El Paso Electric Company

2018 Energy Efficiency Plan and Report 16 Texas Administrative Code §25.181 and §25.183

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> > Project No. 48146



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INTRODUCTION

El Paso Electric Company (EPE or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Texas Administrative Code §25.181 and §25.183 (TAC), which are the sections of the Energy Efficiency Rule (EE Rule) implementing the Public Utility Regulatory Act (PURA) §39.905. As mandated by this section of PURA, 16 TAC §25.181(e)(1) states that each investor owned electric utility must achieve the following minimum demand reduction goals through market-based standard offer programs (SOPs), targeted market transformation programs (MTPs) or utility self-delivered programs:

- §25.181(e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
 - (A) The utility shall acquire no less than a 25% reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2012 program year.
 - (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% of 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, MTPs and utility self-delivered programs that control the manner in which utilities must administer their portfolio of energy efficiency programs in order to achieve their mandated annual demand reduction goals. EPE'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 reports EPE's achievements for 2017 and its projections for 2018 and 2019 as required by the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendix.

ENERGY EFFICIENCY PLAN AND REPORT ORGANIZATION

This EEPR consists of an executive summary, fourteen sections, a list of acronyms, a glossary, and an appendix.

The Executive Summary highlights EPE's reported achievements for 2017 and EPE's plans for achieving its 2018 and 2019 projected energy efficiency savings.

Energy Efficiency Plan

- Section I describes EPE's program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and provides an explanation of any discontinued program(s).
- Section II explains EPE's targeted customer classes, specifying the size of each class, and the method for determining those class sizes.
- Section III presents EPE's goal calculation and projected energy efficiency savings for the prescribed planning period by program for each customer class.
- Section IV describes EPE's proposed energy efficiency budgets for 2018 and 2019 by program for each customer class.

Energy Efficiency Report

- Section V documents EPE's demand reduction goals for each of the previous five years (2013-2017) and the actual savings achieved for those years.
- Section VI compares EPE's projected energy and demand savings to its reported savings by program for calendar years 2016 and 2017.
- Section VII details EPE's incentive and administration expenditures for the previous five years (2013-2017) detailed by program for each customer class.
- Section VIII compares EPE's actual and budgeted program costs for 2017 detailed by program for each customer class. It also provides an explanation of EPE's administrative costs and any expenditure deviation of more than 10% from the anticipated program budget.
- Section IX describes the results from EPE's MTPs.
- Section X documents EPE's most recent Energy Efficiency Cost Recovery Factor (EECRF).
- Section XI reflects EPE's revenue collection through the 2017 EECRF.
- Section XII details the over/under recovery of EPE's energy efficiency program costs for 2017.
- Section XIII reports the number of customers served and the savings relative to the three counties served by EPE in Texas.
- Section XIV details the performance incentive calculation.

Acronyms – a list of abbreviations for common terms used within this document.

Appendix A – Reported kW and kWh Savings by county for each program.

EXECUTIVE SUMMARY

The Energy Efficiency Plan portion of this EEPR details EPE's plan to meet the energy efficiency demand reduction goal for 2018, as established pursuant to 16 TAC §25.181(e)(2). The Final Order of Docket No. 47125¹ issued on February 15, 2018, established the EECRF rates applicable to EPE for 2018. The order also left in place the same demand reduction goal as EPE had in 2017 for the 2018 energy efficiency programs. This goal was 11.16 MW, which is greater than four-tenths of one percent of EPE's average weather-adjusted peak demand at meter for 2012 through 2016. Since EPE has reached a demand reduction goal of greater than four-tenths of 1 percent of its summer weather-adjusted peak demand and in accordance with 16 TAC §25.181(e)(1)(E), EPE's 2019 demand reduction goal should remain at 11.16 MW.

The Final Order of Docket No. 47125 also established an energy efficiency program budget for 2018 of \$4,394,650.² EPE made some modifications to the individual program budgets; however, the overall program budget for 2017 remained the same at \$4,394,650. The modifications consisted of the discontinuance of the Commercial SOP, a reduction to the Texas SCORE MTP budget, an increase to the Residential Solutions MTP budget, the addition of the new Texas Appliance Recycling MTP, the addition of the Demand Response Pilot Program MTP, and a decrease in the Research and Development (R&D) budget.

The goals, budgets and implementation plans that are included in this EEPR are influenced substantially by the requirements of the EE Rule and lessons learned regarding energy efficiency service providers and customer participation in the various energy efficiency programs. A summary of projected goals, savings and budgets is presented in Table 1.

Table 1: Summary of 2018 & 2019 Projected Goals, Savings and Budgets³

Calendar Year	Average Growth in Demand (MW at Meter)	Goal Metric: 30% of 5- year Average Growth of Demand (MW at Meter)	Goal Metric: .4% of 5-year Average Peak Demand (MW at Meter)	Demand Goal (MW)*	Energy Goal (MWh)**	Projected MW Savings (at Meter)	Projected MWh Savings (at Meter)	Proposed Budget (000's)***
2018	38.0	11.39	4.68	11.16	19,552	14.181	21,054	\$4,551
2019	50.8	15.24	4.89	11.16	19,552	14.181	21,054	\$4,552

^{*} Pursuant to 16 TAC §25.181(e)(1)

The Energy Efficiency Report portion of this EEPR shows that, in 2017, EPE achieved a demand reduction in excess of its goal. In 2017, the Company achieved a demand reduction of 15,285 kW, which exceeded the demand reduction goal of 11,160 kW by 36.96%. This was accomplished through the implementation of EPE's SOPs and MTPs.

^{**} Calculated using a 20% conservation load factor

^{***}Proposed budget includes the overall program budget, EM&V expenses, and EECRF proceeding expenses

¹Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Cost Cap, Docket No. 47125.

² Id. at Findings of Fact No. 39

³ Average Growth in Demand and Weather Adjusted Peak Demand are found in Table 4, Projected Demand and Energy Savings are found in Table 5, and Proposed Budgets are found in Table 6.

The SOPs that EPE provided in 2017 were the Commercial SOP and the Load Management SOP. The MTPs were the Small Commercial Solutions MTP, the Large Commercial & Industrial (C&I) Solutions MTP, the Texas SCORE MTP, the Residential Solutions MTP, the LivingWise® MTP, and the Hard-to-Reach Solutions MTP.

In order to reach the projected savings for 2018 and 2019, as shown in Table 1, EPE proposes to offer the following programs:

Standard Offer Program

Load Management SOP

Market Transformation Programs

- Small Commercial Solutions MTP
- Large C&I Solutions MTP
- Texas SCORE MTP
- Residential Solutions MTP
- LivingWise[®] MTP
- Hard-to-Reach Solutions MTP
- Demand Response Pilot Program (DRPP) MTP
- Texas Appliance Recycling MTP

EPE will continue its agreement with CLEAResult Consulting, Inc. (CLEAResult) to implement EPE's Texas SCORE MTP and the four "Solutions" MTPs.

EPE will continue its agreement with Resource Action Programs to offer EPE's LivingWise® MTP.

EPE will continue its agreement with EnergyHub, Inc. (EnergyHub) to implement the DRPP MTP.

EPE executed an agreement with ARCA Recycling, Inc. (ARCA) to implement the Texas Appliance Recycling MTP.

ENERGY EFFICIENCY PLAN

I. 2018 Programs

A. 2018 Program Portfolio

El Paso Electric Company (EPE or Company) plans to continue the implementation of one SOP and eight MTPs in 2018. These programs have been structured to comply with the rules of the Public Utility Commission of Texas (PUCT) governing program design and evaluation. These programs target both broad market segments and specific market segments that offer significant opportunities for cost-effective savings. EPE anticipates that targeted outreach to a broad range of service providers and customers will be necessary in order to meet the demand reduction goals established by the PUCT for EPE. Table 2 below summarizes the programs and target markets:

Table 2: 2018 Energy Efficiency Program Portfolios

Program	Target Market	Application
Load Management SOP	Commercial, Government and Schools	Load Management
Small Commercial Solutions MTP	Small Commercial (<100kW)	Retrofit; New Construction
Large C&I Solutions MTP	Large Commercial and Industrial (≥100kW)	Retrofit; New Construction
Texas SCORE MTP	City, County Governments and Schools	Retrofit; New Construction
Residential Solutions MTP	Residential	Retrofit; New Construction
LivingWise [®] MTP	Residential	Educational; Retrofit
Hard-to-Reach Solutions MTP	Residential Hard-to-Reach	Retrofit; New Construction
Demand Response Pilot Program MTP	Residential & Commercial	Demand Response
Texas Appliance Recycling MTP	Residential	Appliance Recycling

The programs in Table 2 are described in further detail below. EPE maintains a website containing links to the program manuals, the requirements for project participation, and available electronic forms at www.epelectric.com. Programs with manuals can be found at the following website: www.epelectric.com/tx/business/program-manuals-and-guidelines.

B. Existing Programs

Load Management SOP

The Load Management SOP allows participating customers to provide on-call, voluntary curtailment of electric consumption during peak demand periods in return for incentive payments. Any commercial customer, governmental entity, or educational customer that takes service at the distribution level is eligible to participate in the program. Incentives are based on verified demand savings that customers are able to achieve in response to notifications of voluntary curtailment events by EPE. Demand savings and incentive payment amounts are based on the actual, verified load curtailments. EPE plans to continue this program in 2018 and 2019.

Small Commercial Solutions MTP

The Small Commercial Solutions MTP offers customers with a peak demand of less than 100 kW both cash and non-cash incentives. The program pays a cash incentive of \$400 per reduced kW for the majority of measures and up to \$500 per reduced kW when converting T12 lamps to higher efficiency lamps. The incentive is paid to customers, generally through participating contractors, for eligible energy efficiency measures that are installed in new or retrofit applications. This program also provides non-cash incentives which include technical assistance, education on energy efficiency projects, and marketing material to customers and participating contractors. In addition to capturing demand and energy savings, the implementer helps small commercial contractors improve their ability to identify, evaluate, and sell energy efficiency improvements to small business owners. Also, this program assists customers in evaluating energy efficiency proposals from contractors. EPE plans to continue this program in 2018 and 2019. The Small Commercial Solutions Program will continue working with contractors and business owners to improve energy efficiency in the targeted market. This program will continue to expand outreach to active contractors and other building industry players to raise overall energy efficiency practices across the marketplace.

