/Small Commercial Backup Generator Load Management Demonstration Project***

This project will demonstrate the feasibility of utilizing residential and small commercial backup, natural gas-fired generators and the CenterPoint Houston advanced metering system to directly control whole-house residential and small commercial electric load. Standby generators automatically come online when electric service is interrupted and, with the ability of AMS to remotely disconnect electric service, a potentially high impact, low cost load management program can be developed. The project would involve identifying 10 to 20 homeowners/small business owners willing to participate in the project that have generators as well as advanced meters installed. Field testing will be carried out beginning April 2011.

***Program: Smart Partners-Residential Direct Load Control***

CenterPoint Houston's advanced metering system will be utilized in the development, demonstration, and testing of a residential direct load control/load management system. This project will involve the installation of Zigbee-enabled switches or thermostats in approximately 200 single-family residences. Central air conditioning systems, pool pumps, and other selected appliances will be controlled through the meter. The AMS system will be used to communicate with end-use devices and measure demand and energy reductions. Field deployment and testing will be carried out beginning April 2011.

***Program: Residential Feedback Demonstration Program***

This project will determine the feasibility of utilizing energy consumption feedback mechanisms to implement a residential energy efficiency program. CenterPoint Houston will partner with Electric Power Research Institute (EPRI) to develop the program. The program will be segmented into two phases:

Phase 1: 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 Houston collaborated with EPRI, Freeman & Sullivan, and other electric utilities to develop 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.

Phase 2: CenterPoint Houston will use the results of Phase 1 to conduct an actual feedback research project in the CenterPoint Houston service territory. CenterPoint Houston and EPRI are partnering to implement a program that will evaluate the effectiveness of feedback for residential customers with advanced meters installed. The CenterPoint Houston project will focus on providing energy consumption feedback to residential electricity consumers through the deployment of in-home energy consumption displays (IHDs). The objectives of the 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.

***Program: City of Houston Dashboard Project***

The first phase of this project was initiated in 2009 and evaluated the energy saving potential of a commercial dashboard product that allows commercial customers to better monitor and control facility energy usage. The project is a partnership with the City of Houston and involves the monitoring of several fire stations and a waste water treatment facility. CenterPoint Houston's advanced metering infrastructure (AMI) is being utilized to the extent possible. The initial dashboard design for monitoring smart meters for ten fire stations has been completed and the proof of concept for this AMS-facilitated solution has been successfully demonstrated. High-end interval data recorder meters are planned to be installed at the wastewater treatment plant by the end of the first quarter of 2011, which will complete the first phase of the project. Should the City of Houston decide to continue with the project, additional municipal facilities would be added and test data would be collected during the summer months of 2011 to assess demand and energy

impacts. A second phase of the project to include load control and near real-time monitoring of the pilot facilities will be evaluated for implementation after completion of Phase one.

***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) panels. Also, a 250 kW solar farm will be constructed to offset an estimated 15% to 20% of the overall community's energy infrastructure including water and sewage treatment, lighting, recreation, and community pools and buildings. The Center for Commercialization of Electric Technologies (CCET) was successful in its submittal for DOE stimulus grant funding and hopes to sustain this project in spite of the market downturn. CCET has initiated its second phase to develop the key project components. Phase 2 includes: 1) enhancing the use of Synchrophasor measurement to monitor conditions on the Texas power transmission backbone; 2) demonstrating direct load control; and 3) developing the infrastructure of Discovery at Spring Trails community as well as integrate the community with the ERCOT wind energy system as a Smart Grid demonstration project. Phase 3 which includes project implementation and data collection is scheduled to begin and end in 2012.

CenterPoint Houston will provide matching funds and services to support the performance and impact evaluation of the solar systems and efficiency measures being incorporated in the DST development.

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

This project is being conducted in partnership with the Electric Power Research Institute (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 evaluate associated PEV load and infrastructure impacts. The demonstration controls 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, is standards based, and is able to utilize existing CenterPoint Houston fleet



PEVs or future CenterPoint Houston purchased PEVs. Project demonstration and testing began mid 2010 and will be completed by year end of 2012.

## ***D. New Programs for 2012***

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

#### ***Program design***

In 2012, CenterPoint Houston plans to utilize the results from the *Residential Feedback Demonstration Research and Development Program*, the *Residential IHD Pilot Program*, the *Smart Partners – Residential Generator Research and Development Program*, and the *Smart Partners – Direct Load Control Research and Development Program* to implement a pilot program in for REPs. REPs will be able choose from a menu of methods on how they would like to provide verified demand and energy savings to the program. REPs can achieve savings through this program by offering the following services or programs to their customers:

- Residential load management via:
  - Direct load control,
  - Smart thermostats, or
  - Gas generator.
- Residential feedback via:
  - IHD installation, or
  - Time of use rates.

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 third-party as the program implementer. The third-party implementer will recruit service providers 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 project implementer to implement outreach and planning activities;
- Advertises using a multitude of news media, possibly including, but not limited to billboards, print, radio and television;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

## **Home Performance with ENERGY STAR® MTP**

### ***Program design***

The Home Performance with ENERGY STAR® MTP targets existing residential homes. The program provides a comprehensive, whole-house approach to making the home more comfortable, reducing its energy use, improving indoor air quality, and creating a healthier home for your family. Incentives are paid to project sponsors, for measures installed retrofit applications, which provide verifiable demand and energy savings. Incentives are also paid for the initial home energy audit, regardless of what measures are installed in the home.

### ***Implementation process***

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

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

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

- 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;
- Attends appropriate industry-related meetings and seminars to generate awareness and interest;
- Participates in state-wide outreach activities
- 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;
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

## **Energy Efficiency Ambassador Pilot Program**

### ***Program design***

The Energy Efficiency Ambassador Program is meant to bring awareness about energy efficiency and CenterPoint Houston's programs to commercial and residential customers throughout the service territory from a community-based approach to consumer outreach. The program will focus on recruiting CenterPoint Houston personnel and active community members to champion the energy efficiency programs to those within the community and to Stakeholder's with energy conservation pledges.

### ***Implementation process***

The program will be implemented in the CenterPoint Houston service territory using a third-party as the program implementer. The third-party implementer will recruit ambassadors and insure program goals are met. This program is meant to be an educational program and will not pay any incentives to program participants.

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

CenterPoint Houston will promote the Energy Efficiency Ambassador Program in the following manner:

- Recruit CenterPoint Houston personnel interested in becoming an ambassador via service center meetings,
- Conducts workshops and community based meetings (i.e. chamber of commerce and rotary club meetings) as necessary to explain elements such as responsibilities of the ambassador, project requirements, and reporting process.
- Measure the community pledge for energy reduction and compare to other communities and area pledges.
- Provide community based educational information on energy efficiency tips for homes and businesses as well as demonstrate benefits from "smart meters" and electric vehicles.

