

Control Number: 45675



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AEP Texas AEP Texas Central Company 400 West 15th Street, Suite 1520 Austin, TX 78701 AEPTexas com

May 27, 2016

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

RE: Project No. 45675 - 2016 Energy Plans and Reports Pursuant to 16 TAC § 25.181(n)

Dear Ms. Clark:

On April 1, 2016, AEP Texas Central Company (TCC) filed its 2016 Energy Efficiency Plan and Report (EEPR). TCC has discovered that the following corrections to the EEPR were necessary:

- Page 5 Revised the achieved kW peak demand savings for 2015 (kWh adjusted to 43,775 from 43,782)
- Page 5 Revised the achieved kWh peak energy savings for 2015 (kWh adjusted to 68,482,227 from 68,507,216)
- Page 21 Revised the Savings Achieved (MWh) for 2015 (MWh adjusted to 68,482 from 68,507)
- Page 22 Revised the verified and reported savings for the Commercial Solutions MTP program (kW adjusted to 1,185 from 1,192)
- Page 22 Revised the verified and reported savings for the Commercial Solutions MTP program (kWh adjusted to 6,719,171 from 6,744,161)
- Page 22 Revised the total verified and reported savings for 2015 (kW adjusted to 43,775 from 43,782)
- Page 22 Revised the total verified and reported savings for 2015 (kWh adjusted to 68,482,227 from 68,507,216)
- Page 28 Revised the savings in the Commercial Solutions MTP section (kW adjusted to 1,185 from 1,192)
- Page 32 Revised the total verified and reported savings for 2015 (kW adjusted to 43,775 from 43,782)
- Page 32 Revised the achieved kWh peak energy savings for 2015 (kWh adjusted to 68,482,227 from 68,507,216)

- Page 33 Revised the Performance Bonus (adjusted to \$3,459,596 from \$3,461,676). Table 12 was revised to reflect the correction (adjusted to \$3,459,596 from \$3,461,676). The following adjustments to the calculation resulted in the adjustment to the bonus itself:
  - o Adjustment to the Reported/Verified kW total (kW adjusted to 43,775 from 43,782)
  - o Adjustment to the Reported/Verified kWh total (kWh adjusted to 68,482,227 from 68,507,216)
  - o Adjustment to the Total Avoided Costs (adjusted to \$48,302,273 from \$48,323,074)
  - o Adjustment to the Net Benefits (adjusted to \$34,595,962 from \$34,616,764)
  - o Adjustment to the Calculated Bonus (adjusted to \$41,265,557 from \$41,299,752)
  - o Adjustment to the Maximum Bonus Allowed (adjusted to \$3,459,596 from \$3,461,676)
  - o Adjustment to the Bonus (adjusted to \$3,459,596 from \$3,461,676)
- Page 37 Revised the verified and reported savings for the Commercial Solutions program
   Hidalgo County (kW adjusted to 371.32 from 378.93)
- Page 37 Revised the verified and reported savings for the Commercial Solutions program

   Hidalgo County (kWh adjusted to 2,017,124 from 2,042,114)
- Page 37 Revised the verified and reported savings for the Commercial Solutions program
   Total (kW adjusted to 1,184.61 from 1,192.22)
- Page 37 Revised the verified and reported savings for the Commercial Solutions program
   Total (kWh adjusted to 6,719,171 from 6,744,161)

Please find attached a revised copy of the TCC 2016 EEPR which replaces the filing made on April 1, 2016.

If there are any questions regarding this filing of corrected information please contact me at 512-481-4573.

Respectfully submitted,

Jennifer Frederick

Regulatory Case Manager

Attachment

# AEP Texas Central Company 2016 Energy Efficiency Plan and Report

16 Tex. Admin. Code §§ 25.181 and 25.183

# Amended May 27, 2016

Project No. 45675



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#### INTRODUCTION

AEP Texas Central Company (TCC or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (PUCT or Commission) 16 Tex. Admin. Code §§ 25.181 and 25.183 (TAC) (EE Rule), which implement the Public Utility Regulatory Act (PURA) § 39.905. As mandated by this section of PURA, the EE Rule requires that each investor-owned electric transmission and distribution utility (TDU) achieve the following demand reduction goals through market-based standard offer programs (SOPs) and targeted market transformation programs (MTPs). 16 TAC § 25.181(e)(1) provides in pertinent part as follows:

- (e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
  - (B) Beginning with the 2013 program year, until the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
  - (C) If the demand reduction goal to be acquired by a utility under subparagraph (B) of this paragraph is equivalent to at least four-tenths of 1% its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, the utility shall meet the energy efficiency goal described in subparagraph (D) of this paragraph for each subsequent program year.
  - (D) Once the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year.
  - (E) Except as adjusted in accordance with subsection (w) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year, unless the commission establishes a goal for a utility pursuant to paragraph (2) of this subsection.

The EE Rule includes specific requirements related to the implementation of SOPs and MTPs that control the manner in which TDUs must administer their portfolio of energy efficiency programs in order to achieve their mandated annual demand reduction goals. TCC's plan enables it to meet its statutory goals through implementation of energy efficiency programs in a manner that complies with PURA § 39.905 and the EE Rule. This EEPR covers the periods of time required in the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendices.

# **EEPR Organization**

This EEPR consists of an Executive Summary, fourteen sections, a list of acronyms, and four appendices.

• Executive Summary summarizes TCC's plans for achieving its goals and projected energy efficiency savings for program years 2016 and 2017 and highlights TCC's achievements for Program Year 2015.

#### **Energy Efficiency Plan**

- Section I describes TCC's program portfolio. It details how programs will be implemented, presents related informational and outreach activities, and provides an introduction to any programs not included in TCC's 2015 EEPR.
- Section II explains TCC's targeted customer classes, describes the estimated size of each class and the method of determining those class sizes.
- Section III presents TCC's energy and demand goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes TCC's proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

# **Energy Efficiency Report**

- Section V documents TCC's demand reduction goal for each of the previous five years (2011-2015) based on its weather-adjusted peak demand and actual savings achieved for those years.
- Section VI compares TCC's projected energy and demand savings to its reported and verified savings by program for calendar years 2014 and 2015.
- Section VII details TCC's incentive and administration expenditures for each of the previous five years (2011-2015) detailed by program for each customer class.
- Section VIII compares TCC's actual 2015 expenditures with its 2015 budget by program for each customer class. It identifies funds committed but not expended and funds remaining and not committed. It also explains any cost differences of more than 10% from TCC's overall program budget and from each program budget.
- Section IX describes the results from TCC's MTPs.
- Section X describes Research and Development activities.
- Section XI documents TCC's 2016 Energy Efficiency Cost Recovery Factor (EECRF).
- Section XII documents TCC's 2015 EECRF Summary.
- Section XIII documents TCC's Underserved Counties.
- Section XIV describes TCC's Performance Bonus calculation for Program Year 2015.

#### Acronyms

• A list of abbreviations for common terms used within this document.

#### **Appendices**

- Appendix A Reported and verified demand and energy reductions by county for each program.
- Appendix B Program templates for any new or significantly modified programs and programs not included in TCC's previous EEPR.
- Appendix C Existing energy efficiency contracts and obligations.
- Appendix D Data, explanations, or documents supporting other sections of the EEPR.