Large Commercial & Industrial Solutions MTP

The Large C&I Solutions MTP offers customers with a peak demand of equal to or greater than 100 kW both cash and non-cash incentives. The program pays a cash incentive of \$240 per reduced kW to customers for eligible energy efficiency measures that are installed in new or retrofit applications. This program helps companies 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. The Large C&I Solutions Program also provides measurement and verification for projects, as necessary. EPE plans to continue this program in 2018 and 2019. The Large C&I Solutions MTP will continue its outreach to active contractors, architectural firms, engineering firms, and other building industry players to raise overall energy efficiency practices across the marketplace.

Texas SCORE MTP

The Texas SCORE MTP promotes a structured process for school districts, higher education and local governments to identify opportunities and implement energy efficiency measures. This program pays a cash incentive of \$240 per reduced kW to schools and local governmental entities for the installation of energy efficiency measures, as well as non-cash incentive tools used to identify their critical needs and promote best business practices. The Texas SCORE MTP is designed to assist and educate these customers in improving their facilities' energy performance and reducing their El Paso Electric Company

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operating costs by integrating energy efficiency into their short- and long-term planning. This program also helps these customers identify, prioritize, budget, and complete energy efficiency projects. A benchmarking analysis may be conducted depending upon the individual customer needs. The benchmarking data compares energy performance within school campuses and government facilities against national and state averages. This data also serves as the program baseline data. EPE will continue to offer its Texas SCORE MTP in 2018 and 2019. EPE will continue working with schools and governmental entities to help identify energy efficiency opportunities. The Texas SCORE MTP will continue to provide outreach to contractors, architectural firms, engineering firms, and other building industry players to raise overall energy efficiency practices across the marketplace.

Residential Solutions MTP

The Residential Solutions MTP offers both cash and non-cash incentives. The cash incentives vary by measure and are paid to customers, through participating contractors, for eligible energy efficiency measures that are installed in residences. This program also provides non-cash incentives which include technical assistance and education on energy efficiency projects to participating contractors. In addition to capturing demand and energy savings, this program helps contractors improve their ability to identify, evaluate, and sell energy efficiency improvements to home owners. EPE plans to continue this program in 2018 and 2019.

LivingWise® MTP

The LivingWise® MTP is implemented by Resource Action Programs. This program serves as an effective community outreach program to improve customer awareness of energy efficiency programs and measures. The LivingWise® program is designed to generate immediate and long-term energy savings for participants.

Through this program, EPE identifies and enrolls teachers and sixth-grade students during the spring semester, providing them with a LivingWise® kit that contains energy saving devices and energy efficiency educational materials. All of the materials provided meet state and national educational standards, which allow the program to easily fit into the teachers' existing requirements. The students take the LivingWise® kit home and, with the help of their parents, install the devices in their home and complete a home energy audit report. The LivingWise® staff tabulates all responses including home audits, teacher responses, student input and parent responses. EPE plans on continuing this program in 2018 and 2019.

Hard-to-Reach Solutions MTP

The Hard-to-Reach Solutions MTP offers both cash and non-cash incentives. This program targets residential customers that are at or below 200% of the Federal Poverty Guidelines. The cash incentives vary by measure and are paid to customers, through participating contractors, for eligible energy efficiency measures that are installed in residences. This program also provides non-cash incentives which include technical assistance and education on energy efficiency projects to participating contractors. In addition to capturing demand and energy savings, this program helps contractors improve their ability to identify, evaluate, and sell energy efficiency improvements to home owners. EPE plans to continue this program in 2018 and 2019.

Research and Development

EPE has allocated \$75,000 to R&D for 2018. This funding amount is less than 10% of EPE's 2017 total program costs in accordance with 16 TAC §25.181(i). EPE will also utilize a portion of the 2018 R&D budget to fund a deemed savings study that will be performed by Frontier. The remainder of the budget will be used for research on future pilot programs.

C. New Programs for 2018 and 2019

Demand Response Pilot Program

The Demand Response Pilot Program targets reduction in central refrigerated air conditioning load for residential and small commercial customers. An early marketing campaign referred to the Demand Response Pilot Program as the eSmart Thermostat Program. EPE has the capability of remotely adjusting participating customers' internet-enabled smart thermostats during Demand Response Events. Customers will receive a \$25 incentive for participation in the program year. EPE has contracted with EnergyHub to market and administer this program.

Texas Appliance Recycling MTP

EPE has contracted with ARCA to implement the Texas Appliance Recycling MTP in 2018. The Texas Appliance Recycling MTP provides incentives designed to encourage EPE's residential customers to recycle their older, less efficient refrigerators and freezers rather than use them as secondary or backup units. The Texas Appliance Recycling MTP offers eligible customers a \$50 incentive for EPE to remove and recycle their old refrigerator or freezer.

D. Discontinued Program(s) for 2018 and 2019

In 2018, EPE has discontinued the Commercial SOP due to recurring low customer participation. The Commercial SOP targeted small and large commercial and industrial customers. The program paid incentives to qualified project sponsors or to commercial customers who acted as their own project sponsor. Commercial SOP energy efficiency projects included lighting retrofits and HVAC upgrades. The discontinuation of this commercial program will contribute to the reduction of the commercial cost cap pursuant to 16 TAC §25.181(f)(7). EPE currently has no plans to discontinue any programs in 2019.

E. General Implementation Process

Program Implementation

In 2018, EPE will continue to conduct activities to implement energy efficiency programs in a non-discriminatory and cost-effective manner. EPE will provide program announcements to the Energy Efficiency Service Provider (EESP) community in the form of pertinent news and updates, as necessary.

In April 2018, EPE will announce its 2018 Load Management SOP through the EPE website. EESPs who participated in the 2017 Load Management SOP will also be sent e-mails to inform them of the opening of this program. The program manual and initial application will be made available to EESPs on the website. All applications are considered on a first-come, first-served basis and reviewed for eligibility. Once approved, EESPs will be informed of their acceptance into the program.

All of the existing MTPs were opened for new projects in January 2018. Depending upon the program, the MTPs were announced through kick-off meetings, informative e-mails to EESPs, direct communication, or the EPE website.

Program Tracking

EPE uses online databases to track program activity for most of the various MTPs. Depending upon the associated program, these databases are accessible to project sponsors, EESPs, implementers, and administrators. The on-line databases capture customer and project information such as utility meter number or account number, proposed measures and associated energy savings, and incentive amounts.

Measurement and Verification

The majority of projects implemented through EPE's energy efficiency programs report demand and energy reductions utilizing deemed savings as approved by the PUCT. If the deemed savings approach is not applicable for a particular installation, savings will be reported using an approved measurement and verification approach. Guidelines within the International Performance Measurement and Verification Protocol (IPMVP) will be used in instances in which:

- a PUCT-approved deemed savings is not available for the energy efficiency measure(s) included in an eligible project; or
- an EESP has elected to follow the protocol because it believes that measurement and verification
 activities will result in a more accurate estimate of the savings associated with the project than
 would the application of the PUCT-approved deemed savings value.

The IPMVP is voluminous and is not included with this plan.

Based on the EE Rule, the PUCT implemented an evaluation, measurement, and verification (EM&V) process that included the selection of an EM&V contractor in 2013. The PUCT selected the current third-party EM&V contractor through the Request for Proposal 473-17-002 (RFP), Project No. 46302. The selected EM&V team is led by Tetra Tech and includes Texas Energy Engineering Services, Inc. (TEESI). The RFP was for the evaluation of Program Year (PY) 2016 through PY 2019. EPE will continue to provide all of the necessary information and data to the EM&V team.

F. Outreach Activities

EPE anticipates that outreach to a broad range of EESPs and market segments will be necessary in order to meet the savings goals required by Section (e)(1) of the EE Rule and PURA § 39.905. EPE markets the availability of its programs in the following manner:

- EPE maintains the <u>www.epelectric.com</u> website. The use of the website is one of the primary methods of communication to provide potential project sponsors and customers with program information. The website may contain detailed information such as requirements for program participation, project eligibility, end-use measure eligibility, incentive levels, application procedures, program manuals, and available funding.
- EPE offers outreach workshops, either physically or through webinars, for some of the MTPs. EPE
 invites the appropriate EESPs to participate in the workshops. The workshops describe the
 requirements for program participation, project eligibility, end-use measure eligibility, incentive
 levels, application procedures, and available funding.

- EPE gauges EESP interest in its workshops by participation levels. If warranted, EPE will offer workshops dedicated to specific measures.
- EPE includes information on the availability of energy efficiency programs several times a year through the monthly newsletter that is included in customers' bills.
- EPE maintains a dedicated energy efficiency phone line to provide customers with direct access to energy efficiency personnel on program availability, participation requirements, incentive levels, application procedures, and available funding.
- EPE maintains a dedicated energy efficiency e-mail address to allow customers to contact energy efficiency personnel directly.
- EPE utilizes mass electronic mail (e-mail and webinar) notifications to keep potential project sponsors interested and informed.

G. Existing Demand Side Management (DSM) Contracts or Obligations

EPE will continue its agreement with CLEAResult to implement EPE's Texas SCORE MTP and the four "Solutions" MTPs.

EPE will continue its agreement with Resource Action Programs to offer EPE's LivingWise® MTP.

EPE will continue its agreement with EnergyHub, Inc. (EnergyHub) to implement the DRPP MTP.

EPE executed an agreement with ARCA Recycling, Inc. (ARCA) to implement the Texas Appliance Recycling MTP.

II. Customer Classes

For the twelve months ending December 2017, there was an average of 282,153 residential accounts in the EPE Texas service territory. Based on the 2017 Annual Social and Economic Supplement of the U.S. Census Bureau's Current Population Survey, 31.7% of Texas families are at or below 200% of the poverty threshold. Applying this standard pursuant to 16 TAC §25.181(c)(27), approximately 89,442 of EPE's residential accounts fall into the Hard-to-Reach Customer Class. The average number of commercial accounts for this same time period was 31,867.

Customer classes targeted by EPE's energy efficiency programs are residential and commercial customer classes that take service at the distribution level. Transmission level customers are not eligible to participate. The total residential class includes the Hard-to-Reach accounts. Table 3 summarizes the number of customers in each of the customer classes for 2017.