***E. Existing DSM Contracts or Obligations***

All existing DSM contracts ended in 2009 and the program has been terminated.

## II. Customer Classes

Customer classes targeted by CenterPoint Houston's energy efficiency programs are the Hard-to-Reach, Residential, and Commercial customer classes.

The annual MW savings goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account Substantive Rule § 25.181, which states that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers. 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**

<b>Customer Class</b>	<b>Number of Customers</b>
<b>Commercial</b>	256,000
<b>Residential</b>	1,245,000
<b>Hard-to-Reach<sup>5</sup></b>	618,000

<sup>5</sup> CenterPoint Houston does not require income information for electric service and no records are available to correlate revenue for the Hard-to-Reach customer class. However, according to the US Census Bureau's 2007 Current Population Survey, 33% 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 618,000. 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 a percentage of its five-year average rate of growth in demand. Therefore, the annual growth in demand for each year during the planning period is based upon 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, 2011 goal reflects the growth in actual peak demand from 2006 to 2010. For the purposes of this report, the 2012 goal will be based on the same historical load growth data from 2007 to 2010, plus an estimated load growth for 2011. Once actual weather adjusted load data is obtained for the 2011 calendar year, the 2012 goal will be adjusted and based on growth in actual peak demand from 2007 to 2011. The demand savings goals are based on meeting 20% of the electric utility's annual growth in demand of residential and commercial customers by December 31, 2011 and on meeting 25% of the electric utility's annual growth in demand of residential and commercial customers by December 31, 2012. 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 2006-2010 and estimated annual growth for 2011 and 2012. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2011 and 2012. 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.

**Table 4: Annual Growth in Demand and Energy Consumption (at Meter)**

Calendar Year	Peak Demand (MW)				Growth (MW)	Average Growth (MW) <sup>6</sup>
	Total System		Residential & Commercial			
	Actual <sup>8</sup>	Weather Adjusted <sup>7</sup>	Actual	Weather Adjusted	Weather Adjusted	Weather Adjusted
2006	15,686	15,825	13,809	13,948	139	N/A
2007	16,263	16,227	14,076	14,040	92	
2008	15,484	15,845	13,735	14,096	56	
2009	16,240	16,057	14,373	14,190	94	
2010	16,315	16,341	14,602	14,628	438	
2011	15,946	N/A <sup>9</sup>	14,261	N/A	337	164
2012	16,130		14,454		192	203

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.

**2011 Goals**

MW Goal = 163.8 x 20% x (100% – 7% T&D line losses) = 30.47 MW  
MWh Goal = 30.47 MW x 8760 Hours x 20% Load Factor = 53,377 MWh

Consistent with Substantive Rule § 25.183(e)(3)(B), the Company’s demand reduction goal for 2011 remains 39.2 MW and 68,693.8 MWh.

**2012 Goals**

MW Goal = 203.4 x 25% x (100% – 7% T&D line losses) = 47.29 MW  
MWh Goal = 47.29 MW x 8760 Hours x 20% Load Factor = 82,853 MWh

<sup>6</sup> “Average Growth” for previous 5 years. NA = Not Applicable: Averages from 2006-2010 are not applicable to any of the calculations or forecasts in this EEPR.

<sup>7</sup> “Actual Weather Adjusted” Peak Demand is “Actual” Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

<sup>8</sup> 2011 and 2012 Calendar Year “Actual” values are forecasted.

<sup>9</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.



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

Program Goals by Customer Class for 2011 and 2012	2011		2012	
	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter	Projected Savings (MW) at Meter	Projected Savings (MWh) at Meter
<b>Large Commercial</b>	<b>105.66</b>	<b>83,816.00</b>	<b>133.32</b>	<b>88,048.00</b>
Large Commercial SOP	11.53	55,371.00	13.27	63,701.00
The Texas Score MTP	6.94	16,657.00	5.56	13,325.00
Large Commercial Load Management SOP	85.00	255.00	112.50	450.00
Retro-Commissioning MTP	2.18	11,533.00	2.00	10,572.00
<b>Residential and Small Commercial</b>	<b>17.73</b>	<b>52,984.00</b>	<b>35.07</b>	<b>62,902.00</b>
Energy Star MTP	12.07	26,174.00	10.34	22,435.00
Residential SOP	1.13	2,826.00	0.94	2,355.00
Advanced Lighting Program	1.64	15,909.00	1.37	13,258.00
A/C Distributor Program	2.27	7,275.00	2.27	7,275.00
Residential In-Home Display Pilot MTP	0.61	800.00	0.00	0.00
Home Performance with Energy Star	0.00	0.00	4.00	10,512.00
REP Pilot Program	0.00	0.00	16.14	7,067.00
Energy Ambassador Pilot Program	0.00	0.00	0.00	0.00
<b>Hard-to-Reach</b>	<b>4.47</b>	<b>14,996.00</b>	<b>4.33</b>	<b>14,726.00</b>
Hard-To-Reach SOP	1.79	4,731.00	1.90	5,018.00
Multi-Family Water & Space Htg MTP	0.43	4,454.00	0.43	4,454.00
Low-Income Weatherization (SB-712)	0.17	561.00	0.83	2,686.00
Community Weatherization Program	1.40	3,082.00	1.16	2,568.00
Agencies in Action MTP	0.67	2,168.00	0.00	0.00
<b>TOTAL</b>	<b>127.85</b>	<b>151,796.00</b>	<b>172.72</b>	<b>165,676.00</b>

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

Table 6 presents total projected budget allocations required to achieve the projected demand and energy savings for calendar years 2011 and 2012. The budget allocations are a result of the projected demand and energy savings presented in Table 5. The budget allocations presented in Table 6 include incentive and administration costs for each program and customer class.

