# **CenterPoint Energy Houston Electric, LLC**

# **2010 Energy Efficiency Plan and Report**

# Substantive Rule § 25.181 and § 25.183

# April 1, 2010

Project No. 37982



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# Introduction

CenterPoint Energy Houston Electric, LLC (CenterPoint Energy Houston) presents this Energy Efficiency Plan and Report (EEPR) to comply with Substantive Rules § 25.181 and § 25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 requires 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 % of the electric utility's annual growth in demand of residential and commercial customers by December 31, 2009, and
- Beginning in 2009, a utility's demand reduction goal for any year shall not be less than the previous year's goal.

The format used in the EEPR primarily follows the one outlined in § 25.181 (m). The EEPR presents the results of CenterPoint Energy Houston's 2009 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 2010 and 2011 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 form 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 2009. 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 Energy Houston's plans to achieve a 20% reduction in its annual growth in demand of residential and commercial customers by December 31, 2010, and a 20% reduction in its annual growth in demand of residential and commercial customers by December 31, 2011. The Plan also addresses the corresponding energy savings goal, which is calculated from the demand savings goal using a 20% capacity factor. CenterPoint Energy Houston also plans to meet the energy efficiency requirements of the stipulation and agreement of the parties ("settlement agreement") in Docket No. 32093. 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 2010 and 2011 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	2010	144	20%	39.2	68,693.8	114.38	140,036.0	\$30,053
Goals	2011	115	20%	39.2	68,693.8	120.11	121,432.1	\$27,784

Note that the 2010 and 2011 demand and energy goals are established pursuant to the Rule §25.181 provision which states the goal for any year shall not be less than the previous year's goal. Since the actual five-year average demand growth in 2010 and 2011 is lower than in 2009, the 2010 and 2011 goals are set at the 2009 level, 39.2MW.

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

<sup>&</sup>lt;sup>3</sup> Peak demand reduction and energy savings for the current and following calendar year that CenterPoint Energy Houston is planning and budgeting for in the EEPR. These projected savings reflect CenterPoint Energy 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 Energy Houston will implement the following programs:

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

As detailed in the 2009 Energy Efficiency Report contained in this document, CenterPoint Energy Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory 20% energy efficiency savings goal. CenterPoint Energy Houston's goals for 2009 were 39.2 MW in peak demand reduction and 68,693.8 MWh in energy savings. Actual total achieved reductions in 2009 were 75.65 MW and 180,657 MWh. The total forecasted spending for 2009 was \$25.6 million. Actual 2009 spending totaled \$25.34 million.

# **Energy Efficiency Plan**

# I. 2010 Programs

# A. 2010 Program Portfolio

CenterPoint Energy Houston plans to implement thirteen programs in 2010. In addition, one pilot program will be funded in 2010. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Energy Houston anticipates that targeted outreach to a broad range of service providers will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

Program	Target Market	Application	
Large Commercial SOP	Large Commercial	Retrofit; New Construction	
Residential SOP	Residential	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	
Large Commercial Load Management SOP	Large Commercial	Load Management	
TDHCA Low Income Weatherization (SB-712)	Hard-to-Reach Residential	Retrofit	
City of Houston Weatherization	Residential / Hard-to-Reach Residential	Retrofit	
Agencies in Action MTP	Hard-to-Reach Residential	Retrofit	
Rebuilding Together Houston	Hard-to-Reach Residential	Retrofit	
ENERGY STAR® Homes MTP	Residential	New Construction	
Retro-Commissioning MTP	Large Commercial	Retrofit	
Texas SCORE MTP	Large and Small Commercial (K-12 public schools & City facilities)	Retrofit; New Construction	
A/C Distributor MTP	Residential and Small Commercial	Retrofit	
	New Programs for 2010		
Advanced Lighting Pilot MTP	Residential	Retrofit	

Table 2:	2010	Energy	Efficiency	Program	Portfolio
			•	0	

The programs listed in Table 2 are described further in sub-sections B and C. CenterPoint Energy 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>&</sup>lt;sup>4</sup> CenterPoint Energy Houston energy efficiency website is www.centerpointefficiency.com.

# **B.** Existing Programs

#### **ENERGY STAR® Homes MTP**

#### Program design

The ENERGY STAR® Homes MTP targets residential new construction homes. Incentives are paid to builders for building ENERGY STAR® certified homes in the CenterPoint Energy Houston service territory, and the program is also 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. In preparation for major changes to the ENERGY STAR program in 2011, the 2010 program incentives will be based on demand and energy impacts rather than on a HERS index. The Predictive Savings Tool (PST) used to determine the impacts in Energy Star homes has been updated. The changes to the PST are expected to improve the accuracy of predicted demand and energy savings and position CenterPoint Energy for the upcoming changes to the ENERGY STAR program. These program changes will continue to encourage builders to build homes that are 15% above code.

#### Implementation process

CenterPoint Energy 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 Energy Houston's website.

#### Outreach and Research activities

CenterPoint Energy 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 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;

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- 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.

# Large Commercial Standard Offer Program

#### Program design

The Large Commercial SOP targets large commercial customers with a minimum demand of 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 Energy Houston will continue implementation of its Large Commercial SOP whereby any eligible project sponsor may submit an application for qualifying projects. Program information is provided on CenterPoint Energy Houston's website.

#### Outreach and Research activities

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

- Utilizes mass e-mail notifications to keep potential project sponsors interested and informed;
- Maintains internet website with detailed project eligibility, end-use measures, incentives, 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.

#### **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 certain 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. The Residential SOP will remain the same in 2010. The program is open to all qualifying energy efficiency measures, including, but not limited to air conditioning duct sealing, weatherization, ceiling insulation, water saving measures and ENERGY STAR® windows.

#### Implementation process

CenterPoint Energy 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 Energy Houston's website.

#### Outreach and Research activities

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

# 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 Energy 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 Energy Houston's website.

#### Outreach and Research activities

CenterPoint Energy 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.

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

# Program design

The RCx MTP is a 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. Incentives are paid to RCx Agents at the completion of each of three phases: planning phase, implementation 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 2010, programs are allowed to take up to 18 months to complete from the start of the project and the program will evaluate the cost effectiveness of a scaled down RCx program for customers that do not meet the minimum eligibility requirements (i.e., facilities that are smaller in physical size). The RCx process and incentives for these smaller facilities would be scaled down to ensure the project cost effectiveness.

#### Implementation process

The program is implemented through selected RCX agents. Program information is provided on CenterPoint Energy Houston's website.

#### Outreach and Research activities

CenterPoint Energy 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.