Table 3: Summary of Texas Residential and Commercial Customer Classes (2017)

	Number of Texas
Customer Class	Customers
Total Residential	282,153
Hard-to-Reach	89,442
Total Commercial	31,867

III. Projected Energy Efficiency Savings and Goals

As reflected in PUCT Docket No. 47125, EPE's energy efficiency demand reduction goal for 2018 is 11.16 MW, which mirrors the 2017 goal. The following is the Section of the EE Rule that describes how utilities are to calculate their minimum demand reduction goals:

- §25.181(e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
 - (A) The utility shall acquire no less than a 25% reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2012 program year.
 - (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% of 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 demand reduction goal to be acquired in 2018 (11.16 MW) is greater than four-tenths of one percent of EPE's 5-year average summer weather-adjusted peak demand for 2012 through 2016, which is 4.68 MW as shown in Table 1. In accordance with Section (e)(1)(E) of the EE Rule, EPE's demand reduction goal in any year shall not be lower than its goal for the prior year. In light of the parameters established by the EE Rule, EPE's 2019 goal should remain at 11.16 MW (0.91% of the average summer weather-adjusted peak demand for 2013 through 2017) as shown in Table 1. The corresponding energy savings goals for all years are determined by applying a 20% conservation load factor to the demand reduction goals.

Table 4 presents historical annual growth in demand for the previous six years. Projected demand reduction and energy savings by customer class and program for 2018 and 2019 are presented in Table 5. The projected energy and demand savings for 2018, as shown in Table 5, have not changed since the filing of the 2017 EEPR, Project No. 46907 (Revised February 28, 2018).

Table 4: Annual Growth in Demand and Energy Consumption

		Peak I	Demand (MW at Sou	rce)		Energy	y Consumpti	on (MWh at	Meter)	Growth	Growth	Average
	Total	System	Res	sidential &	Commo	ercial	Total System Residential & Commercial				(MW at Source)	(MW at Meter) ⁴	Growth (MW at Meter) ⁵
						Peak Demand @ Source Net							
Calendar		Weather		Weather	Opt-	Opt-		Weather		Weather	Weather	Weather	Weather
Year	Actual	Adjusted	Actual	Adjusted	Out	Outs	Actual	Adjusted	Actual	Adjusted	Adjusted	Adjusted	Adjusted
2012	1,294	1,287	1,191	1,184	0	1,184	6,035,970	6,003,736	5,279,626	5,247,392	-4.0	-3.7	NA
2013	1,357	1,352	1,252	1,248	0	1,248	6,028,388	6,008,772	5,276,023	5,256,408	64.0	58.4	NA
2014	1,385	1,387	1,289	1,291	0	1,291	5,973,273	5,981,108	5,211,869	5,219,704	43.0	39.3	NA
2015	1,398	1,386	1,279	1,266	0	1,266	6,141,917	6,086,745	5,318,795	5,263,622	-25.0	-22.8	NA
2016	1,509	1,509	1,397	1,397	-1.1	1,396	6,188,610	6,187,025	5,381,661	5,380,076	129.9	118.6	NA
2017	1,575	1,579	1,459	1,463	-1.1	1,462	6,205,925	6,223,229	5,387,064	5,404,368	66.0	60.5	NA
2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.0
2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50.8

⁴ Growth at meter for calendar year 2017 includes an 8.32% line loss factor based on EPE's 2013 Analysis of System Losses completed on February 17, 2015. Previous calendar years include an 8.72% line loss factor based on EPE's 2010 Analysis of System Losses completed on December 20, 2011.

⁵ Average 5 year historical growth in demand for residential and commercial customers for 2018 (2012-2016) and 2019 (2013-2017).

Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class

2018	Projected (at me	_				
Customer Class and Program	kW	kWh				
Commercial	10,241	16,635,216				
Small Commercial Solutions MTP	730	3,197,400				
Large C&I Solutions MTP	2,011	10,569,816				
Texas SCORE MTP	500	2,847,000				
Load Management SOP	7,000	21,000				
Residential	940	3,261,640				
Residential Solutions MTP	545	954,840				
LivingWise [®] MTP	200	727,600				
Texas Appliance Recycling MTP	195	1,579,200				
Hard-to-Reach	800	1,051,200				
Hard-to-Reach Solutions MTP	800	1,051,200				
Residential / Commercial	2,200	105,600				
Demand Response Pilot Program	2,200	105,600				
Total	14,181	21,053,656				
2019	Projected	_				
	(at me	(at meter)				
Customer Class and Program	kW	kWh				
Customer Class and Program Commercial	kW 10,241	kWh 16,635,216				
Commercial	10,241	16,635,216				
Commercial Small Commercial Solutions MTP	10,241 730	16,635,216 3,197,400				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP	10,241 730 2,011	16,635,216 3,197,400 10,569,816				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP	730 2,011 500	16,635,216 3,197,400 10,569,816 2,847,000				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP	10,241 730 2,011 500 7,000	16,635,216 3,197,400 10,569,816 2,847,000 21,000				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP	10,241 730 2,011 500 7,000 940	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential	10,241 730 2,011 500 7,000 940 545	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640 954,840				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP	10,241 730 2,011 500 7,000 940 545	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640 954,840 727,600				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP	10,241 730 2,011 500 7,000 940 545 200 195	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640 954,840 727,600 1,579,200				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach	10,241 730 2,011 500 7,000 940 545 200 195 800	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640 954,840 727,600 1,579,200 1,051,200				
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP	10,241 730 2,011 500 7,000 940 545 200 195 800	16,635,216 3,197,400 10,569,816 2,847,000 21,000 3,261,640 954,840 727,600 1,579,200 1,051,200				

IV. Program Budgets

Table 6 presents the total proposed budget allocations required to achieve EPE's projected demand reduction and energy savings shown in Table 5. The budget allocations are broken down by customer class, program, and the budget categories of incentive payments and administration and R&D expenses. Table 6 also includes the estimated annual expenses for the statewide EM&V contractor and the EECRF proceeding expenses. The overall program budget for 2018 is \$4,394,650. The discontinuation of the Commercial SOP was due to recurring low participation and will also assist in lowering EPE's 2018 commercial cost cap pursuant to 16 TAC §25.181(f)(7).

The number of customers in each of the customer classes shown in Table 3 was considered in budget allocations for those classes. EPE first ensured that the 5% goal for Hard-to-Reach customers was met and then allocated the remaining funding to the residential and commercial classes. A variety of additional factors and assumptions also went into the decision process.

Hard-to-Reach customers are residential customers at or below 200% of the Federal Poverty Guidelines. This is estimated to be approximately 89,442 customers or 31.7% of EPE's total residential load in Texas.

Avoided costs for 2018, as established by the PUCT, were set at \$80 per kW per year and \$0.03757 per kWh.

As directed in the EE Rule, EPE will limit administrative costs to a maximum of 15% of the total program costs and R&D costs to a maximum of 10% of the total program costs for 2017; however, the cumulative cost of administration and R&D will not exceed 20% of EPE's total program costs.

EPE used a 6.586% post-tax discount rate to calculate the present value of the avoided cost associated with a project and assumed a 2% escalation rate.

For simplicity, it is assumed that an EESP that completes an energy efficiency project in a given year receives all the incentives associated with that project in that year. Administration costs, however, may be committed in one year and expended in another.

EPE will offer a portfolio of an SOP and MTPs to all eligible 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, the potential interest of customer classes towards specific programs, and the overriding objective of meeting the legislative savings goal. Should funds not be reserved and used as prescribed by program milestones, EPE reserves the right to reallocate those unused funds to other programs in order to maximize contributions towards EPE's energy efficiency goal.

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

2018	Incentives	Admin & R&D	Total Budget
Commercial	\$2,436,511	\$0	\$2,436,511
Small Commercial Solutions MTP	\$461,115	\$0	\$461,115
Large C&I Solutions MTP	\$1,005,396	\$0	\$1,005,396
Texas SCORE MTP	\$510,000	\$0	\$510,000
Load Management SOP	\$460,000	\$0	\$460,000
Residential	\$906,346	\$10,000	\$916,346
Residential Solutions MTP	\$315,000	\$0	\$315,000
LivingWise [®] MTP	\$346,346	\$0	\$346,346
Texas Appliance Recycling MTP	\$245,000	\$10,000	\$255,000
Hard-to-Reach	\$600,000	\$0	\$600,000
Hard-to-Reach Solutions MTP	\$600,000	\$0	\$600,000
Residential / Commercial	\$279,000	\$0	\$279,000
Demand Response Pilot Program	\$279,000	\$0	\$279,000
Administration		\$87,793	\$87,793
Research and Development		\$75,000	\$75,000
Subtotal Budgets	\$4,221,857	\$172,793	\$4,394,650
EM&V		\$56,348	\$56,348
EECRF Proceeding Expenses		\$100,000	\$100,000
Total Budgets	\$4,221,857	\$329,141	\$4,550,998
2019	Incentives	Admin & R&D	Total Budget
2019 Commercial	Incentives \$2,436,511	Admin & R&D	Total Budget \$2,436,511
		\$0	
Commercial	\$2,436,511	\$0 \$0	\$2,436,511
Commercial Small Commercial Solutions MTP	\$2,436,511 \$461,115	\$0 \$0 \$0	\$2,436,511 \$461,115
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP	\$2,436,511 \$461,115 \$1,005,396	\$0 \$0 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP	\$2,436,511 \$461,115 \$1,005,396 \$510,000	\$0 \$0 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000	\$0 \$0 \$0 \$0 \$0 \$0 \$10,000	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346	\$0 \$0 \$0 \$0 \$0 \$10,000	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP Residential / Commercial	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000 \$600,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000 \$600,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP Residential / Commercial Demand Response Pilot Program	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000 \$600,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000 \$600,000 \$279,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP Residential / Commercial Demand Response Pilot Program Administration	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000 \$600,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000 \$600,000 \$279,000 \$279,000 \$87,793
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP Residential / Commercial Demand Response Pilot Program Administration Research and Development	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000 \$279,000 \$279,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000 \$279,000 \$279,000 \$87,793 \$75,000
Commercial Small Commercial Solutions MTP Large C&I Solutions MTP Texas SCORE MTP Load Management SOP Residential Residential Solutions MTP LivingWise® MTP Texas Appliance Recycling MTP Hard-to-Reach Hard-to-Reach Solutions MTP Residential / Commercial Demand Response Pilot Program Administration Research and Development Subtotal Budgets	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$906,346 \$315,000 \$346,346 \$245,000 \$600,000 \$279,000 \$279,000	\$0 \$0 \$0 \$0 \$0 \$10,000 \$0 \$10,000 \$0 \$0 \$0 \$172,793	\$2,436,511 \$461,115 \$1,005,396 \$510,000 \$460,000 \$916,346 \$315,000 \$346,346 \$255,000 \$600,000 \$600,000 \$279,000 \$279,000 \$87,793 \$75,000

ENERGY EFFICIENCY REPORT

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

Table 7 documents EPE's actual demand reduction goals and energy targets for the previous five years (2013-2017) calculated in accordance with 16 TAC §25.181.