# Executive Summary – Energy Efficiency Plan (Plan)

TCC plans to achieve its 2016 mandated demand and energy goals of 15,730 kW and 27,559,000 kWh as shown in Table 1 below through residential and non-residential SOPs and MTPs. TCC will utilize a budget of \$14,265,244 to accomplish these goals.

Table 1: Summary of Goals, Projected Savings (at the Meter), and Budgets

Calendar Year	Average Peak Demand at Meter (MW)	Goal Metric: 0.4% Peak Demand (MW)	Peak Demand Goal (MW)	Energy Goal (MWh)	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)	Projected Budget (000's)*
2016	3,934	15 73	15 73	27,559	46 82	62,528	\$14,265
2017	3,958	15 83	15 83	27,734	46 91	62,668	\$14,082

<sup>\*</sup> The 2016 Projected Budget includes costs associated with Evaluation, Measurement & Verification activities.

# **Executive Summary – Energy Efficiency Report (Report)**

TCC achieved demand and energy reductions of 43,775 kW and 68,482,227 kWh, respectively, in 2015. The total energy efficiency cost for achieving these savings was \$13,508,113. TCC's achievement exceeded the 2015 mandated energy efficiency goals of 12,930 kW and 22,653,000 kWh, thus allowing TCC to earn a Performance Bonus.

A broad portfolio of residential and non-residential SOPs and MTPs was used to accomplish these savings.

Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Table 6.

#### **ENERGY EFFICIENCY PLAN**

# I. 2016 Programs

# A. 2016 Program Portfolio

TCC has implemented a variety of programs in 2016 to enable it to meet its goals in a manner that complies with PURA § 39.905 and the EE Rule. These programs target broad market segments and specific market sub-segments with significant opportunities for cost-effective energy savings.

Table 2 summarizes TCC's programs and targeted customer class markets for Program Year 2016. The programs listed in Table 2 are described in further detail in Subsections B and C. TCC maintains a web site containing information on participation and forms required for project submission at <a href="https://www.AEPTexas.com">www.AEPTexas.com</a>. This site is the primary method of communication used to provide program updates and information to Retail Electric Providers (REPs), potential Energy Efficiency Service Providers (EESPs), and other interested parties.

#### **Implementation Process**

MTPs are implemented by a third-party implementer. These implementers design, market and execute the applicable MTP. Based on the specific MTP, the implementer may perform outreach activities to recruit local contractors and provide participating contractors specialized education, training/certification and tools as necessary. Implementers validate proposed measures/projects, perform quality assurance/quality control, and verify and report savings derived from the program.

SOPs are managed in-house with project sponsors providing eligible program measures. Project sponsors are typically EESPs; however, for commercial projects a TCC end-use customer may serve as its own project sponsor. Eligible project sponsors can submit an application(s) for project(s) meeting the minimum SOP requirements.

TCC monitors projects being submitted so as to not accept duplicate enrollments.

#### **Outreach Activities**

- Promote internet web sites with program information including project eligibility, end-use measures, incentives, procedures, application forms, and in some cases a list of participating project sponsors and the available program budget;
- Utilize mass e-mail notifications to inform and update potential project sponsors on TCC energy efficiency program opportunities;
- Conduct workshops as necessary to explain program elements such as responsibilities of the project participants, program requirements, incentive information and the application and reporting process;
- Conduct specific project sponsor/contractor training sessions as necessary based on the energy efficiency programs being implemented;
- Participate in local, regional, state-wide, and industry-related outreach activities as may be necessary; and
- Facilitate earned media opportunities, spotlighting successful projects and/or interesting stories as applicable.

Table 2: 2016 Energy Efficiency Program Portfolio

Program	Target Market	Application	Link to Program Manual				
Commercial Solutions MTP	Commercial	Retrofit & New Construction	http://eeprograms.net/aep/texascentral/aep-texas-central-commercial- solutions-program/				
Commercial SOP	Commercial	Retrofit & New Construction	https://www.aeptexas.com/save/business/programs/TCCPrograms.aspx				
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	Commercial; Residential	Retrofit	http://eeprograms.net/aep/texascentral aep-texas-central-coolsaver-ac-tune- up-program/				
Earth Networks Residential DR Pilot MTP	Residential	Retrofit	No website available				
Efficiency Connection Pilot MTP	Residential	Retrofit	No website available				
Hard-to-Reach SOP	Residential Hard-to-Reach	Retrofit	http://www.southtxsaves.com/resources-and-tips				
High-Performance New Homes MTP	Residential	New Construction	https://www.aeptexas.com/save.residential/programs/TCCPrograms.aspx				
Load Management SOP	Commercial	Retrofit	https://www.aeptexas.com/save/business/programs TCCPrograms.aspx				
Open MTP	Commercial	Retrofit	http://eeprograms.net/aep/texascentral/aep-texas-central-open/				
Reliant Residential DR Pilot MTP	Residential	Retrofit	No website available				
Residential SOP	Residential	Retrofit	https://www.aeptexas.com/save/residential/programs/TCCPrograms.aspx				
SCORE/CitySmart MTP	Commercial	Retrofit & New Construction	http://eeprograms.net/aep/texascentral.aep-texas-central-score-program/ http://eeprograms.net/aep/texascentral/aep-texas-central-citysmart-program/				
SMART Source <sup>SM</sup> Solar PV MTP	Commercial; Residential	Retrofit & New Construction	http://www.txremcentives.com/apv/				
Targeted Low-Income Energy Efficiency Program	Low-Income Residential	Retrofit	No website available				

# **B.** Existing Programs

# **Commercial Solutions Market Transformation Program (CS MTP)**

The CS MTP targets commercial customers (other than governmental and educational entities) that do not have the in-house expertise to: 1) identify, evaluate, and undertake energy efficiency improvements; 2) properly evaluate energy efficiency proposals from vendors; and/or 3) understand how to leverage their energy savings to finance projects. Incentives are paid to customers served by TCC for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

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

The CSOP targets commercial customers of all sizes. Variable incentives are available to project sponsors based upon verified demand and energy savings for eligible measures installed in new or retrofit applications.

# CoolSaverSM A/C Tune-Up Market Transformation Program (CoolSaverSM MTP)

The CoolSaver<sup>SM</sup> MTP is designed to overcome market barriers that prevent residential and small commercial customers from receiving high performance air conditioning (A/C) system tune-ups. The program works through local A/C networks to offer key program components, including:

- Training and certifying A/C technicians on the tune-up and air flow correction services and protocols.
- Paying incentives to A/C contactors for the successful implementation of A/C tune-up and air flow correction services.
- Paying incentives to A/C contractors who replace existing residential air conditioners and/or heat pumps with new high efficiency units of 16 SEER or higher.

# **Efficiency Connection Pilot MTP (EffCon)**

The EffCon Pilot MTP is a partnership with REPs to help promote energy efficiency to TCC residential customers by offering discounted LED lamps via an online marketplace. A third-party implementer facilitates customer/REP participation and aids in the selection and management of an online retailer/vendor for the program website and order fulfillment.

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

The HTR SOP targets residential customers with total annual household incomes at or below 200% of current federal poverty guidelines. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verifiable demand and energy savings. Program incentives are higher for work performed in historically underserved counties to encourage activity. Project comprehensiveness is encouraged and customer education materials regarding energy conservation behavior are distributed by project sponsors.