# 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 Energy 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 Energy 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.

#### **City of Houston Weatherization**

#### Program design

The City of Houston Weatherization Program targets both hard-to-reach and non hard-to-reach residential customers. The program utilizes a neighborhood approach, where whole neighborhoods are targeted for energy efficiency retrofits. The city of Houston identifies the targeted neighborhoods for the program. Incentives are paid to project sponsors for certain measures installed in retrofit applications that provide verifiable demand and energy savings. The 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 2010 City of Houston Weatherization Program will continue to operate as it has in the past. 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, weatherization, ceiling insulation, compact fluorescent lamps, and water saving measures.

#### Implementation process

The program is implemented through the City of Houston and its contractors.

#### Outreach and Research activities

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

- Attends neighborhood walks and kick-off meetings with city of Houston staff informing residents about the program;
- Participates in periodic meetings with the City of Houston 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 is a low- income energy efficiency program which involves partnerships with a number of community agencies in the CenterPoint Energy Houston electric distribution service area. The measures installed by participating agencies as a part of this program include: attic insulation, solar screens, compact fluorescent lamps, ENERGY STAR® room air conditioners, ENERGY STAR® ceiling fans, ENERGY STAR® refrigerators, duct efficiency improvement and air infiltration control. Incentives are paid to agencies based on verifiable demand and energy savings. In 2009, the annual total household income was raised from 125% of the federal poverty guidelines to 200% of the federal poverty guidelines. The 2010 program will continue to operate under these parameters.

#### Implementation process

CenterPoint Energy Houston will continue implementation of its Agencies in Action MTP whereby any eligible local agency may submit an application for funding provided they meet the program participation requirements and funding is available.

#### Outreach and Research activities

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

- Utilizes mass e-mail notifications to potential agencies to inform them of the program;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Participates in city-wide outreach activities as may be available;
- Contacts non-profit organizations 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.

# **Rebuilding Together Houston (RTH)**

#### Program design

The RTH program offers incentives for the installation of energy efficiency measures in lowincome housing. The measures include ceiling insulation, and compact fluorescent lamps. The program is administered by Rebuilding Together Houston, a private, non-profit organization. It is offered to low-income participants defined as existing households with income at or below 200% of the federal poverty guidelines. This program resulted from negotiations in CenterPoint Energy Houston's 2006 Rate Case Settlement. The energy efficiency component is a direct compliment to Rebuilding Together Houston's core business of home repair for low income residents.

#### Implementation process

CenterPoint Energy Houston will continue implementation of the program through RTH in 2010.

#### Outreach and Research activities

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

• Participates in periodic meetings with RTH to assess program progress and program needs.

#### The Texas SCORE MTP

#### Program design

The Texas SCORE MTP schools program also includes the CitySmart MTP program which targets cities and local governments within the CenterPoint Energy 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 engineering analysis to school administrators and city planners to help them make decisions about cost effective investments.

#### Implementation process

CenterPoint Energy Houston will continue implementation of the Texas SCORE MTP and the CitySmart MTP whereby any eligible project meeting the minimum requirements from any participating school district or city may be submitted for incentive payment.

#### Outreach and Research activities

CenterPoint Energy 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.

## A/C Distributor MTP

#### Program design

The A/C Distributor MTP (formerly A/C Residential and Small Commercial Pilot MTP) provides incentives to air conditioning distributors and/or air conditioning dealers who agree to facilitate the installation of high-efficiency (>14 SEER) air conditioners and heat pumps in single-family homes, multi-family homes and small commercial businesses within CenterPoint Energy Houston's electric distribution service territory. Units installed in single-family new construction applications are eligible as long as the builder is not a participant in CenterPoint Energy Houston's ENERGY STAR® New Home Program.

#### Implementation process

CenterPoint Energy 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 Energy Houston will continue to verify installations, manage and allocate available incentive funds, process all claims for incentive payments and provide other oversight functions. Program information is provided on CenterPoint Energy Houston's website.

#### Outreach and Research activities

CenterPoint Energy 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.

# Large Commercial Load Management SOP

#### Program design

CenterPoint Energy Houston will implement an expanded load management program 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 ERCOT reaches its Step 3 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 Energy Houston Interval Data Recorder (IDR) meter. In 2010, the curtailment calls have been reduced to a 30-minute lead time for load reduction, opposed to the one-hour lead time in 2009. This change was made in an effort to more closely mirror the ERCOT programs.

#### 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 Energy Houston service territory. The 2010 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 Energy 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.

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

This program is identical to the Agencies in Action program. See page 14.

# C. New Programs for 2010

#### **Advanced Lighting Pilot MTP**

#### Program design

In 2010, CenterPoint Houston will continue participation in the statewide CFL program, but the program name will change to the new Advanced Lighting Pilot MTP. The program will continue to offer point of purchase rebates to customers at participating retail stores for the purchase of high efficiency lighting, but will incorporate LED lamps in 2010 and will discontinue offering rebates for the standard 13W spiral CFL. The program will also include a study of the benefits of LED lighting in parking garages in anticipation of a Commercial LED Lighting Program.

#### Implementation process

The program will be implemented in the Houston area in 2010 with Ecos Consulting working as the program implementer. The point of purchase rebates will be offered at participating retailers, including Home Depot, Ace Hardware, and True Value Hardware, throughout the CenterPoint footprint.

#### Outreach and Research activities

CenterPoint Energy 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.

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

#### Program: Commercial LED Lighting Program

This project will evaluate the energy saving potential as a result of converting conventional lighting (i.e., fluorescent, metal halide, etc.) to LED in commercial facilities (i.e., parking garages, street lights, building interior and exteriors, etc.). LED technology is developing rapidly in the commercial sector and offers many benefits; white light for true color rendition, no mercury, instant-on, long life, does not attract bugs, etc. LED lights will be installed in suitable demonstration facilities for evaluation and public demonstration.

# Program: 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 CNP advanced metering system to directly control wholehouse residential and small commercial electric load. Backup generators automatically come on line 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 in the summer of 2010.

#### 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 Energy Houston will partner with Electric Power Research Institute (EPRI) to develop the program. The program will be segmented into two phases:

Phase 1: Protocols must first be developed to design an experiment that measures the impact of energy feedback, along with analysis methods for data collected. CenterPoint Energy Houston will collaborate with EPRI, Freeman & Sullivan, and other electric utilities to develop the research protocols and establish standards for data comparison. Key issues to address in this project will be methods of feedback, research gaps, and costs.