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

Programs Estimated Budget by Customer Class for 2011 and 2012	2011			2012		
	Incentives	Admin.	Total Budget	Incentives	Admin.	Total Budget
<b>Large Commercial</b>	<b>\$12,750,000</b>	<b>\$1,349,000</b>	<b>\$14,099,000</b>	<b>\$14,100,000</b>	<b>\$1,402,500</b>	<b>\$15,502,500</b>
Large Commercial SOP	\$5,650,000	\$662,600	\$6,312,600	\$6,500,000	\$679,400	\$7,179,400
The Texas Score MTP	\$2,500,000	\$254,000	\$2,754,000	\$2,000,000	\$231,900	\$2,231,900
Large Commercial Load Management SOP	\$3,400,000	\$279,200	\$3,679,200	\$4,500,000	\$366,600	\$4,866,600
Retro-Commissioning MTP	\$1,200,000	\$153,200	\$1,353,200	\$1,100,000	\$124,600	\$1,224,600
<b>Residential and Small Commercial</b>	<b>\$7,600,000</b>	<b>\$808,200</b>	<b>\$8,408,200</b>	<b>\$11,000,000</b>	<b>\$1,529,900</b>	<b>\$12,529,900</b>
Energy Star MTP	\$3,500,000	\$386,300	\$3,886,300	\$3,000,000	\$332,900	\$3,332,900
Residential SOP	\$600,000	\$46,800	\$646,800	\$500,000	\$59,200	\$559,200
Advanced Lighting Program	\$1,200,000	\$136,900	\$1,336,900	\$1,000,000	\$120,100	\$1,120,100
A/C Distributor Program	\$2,000,000	\$190,600	\$2,190,600	\$2,000,000	\$165,000	\$2,165,000
Residential In-Home Display Pilot MTP	\$300,000	\$47,600	\$347,600	\$0	\$0	\$0
Home Performance with Energy Star	\$0	\$0	\$0	\$1,000,000	\$115,300	\$1,115,300
REP Pilot Program	\$0	\$0	\$0	\$3,500,000	\$140,700	\$3,640,700
Energy Ambassador Pilot Program	\$0	\$0	\$0	\$0	\$596,700	\$596,700
<b>Hard-to-Reach</b>	<b>\$6,460,000</b>	<b>\$709,100</b>	<b>\$7,169,100</b>	<b>\$5,650,000</b>	<b>\$527,200</b>	<b>\$6,177,200</b>
Hard-To-Reach SOP	\$1,650,000	\$199,700	\$1,849,700	\$1,750,000	\$209,400	\$1,959,400
Multi-Family Water & Space Htg MTP	\$400,000	\$51,200	\$451,200	\$400,000	\$53,000	\$453,000
Low-Income Weatherization (SB-712)	\$660,000	\$105,100	\$765,100	\$2,500,000	\$162,500	\$2,662,500
Community Weatherization Program	\$1,200,000	\$163,500	\$1,363,500	\$1,000,000	\$102,300	\$1,102,300
Agencies in Action MTP	\$2,550,000	\$189,600	\$2,739,600	\$0	\$0	\$0
<b>Sub - TOTAL</b>	<b>\$26,810,000</b>	<b>\$2,866,300</b>	<b>\$29,676,300</b>	<b>\$30,750,000</b>	<b>\$3,459,600</b>	<b>\$34,209,600</b>
R&D	\$0	\$1,107,700	\$1,107,700	\$0	\$1,649,100	\$1,649,100
<b>TOTAL</b>	<b>\$26,810,000</b>	<b>\$3,974,000</b>	<b>\$30,784,000</b>	<b>\$30,750,000</b>	<b>\$5,108,700</b>	<b>\$35,858,700</b>

## 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 (2006-2010). 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)	Energy Goals at Meter (MWh)
2010 <sup>10</sup>	39.21	68,694
2009 <sup>11</sup>	39.21	68,694
2008 <sup>12</sup>	34.09	59,732
2007 <sup>13</sup>	25.31	N/A
2006 <sup>14</sup>	20.43	N/A

<sup>10</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Plan (EEP) filed in April of 2010 under Project No. 37982.

<sup>11</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Report (EER) filed in April of 2009 under Project No. 37982.

<sup>12</sup> Actual weather-adjusted numbers from EER, Project No. 36689.

<sup>13</sup> Actual weather-adjusted numbers from EER, Project No. 35440.

<sup>14</sup> Actual weather-adjusted numbers from EER, Project No. 33884.

## **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 2010. The reported and verified savings are those savings that have been achieved and verified in the 2010 calendar year.

**Table 8: Projected Savings versus Reported and Verified Savings for 2010 (at Meter)**

Programs by Customer Class for 2010	2010					
	Projected Savings		Verified Savings		Reported/ Verified	
	MW	MWh	MW	MWh	MW	MWh
<b>Large Commercial</b>	<b>93.81</b>	<b>97,885.9</b>	<b>100.30</b>	<b>75,633.5</b>	<b>100.30</b>	<b>75,633.5</b>
Large Commercial SOP	17.52	79,479.93	10.60	50,878.1	10.60	50,878.11
The Texas Score MTP	3.76	8,575.55	6.47	15,511.3	6.47	15,511.28
Large Commercial Load Management SOP	70.00	210.00	81.52	163.0	81.52	163.04
Retro-Commissioning	2.54	9,620.44	1.72	9,081.0	1.72	9,081.04
<b>Residential and Small Commercial</b>	<b>13.25</b>	<b>24,091.3</b>	<b>16.06</b>	<b>50,765.80</b>	<b>16.06</b>	<b>50,765.8</b>
Energy Star MTP	8.60	12,120.06	11.82	25,640.8	11.82	25,640.83
A/C Distributor Program	3.24	7,090.00	2.01	6,443.8	2.01	6,443.76
Residential SOP	0.89	1,687.53	0.73	1,897.5	0.73	1,897.54
Advanced Lighting Program	0.53	3,193.75	1.15	15,670.9	1.15	15,670.89
Multi-Family Water & Space Htg - MTP (RES)	-	-	0.04	422.5	0.04	422.53
City of Houston Weatherization (RES)	-	-	0.30	690.2	0.30	690.25
<b>Hard-to-Reach</b>	<b>7.32</b>	<b>18,058.8</b>	<b>4.62</b>	<b>13,265.5</b>	<b>4.62</b>	<b>13,265.5</b>
Hard-To-Reach SOP	2.05	5,046.05	1.76	4,695.2	1.76	4,695.16
Multi-Family Water & Space Htg MTP (HTR)	0.75	2,175.72	0.18	1,802.0	0.18	1,801.98
Res HTR - Affordable Home	-	-	0.08	71.2	0.08	71.22
TDHCA Low-Income Weatherization (SB-712)	0.17	413.70	0.11	353.0	0.11	353.00
City of Houston Weatherization (HTR)	1.94	4,180.63	0.95	2,079.6	0.95	2,079.62
Rebuilding Together Houston	0.65	1,362.70	0.64	1,442.1	0.64	1,442.14
Agencies in Action MTP	1.76	4,879.96	0.90	2,822.4	0.90	2,822.40
<b>TOTAL</b>	<b>114.38</b>	<b>140,036.0</b>	<b>120.98</b>	<b>139,664.8</b>	<b>120.98</b>	<b>139,664.8</b>