#### High-Performance New Homes Market Transformation Program (New Homes MTP)

The New Homes MTP targets several market participants, primarily homebuilders and consumers. The program's goal is to create conditions in which consumers demand highly energy efficient homes, and homebuilders supply them. Incentives are paid to homebuilders who construct homes in the TCC service territory to strict energy-efficient building guidelines and that are at least 10% above the local building code. The program also offers a bonus incentive for homes that are ENERGY STAR®-certified. Each home results in verifiable demand and energy savings. In addition to homebuilder and consumer outreach, the New Homes MTP targets key allies in the homebuilding production and sales cycle: home energy raters, homebuilder sales agents, real estate agents, HVAC contractors, mortgage lenders, product manufacturers, homebuilder associations, and media outlets.

#### Load Management Standard Offer Program (LM SOP)

The LM SOP targets commercial customers with a peak electric demand of 500 kW or more. Incentive payments are based on measured and verified demand reduction of curtailed loads during the summer peak period. Load management events are dispatched by TCC, using a one-hour-ahead notice for load reduction periods of one to four hours duration.

# **Open Market Transformation Program (Open MTP)**

The Open MTP targets traditionally underserved small commercial customers who may not employ knowledgeable personnel with a focus on energy efficiency, who are limited in the ability to implement energy efficiency measures, and/or who typically do not actively seek the help of a professional EESP. Small commercial customers with a peak demand not exceeding 100 kW in the previous 12 consecutive billing months may qualify to participate in the program. Available incentives are paid directly to the contractor, thereby reducing a portion of the project cost for the customer.

The program is intended to overcome market barriers for participating contractors by providing technical support and incentives to implement energy efficiency upgrades and produce demand and energy savings.

The program implementer works with TCC to conduct outreach and planning activities for the Open MTP in the following manner:

- Identifies and recruits contractors who provide services to customers served by TCC to develop a network of participating contractors who will deliver the program directly to customers;
- Develops a recruitment packet with outreach information and enrollment materials that participating contractors can use when marketing the program to customers; and
- Conducts training as necessary to explain elements of the program, such as responsibilities
  of the participants, project requirements, incentive information, and the application and
  reporting process.

# Residential Standard Offer Program (RSOP)

The RSOP targets residential customers in existing homes. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verified demand and energy savings. Program incentives are higher for work performed in historically underserved counties to encourage activity. Project comprehensiveness is encouraged.

#### SCORE/CitySmart Market Transformation Program (SCORE/CS MTP)

The SCORE/CS MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. In addition to educational facilities, SCORE/CS MTP provides these same solutions to local, state, county and federal government customers. This program is designed to help educate and assist these customers in lowering their energy use by facilitating the integration of energy efficiency into their short- and long-term planning, budgeting, and operational practices. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

# SMART Sources Solar PV Market Transformation Program (PV MTP)

The PV MTP offers incentives to customers for the installation of solar photovoltaic (PV) systems interconnected on the customer's side of the meter. The incentives help offset the initial costs of installing solar PV systems, and encourage service providers to seek more installation opportunities. In addition to demand and energy savings achieved from the installations, the PV MTP aims to transform the solar PV market by increasing the number of qualified technicians and installers and decreasing the average installed cost of PV systems, thereby creating greater market economies of scale.

# Targeted Low-Income Energy Efficiency Program (TLIP)

The TLIP is designed to cost-effectively reduce the energy consumption and energy costs for low-income residential customers in TCC's service territory. Weatherization service providers install eligible weatherization and energy efficiency measures in qualified households that meet the Department of Energy (DOE) income-eligibility guidelines of at or below 200% of the federal poverty guidelines. A Savings-to-Investment Ratio of 1.0 or higher is required of each serviced dwelling unit.

# C. New Programs for 2016

# Earth Networks Residential Thermostat Demand Response (DR) Pilot Program

Earth Networks (EN) will use the WeatherBug Home (WBH) technology to deliver an Integrated Demand Side Management (IDMS) aggregation program that will bring residential energy efficiency and demand response capacity to TCC.

# Reliant Residential Demand Response (DR) Pilot Program

The Reliant Residential DR pilot program is a market transformation program that will be utilized to support TCC's energy efficiency goals. TCC will leverage an existing industry-recognized program from a Retail Electric Provider (REP) to reduce demand consumption. Reliant will use its existing customer base from their thermostat-based peak time rebate program, Degrees of Difference, to respond quickly to market conditions.

# D. Discontinued Programs

TCC has no discontinued programs for 2016.

# E. Existing DSM Contracts or Obligations

TCC has no existing DSM contracts or obligations.

#### II. Customer Classes

TCC's energy efficiency programs target its Residential and Commercial customer classes. TCC's energy efficiency programs also target customer sub-classes, such as Residential Hard-to-Reach and Low-Income, Schools, Small Businesses, and Local Governments.

The annual projected savings targets are allocated among these customer classes and sub-classes by examining historical program results and by evaluating economic trends, in compliance with 16 TAC § 25.181(e)(3).

Table 3 summarizes the number of customers in each customer class and the Residential Hard-to-Reach sub-class at TCC. The numbers listed are the actual number of active electric service accounts by class that TCC served for the month of January 2016. These numbers were used to determine goal and budget allocations for each customer class and program. It should be noted, however, that the actual distribution of the annual goal and budget required to achieve the goal must remain flexible based upon the conditions of the marketplace, the potential interest a customer class may have in a specific program, and the overriding objective of meeting TCC's mandated demand and energy reduction goals in total. TCC offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

**Table 3: Summary of Customer Classes** 

Customer Class	Number of Customers
Commercial	147,312
Residential	746,981
Hard-to-Reach 2	277,877

<sup>\*</sup> Hard-to-Reach customer count is a sub-set of the Residential total.

According to the U.S. Census Bureau's 2014 Current Population Survey, 37.2% of Texas families fall below 200% of the poverty threshold. Applying that percentage to TCC's residential customer base of 746,981, the number of HTR customers is estimated to be 277,877.

# III. Energy Efficiency Goals and Projected Savings

TCC's 2016 annual demand and energy reduction goals to be achieved are 15.73 MW and 27,559 MWh. TCC's 2017 annual goals are 15.83 MW and 27,734 MWh. These goals have been calculated as prescribed by the EE Rule.

The 2016 goal was calculated by applying four-tenths of 1% (0.004) of its summer weather-adjusted peak demand for the combined residential and commercial customers to the five year average (2010-2014) peak demand at the meter of 3,934 MW. This resulted in a calculated goal of 15.73 MW.

TCC's 2017 demand goal is calculated by applying four-tenths of 1% (0.004) of its summer weather-adjusted peak demand for the combined residential and commercial customers to the five year average (2011-2015) peak demand at the meter of 3,958 MW. This results in a calculated goal of 15.83 MW.

Table 4 presents historical annual growth in demand data for the previous five years that was used to calculate TCC's goals. Table 5 presents the projected demand and energy savings for Program Years 2016 and 2017 by program, for each customer class with fully-deployed program budgets.