Phase 2: CenterPoint Energy Houston will use the results of the study in Phase one to conduct an actual feedback research project in the CenterPoint Energy Houston service territory. CenterPoint Energy Houston, EPRI and several Retail Electric Providers will team up to design a program that will evaluate the effectiveness of feedback for residential customers with advanced meters installed. It is anticipated that the primary feedback mechanisms tested will be in home energy display devices.

#### 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 Energy 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 is currently under acceptance testing by the City of Houston, and the addition of waste water treatment plant monitoring is planned to be completed by the end of the first quarter of 2010. Test data will be collected during the peak summer months this 2010. 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: 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 of two 50 kW solar energy systems and the associated research measurement equipment on the George R. Brown Convention Center in Houston. HARC is partnering with the Houston Architecture Foundation and the City of Houston to install and test two 50 kW solar energy systems. The objective of the Solar Energy Pilot Program is to collect, analyze and report data related to two different solar energy technologies for potential implementation over the available roof and back wall of the convention center. The system installed on the roof will utilize flexible thin-film solar cells and the system installed on the facility's rear wall will use photovoltaic panels. CenterPoint Energy is providing measurement and verification support for the project and a final report will be generated by HARC later this year.

#### 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. CenterPoint Energy 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: Residential Direct Load Control

CenterPoint Energy 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 systems on approximately 250 single-family and multi-family residences. Multiple technologies will be evaluated as part of the project including HANs, smart thermostats, and related hardware. End-uses that will be controlled will include air conditioning, pool pumps, and other selected appliances if feasible. The AMS system will be used to communicate with end-use devices and measure demand and energy reduction. Essential to the completion of this project is receiving 15-minute demand and energy data out of AMS. Another component of this project is purchasing or developing load management control software which provides individual house addressability and allows for varying load management control strategies.

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

This project will be 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 will control PEV charging requirements under a simulated and real time grid environment with potential load management consideration from off-peak smart charging technology as well as the capability to accept demand response signals. The smart charging platform will be jointly developed by utility and automotive industries which will be standards based and will be able to utilize existing CenterPoint Houston fleet PEVs or future CenterPoint Houston purchased PEVs. Project demonstration and testing will be administered mid 2010 and completed by year end of 2012.

# D. Existing DSM Contracts or Obligations

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

#### **II.** Customer Classes

Customer classes targeted by CenterPoint Energy 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 the legislative goal.

Customer Class	Number of Customers
Commercial	245,000
Residential	1,248,000
Hard-to-Reach⁵	601,000

<b>Table 3: Summary of Cus</b>	stomer Classes
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<sup>&</sup>lt;sup>5</sup> CenterPoint Energy 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, 32.5% of Texas families fall below 200% of the poverty threshold. Applying that percentage to CenterPoint Energy Houston's residential customer totals, the number of HTR customers is estimated at 601,000. 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 Energy 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, 2010 goal reflects the growth in actual peak demand from 2005 to 2009. For the purposes of this report, the 2011 goal will be based on the same historical load growth data as the 2010 goal. Once actual weather adjusted load data is obtained for the 2010 calendar year, the 2011 goal will be adjusted and based on growth in actual peak demand from 2006 to 2010. 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. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the applicable demand savings goals.

Table 4 presents historical annual growth in demand for 2005-2009 and estimated annual growth for 2010 and 2011. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2010 and 2011. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. All of the MW and MWh values presented in tables 4 and 5 are at the customer meter. To derive values at the source, or power plant level, the values shown in the tables should be increased by 7% to account for line losses.

		Peak Den	and (MW)			Peak Dem	and (MWh)		Growth	Average Growth
Calendar Year	Total 5	System	Residential &	c Commercial	Total S	ystem	Residential &	Commercial	(MM)	, (MM)
	Actual <sup>8</sup>	Weather Adiusted <sup>7</sup>	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted	Weather Adjusted	Weather Adjusted
2,005	15,068	15,457	13,420	13,809	76,425,499	78,398,522	68,066,777	70,039,800	341	
2,006	15,686	15,825	13,809	13,948	79,560,019	80,265,033	70,039,800	70,744,814	139	
2,007	16,263	16,227	14,076	14,040	80,919,484	80,740,359	70,040,110	69,860,985	92	N/A
2,008	15,484	15,845	13,735	14,096	77,721,628	79,533,661	68,942,558	70,754,590	56	
2,009	16,240	16,057	14,373	14,190	82,227,667	81,301,087	72,774,523	71,847,943	94	
2,010	15,876	N/A <sup>9</sup>	14,236	N/A	80,384,633	N/A	72,080,854	N/A	196	144
2,011	15,905		14,250		82,482,058		73,899,360		N/A	115
2010 Goals MW Go MW Go	are PUCT sta ne PUCT sta nal = 144.4 x ioal = 26.9 h	<pre>communal {     tred annual {</pre>	goal reduction 0% – 7% T Hours x 209	on percentag procentag &D line loss % Load Fact	the gives the set $26.9 \text{ M}$ es) = 26.9 M es) = 27,055	annual MW IW MWh	and MWh g	i nwon i nwo uni	n Table 1.	
Goals a	djusted to 39	9.2 MW and	l 68,661 MV	VH since the	e 5-year ave	rage growth	for 2010 is	less than in 3	2009.	
2011 Goals MW Gc MWh G	val = 115.4 y voal = 21.5 h	¢ 20% x (10 MW x 8760	0% – 7% T <i>&amp;</i> Hours x 209	&D line loss % Load Fact	es) = 21.5  M $cor = 37,605$	1W MWh				
Goals a	djusted to 39	9.2 MW and	l 68,661 MV	VH since the	e 5-year ave	rage estimat	ed growth fe	or 2011 will	be less than	in 2010.
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<sup>&</sup>lt;sup>o</sup> "Average Growth" for previous 5 years. NA = Not Applicable: Averages from 2005-2009 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> 2010 and 2011 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)