**Table 9: Projected Savings versus Reported and Verified Savings for 2009 (at Meter)**

Programs by Customer Class for 2009	2009					
	Projected Savings		Verified Savings		Reported / Verified	
	MW	MWh	MW	MWh	MW	MWh
<b>Large Commercial</b>	<b>54.07</b>	<b>93,355.5</b>	<b>49.83</b>	<b>80,101.6</b>	<b>49.83</b>	<b>80,101.6</b>
Large Commercial SOP	16.54	75,075.53	11.25	65,293.2	11.25	65,293.19
The Texas Score MTP	3.71	8,483.41	3.66	7,255.6	3.66	7,255.56
Large Commercial Load Management SOP	31.25	93.75	33.08	66.2	33.08	66.17
Retro-Commissioning	2.57	9,702.77	1.84	7,486.7	1.84	7,486.68
<b>Residential and Small Commercial</b>	<b>21.63</b>	<b>22,983.0</b>	<b>20.40</b>	<b>30,117.67</b>	<b>20.40</b>	<b>30,117.7</b>
Energy Star MTP	19.84	17,281.31	17.82	15,801.6	17.82	15,801.60
A/C Residential and Small Commercial Pilot Program	0.37	813.44	0.35	1,125.7	0.35	1,125.66
Residential SOP	0.89	1,694.48	0.71	1,675.6	0.71	1,675.55
Advanced Lighting Pilot Program	0.53	3,193.75	0.89	9,300.2	0.89	9,300.17
Multi-Family Water & Space Htg - MTP (RES)	-	-	0.37	1,692.4	0.37	1,692.43
City of Houston Weatherization (RES)	-	-	0.27	522.3	0.27	522.26
<b>Hard-to-Reach</b>	<b>7.37</b>	<b>18,020.4</b>	<b>5.87</b>	<b>15,207.9</b>	<b>5.87</b>	<b>15,207.9</b>
Hard-To-Reach SOP	2.03	5,007.19	2.43	6,064.8	2.43	6,064.79
Multi-Family Water & Space Htg MTP (HTR)	0.76	2,191.62	0.27	1,264.6	0.27	1,264.63
Res HTR - Affordable Home	-	-	0.09	79.3	0.09	79.31
TDHCA Low-Income Weatherization (SB-712)	0.16	400.00	0.07	284.4	0.07	284.42
City of Houston Weatherization (HTR)	2.26	4,857.46	0.94	1,860.8	0.94	1,860.77
Rebuilding Together Houston	0.65	1,371.40	0.73	1,515.4	0.73	1,515.38
Agencies in Action MTP	1.51	4,192.77	1.35	4,138.7	1.35	4,138.65
<b>TOTAL</b>	<b>83.07</b>	<b>134,358.9</b>	<b>76.11</b>	<b>125,427.2</b>	<b>76.11</b>	<b>125,427.2</b>

## **VII. Historical Program Expenditures**

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2006-2010) broken out by program for each customer class.



**Table 10: Historical Program Incentive and Administrative Expenditures (2006-2010) <sup>15</sup>**

Historical Program Funding by Customer Class	2010		2009		2008		2007		2006	
	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
Large Commercial	\$11,270,036	\$1,196,593	\$8,287,710	\$1,074,257	\$8,721,467	\$923,989	\$8,757,636	\$915,235	\$6,896,666	\$608,240
Large Commercial SOP	\$5,060,993	\$650,943	\$4,643,677	\$638,909	\$5,716,190	\$609,591	\$6,648,045	\$656,231	\$5,691,608	\$447,480
Retro-Commissioning MTP	\$940,596	\$110,454	\$912,365	\$126,804	\$899,366	\$72,522	\$908,929	\$100,653	\$865,111	\$53,537
The Texas Score MTP	\$2,328,447	\$232,255	\$1,408,282	\$134,974	\$1,498,540	\$131,402	\$1,200,662	\$158,351	\$339,947	\$48,251
Large Commercial Load Management SOP	\$2,940,000	\$202,942	\$1,323,386	\$153,570	\$607,371	\$110,474	N/A	\$0	\$0	\$58,972
Residential and Small Commercial	\$6,326,842	\$1,858,767	\$4,875,287	\$1,048,914	\$4,816,184	\$722,277	\$5,208,101	\$568,232	\$4,018,882	\$446,152
Energy Star MTP	\$3,475,535	\$315,323	\$3,332,636	\$293,626	\$3,602,391	\$255,098	\$3,619,851	\$297,201	\$3,213,981	\$273,033
Trees for Efficiency			N/A				\$3,459	\$10,473	\$122,613	\$37,218
CCET Residential Demand Response Pilot			N/A		\$0	\$32,902	\$0	\$0	N/A	N/A
Advanced Lighting Program	\$355,817	\$55,643	\$364,490	\$92,261	\$390,915	\$65,109	\$925,279	\$114,780	\$682,288	\$135,901
Multi-Family Water & Space Htg - MTP (RES)	\$506,617	\$64,903	\$490,095	\$56,180	\$707,821	\$14,097		N/A		
	\$18,600	\$2,552	\$175,200	\$21,367	\$80,220	\$12,187	\$220,354	\$35,876		
A/C Distributor Program	\$1,780,779	\$116,152	\$345,952	\$42,211			N/A			
City of Houston Weatherization (RES)	\$189,494	\$21,567	\$166,914	\$26,673	\$34,837	\$1,895	\$39,158	\$3,986		
R&D	\$0	\$1,282,626	\$0	\$516,596	\$0	\$340,989	\$400,000	\$105,916		
Hard-to-Reach	\$7,383,333	\$71,337	\$9,184,238	\$875,066	\$8,325,707	\$625,210	\$3,668,820	\$445,074	\$2,351,879	\$315,434
Hard-To-Reach SOP	\$1,647,077	\$200,539	\$2,341,131	\$208,718	\$1,656,645	\$166,052	\$1,971,254	\$196,047	\$1,451,547	\$192,929
Multi-Family Water & Space Htg MTP (HTR)	\$181,200	\$24,865	\$284,850	\$34,740	\$414,450	\$62,964	\$183,150	\$29,818	\$281,217	\$56,874
Res HTR - Affordable Home	\$56,153	\$8,781	\$31,607	\$8,000	\$9,734	\$1,621	\$2,386	\$0	\$99,116	\$0
TDHCA Low-Income Weatherization (SB-712)	\$364,098	\$49,228	\$360,000	\$47,241	\$1,147,649	\$60,402	\$0	\$5,468	\$61,077	\$14,671
City of Houston Weatherization (HTR)	\$893,880	\$101,735	\$874,311	\$139,714	\$1,557,328	\$84,721	\$91,526	\$9,317		
Rebuilding Together Houston	\$957,927	\$102,171	\$1,052,339	\$148,895	\$713,351	\$119,710	\$1,120,504	\$117,534	\$204,000	\$22,665
Agencies in Action MTP	\$3,282,998	\$284,018	\$4,240,000	\$287,758	\$2,826,550	\$129,740	\$300,000	\$86,890		
TDHCA									\$254,922	\$28,295
<b>TOTAL</b>	<b>\$24,980,211</b>	<b>\$3,826,698</b>	<b>\$22,347,235</b>	<b>\$2,998,238</b>	<b>\$21,863,358</b>	<b>\$2,271,476</b>	<b>\$17,634,557</b>	<b>\$1,928,541</b>	<b>\$13,267,427</b>	<b>\$1,369,826</b>

<sup>15</sup> 2010 actual spending taken from Table 11 in the current EEP; 2009 actual spending from Energy Efficiency Report (EER) filed under Project No. 37982 ; 2008 actual spending from Energy Efficiency Report (EER) filed under Project No. 36689; 2007 actual spending from Energy Efficiency Report (EER) filed under Project No. 35440; 2006 actual spending from EER, Project No. 33884.