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Table 4: Annual Growth in Demand and Energy Consumption

in the state of th	Peak Demand (MW) @ Source  Total System Residential & Commercial				Energy Consumption (MWh) @ Meter  Total System Residential & Commercial				Energy Efficiency Goal Calculations				
Calendar Year	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt- Out	Peak Demand at Source Net Opt-	Actual	Weather Adjusted	Actual	Weather Adjusted	Peak Demand at Meter (9.4% line losses)*	5 year Average Peak Demand at Meter	Goal Metric: 0.4% Peak Demand at Meter
2011	4,809	4,774	4,369	4,335	-1 24	4,334	23,983	23,064	19,586	18,667	3,927	NA	NA
2012	4,815	4,738	4,371	4,292	-1 24	4,290	23,893	23,476	19,312	18,894	3,887	NA	NA
2013	4,681	4,784	4,224	4,327	-1 25	4,326	23,604	23,397	19,136	18,929	3,919	NA	NA
2014	4,948	4,943	4,465	4,461	-1 02	4,460	24,759	24,657	20,020	19,918	4,040	NA	NA
2015	5,043	4,963	4,524	4,444	-7 90	4,436	25,063	24,836	19,525	19,298	4,019	3,863	15 45
2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,934	15 73
2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,958	15 83

<sup>\*</sup>Line losses are derived from the loss factors determined in TCC's most recent line loss study

Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for 2016 and 2017 (at the Meter)

2016 and 2017 (at the Meter)							
2016	Projecte	ed Savings					
Customer Class and Program	kW	kWh					
Commercial							
Commercial Solutions MTP	834	3,888,000					
Commercial SOP	2,417	16,278,090					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,393	4,376,124					
Load Management SOP	27,092	27,092					
Open MTP	718	2,051,894					
SCORE/CitySmart MTP	1,691	5,749,624					
SMART Source <sup>SM</sup> Solar PV MTP	149	288,000					
Residential		Market Vanderstand					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,017	3,223,609					
Earth Networks Residential DR Pilot MTP	3,750	3,750					
Efficiency Connection Pilot MTP	190	717,025					
High-Performance New Homes MTP	539	1,631,874					
Reliant Residential DR Pilot MTP	60	60					
Residential SOP	4,937	18,211,834					
SMART Source <sup>SM</sup> Solar PV MTP	142	274,000					
Hard-to-Reach							
Hard-to-Reach SOP	1,258	4,578,986					
Targeted Low-Income Energy Efficiency Program	634	1,227,988					
Total Annual Projected Savings	46,821	62,527,950					

Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for 2016 and 2017 (at the Meter)
(Continued)

2017	Projected Savings				
Customer Class and Program	kW	kWh			
Commercial					
Commercial Solutions MTP	834	3,888,000			
Commercial SOP	2,418	16,285,274			
CoolSaver <sup>™</sup> A/C Tune-Up MTP	1,393	4,376,124			
Load Management SOP	27,113	27,113			
Open MTP	718	2,051,894			
SCORE/CitySmart MTP	1,691	5,749,624			
SMART Source <sup>SM</sup> Solar PV MTP	194	374,026			
Residential					
CoolSaver <sup>™</sup> A/C Tune-Up MTP	1,017	3,223,609			
Earth Networks Residential DR Pilot MTP	3,750	3,750			
Efficiency Connection Pilot MTP	190	717,025			
High-Performance New Homes MTP	539	1,631,874			
Reliant Residential DR Pilot MTP	60	60			
Residential SOP	4,937	18,213,100			
SMART Source <sup>SM</sup> Solar PV MTP	166	320,000			
Hard-to-Reach					
Hard-to-Reach SOP	1,258	4,579,193			
Targeted Low-Income Energy Efficiency Program	634	1,227,774			
Total Annual Projected Savings	46,912	62,668,440			

# IV. Program Budgets

Table 6 presents total proposed budget allocations required to meet TCC's projected demand and energy savings to be achieved for Program Years 2016 and 2017. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in the EE Rule, allocation of demand goals, and the incentive levels by customer class. Table 6 budget allocations are detailed by customer class, program, and in the following budget categories: incentives, administration, research and development (R&D), and evaluation, measurement and verification (EM&V).

Table 6: Projected Annual Budget by Program for Each Customer Class for 2016 and 2017

2016	Incentives	Admin	R&D	EM&V	Total Budget
Commercial					
Commercial Solutions MTP	\$508,187	\$56,465			\$564,652
Commercial SOP	\$1,812,700	\$201,411			\$2,014,111
CoolSaver <sup>™</sup> A/C Tune-Up MTP	\$595,950	\$66,217			\$662,167
Load Management SOP	\$650,200	\$72,244			\$722,444
Open MTP	\$793,546	\$88,172			\$881,718
SCORE/CitySmart MTP	\$946,678	\$105,186			\$1,051,864
SMART Source <sup>SM</sup> Solar PV MTP	\$204,000	\$22,667			\$226,667
Residential					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP Earth Networks Residential DR	\$675,000	\$75,000			\$750,000
Pilot MTP	\$150,000	\$16,667			\$166,667
Efficiency Connection Pilot MTP	\$150,000	\$16,666			\$166,666
High-Performance New Homes MTP	\$765,000	\$85,000	1		\$850,000
Reliant Residential DR Pilot MTP	\$5,000	\$556			\$5,556
Residential SOP	\$2,661,115	\$295,679			\$2,956,794
SMART Source <sup>SM</sup> Solar PV MTP	\$204,000	\$22,667			\$226,667
Hard-to-Reach			-		
Hard-to-Reach SOP	\$953,417	\$105,935			\$1,059,352
Targeted Low-Income Energy Efficiency Program	\$1,267,421	\$140,825			\$1,408,246
Research and Development (R&D)					
R&D	NAP	NAP	\$368,887		\$368,887
Evaluation, Measurement & Verification (EM&V)	· · · · · · · · · · · · · · · · · · ·				
EM&V	NAP	NAP	NAP	\$182,785	\$182,785
Total Budget	\$12,342,214	\$1,371,357	\$368,887	\$182,785	\$14,265,244

Table 6: Projected Annual Budget by Program for Each Customer Class for 2016 and 2017 (Continued)

	(Continued)	) 		T. (1.10.10.10.10.10.10.10.10.10.10.10.10.10
2017	Incentives	Admin	R&D	Total Budget
Commercial				
Commercial Solutions MTP	\$508,500	\$56,500		\$565,000
Commercial SOP	\$1,813,500	\$201,500		\$2,015,000
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$596,700	\$66,300		\$663,000
Load Management SOP	\$650,700	\$72,300		\$723,000
Open MTP	\$793,800	\$88,200		\$882,000
SCORE/CitySmart MTP	\$946,800	\$105,200		\$1,052,000
SMART Source <sup>SM</sup> Solar PV MTP	\$204,000	\$22,667		\$226,667
Residential	and the later of			
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$675,000	\$75,000		\$750,000
Earth Networks Residential DR Pilot MTP	\$150,300	\$16,700		\$167,000
Efficiency Connection Pilot MTP	\$150,300	\$16,700		\$167,000
High-Performance New Homes MTP	\$765,000	\$85,000		\$850,000
Reliant Residential DR Pilot MTP	\$5,040	\$560		\$5,600
Residential SOP	\$2,661,300	\$295,700		\$2,957,000
SMART Source <sup>SM</sup> Solar PV MTP	\$204,000	\$22,667		\$226,667
Hard-to-Reach		t t whenthe		
Hard-to-Reach SOP	\$953,460	\$105,940		\$1,059,400
Targeted Low-Income Energy Efficiency				
Program	\$1,267,200	\$140,800		\$1,408,000
Research and Development (R&D)				
R&D	NAP	NAP	\$365,125	\$365,125
Total Budget	\$12,345,600	\$1,371,734	\$365,125	\$14,082,459

### **ENERGY EFFICIENCY REPORT**

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

Table 7 contains TCC's demand and energy reduction goals and actual savings achieved for the previous five years (2011-2015) calculated in accordance with the EE Rule.