	20	10	2011		
Program Cools by Creterior	Projected	Projected	Projected	Projected	
Class for 2010 and 2011	Savings	Savings	Savings	Savings	
Class for 2010 and 2011	(MW) at	(MWh) at	(MW) at	(MWh) at	
	Meter	Meter	Meter	Meter	
Large Commercial	93.81	97,885.92	94.18	74,850.81	
Large Commercial SOP	17.52	79,479.93	14.00	61,320.00	
The Texas Score MTP	3.76	8,575.55	3.75	7,424.10	
Large Commercial Load	70.00	210.00	75.00	225.00	
Management SOP	70.00	210.00	73.00	223.00	
Retro-Commissioning MTP	2.54	9,620.44	1.43	5,881.71	
Residential and Small	13.25	24 001 34	10 30	20 517 70	
Commercial	13.23	24,091.34	19.50	29,317.70	
Energy Star MTP	8.60	12,120.06	15.00	13,271.40	
Residential SOP	0.89	1,687.53	0.80	749.86	
Advanced Lighting Pilot	0.53	3 103 75	0.50	5 604 00	
Program	0.55	5,195.75	0.50	5,094.00	
A/C Distributor Program	3.24	7,090.00	3.00	9,802.44	
Hard-to-Reach	7.32	18,058.75	6.63	17,063.60	
Hard-To-Reach SOP	2.05	5,046.05	1.83	4,577.10	
Multi-Family Water & Space	0.75	2 175 72	0.67	2 1 1 2 7 2	
Htg MTP	0.75	2,175.72	0.07	3,112.72	
Low-Income Weatherization	0.17	412 70	0.10	211.96	
(SB-712)	0.17	415.70	0.10	511.60	
Rebuilding Together Houston	0.65	1,362.70	0.69	1,443.38	
City of Houston Weatherization	1.94	4,180.63	2.40	4,709.38	
Agencies in Action MTP	1.76	4,879.96	0.94	2,909.17	
TOTAL	114.38	140,036.01	120.11	121,432.11	

# **IV. Program Budgets**

Table 6 presents total projected budget allocations required to achieve the projected demand and energy savings for calendar years 2010 and 2011. 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. The decrease in 2011 spending versus 2010 is due primarily to elimination of carryover spending.

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

		2010			2011	
Programs Estimated Budget by Customer Class for 2010 and 2011	Incentives	Admin.	Total Budget	Incentives	Admin.	Total Budget
Large Commercial	\$11,200,000	\$1,388,758	\$12,588,758	\$11,100,000	\$1,332,700	\$12,432,700
Large Commercial SOP	\$6,000,000	\$808,661	\$6,808,661	\$5,600,000	\$713,200	\$6,313,200
The Texas Score MTP	\$1,500,000	\$197,154	\$1,697,154	\$1,500,000	\$214,900	\$1,714,900
Large Commercial Load Management SOP	\$2,800,000	\$257,384	\$3,057,384	\$3,000,000	\$297,800	\$3,297,800
Retro-Commissioning MTP	\$900,000	\$125,559	\$1,025,559	\$1,000,000	\$106,800	\$1,106,800
Residential and Small Commercial	\$5,900,000	\$513,605	\$6,413,605	\$5,400,000	\$567,900	\$5,967,900
Energy Star MTP	\$3,500,000	\$272,539	\$3,772,539	\$3,000,000	\$300,900	\$3,300,900
Residential SOP	\$400,000	\$57,102	\$457,102	\$400,000	\$55,100	\$455,100
Advanced Lighting Pilot Program	\$500,000	\$65,243	\$565,243	\$500,000	\$74,400	\$574,400
A/C Distributor Program	\$1.500.000	\$118.721	\$1.618.721	\$1.500.000	\$137.500	\$1.637.500
Hard-to-Reach	\$9,010,000	\$967,308	\$9,977,308	\$7,410,000	\$865,700	\$8,275,700
Hard-To-Reach SOP	\$1,650,000	\$213,260	\$1,863,260	\$1,650,000	\$217,100	\$1,867,100
Multi-Family Water & Space Htg MTP	\$400,000	\$52,781	\$452,781	\$400,000	\$52,700	\$452,700
Low-Income Weatherization (SB- 712)	\$360,000	\$44,796	\$404,796	\$360,000	\$48,400	\$408,400
Rebuilding Together Houston	\$900,000	\$117,014	\$1,017,014	\$900,000	\$102,700	\$1,002,700
City of Houston Weatherization	\$1,200,000	\$159,499	\$1,359,499	\$1,200,000	\$131,400	\$1,331,400
Agencies in Action MTP	\$4,500,000	\$379,957	\$4,879,957	\$2,900,000	\$313,400	\$3,213,400
Sub - TOTAL	\$26,110,000	\$2,869,671	\$28,979,671	\$23,910,000	\$2,766,300	\$26,676,300
R&D	\$0	\$1,072,847	\$1,072,847	\$0	\$1,107,700	\$1,107,700
TOTAL	\$26,110,000	\$3,942,518	\$30,052,518	\$23,910,000	\$3,874,000	\$27,784,000

# **Energy Efficiency Report**

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

Table 7 documents CenterPoint Energy Houston's actual demand goals and energy targets for the previous five years (2005-2009). Each value was calculated using the methods outlined in Substantive Rule § 25.181.

Calendar Year	Actual Weather Adjusted Demand Goal at Meter (MW)	Actual Weather Adjusted Energy Goals at Meter (MWh)
2009 <sup>10</sup>	39.21	68,694
2008 11	34.09	59,732
2007 <sup>12</sup>	25.31	N/A
2006 13	20.43	N/A
2005 14	27.72	N/A

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

<sup>&</sup>lt;sup>10</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Plan (EEP) filed in April of 2009 under Project No. 36689. <sup>11</sup> Actual weather-adjusted MW Goals and MWh goals as reported in the corresponding Energy Efficiency Report

 <sup>(</sup>EER) filed in April of 2008 under Project No. 36689.
 <sup>12</sup> Actual weather-adjusted numbers from EER, Project No. 35440.
 <sup>13</sup> Actual weather-adjusted numbers from EER, Project No. 33884.

<sup>&</sup>lt;sup>14</sup> Actual weather-adjusted numbers from EER, Project No. 32107.

# 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 2009. The reported and verified savings are those savings that have been achieved and verified in the 2009 calendar year.