## **VIII. Program Funding for Calendar Year 2010**

As shown on the following Table 11, CenterPoint Houston spent a total of \$28,806,909 on energy efficiency programs in 2010. The total forecasted budget for the 2010 programs was \$30,052,518. While the total spending underun vs. the budget was just over 4%, some individual programs showed greater than 10% increases or decreases as follows:

The Commercial and Industrial SOP showed a 16.1% decrease in spending due to a downturn in the economy. The unspent funds from the Commercial and Industrial SOP program were reallocated to various programs that showed increased funding requests due to additional participant activity. The SCORE / CitySmart MTP received an additional \$1,000,000 due to reallocation of funding from programs that were not meeting target projections and showed an increase of 50.9% in spending. The A/C Distributor MTP showed a 17.2% increase in spending due to reallocation of funding and to over-achieving performances by several participating program sponsors. The Multi-family Water and Space Heating program showed a 49.8% decrease in spending due to several projects being cancelled or postponed by several participating builders. The R&D spending increased by 19.6% due to new R&D projects being implemented in 2010. R&D spending is being ramped up to support development of new programs in anticipation of meeting future higher goals. The Agencies and Action program showed a 26.9% decrease in projected spending due to a mid-year decline in the submission and completion of the projects by participating agencies. This curtailment in activity was the result of necessary program process improvements made by CenterPoint Houston and the program implementer. City of Houston Weatherization spending decreased by 11.2 % as the program sponsor was not able to market energy efficiency retrofits to as many low-income customers as initially expected.

Table 11: Program Funding for Calendar Year 2010

Program Funding for Calendar Year 2010	Number of Customers	Forecasted Budget	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)	Percentage Change From Budgeted/ Actual
<b>Large Commercial</b>	<b>252</b>	<b>\$12,588,758</b>	<b>\$11,116,142</b>	<b>\$1,196,593</b>	<b>\$12,312,735</b>	<b>\$153,895</b>	<b>\$122,128</b>	<b>99.0%</b>
Large Commercial SOP	121	\$6,808,661	\$4,907,099	\$650,943	\$5,558,041	\$153,895	\$1,096,726	83.9%
The Texas Score MTP	28	\$1,697,154	\$2,328,447	\$232,255	\$2,560,702	\$0	-\$863,548	150.9%
Large Commercial Load Management SOP	92	\$3,057,384	\$2,940,000	\$202,942	\$3,142,942	\$0	-\$85,558	102.8%
Retro-Commissioning MTP	11	\$1,025,559	\$940,596	\$110,454	\$1,051,050	\$0	-\$25,491	102.5%
<b>Residential and Small Commercial</b>	<b>13,472</b>	<b>\$6,413,605</b>	<b>\$6,326,842</b>	<b>\$576,141</b>	<b>\$6,902,983</b>	<b>\$0</b>	<b>-\$489,378</b>	<b>107.6%</b>
Energy Star MT	9,569	\$3,772,539	\$3,475,535	\$315,323	\$3,790,858	\$0	-\$18,319	100.5%
A/C Distributor Program	2,557	\$1,618,721	\$1,780,779	\$116,152	\$1,896,931	\$0	-\$278,210	117.2%
Residential SOP	859	\$457,102	\$355,817	\$55,643	\$411,460	\$0	\$45,642	90.0%
Advanced Lighting Program	N/A	\$565,243	\$506,617	\$64,903	\$571,519	\$0	-\$6,276	101.1%
Multi-Family Water & Space Htg MTP (RES) <sup>16</sup>	93	N/A	\$18,600	\$2,552	\$21,152	\$0	-\$21,152	N/A
City of Houston Weatherization (RES)	394	N/A	\$189,494	\$21,567	\$211,061	\$0	-\$211,061	N/A
<b>Hard-to-Reach</b>	<b>5,713</b>	<b>\$9,977,308</b>	<b>\$7,383,333</b>	<b>\$771,337</b>	<b>\$8,154,670</b>	<b>\$0</b>	<b>\$1,822,638</b>	<b>81.7%</b>
Hard-To-Reach SOP	2,052	\$1,863,260	\$1,647,077	\$200,539	\$1,847,616	\$0	\$15,645	99.2%
Multi-Family Water & Space Htg MTP (HTR) <sup>16</sup>	424	\$452,781	\$181,200	\$24,865	\$206,065	\$0	\$246,716	50.2%
Res & SCHTR - Afford. Home	71	N/A	\$56,153	\$8,781	\$64,935	\$0	-\$64,935	N/A
TDHCA Low-Income Weatherization (SB-712)	127	\$404,796	\$364,098	\$49,228	\$413,326	\$0	-\$8,530	102.1%
City of Houston Weatherization (HTR) <sup>17</sup>	1,275	\$1,359,499	\$893,880	\$101,735	\$995,615	\$0	\$363,884	88.8%
Rebuilding Together Houston	855	\$1,017,014	\$957,927	\$102,171	\$1,060,098	\$0	-\$43,084	104.2%
Agencies in Action MTP <sup>18</sup>	909	\$4,879,957	\$3,282,998	\$284,018	\$3,567,016	\$0	\$1,312,941	73.1%
<b>Sub - TOTAL</b>	<b>19,437</b>	<b>\$28,979,671</b>	<b>\$24,826,316</b>	<b>\$2,544,072</b>	<b>\$27,370,388</b>	<b>\$153,895</b>	<b>\$1,455,388</b>	<b>95.0%</b>
R&D	0	\$1,072,847	\$0	\$1,282,626	\$1,282,626	\$0	-\$209,779	119.6%
<b>TOTAL</b>	<b>19,437</b>	<b>\$30,052,518</b>	<b>\$24,826,316</b>	<b>\$3,826,698</b>	<b>\$28,653,014</b>	<b>\$153,895</b>	<b>\$1,245,609</b>	<b>95.9%</b>

<sup>16</sup> Multi-Family Space and Water Heating was budgeted and operated as one program in 2010. Therefore the percentage decrease for both is 49.8%

<sup>17</sup> City of Houston Weatherization Program was budgeted and operated as one program in 2010. Therefore the percentage decrease for both is only 11.2%

<sup>18</sup> TDHCA Settlement replacement program.

## **IX. Market Transformation Program Results**

### **ENERGY STAR® 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® homes and products. Additionally, the program is designed to condition the market so that consumers are aware of and request ENERGY STAR® homes and products.