Table 7: Historical Demand and Energy Goals\* and Savings Achieved (at the Meter)

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Savings Achieved (MW)	Savings Achieved (MWh)
2015	12.93	22,653	43.78	68,482
2014	12.93	22,653	39.81	63,587
2013	12.93	22,653	34.14	48,954
2012	12.93	22,653	33.67	54,313
2011	12.93	22,653	27.50	69,158

<sup>\*</sup> Actual Weather Adjusted MW and MWh Goals as reported in TCC's EEPRs filed in years 2011-2015.

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

Table 8: Projected versus Reported and Verified Savings for 2015 and 2014 (at the Meter)

2015	Projec	ted Savings	Reported and Verified Savings		
Customer Class and Program	kW	kWh	kW	kWh	
Commercial					
Commercial Solutions MTP	834	3,888,000	1,185	6,719,171	
Commercial SOP	3,625	17,467,000	2,233	15,036,669	
CoolSaver <sup>™</sup> A/C Tune-Up MTP	1,393	4,376,124	1,593	5,104,501	
Load Management SOP	16,255	43,000	27,418	27,418	
Open MTP	676	2,051,894	680	3,059,520	
SCORE/CitySmart MTP	1,691	5,749,624	1,333	7,159,107	
SMART Source <sup>SM</sup> Solar PV MTP	149	288,000	1,029	1,984,354	
Residential					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,017	3,223,609	1,051	3,997,053	
Efficiency Connection Pilot MTP	105	525,131	17	62,004	
High-Performance New Homes MTP	393	1,596,286	501	1,903,959	
Residential SOP	4,838	14,835,000	4,734	17,465,758	
SMART Source <sup>SM</sup> Solar PV MTP	142	274,000	144	278,032	
Hard-to-Reach					
Hard-to-Reach SOP	1,315	3,686,000	1,224	4,456,145	
Targeted Low-Income Energy Efficiency Program	634	1,110,000	633	1,228,535	
Total Annual Savings	33,067	59,113,668	43,775	68,482,227	

Table 8: Projected versus Reported and Verified Savings for 2015 and 2014 (at the Meter) (Continued)

2014	Projec	ted Savings	Reported and Verified Savings		
Customer Class and Program	kW	kWh	kW	kWh	
Commercial		The state of the s	A STATE OF THE STA		
Commercial Solutions MTP	834	3,888,000	834	4,445,236	
Commercial SOP	3,580	12,539,000	2,803	15,988,200	
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,393	3,548,015	1,389	4,364,242	
Irrigation Load Management MTP	4,000	192,000	326	652	
Load Management SOP	13,760	38,148	22,997	67,384	
Open MTP	643	1,987,000	668	2,975,834	
SCORE/CitySmart MTP	1,691	5,749,624	1,667	5,296,896	
SMART Source <sup>SM</sup> Solar PV MTP	145	280,000	611	1,176,768	
Residential					
A/C Distributor Pilot MTP	248	893,014	289	1,089,371	
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	865	2,877,018	825	3,144,001	
High-Performance New Homes MTP	393	1,596,286	435	1,777,564	
Residential SOP	5,370	11,750,000	4,829	17,595,431	
SMART Source <sup>SM</sup> Solar PV MTP	125	240,000	122	235,168	
Hard-to-Reach					
Hard-to-Reach SOP	1,590	3,480,000	1,328	4,256,719	
Targeted Low-Income Energy Efficiency Program	510	1,110,000	683	1,173,567	
Total Annual Savings	35,147	50,168,105	39,806	63,587,033	

VII. Historical Program Expenditures

This section documents TCC's incentive and administration expenditures for the previous five years (2011-2015) detailed by program for each customer class.

Table 9: Historical Program Incentive and Administrative Expenditures for 2011 through 2015 (000's)

	2015		2014		2013		2012		2011	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
Commercial										
A/C Distributor Pilot MTP	NAP	NAP	NAP	NAP	\$40.76	\$6.08	\$29.94	\$5.32	NAP	NAP
AEP Texas CARE\$ Energy Efficiency for Not-for-Profit Agencies SOP	NAP	NAP	NAP	NAP	NAP	NAP	\$54.04	\$11.30	\$145.00	\$18.40
Commercial Solutions MTP	\$660.88	\$62.02	\$479.55	\$50.29	\$424.94	\$42,46	\$419.12	\$35.86	\$467.23	\$56.45
Commercial SOP	\$1,675.57	\$178.07	\$1,704.68	\$183.80	\$950.47	\$153.00	\$881.36	\$143.85	\$1,830,61	\$192.01
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$601.34	\$45.73	\$642.34	\$46.69	\$624.27	\$47.61	\$144.76	\$13.93	\$159.00	\$13.18
Irrigation Load Management MTP	NAP	NAP	\$200.00	\$16.65	\$440.00	\$34.78	NAP	NAP	NAP	NAP
Load Management SOP	\$650.20	\$51.71	\$543.00	\$45.03	\$513.29	\$54.38	\$300.00	\$32.33	\$225.98	\$24.38
Load Management SOP - Expanded	NAP	NAP	NAP	NAP	NAP	NAP	\$206,63	\$22.47	NAP	NAP
Open MTP	\$818.94	\$61,45	\$741.21	\$52.54	\$684.76	\$51,66	NAP	NAP	NAP	NAP
SCORE/CitySmart MTP	\$840.09	\$73.65	\$1,026.19	\$86.89	\$911.24	\$ 75.97	\$905.59	\$70.72	\$610.43	\$39.00
SMART Source <sup>SM</sup> Solar PV MTP	\$58.56	\$6.41	\$200.01	\$15.15	\$152.14	\$11.20	\$197.18	\$16.71	\$344,97	\$21.67

(Table continued on next page)

Table 9: Historical Program Incentive and Administrative Expenditures for 2011 through 2015 (000's)
(Continued)

	2015		2014		2013		2012		2011	
	Incent.	Admin								
Residential										
A/C Distributor Pilot MTP	NAP	NAP	\$278.05	\$40.25	\$266,43	\$39.77	\$68.07	\$11.73	NAP	NAP
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$673.27	\$51.20	\$525.36	\$38.18	\$601.41	\$45,95	\$375.08	\$36.09	\$178.91	\$14.84
Efficiency Connection Pilot MTP	\$67.03	\$4.45	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
High-Performance New Homes MTP	\$757.64	\$82.07	\$777.07	\$85.08	\$ 730.16	\$79.58	\$797.45	\$90.48	\$671,60	\$73.09
Residential SOP	\$2,649.88	\$246.42	\$2,626.27	\$263.28	\$2,596.76	\$292.37	\$3,622.65	\$374.20	\$3,712.17	\$375.14
SMART Source <sup>SM</sup> Solar PV MTP	\$207.62	\$16.33	\$199.75	\$15.14	\$207.81	\$15.29	\$197.19	\$15.98	\$184.89	\$12.39
Hard-to-Reach										
Hard-to-Reach SOP	\$922.10	\$97.61	\$950.70	\$85,02	\$950.33	\$96.29	\$1,177.86	\$114.69	\$2,024.93	\$183.43
Targeted Low-Income Energy Efficiency Program	\$1,270.64	\$98.09	\$1,262.46	\$87.13	\$1,271.58	\$96.69	\$1,267.07	\$93.57	\$1,149.19	\$89.66
Research and Development (R&D)	NAP	\$332.54	NAP	\$427.12	NAP	\$184,31	NAP	\$389.54	NAP	\$314.13
Evaluation and Measurement Verification (EM&V)	NAP	\$246.63	NAP	\$305,06	NAP	361.07	NAP	NAP	NAP	NAP
Total Expenditures	\$11,853.76	\$1,654.36	\$12,156.64	\$1,843.30	\$11,366.35	\$1,688.46	\$10,643.99	\$1,478.77	\$11,704.91	\$1,427.77

# VIII. Program Funding for Calendar Year 2015

As shown in Table 10, the total projected budget in 2015 was \$14,395,591 and the actual total funds expended were \$13,508,113. This is an overall total program expenditure difference of less than 10% from the amount budgeted.