	2009							
Programs by Customer Class for 2009	Projecte	d Savings	Verified Savings		Reported Sav	Reported / Verified Savings		
	MW	MWh	MW	MWh	MW	MWh		
Large Commercial	54.07	93,355.5	49.83	80,101.6	49.83	80,101.6		
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		
Residential and Small	21.62	22.082.0	20.40	20 117 67	20.40	20 117 7		
Commercial	21.05	22,983.0	20.40	30,117.07	20.40	30,117.7		
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		
Res & SC SOP	0.89	1,694.48	0.71	1,675.6	0.71	1,675.55		
Statewide CFL Program	0.53	3,193.75	0.89	9,300.2	0.89	9,300.17		
Multi-Family Water & Space Htg - RES MTP	-	-	0.37	1,692.4	0.37	1,692.43		
City of Houston Weatherization - RES	-	-	0.27	522.3	0.27	522.26		
Hard-to-Reach	7.37	18,020.4	5.87	15,207.9	5.87	15,207.9		
Hard-To-Reach SOP	2.03	5,007.19	2.43	6,064.8	2.43	6,064.79		
Multi-Family Water & Space Htg HTR MTP	0.76	2,191.62	0.27	1,264.6	0.27	1,264.63		
Res & SC HTR - Afford. 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		
TOTAL	83.07	134,358.9	76.11	125,427.2	76.11	125,427.2		

#### Table 8: Projected Savings versus Reported and Verified Savings for 2009 (at Meter)

	2008							
Programs by Customer Class for 2008	Projecte	d Savings	Verified Savings		Reported Sav	Reported / Verified Savings		
	MW	MWh	MW	MWh	MW	MWh		
Large Commercial	34.36	99,559.8	45.02	190,818.2	42.24	163,598.9		
Large Commercial SOP	17.74	80,520.58	23.64	174,903.3	20.86	147,683.97		
The Texas Score MTP	4.00	9,134.63	4.62	10,801.6	4.62	10,801.65		
Load Management SOP	10.00	-	15.79	15.8	15.79	15.79		
Retro-Commissioning	2.62	9,904.63	0.97	5,097.5	0.97	5,097.47		
Residential and Small Commercial	21.39	24,269.5	22.30	23,734.8	22.30	23,734.8		
Energy Star MT	19.80	17,248.19	20.64	18,075.5	20.64	18,075.48		
CCET Residential Demand Response Pilot	0.50	-	-	-	-	-		
Res & SC SOP	0.80	1,521.24	0.91	1,648.8	0.91	1,648.84		
CFL Program	0.29	5,500.09	0.53	3,193.8	0.53	3,193.75		
Multi-Family Water & Space Htg - MTP (RES)	-	-	0.14	690.9	0.14	690.94		
City of Houston Weatherization (RES)	-	-	0.09	125.8	0.09	125.80		
Hard-to-Reach	7.18	17,480.7	6.34	17,106.5	6.34	17,106.5		
Hard-To-Reach SOP	1.60	3,943.07	2.03	5,067.9	2.03	5,067.94		
Multi-Family Water & Space Htg MTP (HTR)	0.50	1,444.92	0.39	2,483.6	0.39	2,483.63		
Res & SC HTR - Afford. Home	-	-	0.02	14.6	0.02	14.57		
TDHCA Low-Income Weatherization (SB-712)	0.50	1,226.40	0.29	1,060.2	0.29	1,060.20		
City of Houston Weatherization (HTR)	2.24	4,834.94	2.06	4,291.7	2.06	4,291.73		
Rebuilding Together Houston	0.68	1,431.41	0.64	1,299.9	0.64	1,299.95		
Agencies in Action MTP	1.66	4,600.00	0.93	2,888.5	0.93	2,888.52		
TOTAL	62.94	141,310.1	73.66	231,659.5	70.89	204,440.2		

## Table 9: Projected Savings versus Reported and Verified Savings for 2008 (at Meter)

#### VII. Historical Program Expenditures

This section documents CenterPoint Energy Houston's incentive and administration expenditures for the previous five years (2005-2009) broken out by program for each customer class.

	2,00	6	2,008		2,00	-	2,00	9	2,00	2
Historical Program Funding by Customer Class	səvйnээлІ	nimbA	səvünəənI	nimbA	səvünəənl	nimbA	səvünəənI	nimbA	səvünəənl	nimbA
Large Commercial	\$8,287,710	\$1,074,257	\$8,721,467	\$923,989	\$8,757,636	\$915,235	\$6,896,666	\$608,240	\$5,124,839	\$563,061
Large Commercial SOP	\$4,643,677	\$658,909	\$5,716,190	\$609,591	\$6,648,045	\$656,231	\$5,691,608	\$447,480	\$4,059,113	\$445,373
Retro-Commissioning MT	\$912,365	\$126,804	\$899,366	\$72,522	\$908,929	\$100,653	\$865,111	\$53,537	\$1,065,726	\$117,688
The Texas Score MT	\$1,408,282	\$134,974	\$1,498,540	\$131,402	\$1,200,662	\$158,351	\$339,947	\$48,251	N/A	
Large Commercial Load Management SOP	\$1,323,386	\$153,570	\$607,371	\$110,474	N/A		0\$	\$58,972	N/A	
Residential and Small Commercial	\$4,875,287	\$1,048,914	\$4,816,184	\$722,277	\$5,208,101	\$568,232	\$4,018,882	\$446,152	\$4,872,356	\$562,721
Energy Star MT	\$3,332,636	\$293,626	\$3,602,391	\$255,098	\$3,619,851	\$297,201	\$3,213,981	\$273,033	\$2,474,168	\$289,116
Trees for Efficiency		//N	ł		\$3,459	\$10,473	\$122,613	\$37,218	N/A	
CCET Residential Demand Response Pilot	V/N		0\$	\$32,902	80	\$0		N/N	A	
Res & SC SOP	\$364,490	\$92,261	\$390,915	\$65,109	\$925,279	\$114,780	\$682,288	\$135,901	\$961,367	\$114,367
Statewide CFL Program	\$490,095	\$56,180	\$707,821	\$14,097			N/A			
Multi-Family Water & Space Htg - RES	\$175,200	\$21,367	\$80,220	\$12,187	\$220,354	\$35,876		N//	A	
A/C Residential and Small Commercial Pilot Program	\$345,952	\$42,211			N/A				\$1,436,821	\$159,238
City of Houston Weatherization - RES	\$166,914	\$26,673	\$34,837	\$1,895	\$39,158	\$3,986		N/	V	
R&D	80	\$516,596	\$0	\$340,989	\$400,000	\$105,916		'N	A	
Hard-to-Reach	\$9,184,238	\$875,066	\$8,325,707	\$625,210	\$3,668,820	\$445,074	\$2,351,879	\$315,434	\$2,348,642	\$238,662
Hard-To-Reach SOP	\$2,341,131	\$208,718	\$1,656,645	\$166,052	\$1,971,254	\$196,047	\$1,451,547	\$192,929	\$1,350,750	\$151,497
Multi-Family Water & Space Htg - HTR	\$284,850	\$34,740	\$414,450	\$62,964	\$183,150	\$29,818	\$281,217	\$56,874	\$991,987	\$87,165
Res & SCHTR - Afford. Home	\$31,607	\$8,000	\$9,734	\$1,621	\$2,386	\$0	\$99,116	\$0	\$5,905	\$0
TDHCA Low-Income Weatherization (SB-712)	\$360,000	\$47,241	\$1,147,649	\$60,402	\$0	\$5,468	\$61,077	\$14,671	N/A	
City of Houston Weatherization - HTR	\$874,311	\$139,714	\$1,557,328	\$84,721	\$91,526	\$9,317	N/A	,	N/A	
Rebuilding Together Houston	\$1,052,339	\$148,895	\$713,351	\$119,710	\$1,120,504	\$117,534	\$204,000	\$22,665	N/A	
Agencies in Action MT	\$4,240,000	\$287,758	\$2,826,550	\$129,740	\$300,000	\$86,890	N/A		N/A	
TDHCA		N/N	A A		\$0	\$0	\$254,922	\$28,295	N/A	
TOTAL	\$22,347,235	\$2,998,238	\$21,863,358	\$2,271,476	\$17,634,557	\$1,928,541	\$13,267,427	\$1,369,826	\$12,345,837	\$1,364,444