In 2010, the Houston housing market was still in a decline with only 18,752 home starts for the year. There were 9,569 homes certified, labeled and incentivized through CenterPoint Houston's ENERGY STAR® New Home MTP. The 2010 program paid on specific energy and demand measures rather than on a HERS index, which includes points for gas measures. The average savings per home was of 1.24 kW and 2,679 kWh per home. The increase in kWh per home was due to counting savings for specific electric measures.

The Predictive Savings Tool (PST) used to determine the savings achieved in the Energy Star homes was updated to reflect the following;

- City of Houston energy code updates, and expected statewide changes.
- Position the CenterPoint Houston ENERGY STAR® New Homes MTP for continued high performance should local builders end their affiliation with the EPA ENERGY STAR® 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.

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

The RCx program offers commercial customers the opportunity to make operational performance improvements in their facilities. 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 are undertaking retro-commissioning activities.

In 2010, the RCx program adjusted the bonus concept introduced in 2009 and paid incentives to the RCx agents and customers based on the successful completion of projects. The deadline for the completion of projects was increased in 2010 to a maximum of 18 months from project kickoff. Previously, projects had to complete within the same calendar year of kickoff. RCx agents will continue to be paid a flat rate for completion of the Planning and Investigation phases. Incentives are based on the verified energy savings as a result of completing cost effective measures identified in the RCx project. Incentives are paid at \$0.017 per kWh of energy saved, with a project cap of \$10,000. This was the basis for both the RCx agents' payment for the Verification phase, and the incentive for the customer. The interest in RCx continues to increase as several new firms have been added to the list of qualified RCx Agents, bringing the total to 20. A larger attendance at the annual kick-off meeting (building owners, management companies, and potential new RCx Agents) points to a growing interest in this program. The market is far from being transformed. With the new lower requirements of the RCx Fast Track Program, many more facilities are now eligible to participate in the program. Since the program started in 2004, approximately 60 projects have been completed. With the vast number of buildings in the greater Houston area, the RCx program has a tremendous potential for growth over the next few years.

## **Multi-Family Water & Space Heating MTP Program**

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

In 2010, the Multi-family Water and Space Heating MTP paid incentives on 517 apartment units in the CenterPoint Houston service area. Of these units, 424 were classified as Hard-To-Reach

and 93 units were classified as Market Rate residential complexes. Two apartment complexes installed gas boiler systems and the remaining three projects installed individual gas hot water heaters.

The multi-family gas market continues to improve in spite of economic pressures. Prior multi-family gas projects which were postponed due to the economy are now beginning the construction phase and are expected to be complete in late 2011 or early 2012. Interest in the program continues to be favorable. CenterPoint Houston received 11 applications for the 2011 Multi-family Water & Space Heating Program which represents 1,184 units with an estimated total incentive payment of \$487,000. In addition developers, architects and builders will be invited to attend a Multi-family Water & Space Heating Program kickoff meeting in May 2011.

### **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 2010, the SCORE/City Smart MTP budget was increased by \$1 million dollars due the program budget being fully utilized in 2009, and increased interest from city and counties. The program achieved 6,467 kW and 15,511,280 kWh with 17 school districts, two higher education facilities, six participating cities and one state agency. Most of the school districts in the CenterPoint footprint have been participating in the program since the program's inception, however a few smaller districts have just recently joined. The newer districts in the program need the most non-cash incentives.

In 2011, a new component of the program will be offered, SCORE Lite, to those school entities that do not require technical assistance or any of the other non-cash incentive components. The SCORE Lite will provide a higher kW and kWh incentive than the full SCORE/City Smart MTP. The 2011 kick off meeting saw more cities and governmental entities in attendance as this market segment has just been targeted over the past year.

## **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. Frontier Associates administers the program for CenterPoint Houston.

In 2010 Frontier Associates contracted with nine 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, Houston Works, and Baytown Housing Authority. The Agencies in Action program served 909 participants in 2010 with kW savings of 903 and kWh savings of 2,822,403.

In 2011 CenterPoint will continue to focus on expanding the program to under-served areas of the CenterPoint electric footprint, and promoting a whole-house retrofit approach for low-income customers. A successful project was completed in 2010 with 80 Baytown Housing Authority residential units receiving energy efficiency retrofits. CenterPoint and its implementer will pursue other opportunities with local housing authorities in 2011. CenterPoint Energy and Frontier Associates are also evaluating potential program structure changes for 2011. Currently, the participating agencies are responsible for marketing the program, conducting home assessments, and ensuring that eligible energy efficiency retrofits are properly installed. The proposed changes to the program would only require the agencies to be responsible for outreach, qualification of low-income residents, and home assessments through a qualified assessor. Frontier Associates

would manage the installation of energy efficiency retrofits through a bidding process with independent contractors.

### **TDHCA Low Income Weatherization (SB-712)**

The TDHCA 712 Low Income Weatherization program is bundled with the Agencies in Action program and follows the same program guidelines. The only distinction between the two programs is that incentives are split between the Agencies in Action program itself and the SB-712 requirement for the TDHCA Low Income Weatherization program.

In 2010, the TDHCA program served 127 customers with 107 kW and 353,000 kWh of demand and energy savings.

### **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 homes, multi-family homes and small commercial businesses within CenterPoint Houston's electric distribution service territory.

ICF Associates contracted with CenterPoint Houston to help implement the 2010 program. CenterPoint Houston and ICF held A/C dealer training sessions with each distributor in order to educate various A/C dealers on how to participate with their distributors. CenterPoint began the 2010 program year with the same requirements for the 2009 pilot program year (>14.5 SEER/12 EER). ICF Associates asked each distributor for their sales history in 2009 and their sales prediction for 2010 broken out by SEER level in order to accurately distribute funds throughout the program. Once the results were in, it was clear that the A/C distributors were successfully marketing units below 15 SEER, therefore CenterPoint decided to increase the minimum SEER level to 16 in order to continue the program's goal of transforming the market.



The 2010 program had 8 participating A/C Distributors and five out of the eight distributors exceeded their original contract amount. In 2010, the A/C Distributor MTP served 2,557 customers resulting in 2,012 kW savings and 6,443,764 kWh savings.

### **Solar Energy Pilot Project**

The Houston Advanced Research Center (HARC), on behalf of the Houston Architecture Foundation and the City of Houston, has completed the installation and performance testing of two 50 kW solar energy systems and the associated research measurement equipment on the George R. Brown Convention Center in Houston. HARC partnered with the Houston Architecture Foundation and the City of Houston to install and test the two 50 kW solar energy systems. Test results concluded that the BP Global poly-crystalline 51.3 kW DC solar array and the Uni-Solar 49.0 kW DC thin-film amorphous silicon panels performed within the acceptable energy production tolerances for the monthly and annual production estimates modeled using U.S. National Renewable Energy Laboratory (NREL) PVWATTS calculator. Both systems exceeded the guaranteed annual energy production by 15% for Year 1 (August 2009 – July 2010).