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

Calendar Year	Demand Goals (kW)	Energy Targets (kWh)	Actual Demand Reduction (kW)	Actual Energy Savings (kWh)
2017 ⁶	11,160	19,552,320	15,285	23,311,792
2016 ⁷	11,160	19,552,320	12,790	22,912,026
2015 ⁸	11,160	19,552,320	12,305	22,282,527
2014 ⁹	11,160	19,552,320	13,389	22,117,822
2013 ¹⁰	11,160	19,552,320	14,188	23,394,394

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^{6 2017} demand goal and energy target as reported in EPE's EEPR filed April 3, 2017 under Project No. 46907. 2017 actual demand reduction and energy savings reported in this document, Project No. 48146.

⁷ 2016 demand goal and energy target as reported in EPE's EEPR filed April 1, 2016 under Project No. 45675. 2016 actual demand reduction and energy savings reported in this document, Project No. 46907.

^{8 2015} demand goal and energy target as reported in EPE's EEPR filed April 1, 2015 under Project No. 44480. 2015 actual demand reduction and energy savings reported in Project No. 45675.

⁹ 2014 demand goal and energy target as reported in EPE's EEPR filed April 1, 2014 under Project No. 42264. 2014 actual demand reduction and energy savings reported in Project No.44480.

¹⁰ 2013 demand goal and energy target as reported in EPE's EEPR filed March 29, 2013 under Project No. 41196. 2013 actual demand reduction and energy savings reported in Project No. 42264.

VI. Projected, Reported and Verified Demand and Energy Savings

Table 8: Projected versus Reported	Savings for 201	6 and 2017 (at	: Meter)			
2016	Projected	Savings	-	and Verified ⁄ings		
Customer Class and Program	kW	kWh	kW	kWh		
Commercial	11,207	18,104,000	11,194	19,909,300		
Commercial SOP	700	3,066,000	30	177,439		
Small Comm. Solutions MTP	730	3,197,000	852	3,856,747		
Large C&I Solutions MTP	2,011	8,808,000	2,162	12,734,634		
Texas SCORE MTP	700	2,759,000	551	3,117,684		
Load Management SOP	7,000	14,000	7,599	22,796		
Commercial Rebate Pilot Program	66	260,000	-	_		
Residential	558	2,074,000	672	1,542,351		
Residential Solutions MTP	418	732,000	452	814,715		
LivingWise [®] MTP	140	1,342,000	220	727,636		
Hard-to-Reach	800	1,051,200	924	1,460,375		
Hard-to-Reach Solutions MTP	800	1,051,200	924	1,460,375		
Total	12,565	21,229,200	12,790	22,912,026		
2017	Projected	Savings	Reported and Verified Savings			
Customer Class and Program	kW	kWh	kW	kWh		
Commercial	10,641	17,723,216	13,586	19,603,114		
Commercial SOP	150	657,000	51	277,531		
Small Comm. Solutions MTP	730	3,197,400	746	3,687,641		
Large C&I Solutions MTP	2,011	10,569,816	2,240	11,214,161		
Texas SCORE MTP	750	3,285,000	870	4,398,788		
Load Management SOP	7,000	14,000	9,679	24,993		
Residential	618	1,459,936	968	2,256,910		
Residential Solutions MTP	418	732,336	429	870,851		
LivingWise [®] MTP	200	727,600	539	1,386,059		
Hard-to-Reach	800	1,051,200	731	1,451,768		
Hard-to-Reach Solutions MTP	800	1,051,200	731	1,451,768		
Total	12,059	20,234,352	15,285	23,311,792		

VII. Historical Program Expenditures

Table 9 documents EPE's incentive and administration expenditures for the previous five years (2013-2017) by program for each customer class. Note that this table does not include R&D expenditures, EM&V expenditures, and administration costs not allocated to particular programs. R&D expenditures, EM&V expenditures, and administration costs not associated with particular programs for 2017 can be found in Table 10.

Table 9: Historical Program Incentive and Administration Expenditures for 2013 through 2017¹¹

	20	17	20	16	20	015	2014	4	2013		
Programs	Incent.	Admin			Incent.	Admin	Incent.	Admin	Incent.	Admin	
Commercial	\$2,589,932	\$0	\$2,354,215	\$0	\$2,308,969	\$739	\$2,414,919	\$1,450	\$2,646,031	\$21,614	
Commercial SOP	\$23,821	\$0	\$14,605	\$0	\$160,945	\$739	\$180,951	\$1,450	\$204,235	\$21,091	
Small Comm. Solutions	\$487,385	\$0	\$524,420	\$0	\$426,637	\$0	\$458,717	\$0	\$461,625	\$0	
Large C&I Solutions	\$1,038,708	\$0	\$1,054,659	\$0	\$932,618	\$0	\$820,871	\$0	\$872,385	\$0	
Texas SCORE MTP	\$652,225	\$0	\$436,538	\$0	\$447,792	\$0	\$468,130	\$0	\$440,716	\$0	
Load Management SOP	\$387,793	\$0	\$323,993	\$0	\$318,627	\$0	\$462,300	\$0	\$464,700	\$0	
Commercial Rebate Pilot Program	NA	NA	\$0	\$0	\$22,350	\$0	\$23,950	\$0	\$202,370	\$523	
Residential	\$585,053	\$0	\$592,090	\$0	\$548,496	\$0	\$560,482	\$0	\$536,266	\$0	
Residential Solutions	\$238,744	\$0	\$245,748	\$0	\$202,144	\$0	\$214,136	\$0	\$190,006	\$0	
LivingWise [®] MTP	\$346,309	\$0	\$346,342	\$0	\$346,352	\$0	\$346,346	\$0	\$346,260	\$0	
Hard-to-Reach	\$555,425	\$0	\$662,577	\$0	\$651,474	\$0	\$576,214	\$0	\$600,238	\$0	
Hard-to-Reach Solutions	\$555,425	\$0	\$662,577	\$0	\$651,474	\$0	\$576,214	\$0	\$600,238	\$0	
Residential / Comm.	\$0	\$0	\$0	\$0	\$334,648	\$30,178	\$405,380	\$33,941	\$454,833	\$42,735	
Appliance Recycling MTP	NA	NA	NA	NA	\$140,418	\$0	\$181,185	\$0	\$241,747	\$7,145	
Solar PV Pilot MTP	NA	NA	NA	NA	\$194,230	\$30,178	\$224,195	\$33,941	\$213,086	\$35,590	
Total	\$3,730,410	\$0	\$3,608,882	\$0	\$3,843,587	\$30,917	\$3,956,995	\$35,391	\$4,237,368	\$64,349	

¹¹ 2016 expenditures are from EEPR filed in Project No. 46907; 2015 expenditures are from EEPR filed in Project No. 45675; 2014 expenditures are from EEPR filed in Project No. 44480; and 2013 expenditures are from EEPR filed in Project No. 42264.

VIII. Program Funding and Explanation of Administration Costs for Calendar Year 2017

As shown in the subtotal for the "Total Funds Expended" column of Table 10, EPE spent \$4,079,381 on program expenses (excluding EM&V and EECRF Proceeding Expenses) for its PUCT-approved energy efficiency programs in 2017. These programs were funded by EPE's 2017 EECRF. These expenses account for 92.8% of the total forecasted program budget for 2017 of \$4,394,650. Actual program funding levels are shown in Table 10 and Table 11.

The administration expenses shown in Table 10 benefited the entire portfolio of programs. These expenses include, but were not limited to, outsourced program administration, marketing (i.e. website maintenance and promotional items), Electric Utility Marketing Managers of Texas (EUMMOT) expenses, costs associated with regulatory filings, and EM&V administration expenses outside of those associated with the PUCT-appointed EM&V contractor.

Table 10: Program Funding for Calendar Year 2017

	ı	Total Projected Budget	Number of Customer Projects	ı	Actual Funds Expended (Incentives)		Expended (Incentives)		Expended (Incentives)		Expended		Actual Funds Expended		Actual Funds Expended		Expended (Incentives) Expended (Admi		tual Funds expended Admin & R&D)	Total Funds Expended		Funds Committed (Not Expended)		Funds Remaining	
Commercial	\$	2,760,075	683	\$	2,589,932	\$	-	\$	2,589,932	\$	-	\$	170,143												
Commercial SOP		128,995	5		23,821		-		23,821		-		105,174												
Small Comm. Solutions MTP		461,115	350		487,385		-		487,385		-		(26,270)												
Large C&I Solutions MTP		1,005,396	210		1,038,708		-		1,038,708		-		(33,312)												
Texas SCORE MTP		704,569	108		652,225		-		652,225		-		52,344												
Load Management		460,000	10		387,793		-		387,793		-		72,207												
Residential	\$	576,346	12,080	\$	585,053	\$	-	\$	585,053	\$	-	\$	(8,707)												
Residential Solutions MTP		230,000	3,141		238,744		-		238,744				(8,744)												
LivingWise MTP		346,346	8,939		346,309		-		346,309		-		37												
Hard-to-Reach	\$	600,000	5,974	\$	555,425		-	\$	555,425	\$	•	\$	44,575												
Hard-to-Reach Solutions MTP		600,000	5,974		555,425		-		555,425		-		44,575												
Research and Development	\$	364,000	-	\$	-	\$	306,365	\$	306,365	\$	-	\$	57,635												
Demand Response		364,000					306,365		306,365				57,635												
Administration Expenses	\$	94,229		\$	-	\$	42,606	\$	42,606		-	\$	51,623												
Subtotal	\$	4,394,650	18,737	\$	3,730,410	\$	348,971	\$	4,079,381	\$	•	\$	315,269												
EM&V Expenses	\$	56,342				\$	56,331	\$	56,331	\$		\$	11												
EECRF Proceeding Expenses (includes EPE and Municipal expenses)*	\$	85,000			-	\$	124,718	\$	124,718			\$	(39,718)												
Total	\$	4,535,992	18,737	\$	3,730,410	\$	530,020	\$	4,260,430	\$	-	\$	275,562												

^{*}Actual EECRF proceeding expenses of \$124,718 consists of \$108,017.12 in EPE proceeding expenses and \$16,700.69 in municipal proceeding expenses.