The CS MTP exceeded its budget due to higher than expected LED projects which were paid at a higher incentive rate.

The EffCon Pilot MTP was under budget due to lower than projected results. This was primarily due to the time and scheduling necessary to create and communicate marketing materials to customers.

The commercial component of the PV MTP did not fully utilize its incentive budget during the program year due to lower than expected participation.

The SCORE/CS MTP did not expend its entire budget due to lower than expected participation.

TCC's combined 2015 expenditures for the TLIP and the HTR SOP constituted 17% of its energy efficiency budget for the 2015 Program Year. TCC's 2015 expenditure for the TLIP constituted 10% of its energy efficiency budget for the 2015 Program Year.

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Table 10: Program Funding for Calendar Year 2015 (Dollar amounts in 000's)

Table 10; Fr	ogram Fund	ling for	<u> alendar Y</u>	ear 2015 (1	Jollar am	ounts in U	)U'S)
	Total Projected Budget <sup>3</sup>	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research and Development (R&D)	Evaluation and Measurement Verification (EM&V)	Total Funds Expended
Commercial				*****			
Commercial Solutions MTP	\$564.65	140	\$660.88	\$62.02			\$722.90
Commercial SOP	\$2,014.11	111	\$1,675.57	\$178.07			\$1,853.64
CoolSaver <sup>SM</sup> A/C Tune- Up MTP	\$662.17	387	\$601.34	\$45.73			\$647.06
Load Management SOP	\$722.44	31	\$650.20	\$51.71			\$701.91
Open MTP	\$881.72	90	\$818.94	\$61.45			\$880.39
SCORE/CitySmart MTP	\$1,051.86	52	\$840.09	\$73.65			\$913.74
SMART Source <sup>SM</sup> Solar PV MTP	\$222.22	4	\$58.56	\$6.41			\$64.96
Residential			-				
CoolSaver <sup>SM</sup> A/C Tune- Up MTP	\$750.00	1,929	\$673.27	\$51.20			\$724.47
Efficiency Connection Pilot MTP	\$166.67	118	\$67.03	\$4.45			\$71.48
High-Performance New Homes MTP	\$850.00	499	\$757.64	\$82.07			\$839.71
Residential SOP	\$2,956.79	4,921	\$2,649.88	\$246.42			\$2,896.30
SMART Source <sup>SM</sup> Solar PV MTP	\$222.22	21	\$207.62	\$16.33			\$223.95
Hard-to-Reach							
Hard-to-Reach SOP	\$1,059.35	1,428	\$922.10	\$97.61			\$1,019.71
Targeted Low-Income Energy Efficiency SOP	\$1,408.25	317	\$1,270.64	\$98.09			\$1,368.73
Research and Development	\$550.00	NAP	NAP	NAP	\$332.54	NAP	\$332.54
EM&V							
Statewide EM&V Contractor	\$313.13	NAP	NAP	NAP	NAP	\$246.63	\$246.63
Total Expenditures	\$14,395.59	NAP	\$11,853.76	\$1,075.19	\$332.54	\$246.63	\$13,508.11

Projected Budget from the EEPR filed April 2015 Project No. 44480.

# IX. Market Transformation Program Results

#### **Commercial Solutions MTP**

In 2015, TCC projected to acquire 834 kW demand savings from this program. TCC verified and is reporting 1,185 kW. This included participation by 140 customers.

#### CoolSavers MTP

In 2015, TCC projected to acquire 2,410 kW demand savings from this program. TCC verified and reported 2,644 kW. This included participation by 2,316 residential and commercial customers.

#### **Efficiency Connection Pilot MTP**

The Efficiency Connection Pilot MTP goal was to acquire 105 kW demand savings and 525,131 kWh in energy savings. A total of 17 kW and 62,004 kWh were achieved in 2015.

#### **High-Performance New Homes MTP (New Homes)**

In 2015, 498 high-performance homes were constructed in the New Homes MTP program with a savings of 501 kW. TCC provided continuing education courses and other training opportunities for contractors, homebuilders, home energy raters, and HVAC contractors on the advantages of High-Performance and ENERGY STAR homes and building practices. The training included various aspects of building efficient homes, from construction and measure installation, to the importance of whole-house energy efficiency.

#### **Open MTP**

In 2015, TCC projected to acquire 676 kW demand savings from this program. TCC verified and is reporting 679 kW. The savings were achieved with 90 small commercial customers and 5 participating contractors.

#### **SCORE/CitySmart MTP**

In 2015, TCC projected to acquire 1,691 kW demand savings from this program. TCC verified and is reporting 1,333 kW. This included participation by 52 customers. To date, the program has benchmarked 842 facilities for 30 school districts, and 9 government customers.

# SMART Source<sup>SM</sup> Solar PV MTP

The 2015 PV MTP projected to acquire 291 kW in demand savings and 562,000 kWh in energy savings from the residential and non-residential components. A total of 25 residential and non-residential solar PV projects were completed within the program, resulting in a peak demand reduction of 1,174 kW and 2,262,386 kWh of energy savings.

# X. Administrative Costs and Research and Development

#### **Administrative Costs**

Administrative costs incurred by TCC to meet its energy efficiency goals and objectives include, but may not be limited to, energy efficiency employees' payroll, marketing costs associated with regulatory filings, and EM&V costs outside of the actual cost associated with the EM&V contractor. Any portion of these costs which are not directly assignable to a specific program are allocated among the programs in proportion to the program incentive costs.

# **Program Research and Development**

R&D activities are intended to help TCC meet future energy efficiency goals by researching new technologies, program options and developing better, more efficient ways to administer current programs. The following is a summary of TCC's R&D activities for 2015.

TCC dedicated resources in 2015 to develop a new electronic data collection and management system for current programs. In addition, TCC participated with Electric Utility Marketing Managers of Texas (EUMMOT) in researching potentially new deemed savings measures for various programs.

#### **Informational Activities**

TCC continues its best efforts to encourage and facilitate the involvement of REPs and EESPs in the delivery of its programs to customers. TCC utilizes local, regional and national conferences, trade shows, and other events for outreach and information exchange with participating REPs and EESPs. TCC again disbursed program information at its annual AEP Texas Competitive REP

workshop in September 2015. TCC provides new and existing energy efficiency program information to the REPs and EESPs throughout the year on a timely basis via e-mail distribution.