## **X. Current Energy Efficiency Cost Recovery Factor (EECRF)**

CenterPoint Houston's 2011 EECRF was approved by the Public Utility Commission of Texas in Docket No. 38213 in November of 2010 for the amount of \$10,865,852, the incremental amount of energy efficiency revenue requirement not included in base rates. The amount that is recovered in base rates is \$22,925,492.

## **XI. Revenue Collected Through EECRF**

In 2010, CenterPoint Houston collected a total of \$30,594,941 for energy efficiency related costs; \$22,925,492 through base rates and \$7,669,449 through the EECRF Rider.

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

In Docket No. 36952, the PUC approved energy efficiency costs to be recovered in 2010 of \$30,930,082 consisting of:

\$ 27,952,697	Program Costs
\$ 2,854,336	Bonus
\$ <u>123,049</u>	Deferred Interest
\$ 30,930,082	Total

This was approved to be recovered through base rates in the amount of \$22,925,492, and \$8,004,590 through the EECRF Rider. In 2010, actual program costs were \$28,806,909 for a total energy efficiency related costs of \$31,784,294. Total revenues collected through base rates and the EECRF Rider were \$30,594,941, resulting in overall under-recovery of \$1,189,353.

### **XIII. Under-served Counties<sup>19</sup>**

There were no counties within the CenterPoint Houston service territory that were under-served by the Company's energy efficiency programs in 2010. All of 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 2010 through the Company's energy efficiency programs.

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<sup>19</sup> PUC Subst. R. 25.181(m)(2)(T) requires utilities to include in their EEPs filed in 2011 "a list of any counties that in the prior year were under-served by the energy efficiency program."

#### **XIV. Performance Bonus Calculation**

In 2010, CenterPoint Houston's total spending on the implementation of Energy Efficiency programs was \$28,806,909.

Per Substantive Rule § 25.181, the calculation of the performance bonus is the lesser of:  
Percentage of net benefits or 20% of program costs.

Due to exceeding the 2010 goal by 209%, CenterPoint Houston reached the maximum allowable performance bonus by rule of 20% of program costs. Therefore, CenterPoint Houston will request a performance bonus of \$5,761,382 as part of the 2011 EECRF filing.

Table 12 shows the performance bonus calculation for CenterPoint Houston for 2010.

**Table 12: Performance Incentive Calculation**

<b>Performance Incentive for Calendar Year 2010</b>	<b>kW</b>	<b>kWh</b>
2010 Program Goals	39,209	68,693,818
2010 Program Savings		
<i>Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs &lt; or &gt; 10 years)</i>	120,982	139,664,780
<i>Reported/Verified Hard-to-Reach</i>	4,622	13,265,515
Percentage Excess of Goal		209%
<b>Avoided Cost</b>		
<i>per kW</i>		\$80
<i>per kWh</i>		\$0.064
<i>Inflation Rate</i>		2.0%
<i>Discount Rate</i>		7.5%
<i>PV(Avd Capacity Cost)</i>		\$606.142
where - $\$80 \times [(1 + 2\%) / (8\% - 2\%)] \times [1 - ((1 + 2\%) / (1 + 8\%)) \text{ to the power } (10 \text{ years})]$		
<i>PV(Avd Energy Cost)</i>		\$0.485
where - $\$0.064 \times [(1 + 2\%) / (8\% - 2\%)] \times [1 - ((1 + 2\%) / (1 + 8\%)) \text{ to the power } (10 \text{ years})]$		
<i>Measure Life Avg. Yrs</i>		10
<b>Total Avoided Cost</b>		<b>\$141,057,282</b>
where - TTL Av. Cost = (Reported kW * PV(Av. \$/kW) + Reported kWh * PV(Av. \$/kWh))		
<b>2010 Program Costs</b>		<b>\$28,806,909</b>
Net Benefits = Total Avoided Cost - Total Program Costs		
<b>Net Benefits</b>		<b>\$112,250,373</b>
<b>Bonus Based on Net Benefits – (% Excess of Goal/2) * Net Benefits</b>		
		<b>\$117,053,153</b>
<b>Bonus based on 20% of Program Costs</b>		
		<b>\$5,761,382</b>

## **APPENDIX A: ACRONYMS**



*(a) Acronyms*

<b>CCET</b>	Center for the Commercialization of Electric Technologies
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EECRF</b>	Energy Efficiency Cost Recovery Factor
<b>EEP</b>	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EER</b>	Energy Efficiency Report, which was filed as a separate document prior to April 2008
<b>ERCOT</b>	Electric Reliability Council of Texas
<b>HERS</b>	Home Energy Ratings
<b>HTR</b>	Hard-To-Reach
<b>MTP</b>	Market Transformation Program
<b>PUCT</b>	Public Utility Commission of Texas
<b>RCx</b>	<b>Retro-Commissioning</b>
<b>REP</b>	Retail Electrical Provider
<b>RES</b>	Residential
<b>RESNET</b>	Residential Energy Services Network
<b>SCORE</b>	Schools Conserving Resources
<b>SOP</b>	Standard Offer Program

## **APPENDIX B: GLOSSARY**

*(b) Glossary*

**Actual Weather Adjusted** -- Actual Weather Adjusted peak demand and energy consumption is the historical peak demand and energy consumption adjusted for weather fluctuations using weather data for the most recent ten years.

**Average Growth** -- Average historical growth in demand (kW) over the prior 5 years for residential and commercial customers adjusted for weather fluctuations.

**Capacity Factor** -- The annual kilowatt-hour sales divided by the product of the total hours in a year (8760) and the rated capacity or peak demand of the utility in kilowatts.

**Commercial customer** -- A non-residential customer taking service at a metered point of delivery at a distribution voltage under an electric utility's tariff during the prior calendar year or a non-profit customer or government entity, including an educational institution. For purposes of this section, each metered point of delivery is considered a separate customer.

**Deemed savings** -- A pre-determined, validated estimate of energy and peak demand savings attributable to an energy efficiency measure in a particular type of application that an electric utility may use instead of energy and peak demand savings determined through measurement and verification activities.

**Demand** -- The rate at which electric energy is used at a given instant, or averaged over a designated period, usually expressed in kilowatts (kW) or megawatts (MW).

**Demand savings** -- A quantifiable reduction in demand.

**Energy efficiency** -- Improvements in the use of electricity that are achieved through facility or equipment improvements, devices, or processes that produce reductions in demand or energy consumption with the same or higher level of end-use service and that do not materially degrade existing levels of comfort, convenience, and productivity.