Table 11: Program Comparison – Budget to Actual Expenditures

Drograms		2017	2017		Daraant	>409/ Variance Evalenation
Programs		Budget	Ex	penditures	Percent	>10% Variance Explanation
Commercial	\$	2,760,075	\$	2,589,932	93.8%	
Commercial SOP		128,995		23,821	18.5%	Program did not draw the number of participants anticipated. Funds were reallocated to better performing programs. The Program has been discontinued for Program Year 2018.
Small Comm. Solutions MTP		461,115		487,385		
Large C&I Solutions MTP		1,005,396		1,038,708		
Texas SCORE MTP		704,569		652,225	92.6%	
Load Management		460,000		387,793	84.3%	Program expenditures were not as high as anticipated; however, demand and energy savings exceeded goal.
Residential	\$	576,346	\$	585,053		
Res. Solutions MTP		230,000		238,744	103.8%	
LivingWise MTP		346,346		346,309	100.0%	
Hard-to-Reach	\$	600,000	\$	555,425	92.6%	
Hard-to-Reach Solutions MTP		600,000		555,425	92.6%	
Research and Development	\$	364,000	\$	306,365	84.2%	
Demand Response		364,000		306,365	84.2%	Administrative expenses attributable to R&D were less than anticipated.
Admin. Expenses	\$	94,229	\$	42,606		Not allocated to specific programs
Total	\$	4,394,650	\$	4,079,381	92.8%	

IX. Program Results for MTPs

A. Market Transformation Programs

Small Commercial Solutions MTP

In 2017, the Small Commercial Solutions MTP provided customers and participating contractors with cash and non-cash incentives. This program targeted commercial customers with a demand of less than 100 kW. This program focused on improving the energy efficiency of small commercial facilities, as well as improving the installation practices of participating contractors. EPE contracted with a third-party program implementer to provide the non-cash incentives such as technical assistance, education on energy efficiency projects, and communications services to participating customers and contractors.

The 2017 projected savings for this program was 730 kW. There were 350 projects completed in the Small Commercial Solutions MTP during 2017. These projects reduced demand by 746 kW and saved 3,687,641 kWh in energy.

Large C&I Solutions MTP

The Large C&I Solutions MTP was established to test a solutions-based approach toward garnering peak kW savings among large commercial customers. This program targeted commercial customers with a demand of equal to or greater than 100 kW. Key components of the "solutions" approach include: EPE acting as a third-party unbiased player to assist commercial customers in identifying energy efficiency opportunities, realizing the financial benefits associated with such opportunities, assisting with the evaluation of contractor bids, and conveying the social and financial benefits by way of internal and community-wide communications efforts. Besides peak demand reduction, this program has also had success in reaching out to the contracting community, including affiliated architectural and engineering firms.

In 2017, the Large C&I Solutions MTP provided customers with cash and non-cash incentives. As with the Small Commercial Solutions MTP, EPE contracted with a third-party program implementer to provide non-cash incentives such as technical assistance, education on energy efficiency projects, measurement and verification, and communications services to participating customers.

The 2017 projected savings for this program was 2,011 kW. There were 210 projects completed in the Large C&I Solutions MTP during 2017 that reduced demand by 2,240 kW and saved 11,214,161 kWh in energy.

Texas SCORE MTP

As with the previous programs, the 2017 Texas SCORE MTP provided customers with cash and non-cash incentives. This program targeted schools districts, higher educational facilities and local governmental entities. EPE recognized that many school districts and local governments lack the technical knowledge, first-hand experience, and management decision-making processes that are necessary for identifying, prioritizing and completing projects that improve their facilities' energy performance and reduce operating costs. This program helped these customers identify, prioritize, budget, and complete energy efficiency projects. EPE contracted with a third-party program implementer to provide non-cash incentives such as benchmarking, technical assistance, education on energy efficiency projects, and communications services to participating customers.

The 2017 projected savings for this program was 750 kW. This program had 108 projects from participating schools and local government entities in the EPE service territory. These projects reduced demand by 870 kW and saved 4,398,788 kWh in energy.

Residential Solutions MTP

In 2017, the Residential Solutions MTP offered residential customers, through the use of participating contractors, incentives for making energy efficient improvements to their homes. This program focused on improving the energy efficiency of residential buildings, as well as improving the installation practices of the participating contractors. EPE contracted with a third-party implementer to administer the Residential Solutions MTP.

The 2017 projected savings for this program was 418 kW. There were 3,141 participants that reduced demand by approximately 429 kW and saved 870,851 kWh in energy.

LivingWise® MTP

The LivingWise® MTP is an educational program that uses a school-based method that builds student knowledge, provides high energy efficiency devices to families and serves as an effective community outreach program. In 2017, each participant received a kit that contained energy saving devices to be installed in their homes, as well as energy efficiency educational materials.

The 2017 projected savings for this program was 200 kW. In 2017, the LivingWise® MTP provided 8,939 LivingWise® kits. The savings from this program were 539 kW in demand savings and 1,386,059 kWh in energy savings.

Hard-to-Reach Solutions MTP

In 2017, the Hard-to-Reach Solutions MTP offered residential customers who were at or below 200% of the Federal Poverty Guidelines, through the use of participating contractors, incentives for making energy efficient improvements to their homes. This program focused on improving the energy efficiency of low income residential buildings, as well as improving the installation practices of the participating contractors. EPE contracted with a third-party implementer to administer the Hard-to-Reach Solutions MTP.

The 2017 projected savings for this program was 800 kW. There were 5,974 projects in this program that reduced demand by 731 kW and saved 1,451,768 kWh in energy.

X. Current Energy Efficiency Cost Recovery Factor (EECRF)

Report for 2017

In Docket No. 45885, EPE was granted approval for recovery through its 2017 EECRF of (a) \$4,394,650 in energy efficiency program costs projected to be incurred from January 1 through December 31, 2017; (b) a performance incentive for 2015 of \$512,545; (c) EPE's 2015 EECRF proceeding expenses of \$83,290; and (d) the 2015 over-recovery revenue amount of \$380,039. EPE requested that the EECRF be applicable beginning January 1, 2017. The Final Order in Docket No. 45885 concluded that the filling conformed to the requirements of the EE Rule. The order also found the allocation of the energy efficiency costs and performance incentive in accordance with the EE Rule. The recovery of the agreed-upon EECRF amount of \$4,610,446 is based on a dollar per kWh rate. The 2017 cost recovery factors by rate are listed in Table 12.

Table 12: 2017 EECRF Monthly Rates

Rate No.	Description	Energy Efficiency Cost Recovery Factor (\$/kWh)
01	Residential Service Rate	\$ 0.000704
02	Small Commercial Service Rate	\$ 0.004017
07	Outdoor Recreational Lighting Service Rate	\$ (0.000407)
08	Governmental Street Lighting and Signal Service Rate	\$ (0.000110)
09	Governmental Traffic Signal Service	\$0.000000
11	Municipal Pumping Service Rate	\$ (0.001121)
11-TOU	Time-Of-Use Municipal Pumping Service Rate	\$ (0.001121)
WH	Water Heating	\$ (0.000188)
22	Irrigation Service Rate	\$ (0.001053)
24	General Service Rate	\$ 0.000623
25	Large Power Service Rate (excludes transmission)	\$ 0.001185
34	Cotton Gin Service Rate	\$ (0.000142)
41	City and County Service Rate	\$ 0.001535
46	Maintenance Power Service For Cogeneration And Small Power Production Facilities	\$ (0.000142)
47	Backup Power Service For Cogeneration And Small Power Production Facilities	\$ (0.000142)

¹² Docket No. 45885, Final Order at Findings of Fact No. 22 (November 2, 2016)

¹³ Id. at Conclusion of Law No. 9

XI. Revenue Collected through EECRF

In 2017, EPE collected a total of \$4,597,301 under Rate Schedule No. 97 – Energy Efficiency Cost Recovery Factor.

XII. Over/Under Recovery of Energy Efficiency Program Costs

In 2017, EPE over-recovered an amount of \$302,124 as shown in Table 13. Docket No. 45885 did not order the recovery of 2016 EM&V costs; however, those costs were addressed in Docket No. 47125.

Table 13: Authorized and Actual Recovery Amounts

Description	uthorized in Docket No. 45885	Actual
January 1 – December 31, 2017 Energy Efficiency Costs	\$ 4,394,650	\$ 4,079,381
Program Year 2016 EM&V Review	\$ -	\$ -
2015 (Over)/Under Recovery	\$ (380,039)	\$ (380,039)
2015 Performance Bonus	\$ 512,545	\$ 512,545
2015 EECRF Proceeding Costs	\$ 83,290	\$ 83,290
2017 Total Costs	\$ 4,610,446	\$ 4,295,177
2017 EECRF Revenues		\$ 4,597,301
2017 (Over)/Under Recovery		\$ (302,124)

XIII. Underserved Counties

EPE serves customers in three Texas counties: Culberson, Hudspeth, and El Paso. During 2017, the majority of energy efficiency projects were in El Paso County. EPE has defined Underserved Counties as any county in the Texas EPE service territory that EPE reported no demand or energy savings through any of its 2017 energy efficiency programs. Based on this definition, EPE had no Underserved Counties in 2017.