Table 10: Historical Program Incentive and Administrative Expenditures (2005 – 2009) <sup>15</sup>

<sup>15</sup> 2009 actual spending taken from Table 12 in the current EEPR; 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 Energy Efficiency Report (EER) filed under Project No. 32684; 2005 actual spending from Energy Efficiency Report (EER) filed under Project No. 32684; 2005 actual spending from Energy Efficiency Report (EER) filed under Project No. 32684; 2005 actual spending from Energy Efficiency Report (EER) filed under Project No. 32684; 2005 actual spending from Energy Efficiency Report (EER) filed under Project No. 32640; 2006 actual spending from Energy Efficiency Report (EER) filed under Project No. 32640; 2006 actual spending from Energy Efficiency Report (EER) filed under Project No. 32640; 2006 actual spending from Energy Efficiency Report (EER) filed under Project No. 32640; 2006 actual spending from Energy Efficiency Report (EER) filed under Project No. 32640; 2006 actual spending from Energy Report (EER) filed under Project No. 32107.

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#### VIII. Program Funding for Calendar Year 2009

As shown on the following Table 12, CenterPoint Energy Houston spent a total of \$25,345,473 on energy efficiency programs in 2009. The total forecasted budget for the 2009 programs was \$25,615,111. While the total spending underun vs. the budget was under 2%, individual programs showed greater than 10% increases or decreases as follows:

The Commercial and Industrial SOP showed a 16.9% decrease in spending due to a downturn in the economy and the cancellation or postponement of several projects. The unspent funds from the Commercial and Industrial SOP program were reallocated to various programs in an effort to spend carryover from previous years. The A/C Residential and Small Commercial Pilot MTP showed a 14.9% increase in spending due reallocation of funding and to over-achieving performances by several participating program sponsors. The Hard-to-Reach SOP showed a 37.1% increase in spending due to reallocation of funding. The Multi-family Water and Space Heating program showed a 12.4% increase in spending due to increased program scope and reallocation of funds from programs that were under spending in 2009. The R&D spending is being ramped up to support development of new programs in anticipation of meeting future higher goals. The Rebuilding Together Houston program showed a 16.8% increase in spending due to reallocation of funds from programs that were under spending in 2009. The City of Houston program showed a 24.0% decrease in spending due to reallocation of some funds to the Agencies in Action/SB 712 program in which the City of Houston is also a participant.

Table 11:	Program	Funding	for Ca	lendar	Year 2009
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Program Funding for Calendar Year 2009	Number of Customers	Forecasted Budget	Actuals Fundas Expended (Incentives)	Actuals Fundas Expended (Admin)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)	Percentage Change From Budgeted/ Actual
Large Commercial	369	\$10,569,587	\$7,871,723	\$1,074,257	\$8,945,980	\$415,987	\$1,207,619	88.6%
Large Commercial SOP	175	\$6,384,586	\$4,227,690	\$658,909	\$4,886,599	\$415,987	\$1,082,000	83.1%
The Texas Score MTP	119	\$1,692,322	\$1,408,282	\$134,974	\$1,543,256	\$0	\$149,066	91.2%
Large Commercial Load Management SOP	68	\$1,446,212	\$1,323,386	\$153,570	\$1,476,956	\$0	-\$30,743	102.1%
Retro-Commissioning MTP	7	\$1,046,466	\$912,365	\$126,804	\$1,039,169	\$0	\$7,297	99.3%
Residential and Small Commercial	34,388	\$5,146,699	\$4,875,287	\$532,318	\$5,407,605	\$0	-\$260,906	105.1%
Energy Star MT	9,565	\$3,779,820	\$3,332,636	\$293,626	\$3,626,262	\$0	\$153,557	95.9%
A/C Residential and Small Commercial Pilot Program	472	\$337,910	\$345,952	\$42,211	\$388,163	\$0	-\$50,253	114.9%
Res & SC SOP	883	\$459,723	\$364,490	\$92,261	\$456,751	\$0	\$2,971	99.4%
Statewide CFL Program	22,500	\$569,247	\$490,095	\$56,180	\$546,275	\$0	\$22,972	96.0%
Multi-Family Water & Space Htg MTP (RES) <sup>16</sup>	626	N/A	\$175,200	\$21,367	\$196,567	\$0	-\$196,567	N/A
City of Houston Weatherization (RES)	342	N/A	\$166,914	\$26,673	\$193,587	\$0	-\$193,587	N/A
Hard-to-Reach	7,542	\$9,552,359	\$9,184,238	\$875,066	\$10,059,304	\$0	-\$506,946	105.3%
Hard-To-Reach SOP	2,804	\$1,859,558	\$2,341,131	\$208,718	\$2,549,849	\$0	-\$690,292	137.1%
Multi-Family Water & Space Htg MTP (HTR) <sup>16</sup>	648	\$459,152	\$284,850	\$34,740	\$319,590	\$0	\$139,562	112.4%
Res & SC HTR - Afford. Home	85	N/A	\$31,607	\$8,000	\$39,607	\$0	-\$39,607	N/A
TDHCA Low-Income Weatherization (SB-712)	103	\$395,695	\$360,000	\$47,241	\$407,241	\$0	-\$11,546	102.9%
City of Houston Weatherization (HTR) <sup>17</sup>	1,135	\$1,588,740	\$874,311	\$139,714	\$1,014,025	\$0	\$574,715	76.0%
Rebuilding Together Houston	1,477	\$1,028,590	\$1,052,339	\$148,895	\$1,201,234	\$0	-\$172,645	116.8%
Agencies in Action MTP <sup>18</sup>	1,290	\$4,220,625	\$4,240,000	\$287,758	\$4,527,758	\$0	-\$307,133	107.3%
Sub - TOTAL	42,299	\$25,268,644	\$21,931,248	\$2,481,642	\$24,412,889	\$415,987	\$439,768	98.3%
R&D	0	\$346,467	\$0	\$516,596	\$516,596	\$0	-\$170,129	149.1%
TOTAL	42,299	\$25,615,111	\$21,931,248	\$2,998,238	\$24,929,486	\$415,987	\$269,638	98.9%

 <sup>&</sup>lt;sup>16</sup> Multi-Family Space and Water Heating was budgeted and operated as one program in 2009. Therefore the percentage increase for both is only 12.4%.
 <sup>17</sup> City of Houston Weatherization Program was budgeted and operated as one program in 2009. Therefore the percentage decrease for both is only 24.0%
 <sup>18</sup> TDHCA Settlement replacement program.