**Energy efficiency measures** -- Equipment, materials, and practices at a customer's site that result in a reduction in electric energy consumption, measured in kilowatt-hours (kWh), or peak demand, measured in kilowatts (kW), or both. These measures may include thermal energy storage and removal of an inefficient appliance so long as the customer need satisfied by the appliance is still met.

**Energy efficiency program** -- The aggregate of the energy efficiency activities carried out by an electric utility under this section or a set of energy efficiency projects carried out by an electric utility under the same name and operating rules.

**Project sponsor** -- An energy efficiency service provider or customer who installs energy efficiency measures or performs other energy efficiency services under the Energy Efficiency Rule. An energy efficiency service provider may be a retail electric provider or commercial customer.

**Energy Efficiency Rule** – PUCT Substantive Rules § 25.181 and § 25.183.

**Energy savings** -- A quantifiable reduction in a customer's consumption of energy.

**Growth in demand** -- The annual increase in demand in the Texas portion of an electric utility's service area at time of peak demand, as measured in accordance with the Energy Efficiency Rule.

**Hard-to-reach (HTR) customers** -- Residential customers with an annual household income at or below 200% of the federal poverty guidelines.

**Incentive payment** -- Payment made by a utility to an energy efficiency service provider under an energy-efficiency program.

**Inspection** -- Examination of a project to verify that an energy efficiency measure has been installed, is capable of performing its intended function, and is producing an energy saving or demand reduction.

**Load control** -- Activities that place the operation of electricity-consuming equipment under the control or dispatch of an energy efficiency service provider, an independent system operator or other transmission organization or that are controlled by the customer, with the objective of producing energy or demand savings.

**Load management** -- Load control activities that result in a reduction in peak demand on an electric utility system or a shifting of energy usage from a peak to an off-peak period or from high-price periods to lower price periods.

**Market transformation program (MTP)** -- Strategic efforts to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services, and practices.

**Measurement and verification (M&V)** -- Activities intended to determine the actual energy and demand savings resulting from energy efficiency projects as described in this section.

**Peak demand** -- Electrical demand at the times of highest annual demand on the utility's system.

**Peak demand reduction** -- Reduction in demand on the utility system during the utility system's peak period.

**Peak period** -- For the purpose of this EEPR, the peak period consists of the hours from one p.m. to seven p.m., during the months of June, July, August, and September, excluding weekends and Federal holidays.

**Projected Demand and Energy Savings** -- 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 CenterPoint Houston's goals required by the Energy Efficiency Rule (Substantive Rule § 25.181) and the additional savings expected based on the current funding requirements.

**Renewable demand side management (DSM) technologies** -- Equipment that uses a renewable energy resource, as defined in Substantive Rule §25.173(c) that, when installed at a customer site, reduces the customer's net purchases of energy, demand, or both.

**Standard offer program (SOP)** -- A program under which a utility administers standard offer contracts between the utility and energy efficiency service providers

**APPENDIX C: REPORTED DEMAND AND ENERGY  
REDUCTION BY COUNTY**



**Appendix C**  
**CenterPoint Energy Houston Electric, LLC Efficiency Programs**  
**Energy Efficiency Programs**  
**2010 Demand (kW) and Energy (kWh) Savings at Meter-By-County**

Programs	C O U N T I E S											Total
	Austin	Brazoria	Chambers	Fl-Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	
Large Commercial SOP	kW	30.9	595.9	9,925.6	44.3	10,596.7						
	kWh	176,875.2	4,669,405.6	45,717,919.0	313,907.8	50,878,107.6						
The Texas Score MT	kW	11.8	75.5	1,120.6	135.8	6,467.5						
	kWh	53,046.0	187,076.0	2,927,075.0	229,188.0	15,511,280.0						
Large Commercial Load Management	kW	1,085.5	760.5	3,410.5	0.0	81,517.7						
	kWh	2,171.0	1,521.0	6,821.0	0.0	163,035.5						
Retro-Commissioning MT	kW	0.0	0.0	1,718.0	0.0	1,718.0						
	kWh	0.0	0.0	9,081,041.0	0.0	9,081,041.0						
Energy Star MT	kW	4.6	536.8	5,237.4	30.4	11,823.3						
	kWh	9,721.3	1,240,065.8	121,807,111.0	65,335.6	25,640,831.4						
Res & SC SOP	kW	4.7	29.2	72.5	37.8	729.4						
	kWh	14,160.0	67,804.0	5,801.0	107,253.0	1,433,142.0						
Statewide CFL Program	kW	0.0	67.7	152.5	58.3	853.5						
	kWh	0.0	921,463.0	2,077,095.0	793,410.0	11,622,499.0						
Multi-Family Water & Space Htg - RES	kW	0.0	0.0	39.1	0.0	39.1						
	kWh	0.0	0.0	422,534.0	0.0	422,534.0						
A/C Distributor Pilot Program	kW	6.8	95.5	427.4	11.3	2,012.7						
	kWh	23,141.0	303,791.0	31,664.0	1,386,409.0	36,045.0						
City of Houston Weatherization - RES	kW	0.0	0.9	14.2	0.4	304.2						
	kWh	0.0	3,764.0	57,734.0	1,794.0	626,280.0						
Hard-To-Reach SOP	kW	0.0	22.0	128.9	133.1	1,755.1						
	kWh	0.0	62,051.0	10,206.0	334,227.0	3,803,431.0						
Multi-Family Water & Space Htg - HTR	kW	0.0	40.3	137.8	0.0	178.1						
	kWh	0.0	385,369.0	1,416,607.0	0.0	1,801,976.0						
TDHCA Low-Income Weatherization (SB-712)	kW	0.0	0.0	107.9	0.0	107.9						
	kWh	0.0	0.0	353,001.7	0.0	353,001.7						
Affordable Single Family Homes	kW	0.0	0.0	83.8	0.0	83.8						
	kWh	0.0	0.0	71,220.3	0.0	71,220.3						
City of Houston Weatherization - HTR	kW	0.0	2.3	24.4	0.0	950.0						
	kWh	0.0	5,523.0	93,567.0	0.0	2,079,620.0						
Rebuilding Together Houston	kW	0.0	2.2	641.7	0.0	644.0						
	kWh	0.0	8,826.0	1,433,309.0	0.0	1,442,135.0						
Agencies in Action MT	kW	0.0	10.6	198.3	10.0	903.5						
	kWh	0.0	42,949.2	715,780.0	21,196.8	2,822,403.8						
<b>Programs - TOTAL</b>												
Total kW Savings		1,113.3	1,672.1	76.8	11,583.5	417.1	105,236.5	0.0	1,010.7	60.6	11.9	120,981.6
Total kWh Savings		102,239.2	3,398,258.2	178,304.1	23,581,141.4	1,588,449.4	108,177,123.3	0.0	2,232,108.6	361,235.2	45,914.0	139,664,779.9