Table 14: 2017 Energy Efficiency Activities by County

County	Dortioiponto	Reported Savings		
County	Participants	kW kWh	kWh	
El Paso County	18,683	15,281.00	23,302,248	
Culberson County	23	1.39	3,566	
Hudspeth County	31	2.96	5,978	
Total	18,737	15,285.35	23,311,792	

XIV. Performance Incentive Calculation

EPE achieved a 15,285 kW reduction in demand from its energy efficiency programs offered in 2017. EPE's demand reduction goal for 2017 was 11,160 kW. EPE's achievement represents 136.96% of its demand reduction goal, qualifying it for a performance incentive. Per 16 TAC §25.181, EPE is eligible for a performance incentive of \$1,087,804 which it plans to request in its 2018 EECRF filling, as shown below in Table 15.

Docket No. 45885 did not order the recovery of 2016 EM&V costs, however EM&V costs were forecasted for purposes of budget planning in Project No. 46907.

Table 15: 2017 Performance Incentive Calculations

	kW	kWh
Demand and Energy Goals	11,160	19,552,320
Demand and Energy Savings		
Actual Demand and Energy Savings		
(including Hard-to-Reach)	15,285	23,311,792
Reported/Verified Hard-to-Reach	731	
PUCT-Approved Avoided Costs		
per kW		\$80.00
per kWh	\$0.03989	
Inflation Rate	2.00%	
Discount Rate	6.586%	
Total Avoided Costs	\$1	15,138,470
2017 Program Costs (includes allocated EM&V and municipalities'		
EECRF proceeding costs)	\$4,260,431*	
Net Benefits	¢40,979,020	
Mer Delietif2	Ф	10,878,039
Performance Incentive	\$	1,087,804

^{*} The 2017 program costs in Table 15 vary slightly from the program costs in Table 10 due to rounding.

ACRONYMS

C&I Commercial and Industrial

DR Demand Response

DRPP Demand Response Pilot Program

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 Provider

EPE El Paso Electric Company

EM&V Evaluation, Measurement & Verification

HTR Hard-To-Reach

M&V Measurement and Verification

MTP Market Transformation Program

PUCT Public Utility Commission of Texas

PURA Public Utility Regulatory Act

PV Photovoltaic

R&D Research and Development

RES Residential

SCORE Schools and Cities Conserving Resources

SOP Standard Offer Program

TAC Texas Administrative Code

GLOSSARY

Glossary is the same as the definitions in 16 TAC §25.181(c).

APPENDIX A: REPORTED DEMAND AND ENERGY REDUCTION BY COUNTY

Table 16: Program Savings by County

Commercial SOP

County	# of Dorticipants	Reported Savings		
County	# of Participants	kW	kWh	
El Paso County	5	51.26	277,531	
Total	5	51.26	277,531	

Small Commercial Solutions MTP

County	# of Participants	Reported Savings		
County	# of Participants	kW	kWh	
El Paso County	350	745.66	3,687,641	
Total	350	745.66	3,687,641	

Large C&I Solutions MTP

County	# of Participants	Reported Savings		
County	# Of Farticipants	kW	kWh	
El Paso County	210	2,239.66	11,214,161	
Total	210	2,239.66	11,214,161	

Texas SCORE MTP

County	# of Participants	Reported Savings		
County	# Of Farticipants	kW	kWh	
El Paso County	108	870.23	4,398,788	
Total	108	870.23	4,398,788	

Load Management SOP

County	# of Participants	Reported Savings		
County	# Of Participants	kW	kWh	
El Paso County	10	9,678.89	24,993	
Total	10	9,678.89	24,993	

Residential Solutions MTP

County	# of Participants	Reported Savings		
County	# of Participants	kW	kWh	
El Paso County	3,140	429.01	870,295	
Hudspeth County	1	0.36	556	
Total	3,141	429.37	870,851	

LivingWise® MTP

County	# of Dorticipants	Reported Savings		
County	# of Participants	kW kWh	kWh	
Culberson	23	1.39	3,566	
El Paso County	8,887	536.24	1,377,996	
Hudspeth County	29	1.75	4,497	
Total	8,939	539.38	1,386,059	

Hard-to-Reach Solutions MTP

County	# of Dorticipants	Reported Savings		
County	# Of Participants	# of Participants kW	kWh	
El Paso County	5,973	729.86	1,450,843	
Hudspeth County	1	0.85	925	
Total	5,974	730.71	1,451,768	

REDLINE PAGES

El Paso Electric Company

2018 Energy Efficiency Plan and Report

16 Texas Administrative Code §25.181 and §25.183

April 2, 2018

(Errata April 27, 2018)

Project No. 48146



INTRODUCTION

El Paso Electric Company (EPE or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Texas Administrative Code §25.181 and §25.183 (TAC), which are the sections of the Energy Efficiency Rule (EE Rule) implementing the Public Utility Regulatory Act (PURA) §39.905. As mandated by this section of PURA, 16 TAC §25.181(e)(1) states that each investor owned electric utility must achieve the following minimum demand reduction goals through market-based standard offer programs (SOPs), targeted market transformation programs (MTPs) or utility self-delivered programs:

- §25.181(e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
 - (A) The utility shall acquire no less than a 25% reduction of the electric utility's annual growth in demand of residential and commercial customers for the 2012 program year.
 - (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% of 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, MTPs and utility self-delivered programs that control the manner in which utilities must administer their portfolio of energy efficiency programs in order to achieve their mandated annual demand reduction goals. EPE'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 reports EPE's achievements for 2017 and its projections for 2018 and 2019 as required by the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendixees.

EXECUTIVE SUMMARY

The Energy Efficiency Plan portion of this EEPR details EPE's plan to meet the energy efficiency demand reduction goal for 2018, as established pursuant to 16 TAC §25.181(e)(2). The Final Order of Docket No. 47125¹ issued on February 15, 2018, established the EECRF rates applicable to EPE for 2018. The order also left in place the same demand reduction goal as EPE had in 2017 for the 2018 energy efficiency programs. This goal was 11.16 MW, which is greater than four-tenths of one percent of EPE's average weather-adjusted peak demand at meter for 2012 through 2016. Since EPE has reached a demand reduction goal of greater than four-tenths of 1 percent of its summer weather-adjusted peak demand and in accordance with 16 TAC §25.181(e)(1)(E), EPE's 2019 demand reduction goal should remain at 11.16 MW.

The Final Order of Docket No. 47125 also established an energy efficiency program budget for 2018 of \$4,394,650.² EPE made some modifications to the individual program budgets; however, the overall program budget for 2017 remained the same at \$4,394,650. The modifications consisted of the discontinuance of the Commercial SOP, a reduction to the Texas SCORE MTP budget, an increase to the Residential Solutions MTP budget, the addition of the new Texas Appliance Recycling MTP, the addition of the Demand Response Pilot Program MTP, and a decrease in the Research and Development (R&D) budget.

The goals, budgets and implementation plans that are included in this EEPR are influenced substantially by the requirements of the EE Rule and lessons learned regarding energy efficiency service providers and customer participation in the various energy efficiency programs. A summary of projected goals, savings and budgets is presented in Table 1.

Table 1: Summary of 2018 & 2019 Projected Goals, Savings and Budgets³

Calendar Year	Average Growth in Demand (MW at Meter)	Goal Metric: 30% of 5- year Average Growth of Demand (MW at Meter)	Goal Metric: .4% of 5-year Average Peak Demand (MW at Meter)	Demand Goal (MW)*	Energy Goal (MWh)**	Projected MW Savings (at Meter)	Projected MWh Savings (at Meter)	Proposed Budget (000's)***
2018	38.0	11.39	4.68	11.16	19,552	14.181	21,054	\$4,551
2019	50.8	15.24	4.89	11.16	19,552	14.181	21,054	\$4,552

^{*} Pursuant to 16 TAC §25.181(e)(1)

The Energy Efficiency Report portion of this EEPR shows that, in 2017, EPE achieved a demand reduction in excess of its goal. In 2017, the Company achieved a demand reduction of 15,285 kW15.119 MW, which exceeded the demand reduction goal of 11,160 kW11.16 MW by 36.9635.47%. This was accomplished through the implementation of EPE's SOPs and MTPs.

^{**} Calculated using a 20% conservation load factor

^{***}Proposed budget includes the overall program budget, EM&V expenses, and EECRF proceeding expenses

¹Application of El Paso Electric Company for Approval to Revise its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Cost Cap, Docket No. 47125.

² Id. at Findings of Fact No. 39

³ Average Growth in Demand and Weather Adjusted Peak Demand are found in Table 4, Projected Demand and Energy <u>SavingsReductions</u> are found in Table 5, and Proposed Budgets are found in Table 6.

Research and Development

EPE has allocated \$75,000 to R&D for 2018. This funding amount is less than 10% of EPE's 2017 total program costs in accordance with 16 TAC §25.181(i). EPE will also utilize a portion of the 2018 R&D budget to fund a deemed savings study that will be performed by Frontier. The remainder of the budget will be used for research on future pilot programs.

C. New Programs for 2018 and 2019

Demand Response Pilot Program

The Demand Response Pilot Program targets reduction in central refrigerated air conditioning load for residential and small commercial customers. An early marketing campaign referred to the Demand Response Pilot Program as the eSmart Thermostat Program. EPE has the capability of remotely adjusting participating customers' internet-enabled smart thermostats during Demand Response Events. Customers will receive a \$25 incentive for participation in the program year. EPE has contracted with EnergyHub to market and administer this program.

Texas Appliance Recycling MTP

EPE has contracted with ARCA to implement the Texas Appliance Recycling MTP in 2018. The Texas Appliance Recycling MTP provides incentives designed to encourage EPE's residential customers to recycle their older, less efficient refrigerators and freezers rather than use them as secondary or backup units. The Texas Appliance Recycling MTP offers eligible customers a \$50 incentive for EPE to remove and recycle their old refrigerator or freezer.

D. Discontinued Program(s) for 2018 and 2019

In 2018, EPE has discontinued the Commercial SOP due to recurring low customer participation. The Commercial SOP targeted small and large commercial and industrial customers. The program paid incentives to qualified project sponsors or to commercial customers who acted as their own project sponsor. Commercial SOP energy efficiency projects included lighting retrofits and HVAC upgrades. The discontinuation of this commercial program will also contribute to the reduction of the commercial cost cap pursuant to 16 TAC §25.181(f)(7). EPE currently has no plans to discontinue any programs in 2019.