# IX. Market Transformation Program Results

# **ENERGY STAR<sup>®</sup> MTP Program**

The primary objective of this program is to achieve peak demand reductions and/or energy savings through increased sales of ENERGY STAR<sup>®</sup> homes and products. Additionally, the program is designed to condition the market so that consumers are aware of and request ENERGY STAR<sup>®</sup> homes and products.

In 2009, the Houston housing market was still in a decline with only 22,000 home starts for the year. There were 9,565 homes certified, labeled and incentivized ENERGY STAR<sup>®</sup> within CenterPoint Energy's electric service territory. The 2009 program paid three different incentive amounts based upon the HERS index, with an average savings of 1.86 kW per home. An additional incentive was paid to builders who included the Advanced Lighting Package. A total of 571 homes received an additional \$200 incentive under the Advanced Lighting Package program.

In 2010, the Predictive Savings Tool (PST) used to determine the savings achieved in the Energy Star homes will be updated. The PST updates are being made to reflect market changes related to;

- City of Houston energy code updates, and expected statewide changes proposed.
- Position program to evaluate proposed ENERGY STAR Home (ESH) standards for 2011.
- Decouple the analysis from reliance on the 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 highest impact efficiency measures.

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

Energy Efficiency Report

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

The RCx program offers commercial customers the opportunity to make operational performance improvements in their facilities. In 2004, CenterPoint Energy 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 2009, the RCx program improved on the benefits available to RCx agents and customers by providing added bonuses for reaching project milestones and for completing the program within the calendar year. RCx agents received \$4,000 and customers received \$10,000 bonuses per successful project. All projects completed in 2009 were cost effective. The final demand and energy savings for the 2009 program were 1.62 MW and 6,808 MWh, respectively.

In 2010, the RCx program will adjust the bonus concept introduced in 2009 and by paying incentives to the RCx agents and customers based on the successful completion of projects. The project deadline has been adjusted such that a successful project is one that is completed within 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 will be the basis for both the RCx agents' payment for the Verification phase, and the incentive for the customer.

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

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

In 2009, the Multi-family Water and Space Heating MTP exceeded its original estimates of 1,000 units and paid on 1,274 apartment units in the CenterPoint Energy Houston service area. Of these

units, 648 were classified as Hard-To-Reach and 626 units were classified as Residential complexes. Three apartment complexes had gas boiler systems installed.

#### The Texas SCORE MTP

The mission of the Texas SCORE MTP is to provide viable energy efficiency and demand reduction solutions for public schools in order to minimize the impacts of volatile energy costs, ease budget pressures, provide infrastructure improvements, and optimize learning/working environments in their buildings.

In 2009, the Texas SCORE/City Smart MTP achieved 3,658 kW and 7,255,559 kWh with 20 school districts, one higher education facility and two participating cities. At the beginning of the 2009 year, a competitive bid was conducted for program implementation consulting services for the next two years. Also, to comply with legislative requirements, a baseline study was conducted in conjunction with the other investor owned utilities.

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

The Agencies in Action program involves partnerships with a number of community action agencies in the CenterPoint Energy 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 Energy 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 Energy Houston.

In 2009 the income requirements for program eligibility were raised from 125% of federal poverty guidelines to 200%. The maximum allowable household expenditure also increased from \$4,000 to \$6,500. Frontier Associates contracted with seven different agencies throughout the

CenterPoint Energy 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, and City of Houston. The Agencies in Action program served 1,241 participants in 2009 with kW savings of 1,345.66 and kWh savings of 4,138,651.28.

A new agency, Houston Works, has joined as a program participant for 2010. Two major goals for 2010 are to expand the program to under-served areas of the CenterPoint electric footprint, and increase the amount of expenditure on a per-home basis.

#### **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 2009, the TDHCA program served 134 customers with 68.85 kW and 284,419 kWh of demand and energy savings.

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

CenterPoint Energy's EECRF was approved by the Public Utility Commission of Texas in Docket No. 36952 in October of 2009 in the amount of \$8,004,590. As CenterPoint Houston is subject to a rate freeze pursuant to the settlement in docket No. 32093, the Commission approved the deferral of the recovery until July 1, 2010.

# XI. Revenue Collected Through EECRF

Refer to Section X.

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

Refer to Section X.

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

There were no counties within the CenterPoint Energy Houston service territory that were underserved by the Company's energy efficiency programs in 2009. All of CenterPoint Energy 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 Energy Houston and the amount of savings each county experienced in 2009 through the Company's energy efficiency programs.

<sup>&</sup>lt;sup>19</sup> PUC Subst. R. 25.181(m)(2)(T) requires utilities to include in their EEPRs filed in 2010 "a list of any counties that in the prior year were under-served by the energy efficiency program."

# **XIV. Performance Bonus Calculation**

In 2009, CenterPoint Energy Houston's total spending on the implementation of Energy Efficiency programs was \$25,345,473.

Per the 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 2009 goal by 94%, CenterPoint Energy Houston reached the maximum allowable performance bonus by rule of 20% of program costs. Therefore, CenterPoint Energy Houston will request a performance bonus of \$5,069,095 as part of the 2010 EECRF filing.<sup>20</sup>

Table 13 shows the performance bonus calculation for CenterPoint Energy Houston for 2009.

<sup>&</sup>lt;sup>20</sup> The Company acknowledges that the Commission's Final Order in Docket No. 36952 did not allow CenterPoint Houston to include approximately \$10 million spent on energy efficiency programs in its performance bonus calculation because that amount was the result of settlement agreement relating to energy efficiency in its last base rate case. However, the Company has appealed the Commission's decision and the appeal is currently pending in Travis County District Court as *CenterPoint Energy Houston LLC vs. Public Utility Commission of Texas*, Cause No. D-1-GN-10-000119. Consistent with that appeal and so as to prevent waiver of its right to recover the full performance bonus should the Commission's decision in docket No. 36952 be reversed, the Company has calculated its 2009 bonus based on CenterPoint Houston's total spending for all energy efficiency programs.