# XI. 2016 Energy Efficiency Cost Recovery Factor (EECRF)

The total amount approved to be collected through TCC's 2016 EECRF is \$8,882,673, which consists of the following components:

- recovery of \$6,924,634 in energy efficiency expenses budgeted for Program Year 2016 (TCC's actual projected budget for energy efficiency expenses for Program Year 2016 is \$14,082,459, which is reduced by \$6,334,949 in energy efficiency costs expressly included in base rates and \$822,876 of load growth);
- recovery of a performance bonus in the amount of \$2,835,621 for achieving energy efficiency goals in Program Year 2014;
- return to customers \$1,079,195 in energy efficiency program costs over-collected through TCC's EECRF in Program Year 2014;
- recovery of \$182,785 in EM&V costs for evaluation of Program Year 2015; and
- recovery of \$18,828 for 2014 EECRF proceeding expenses incurred in Docket No. 42508 by municipalities as authorized by 16 TAC § 25.181(f)(3)(B).

**Table 11: 2016 EECRF** 

Customer Class	
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#### **EECRF**

Residential Service	\$0.000554 per kWh
Secondary Service (less than or equal to 10 kW)	\$0.000357 per kWh
Secondary Service (greater than 10 kW)	\$0.000458 per kWh
Primary Service	\$0.000253 per kWh
Transmission Service	(\$0.000125) per kWh
Transmission Service	(\$0.000123) per kwii

# XII. 2015 EECRF Summary

# **2015 Collections for Energy Efficiency**

TCC collected \$7,213,146 through its 2015 base rates, including \$6,334,949 expressly included in base rates and an adjustment for load growth in the amount of \$878,197, and \$10,392,970 through its 2015 EECRF for a total of \$17,606,116. A performance bonus of \$4,595,235 for exceeding its 2013 energy efficiency goals and \$1,752,047 returned to customers are reflected in TCC's total amount collected for energy efficiency in 2015.

#### **Energy Efficiency Program Costs Expended**

TCC expended a total of \$13,508,113 for its 2015 energy efficiency programs. The amount expended is \$887,478 less than TCC's 2014 projected budget of \$14,395,591 for energy efficiency program.

# **Over-Recovery of Energy Efficiency Costs**

TCC's actual 2015 energy efficiency program costs (including EM&V costs) less municipal rate case expenses are \$13,502,486 and actual energy efficiency program revenues are \$7,549,782. These associated 2015 costs and revenues result in an over-recovery of energy efficiency costs of \$1,260,443. This is the amount that TCC will request be returned to customers within its 2017 EECRF.

#### **XIII. Underserved Counties**

TCC has defined Underserved Counties as any county in the TCC service territory for which TCC reported no demand or energy savings through any of its 2015 SOPs or MTPs. Per 16 TAC § 25.181(n)(2)(U), a list of the Underserved Counties is as follows:

Caldwell	Guadalupe	McMullen
Dewitt	Kenedy	Real
Edwards	Live Oak	Wilson
Gonzales	Medina	

#### XIV. Performance Bonus

TCC achieved a 43,775 kW reduction in peak demand from its energy efficiency programs offered in 2015. TCC's demand reduction goal for 2015 was 12,930 kW. This achievement represents 339% of its 2015 demand reduction goal. TCC also achieved energy savings of 68,482,227 kWh, which represents 302% of its 2015 energy goal of 22,653,000 kWh. These results qualify TCC for a Performance Bonus. Per 16 TAC § 25.181(h), TCC is eligible for a Performance Bonus of \$3,461,676, which it will request within its June 1, 2016 EECRF Filing for recovery in 2017.

In 2015, TCC's total spending on energy efficiency programs was \$13,508,113. This includes actual EM&V expenditures to the EM&V contractor of \$246,631. Per the PUCT, the total program costs to be used in the performance bonus calculation should include the EM&V cost allocation provided by the EM&V contractor for Program Year 2015, instead of the actual EM&V contractor expenditures. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the applicable tables in this EEPR. For the purposes of the performance bonus calculation, TCC's 2015 total program costs equaled \$13,706,310.

**Table 12: Energy Efficiency Performance Bonus Calculation for 2015** 

	kW	kWh
2015 Goals	12,930	22,653,000
2015 Savings		
Reported/Verified Total (including HTR and measures with <10yr EUL)	43,775	68,482,227
Reported/Verified Hard-to-Reach	1,858	
2015 Program Costs	\$13,	706,310
2015 Performance Bonus	\$3,4	159,596
		•

# **Performance Bonus Calculation**

339%	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
302%	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$48,302,273	Total Avoided Cost (Reported kW * PV(Avoided Capacity Cost) + Reported kWh * PV(Avoided Energy Cost))
\$13,706,310	Total Program Costs
\$34,595,962	Net Benefits (Total Avoided Cost - Total Expenses)

# **Bonus Calculation**

\$41,265,557	Calculated Bonus ((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits
\$3,459,596	Maximum Bonus Allowed (10% of Net Benefits)
\$3,459,596	Bonus (Minimum of Calculated Bonus and Bonus Limit)

# **Acronyms**

**CSOP** Commercial Standard Offer Program

CS MTP Commercial Solutions Market Transformation Program

**DR** Demand Response

**DSM** Demand Side Management

**EECRF** Energy Efficiency Cost Recovery Factor

**EEPR** Energy Efficiency Plan and Report

**EE Rule** Energy Efficiency Rule, 16 TAC §§ 25.181 and 25.183

**EESP** Energy Efficiency Service Providers

**EffCon** Efficiency Connection Pilot Market Transformation Program

**EUMMOT** Electric Utility Marketing Managers of Texas

HTR Hard-To-Reach

HTR SOP Hard-to-Reach Standard Offer Program

LM SOP Load Management Standard Offer Program

MTP Market Transformation Program

NAP Not Applicable

New Homes High-Performance New Home Market Transformation Program

Open Market Transformation Program

# **Acronyms** (Continued)

PUCT Public Utility Commission of Texas

PURA Public Utility Regulatory Act

PV Photovoltaic

**PV MTP** SMART Source<sup>SM</sup> Solar PV Market Transformation Program

**R&D** Research and Development

**REP** Retail Electric Provider

**RES** Residential

**RSOP** Residential Standard Offer Program

**SCORE** Schools Conserving Resources

SCORE/CS MTP SCORE/CitySmart Market Transformation Program

**SOP** Standard Offer Program

TCC AEP Texas Central Company

**TDU** Transmission and Distribution Utility

**TLIP** Targeted Low-Income Energy Efficiency Program

**TRM** Texas Technical Reference Manual

# **APPENDIX A:**

# REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY

#### **CALENDAR YEAR 2015**

#### COMMERCIAL SOLUTIONS MTP

	Reported	and Verified
County	Savings	
	kW	kWh
Aransas	72.25	215,875
Brooks	2.30	14,110
Calhoun	36.82	167,432
Cameron	21.63	151,378
Dimmit	18.16	115,493
Hidalgo	371.32	2,017,124
Jackson	0.38	2,494
Jim Wells	1.42	7,750
Kleberg	41.62	244,877
Matagorda	12.09	78,469
Nueces	504.94	3,142,733
San Patricio	75.04	403,937
Victoria	2.02	13,109
Webb	12.17	77,937
Wharton	4.64	29,437
Willacy	2.22	15,263
Zapata	5.59	21,753
Total	1,184.61	6,719,171

