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 appendices.

##### 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. 47125[[1]](#footnote-1) 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]](#footnote-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 and budgets is presented in Table 1.

Table 1: Summary of 2018 & 2019 Projected Goals, Savings and Budgets[[3]](#footnote-3)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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)

\*\* Calculated using a 20% conservation load factor

\*\*\*Proposed budget includes the overall program budget, EM&V expenses, and EECRF proceeding expenses

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 15.119 MW, which exceeded the demand reduction goal of 11.16 MW by 35.47%. This was accomplished through the implementation of EPE’s SOPs, and MTPs.

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

# 2018 Programs

## 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](http://www.epelectric.com). Programs with manuals can be found at the following website:

[www.epelectric.com/tx/business/program-manuals-and-guidelines](http://www.epelectric.com/tx/business/program-manuals-and-guidelines).

## 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 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.

## 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. 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.

## Discontinued Program(s) for 2018 and 2019

In 2018, EPE has discontinued the Commercial SOP due to recurring low customer participation. 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.

## 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 efficiencymeasure(s) included in an eligible project; or
* an EESP has elected to follow the protocol because it believes that measurement andverification activities will result in a more accurate estimate of the savings associated with theproject 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.

## 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 [www.epelectric.com](http://www.epelectric.com) 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.

## 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.

# 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)

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

# 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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Calendar Year | Peak Demand (MW at Source) | | | | | | Energy Consumption (MWh at Meter) | | | | Growth (MW at Source) | Growth (MW at Meter)[[4]](#footnote-4) | Average Growth (MW at Meter)[[5]](#footnote-5) |
| Total System | | Residential & Commercial | | | | Total System | | Residential & Commercial | |
| Actual | Weather Adjusted | Actual | Weather Adjusted | Opt-Out | Peak Demand @ Source Net Opt-Outs | Actual | Weather Adjusted | Actual | Weather Adjusted | Weather Adjusted | Weather Adjusted | Weather 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 |

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



# 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



##### Energy Efficiency Report

# 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 (MW) | Energy Targets (MWh) | Actual Demand Reduction  (MW) | Actual Energy Savings (MWh) |
| 2017[[6]](#footnote-6) | 11.16 | 19,552 | 15.119 | 23,331 |
| 2016[[7]](#footnote-7) | 11.16 | 19,552 | 12.790 | 22,912 |
| 2015[[8]](#footnote-8) | 11.16 | 19,552 | 12.305 | 22,283 |
| 2014[[9]](#footnote-9) | 11.16 | 19,552 | 13.389 | 22,118 |
| 2013[[10]](#footnote-10) | 11.16 | 19,552 | 14.188 | 23,394 |

# Projected, Reported and Verified Demand and Energy Savings



# 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 2017[[11]](#footnote-11)



# 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



\*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



# Program Results for MTPs

## 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 2,073 kW and saved 11,230,307 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 871 kW and saved 4,401,389 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.

# 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 filing conformed to the requirements of the EE Rule.[[12]](#footnote-12) The order also found the allocation of the energy efficiency costs and performance incentive in accordance with the EE Rule.[[13]](#footnote-13) 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) |

# Revenue Collected through EECRF

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

# Over/Under Recovery of Energy Efficiency Program Costs

In 2017, EPE over-recovered an amount of $302,124 as shown in Table 13.

Table 13: Authorized and Actual Recovery Amounts



# 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 | Participants | Reported Savings | |
| kW | kWh |
| El Paso County | 18,683 | 15,115.00 | 23,320,995 |
| Culberson County | 23 | 1.39 | 3,566 |
| Hudspeth County | 31 | 2.96 | 5,978 |
| Total | 18,737 | 15,119.35 | 23,330,539 |

# Performance Incentive Calculation

EPE achieved a 15.119 MW reduction in demand from its energy efficiency programs offered in 2017. EPE's demand reduction goal for 2017 was 11.16 MW. EPE's achievement represents 135.47% of its demand reduction goal, qualifying it for a performance incentive. Per 16 TAC §25.181, EPE is eligible for a performance incentive of $1,074,335 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)* | 15,119 | 23,330,539 |
| *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 | $15,003,793 | |
|  |  | |
| 2017 Program Costs  (includes allocated EM&V and municipalities’ EECRF proceeding costs) | $4,260,448 | |
|  |  | |
| Net Benefits | $10,743,346 | |
|  |  | |
| Performance Incentive | $1,074,335 | |

##### 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 | |
| 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 | |
| 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 | |
| kW | kWh |
| El Paso County | 210 | 2,073.10 | 11,230,307 |
| Total | 210 | 2,073.10 | 11,230,307 |

Texas SCORE MTP

|  |  |  |  |
| --- | --- | --- | --- |
| County | # of Participants | Reported Savings | |
| kW | kWh |
| El Paso County | 108 | 870.69 | 4,401,389 |
| Total | 108 | 870.69 | 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 |

Residential Solutions MTP

|  |  |  |  |
| --- | --- | --- | --- |
| County | # of Participants | Reported Savings | |
| 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 Participants | Reported Savings | |
| kW | 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 Participants | Reported Savings | |
| 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 |

1. *Application 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. [↑](#footnote-ref-1)
2. *Id.* at Findings of Fact No. 39 [↑](#footnote-ref-2)
3. Average Growth in Demand and Weather Adjusted Peak Demand are found in Table 4, Projected Demand and Energy Reductions are found in Table 5, and Proposed Budgets are found in Table 6. [↑](#footnote-ref-3)
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. [↑](#footnote-ref-4)
5. Average 5 year historical growth in demand for residential and commercial customers for 2018 (2012-2016) and 2019 (2013-2017). [↑](#footnote-ref-5)
6. 2017 MW goal and MWh 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. [↑](#footnote-ref-6)
7. 2016 MW goal and MWh 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. [↑](#footnote-ref-7)
8. 2015 MW goal and MWh 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. [↑](#footnote-ref-8)
9. 2014 MW goal and MWh 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. [↑](#footnote-ref-9)
10. 2013 MW goal and MWh 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.

    [↑](#footnote-ref-10)
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. [↑](#footnote-ref-11)
12. Docket No. 45885, Final Order at Findings of Fact No. 22 (November 2, 2016) [↑](#footnote-ref-12)
13. *Id.* at Conclusion of Law No. 9 [↑](#footnote-ref-13)