	Table 13	Performance	Bonus	Calculation
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Performance Bonus for Calendar Year 2009	kW	kWh
2009 Program Goals	39,209	68,693,818
2009 Program Savings		
Reported/Verified Total (including HTR and		
measures with <10yr EUL)	76,109	125,427,214
Reported/Verified Hard-to-Reach	5,871	15,207,943
Percentage Excess of Goal		94%
Avoided Cost		
per k W		\$80
per k Wh		\$0.055
Inflation Rate		2.0%
Discount Rate		10.7%
PV(Avd Capacity Cost)		\$524.221
where - $\$0 x [(1 + 2\%) / (11\% - 2\%)] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 - ((1 + 2\%) / (1 + 1))] x [1 -$	1%)) square root	(10 years)]
PV(Avd Energy Cost)		\$0.360
where - $(1 + 2)/(11 - 2)/(11 - 2)/(1 - 2)/(1 - (1 - 2)/(1 - 2))/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 - 2)/(1 -$	+ 11%)) square ro	oot (10 years)]
Measure Life Avg. Yrs		10
Total Avoided Cost		\$85,101,950
where - TTL Av. Cost = (Reported kW * $PV(Av. \/kW) + 1$	Reported kWh * I	PV(Av. \$/kWh))
2009 Program Costs		\$25,345,473
Net Benefits = (% Excess of Goal/2) * (Total Avoided Cos	t - Total Program	Costs)
Net Benefits		\$28,118,813
20% of Program Costs		\$5.069.095

# **APPENDIX A: ACRONYMS**

## (a) Acronyms

CCET	Center for the Commercialization of Electric Technologies
DR	Demand Response
DSM	Demand Side Management
EEP	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
EEPR	Energy Efficiency Plan and Report
EER	Energy Efficiency Report, which was filed as a separate document prior to April 2008
ERCOT	Electric Reliability Council of Texas
HTR	Hard-To-Reach
МТР	Market Transformation Program
PUCT	Public Utility Commission of Texas
REP	Retail Electrical Provider
RES	Residential
SCORE	Schools Conserving Resources
SOP	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 nonprofit 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 (kWs), 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 Energy Houston is planning and budgeting for in the EEPR. These projected savings reflect CenterPoint Energy 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 2009 Demand (kW) and Energy (kWh) Savings at Meter By County
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Programs		-					COUN	TIES					
		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	Total
I oraco Commonial COD	kW	104.4			686.7	740.3	9,331.6			211.2	178.8		11,253.0
Large Conniercial SUF	kWh	561,392.0			2,491,793.0	5,411,652.0	53,790,519.0			949,936.0	2,087,900.0		65,293,192.0
	kW		28.5		827.6	18.0	2,735.1			49.3			3,658.48
The Texas Score MI	kWh		71,312.0		1,655,922.0	9,876.0	5,412,389.0			106,060.0			7,255,559.0
Large Commercial Load	kW	683.2	475.6		2,618.0		29,231.8			76.2			33,084.7
Management	kWh	1,366.3	951.2		5,236.0		58,463.6			152.4			66,169.3
	kW	4.3	695.0	19.9	7,440.2	115.9	8,402.1			1,134.0		2.6	17,817.0
thereby star int	kWh	3,682.0	608,654.0	16,735.0	6,597,067.0	99,171.0	7,459,586.0			1,011,809.0		4,892.0	15,801,596.0
uvs vs -8 -2 u	kW	11.4	47.8	0.9	75.1	20.8	546.7			4.5	5.5		712.8
Kes & SC SOF	kWh	23,657.0	121,837.0	1,402.0	176,919.0	51,445.0	1,276,376.0			9,513.0	14,401.0		1,675,550.0
	kW		34.1		54.8	29.8	759.8			7.8			886.3
Statewide CFL Frogram	kWh		357,788.0		575,478.0	312,186.0	7,973,124			81,594.0			9,300,170.0
Multi-Family Water & Space Htg -	kW						367.9						367.9
RES	kWh						1,692,432.0						1,692,432.0
A/C Distributor Bilot Program	kW	0.8	8.2	2.8	59.5	8.8	259.8			6.0			345.9
	kWh	2,452.0	27,051.0	10,147.0	197,528.0	27,951.0	841,055.0			19,478.0			1,125,662.0
Hond To Deceb SOD	kW	5.6	99.9	1.2	139.6	279.2	1,887.9			16.4	0.7		2,430.4
	kWh	11,393.0	270,067.0	2,284.0	406,892.0	572,951.0	4,762,161.0			37,764.0	1,277.0		6,064,789.0
Multi-Family Water & Space Htg -	kW		20.2				245.7						265.9
HTR	kWh		92,736.0				1,171,896.0						1,264,632.0
TDHCA Low-Income Weatherization	kW						68.9						68.9
(SB-712)	kWh						284,419.0						284,419.0
Affoudoble Cincle Found a Homos	kW						92.0						92.0
	kWh						79,310.0						79,310.0
Dotto Commissioning MF	kW						1,837.0						1,837.0
	kWh						7,486,684.0						7,486,684.0
City of Houston Weatherization -	kW		1.3	1.0	32.0		240.2						274.5
RES	kWh		3,609.0	3,645.0	74,464.0		440,539.0						522,257.0
City of Houston Weatherization -	kW				122.0		818.4						940.4
HTR	kWh				310,744.0		1,550,021.0						1,860,765.0
Debuilding Torrether Houston	kW						728.1						728.1
nonsnorr ramañor filminnavi	kWh						1,515,376.6						1,515,376.6
Agencies in Action MT	kW		3.0	1.6	283.1	2.9	1,055.0						1,345.7
	kWh		13,734.6	8,785.1	1,022,447.2	12,202.2	3,081,482.1						4,138,651.3
S ettlement Programs - TOTAL		1						0	6				
Total kW Savings		809.6	1,413.5	27.4	12,338.7	1,215.6	58,608.0	0.0	0.0	1,505.4	185.0	5.6	76,108.7
LOTAL K Wh Savings		605,942.5	1,507,759.0	42,998.1	13,514,490.2	6,497,454.2	08,618,86	0.0	0.0	2,210,500.4	2,105,578.0	4,892.0	125,427,214

CenterPoint Energy Houston Electric, LLC

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