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#### **COMMERCIAL SOP**

County	Reported and Verified Savings	
	kW	kWh
Aransas	131.26	1,066,966
Atascosa	9.99	48,541
Bee	65.55	425,973
Cameron	265.58	1,409,754
Dimmit	3.94	13,083
Hidalgo	335.79	2,087,154
Jim Wells	51.96	221,875
Karnes	3.57	12,586
Kleberg	100.33	698,500
Maverick	9.96	47,086
Nueces	784.10	6,125,648
Refugio	18.11	154,571
San Patricio	154.26	1,019,262
Starr	11.66	76,356
Uvalde	0.51	4,542
Val Verde	29.20	191,265
Webb	183.95	1,140,085
Willacy	54.00	207,171
Zavala	18.89	86,251
Total	2,232.61	15,036,669

#### COOLSAVERSM A/C TUNE-UP MTP

County	Reported and Verified Savings	
	kW	kWh
Aransas	20.50	60,839
Bee	0.91	1,993
Cameron	442.21	1,152,885
Hidalgo	1,372.00	5,214,030
Kinney	2.8	8,789
Kleberg	12.32	38,915
Maverick	335.08	1,107,655
Nueces	335.48	1,117,954
Refugio	2.02	6,259
San Patricio	16.66	47,296
Starr	49.09	152,622
Uvalde	2.55	8,495
Val Verde	52.11	183,822
Total	2,643.73	9,101,554

#### **Efficiency Connection MTP**

County	Reported and Verified Savings	
	kW	kWh
Aransas	1.22	4,241
Atascosa	0.17	904
Bee	0.19	1,017
Calhoun	0.35	1,228
Cameron	2.74	9,533
Colorado	0.13	653
Duval	0.05	166
Hidalgo	2.98	10,376
Jackson	0.12	620
Kleberg	0.19	665
Matagorda	0.30	1,575
Maverick	0.21	1,122
Nueces	5.03	17,524
Refugio	0.20	699
San Patricio	1.12	3,907
Val Verde	0.26	1,346
Victoria	0.27	1,432
Webb	0.73	2,532
Wharton	0.14	754
Willacy	0.14	492
Zapata	0.35	1,218
Total	16.89	62,004

#### **HARD-TO-REACH SOP**

County	Reported and Verified Savings	
	kW	kWh
Aransas	12.86	50,020
Atascosa	0.83	1,426
Brooks	2.54	11,348
Cameron	205.31	745,889
Dimmit	69.96	322,470
Duval	11.65	36,010
Frio	107.60	407,450
Hidalgo	345.10	1,346,819
Jim Hogg	3.15	15,013
Jim Wells	72.35	265,685
Kleberg	2.87	11,214
Maverick	4.46	23,290
Nueces	330.14	1,056,952
San Patricio	3.77	14,001
Starr	3.09	14,455
Victoria	26.12	87,282
Webb	22.26	46,821
Total	1,224.06	4,456,145

#### HIGH-PERFORMANCE NEW HOMES MTP

County	Reported and Verified Savings	
_	kW	kWh
Aransas	41.81	144,780
Cameron	3.49	13,983
Goliad	0.48	1,338
Hidalgo	95.74	422,435
Nueces	281.04	1,038,108
Refugio	3.15	10,277
San Patricio	71.68	258,250
Victoria	1.77	5,250
Webb	2.19	9,538
Total	501.35	1,903,959

#### LOAD MANAGEMENT SOP

County	Reported and Verified Savings	
	kW	kWh
Cameron	2,656.93	2,657
Hidalgo	7,479.00	7,479
Matagorda	870.05	870
Nueces	2,032.50	2,033
Refugio	1,183.75	1,184
San Patricio	7,671.32	7,671
Victoria	3,593.82	3,594
Webb	1,192.32	1,192
Willacy	737.96	738
Total	27,417.65	27,418

#### **OPEN MTP**

County	Reported and Verified Savings	
County	kW	kWh
Cameron	23.50	150,756
Hidalgo	622.88	2,745,561
Nueces	11.57	54,025
Webb	13.58	57,126
Willacy	7.95	52,052
Total	679.48	3,059,520

#### RESIDENTIAL SOP

		and Verified
County	Sa	vings
	kW	kWh
Aransas	68.03	212,700
Atascosa '	11.22	35,128
Brooks	7.48	17,364
Calhoun	20.14	84,917
Cameron	490.29	1,854,912
Colorado	22.24	84,416
Dimmitt	87.77	344,996
Duval	42.26	161,063
Frio	44.25	147,688
Hidalgo	1,403.81	5,955,391
Jackson	8.24	33,521
Jim Hogg	1.44	1,882
Jim Wells	117.46	431,112
Kleberg	156.53	466,957
La Salle	2.41	7,857
Matagorda	27.51	125,973
Maverick	88.93	429,864
Nueces	1,255.65	4,104,606
San Patricio	311.80	1,164,460
Starr	49.47	195,484
Uvalde	12.43	53,856
Val Verde	2.82	15,561
Victoria	287.69	803,037
Webb	145.00	450,776
Wharton	6.75	24,923
Zavala	62.87	257,314
Total	4,734.49	17,465,758

#### SCORE/CITYSMART MTP

County	Reported and Verified Savings	
	kW	kWh
Hidalgo	509.49	2,249,846
Nueces	556.32	2,768,609
Val Verde	39.24	257,043
Webb	227.73	1,883,609
Total	1,332.78	7,159,107

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# SMART SOURCE $^{SM}$ SOLAR PV MTP

County	Reported and Verified Savings	
	kW	kWh
Atascosa	3.04	5,856
Cameron	13.60	26,208
Duval	9.26	17,856
Frio	4.32	8,320
Goliad	3.32	6,400
Hidalgo	1,042.60	2,009,826
Jim Wells	14.19	27,360
Maverick	8.47	16,320
Nueces	22.44	43,248
Webb	52.39	100,992
Total	1,173.61	2,262,386

#### TARGETED LOW-INCOME ENERGY EFFICIENCY PROGRAM

	Reported and Verified Savings	
County		
	kW	kWh ·
Calhoun	99.35	167,030
Cameron	214.42	389,644
Dimmit	13.28	37,041
Duval	1.12	4,181
Goliad	29.91	43,069
Hidalgo	66.00	153,824
Jim Wells	2.26	5,034
Kinney	0.71	2,074
Kleberg	1.45	3,644
La Salle	61.81	84,364
Matagorda	24.88	65,825
Maverick	8.48	16,057
Nueces	15.27	37,835
Refugio	0.73	4,047
San Patricio	2.22	4,359
Starr	23.10	56,081
Uvalde	11.91	22,715
Val Verde	31.20	64,533
Victoria	1.53	4,015
Webb	12.52	29,751
Willacy	1.40	6,601
Zavala	9.94	26,811
Total	633.49	1,228,536

## **APPENDIX B:**

## PROGRAM TEMPLATES

TCC does not have any Program Templates to report this year.

#### **APPENDIX C:**

#### **EXISTING CONTRACTS OR OBLIGATIONS**

TCC has no Existing Contracts or Obligations documentation to provide.

## **APPENDIX D:**

## **OPTIONAL SUPPORT DOCUMENTATION**

TCC has no Optional Supporting Documentation to provide.