E. General Implementation Process

Program Implementation

In 2018, EPE will continue to conduct activities to implement energy efficiency programs in a non-discriminatory and cost-effective manner. EPE will provide program announcements to the Energy Efficiency Service Provider (EESP) community in the form of pertinent news and updates, as necessary.

In April 2018, EPE will announce its 2018 Load Management SOP through the EPE website. EESPs who participated in the 2017 Load Management SOP will also be sent e-mails to inform them of the opening of this program. The program manual and initial application will be made available to EESPs on the website. All applications are considered on a first-come, first-served basis and reviewed for eligibility. Once approved, EESPs will be informed of their acceptance into the program.

ENERGY EFFICIENCY REPORT

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

Table 7 documents EPE's actual demand reduction goals and energy targets for the previous five years (2013-2017) calculated in accordance with 16 TAC §25.181.

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

Calendar Year	Demand Goals (<u>kW</u> MW)	Energy Targets (<u>kWh</u> MWh)	Actual Demand Reduction (<u>kW</u> ##)	Actual Energy Savings (<u>kWh</u> MWh)
2017 ⁶	<u>11,160</u> 11.16	<u>19,552,320</u> 19,552	<u>15,285</u> 15.119	<u>23,311,792</u> 23,331
2016 ⁷	<u>11,160</u> 11.16	<u>19,552,320</u> 19,552	<u>12,790</u> 12.790	<u>22,912,026</u> 22,912
2015 ⁸	<u>11,160</u> 11.16	<u>19,552,320</u> 19,552	<u>12,305</u> 12.305	<u>22,282,527</u> 22,283
2014 ⁹	<u>11,160</u> 11.16	<u>19,552,320</u> 19,552	<u>13,389</u> 13.389	22,117,82222,118
2013 ¹⁰	<u>11,160</u> 11.16	<u>19,552,320</u> 19,552	<u>14,188</u> 14.188	23,394,39423,394

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^{6 2017 &}lt;u>demandMW</u> goal and <u>energyMWh</u> target as reported in EPE's EEPR filed April 3, 2017 under Project No. 46907. 2017 actual demand reduction and energy savings reported in this document, Project No. 48146.

⁷ 2016 <u>demandMW</u> goal and <u>energyMWh</u> target as reported in EPE's EEPR filed April 1, 2016 under Project No. 45675. 2016 actual demand reduction and energy savings reported in this document, Project No. 46907.

^{8 2015} demandMW goal and energyMWh target as reported in EPE's EEPR filed April 1, 2015 under Project No. 44480. 2015 actual demand reduction and energy savings reported in Project No. 45675.

⁹ 2014 <u>demandMW</u> goal and <u>energyMWh</u> target as reported in EPE's EEPR filed April 1, 2014 under Project No. 42264. 2014 actual demand reduction and energy savings reported in Project No.44480.

¹⁰ 2013 <u>demandMW</u> goal and <u>energyMWh</u> target as reported in EPE's EEPR filed March 29, 2013 under Project No. 41196. 2013 actual demand reduction and energy savings reported in Project No. 42264.

VI. Projected, Reported and Verified Demand and Energy Savings

Table 8: Projected versus Reported	Savings for 201	.6 and 2017 (at	: Meter)	
2016	Projected	Savings	•	and Verified vings
Customer Class and Program	kW	kWh	kW	kWh
Commercial	11,207	18,104,000	11,194	19,909,300
Commercial SOP	700	3,066,000	30	177,439
Small Comm. Solutions MTP	730	3,197,000	852	3,856,747
Large C&I Solutions MTP	2,011	8,808,000	2,162	12,734,634
Texas SCORE MTP	700	2,759,000	551	3,117,684
Load Management SOP	7,000	14,000	7,599	22,796
Commercial Rebate Pilot Program	66	260,000	-	-
Residential	558	2,074,000	672	1,542,351
Residential Solutions MTP	418	732,000	452	814,715
LivingWise [®] MTP	140	1,342,000	220	727,636
Hard-to-Reach	800	1,051,200	924	1,460,375
Hard-to-Reach Solutions MTP	800	1,051,200	924	1,460,375
Total	12,565	21,229,200	12,790	22,912,026
2017	Projected	Savings	Reported and Saving	
Customer Class and Program	kW	kWh	kW	kWh
Commercial	10,641	17,723,216	13,586	19,603,114
Commercial SOP	150	657,000	51	277,531
Small Comm. Solutions MTP	730	3,197,400	746	3,687,641
Large C&I Solutions MTP	2,011	10,569,816	2,240	11,214,161
Texas SCORE MTP	750	3,285,000	870	4,398,788
Load Management SOP	7,000	14,000	9,679	24,993
Residential	618	1,459,936	968	2,256,910
Residential Solutions MTP	418	732,336	429	870,851
LivingWise [®] MTP	200	727,600	539	1,386,059
Hard-to-Reach	800	1,051,200	731	1,451,768
Hard-to-Reach Solutions MTP	800	1,051,200	731	1,451,768
Total	12,059	20,234,352	15,285	23,311,792

VII. Historical Program Expenditures

Table 9 documents EPE's incentive and administration expenditures for the previous five years (2013-2017) by program for each customer class. Note that this table does not include R&D expenditures, EM&V expenditures, and administration costs not allocated to particular programs. R&D expenditures, EM&V expenditures, and administration costs not associated with particular programs for 2017 can be found in Table 10.

Table 9: Historical Program Incentive and Administration Expenditures for 2013 through 2017¹¹

	2017		20	16	20	015	2014	4	2013	
Programs	Incent.	Admin			Incent.	Admin	Incent.	Admin	Incent.	Admin
Commercial	\$2,589,932	\$0	\$2,354,215	\$0	\$2,308,969	\$739	\$2,414,919	\$1,450	\$2,646,031	\$21,614
Commercial SOP	\$23,821	\$0	\$14,605	\$0	\$160,945	\$739	\$180,951	\$1,450	\$204,235	\$21,091
Small Comm. Solutions	\$487,385	\$0	\$524,420	\$0	\$426,637	\$0	\$458,717	\$0	\$461,625	\$0
Large C&I Solutions	\$1,038,708	\$0	\$1,054,659	\$0	\$932,618	\$0	\$820,871	\$0	\$872,385	\$0
Texas SCORE MTP	\$652,225	\$0	\$436,538	\$0	\$447,792	\$0	\$468,130	\$0	\$440,716	\$0
Load Management SOP	\$387,793	\$0	\$323,993	\$0	\$318,627	\$0	\$462,300	\$0	\$464,700	\$0
Commercial Rebate Pilot Program	NA	NA	\$0	\$0	\$22,350	\$0	\$23,950	\$0	\$202,370	\$523
Residential	\$585,053	\$0	\$592,090	\$0	\$548,496	\$0	\$560,482	\$0	\$536,266	\$0
Residential Solutions	\$238,744	\$0	\$245,748	\$0	\$202,144	\$0	\$214,136	\$0	\$190,006	\$0
LivingWise [®] MTP	\$346,309	\$0	\$346,342	\$0	\$346,352	\$0	\$346,346	\$0	\$346,260	\$0
Hard-to-Reach	\$555,425	\$0	\$662,577	\$0	\$651,474	\$0	\$576,214	\$0	\$600,238	\$0
Hard-to-Reach Solutions	\$555,425	\$0	\$662,577	\$0	\$651,474	\$0	\$576,214	\$0	\$600,238	\$0
Residential / Comm.	\$0	\$0	\$0	\$0	\$334,648	\$30,178	\$405,380	\$33,941	\$454,833	\$42,735
Appliance Recycling MTP	NA	NA	NA	NA	\$140,418	\$0	\$181,185	\$0	\$241,747	\$7,145
Solar PV Pilot MTP	NA	NA	NA	NA	\$194,230	\$30,178	\$224,195	\$33,941	\$213,086	\$35,590
Total	\$3,730,410	\$0	\$3,608,882	\$0	\$3,843,587	\$30,917	\$3,956,995	\$35,391	\$4,237,368	\$64,349

¹¹ 2016 expenditures are from EEPR filed in Project No. 46907; 2015 expenditures are from EEPR filed in Project No. 45675; 2014 expenditures are from EEPR filed in Project No. 44480; and 2013 expenditures are from EEPR filed in Project No. 42264.

Table 10: Program Funding for Calendar Year 2017

	Total Projected Budget	Number of Customer Projects		ctual Funds Expended Incentives)	E	tual Funds xpended Admin & R&D)	otal Funds Expended	Funds committed (Not expended)	Re	Funds emaining
Commercial	\$ 2,760,075	683	\$	2,589,932	\$	-	\$ 2,589,932	\$ -	\$	170,143
Commercial SOP	128,995	5		23,821		-	23,821	-		105,174
Small Comm. Solutions MTP	461,115	350		487,385		-	487,385	-		(26,270)
Large C&I Solutions MTP	1,005,396	210		1,038,708		-	1,038,708	-		(33,312)
Texas SCORE MTP	704,569	108		652,225		-	652,225	-		52,344
Load Management	460,000	10		387,793		-	387,793	-		72,207
Residential	\$ 576,346	12,080	\$	585,053	\$	-	\$ 585,053	\$ -	\$	(8,707)
Residential Solutions MTP	230,000	3,141		238,744		-	238,744	-		(8,744)
LivingWise MTP	346,346	8,939		346,309		-	346,309	-		37
Hard-to-Reach	\$ 600,000	5,974	\$	555,425		-	\$ 555,425	\$ -	\$	44,575
Hard-to-Reach Solutions MTP	600,000	5,974		555,425		-	555,425	-		44,575
Research and Development	\$ 364,000	-	\$	-	\$	306,365	\$ 306,365	\$ -	\$	57,635
Demand Response	364,000					306,365	306,365			57,635
Administration Expenses	\$ 94,229		\$	-	\$	42,606	\$ 42,606	-	\$	51,623
Subtotal	\$ 4,394,650	18,737	\$	3,730,410	\$	348,971	\$ 4,079,381	\$ -	\$	315,269
EM&V Expenses	\$ 56,342			-	\$	56,331	\$ 56,331	\$ -	\$	11
EECRF Proceeding Expenses (includes EPE and Municipal expenses)*	\$ 85,000			-	\$	124,718	\$ 124,718		\$	(39,718)
Total	\$ 4,535,992	18,737	\$	3,730,410	\$	530,020	\$ 4,260,430	\$ -	\$	275,562

^{*}Actual EECRF proceeding expenses of \$124,718 consists of \$108,017.12 in EPE proceeding expenses and \$16,700.69 in municipal proceeding expenses.

Table 11: Program Comparison – Budget to Actual Expenditures

Programs		2017	2017	Percent	>10% Variance Explanation
_			 penditures		·
Commercial	\$	2,760,075	\$ 2,589,932	93.8%	
Commercial SOP		128,995	23,821		Program did not draw the number of participants anticipated. Funds were reallocated to better performing programs. The Program has been discontinued for Program Year 2018.
Small Comm. Solutions MTP		461,115	487,385	105.7%	
Large C&I Solutions MTP		1,005,396	1,038,708	103.3%	
Texas SCORE MTP		704,569	652,225	92.6%	
Load Management		460,000	387,793	84.3%	Program expenditures were not as high as anticipated; however, demand and energy savings exceeded goal.
Residential	\$	576,346	\$ 585,053	101.5%	
Res. Solutions MTP		230,000	238,744	103.8%	
LivingWise MTP		346,346	346,309	100.0%	
Hard-to-Reach	\$	600,000	\$ 555,425	92.6%	
Hard-to-Reach Solutions MTP		600,000	555,425	92.6%	
Research and Development	\$	364,000	\$ 306,365	84.2%	
Demand Response Pilot Program MTP		364,000	306,365	84.2%	Administrative expenses attributable to R&D were less than anticipated.
Admin. Expenses	\$	94,229	\$ 42,606		Not allocated to specific programs
Total	\$	4,394,650	\$ 4,079,381	92.8%	

IX. Program Results for MTPs

A. Market Transformation Programs

Small Commercial Solutions MTP

In 2017, the Small Commercial Solutions MTP provided customers and participating contractors with cash and non-cash incentives. This program targeted commercial customers with a demand of less than 100 kW. This program focused on improving the energy efficiency of small commercial facilities, as well as improving the installation practices of participating contractors. EPE contracted with a third-party program implementer to provide the non-cash incentives such as technical assistance, education on energy efficiency projects, and communications services to participating customers and contractors.

The 2017 projected savings for this program was 730 kW. There were 350 projects completed in the Small Commercial Solutions MTP during 2017. These projects reduced demand by 746 kW and saved 3,687,641 kWh in energy.

Large C&I Solutions MTP

The Large C&I Solutions MTP was established to test a solutions-based approach toward garnering peak kW savings among large commercial customers. This program targeted commercial customers with a demand of equal to or greater than 100 kW. Key components of the "solutions" approach include: EPE acting as a third-party unbiased player to assist commercial customers in identifying energy efficiency opportunities, realizing the financial benefits associated with such opportunities, assisting with the evaluation of contractor bids, and conveying the social and financial benefits by way of internal and community-wide communications efforts. Besides peak demand reduction, this program has also had success in reaching out to the contracting community, including affiliated architectural and engineering firms.

In 2017, the Large C&I Solutions MTP provided customers with cash and non-cash incentives. As with the Small Commercial Solutions MTP, EPE contracted with a third-party program implementer to provide non-cash incentives such as technical assistance, education on energy efficiency projects, measurement and verification, and communications services to participating customers.

The 2017 projected savings for this program was 2,011 kW. There were 210 projects completed in the Large C&I Solutions MTP during 2017 that reduced demand by 2,2402,073 kW and saved 11,214,16111,230,307 kWh in energy.

Texas SCORE MTP

As with the previous programs, the 2017 Texas SCORE MTP provided customers with cash and non-cash incentives. This program targeted schools districts, higher educational facilities and local governmental entities. EPE recognized that many school districts and local governments lack the technical knowledge, first-hand experience, and management decision-making processes that are necessary for identifying, prioritizing and completing projects that improve their facilities' energy performance and reduce operating costs. This program helped these customers identify, prioritize, budget, and complete energy efficiency projects. EPE contracted with a third-party program implementer to provide non-cash incentives such as benchmarking, technical assistance, education on energy efficiency projects, and communications services to participating customers.

The 2017 projected savings for this program was 750 kW. This program had 108 projects from participating schools and local government entities in the EPE service territory. These projects reduced demand by 870871 kW and saved 4,398,7884,401,389 kWh in energy.

XI. Revenue Collected through EECRF

In 2017, EPE collected a total of \$4,597,301 under Rate Schedule No. 97 – Energy Efficiency Cost Recovery Factor.

XII. Over/Under Recovery of Energy Efficiency Program Costs

In 2017, EPE over-recovered an amount of \$302,124 as shown in Table 13. <u>Docket No. 45885 did not order the recovery of 2016 EM&V costs; however, those costs were addressed in Docket No. 47125.</u>

Table 13: Authorized and Actual Recovery Amounts

Description	uthorized in Docket No. 45885	Actual
January 1 – December 31, 2017 Energy Efficiency Costs	\$ 4,394,650	\$ 4,079,381
Program Year 2016 EM&V Review	\$ -	\$ -
2015 (Over)/Under Recovery	\$ (380,039)	\$ (380,039)
2015 Performance Bonus	\$ 512,545	\$ 512,545
2015 EECRF Proceeding Costs	\$ 83,290	\$ 83,290
2017 Total Costs	\$ 4,610,446	\$ 4,295,177
2017 EECRF Revenues		\$ 4,597,301
2017 (Over)/Under Recovery		\$ (302,124)

XIII. Underserved Counties

EPE serves customers in three Texas counties: Culberson, Hudspeth, and El Paso. During 2017, the majority of energy efficiency projects were in El Paso County. EPE has defined Underserved Counties as any county in the Texas EPE service territory that EPE reported no demand or energy savings through any of its 2017 energy efficiency programs. Based on this definition, EPE had no Underserved Counties in 2017.

Table 14: 2017 Energy Efficiency Activities by County

County	Participante	Reporte	d Savings
County	Participants	kW	kWh
	18,683	<u>15,281.00</u> 15,115.0	<u>23,302,248</u> <u>23,320,99</u>
El Paso County		0	5
Culberson County	23	1.39	3,566
Hudspeth County	31	2.96	5,978
	18,737	<u>15,285.35</u> 15,119.3	23,311,792 <mark>23,330,53</mark>
Total		5	9

EPE achieved a 15.119 MW15,285 kW reduction in demand from its energy efficiency programs offered in 2017. EPE's demand reduction goal for 2017 was 11.16 MW11,160 kW. EPE's achievement represents 135.47136.96% of its demand reduction goal, qualifying it for a performance incentive. Per 16 TAC §25.181, EPE is eligible for a performance incentive of \$1,087,804\$1,074,335 which it plans to request in its 2018 EECRF filing, as shown below in Table 15.

Docket No. 45885 did not order the recovery of 2016 EM&V costs, however EM&V costs were forecasted for purposes of budget planning in Project No. 46907. The performance incentive calculation below also includes the 2017 EECRF proceeding costs for municipalities of \$16,700.69. As a result, the total program costs for the performance incentive calculation will not match the actual total program costs exhibited in Table 15 differs from Table 10.

Table 15: 2017 Performance Incentive Calculations

	kW	kWh			
Demand and Energy Goals	11,160	19,552,320			
Demand and Energy Savings					
Actual Demand and Energy Savings (including Hard-to-Reach)	<u>15,285</u> 15,119	23,311,79223,330,539			
Reported/Verified Hard-to-Reach	731				
PUCT-Approved Avoided Costs					
per kW		\$80.00			
per kWh	\$0.03989				
Inflation Rate	2.00%				
Discount Rate	6.586%				
Total Avoided Costs	\$15,138	<u>,470</u> \$ 15,003,793			
2017 Program Costs (includes allocated EM&V and municipalities' EECRF proceeding costs)	\$4,260	<u>,431*</u> \$4 <u>,260,</u> 448			
Net Benefits	<u>\$10,878</u>	,039\$10,743,346			
Performance Incentive	\$1,087	7,804 <mark>\$1,074,335</mark>			

^{*} The 2017 program costs in Table 15 vary slightly from the program costs in Table 10 due to rounding.

ACRONYMS

C&I Commercial and Industrial

DR Demand Response

DRPP Residential and Small Commercial Demand Response Pilot Program

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 Provider

EPE El Paso Electric Company

EM&V Evaluation, Measurement & Verification

HTR Hard-To-Reach

M&V Measurement and Verification

MTP Market Transformation Program

PUCT Public Utility Commission of Texas

PURA Public Utility Regulatory Act

PV Photovoltaic

R&D Research and Development

RES Residential

SCORE Schools and Cities Conserving Resources

SOP Standard Offer Program

TAC Texas Administrative Code

GLOSSARY

Glossary is the same as the definitions in 16 TAC §25.181(c).

APPENDIX A: REPORTED DEMAND AND ENERGY REDUCTION BY COUNTY

Table 16: Program Savings by County

Commercial SOP

County	# of Participants	Reported Savings				
County	# of Participants	kW	kWh			
El Paso County	5	51.26	277,531			
Total	5	51.26	277,531			

Small Commercial Solutions MTP

County	# of Participants	Repo	orted Savings
County	# of Participants	kW	kWh
El Paso County	350	745.66	3,687,641
Total	350	745.66	3,687,641

Large C&I Solutions MTP

County	# of Participants	Repor	ted Savings
County	# Of Farticipants	kW	kWh
El Paso County	210	<u>2,239.66</u> 2,073.10	<u>11,214,161</u> 11,230,307
Total	210	<u>2,239.66</u> 2,073.10	<u>11,214,161</u> 11,230,307

Texas SCORE MTP

County	# of Participants	Reported Savings	
		kW	kWh
El Paso County	108	<u>870.23</u> 870.69	<u>4,398,788</u> 4,401,389
Total	108	<u>870.23</u> 870.69	<u>4,398,788</u> 4,401,389

Load Management SOP

County	# of Participants	Reported Savings	
		kW	kWh
El Paso County	10	9,678.89	24,993
Total	10	9,678.89	24,993