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**2021 Energy Efficiency Plan and Report**

**16 Tex. Admin. Code §§ 25.181, 28.182 and 25.183**

**April 1, 2021**

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Project No. 51672



An **AEP** Company

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**BOUNDLESS ENERGY™**

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## INTRODUCTION

AEP Texas Inc. (AEP Texas or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (PUC or Commission) 16 Tex. Admin. Code §§ 25.181, 25.182 and 25.183 (TAC) (EE Rule), which implement the Public Utility Regulatory Act (PURA) § 39.905. Effective December 31, 2016, AEP Texas Central Company (TCC ) and AEP Texas North Company (TNC) were merged into their parent company, now called AEP Texas. The merger was approved by the Commission in Docket No. 46050 – *Application of AEP Texas Central Company, AEP Texas North Company, and AEP Utilities, Inc. for Approval of Merger*. The Commission ordered AEP Texas to “maintain separate TCC and TNC divisions, which will continue to charge separate rates and riders, and maintain separate tariffs, unless and until such time as the Commission may consider and approve consolidated rates and tariffs.”<sup>1</sup> Consistent with the Commission’s order, AEP Texas was maintaining two divisions within AEP Texas: AEP Texas – Central Division (formerly TCC) and AEP Texas – North Division (formerly TNC). In its Energy Efficiency Cost Recovery Factor (EECRF) filed in Docket No. 50892, AEP Texas requested and was approved for a combined EECRF for the two divisions of AEP Texas beginning in 2021. Therefore, this EEPR filing for AEP Texas presents separate sets of historical information for the two divisions of AEP Texas for 2020 and combined information for 2021 and 2022.

As mandated by PURA § 39.905, the EE Rule requires that each investor-owned electric transmission and distribution utility (TDU) achieve the following demand reduction goals through market-based standard offer programs (SOPs) and targeted market transformation programs (MTPs). 16 TAC § 25.181(e)(1) provides in pertinent part as follows:

- (e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
- (A) Beginning with the 2013 program year, until the trigger described in subparagraph (B) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
  - (B) If the demand reduction goal to be acquired by a utility under subparagraph (A) 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 (C) of this paragraph for each subsequent program year.

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<sup>1</sup> Docket No. 46050, *Application of AEP Texas Central Company, AEP Texas North Company, and AEP Utilities, Inc. for Approval of Merger*, Final Order at Ordering Paragraph No. 2 (Dec. 12, 2016).

- (C) Once the trigger described in subparagraph (B) 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.
- (D) Except as adjusted in accordance with subsection (u) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year, unless the commission establishes a goal for a utility pursuant to paragraph (2) of this subsection.

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

## **EEPR ORGANIZATION**

This EEPR consists of an Executive Summary, thirteen sections, a list of acronyms, and three appendices.

### **Executive Summary**

- Summarizes AEP Texas' plans for achieving its goals and projected energy efficiency savings for program years 2021 and 2022 and highlights AEP Texas' achievements for Program Year (PY) 2020.

### **Energy Efficiency Plan**

- Section I describes the program portfolio. It details how programs will be implemented, presents related informational and outreach activities, and provides an introduction to any programs not included in the 2020 EEPR.
- Section II explains the targeted customer classes, describes the estimated size of each class and the method of determining those class sizes.
- Section III presents the energy and demand goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes the proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

### **Energy Efficiency Report**

- Section V documents the demand reduction goal for each of the previous five years (2016-2020) based on its weather-adjusted peak demand and actual savings achieved for those years.
- Section VI compares the projected energy and demand savings to its reported and verified savings by program for PY 2019 and 2020.
- Section VII details the incentive and administration expenditures for each of the previous five years (2016-2020) detailed by program for each customer class.

- Section VIII compares the actual 2020 expenditures with the 2020 budget by program for each customer class. It also explains any cost differences of more than 10% from the overall program budget and from each program budget.
- Section IX describes the results from the MTPs.
- Section X describes Administrative costs and Research and Development activities.
- Section XI documents the 2021 EECRF.
- Section XII documents the 2020 EECRF Summary.
- Section XIII documents the Underserved Counties.

**Acronyms**

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

**Appendices**

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

**EXECUTIVE SUMMARY – ENERGY EFFICIENCY PLAN (PLAN)**

AEP Texas plans to achieve its 2021 mandated demand and energy goals of 20.6 MW and 36,091 MWh as shown in Table 1 below through residential and non-residential SOPs and MTPs. AEP Texas will utilize a budget of \$17,954,606 to accomplish these goals.

**Table 1: Summary of Goals, Projected Savings (at the Meter),<sup>2</sup> and Budgets**

<b>Calendar Year</b>	<b>Average Peak Demand at Meter (MW)</b>	<b>Goal Metric: 0.4% Peak Demand (MW)</b>	<b>Peak Demand Goal (MW)</b>	<b>Energy Goal (MWh)</b>	<b>Projected Demand Reduction (MW)</b>	<b>Projected Energy Savings (MWh)</b>	<b>Projected Budget (000's)*</b>
2021	5,150	20.60	20.60	36,091	39.27	56,055	\$17,955
2022	5,207	20.83	20.83	36,494	43.71	61,616	\$17,959

\* The Projected Budgets include costs associated with Evaluation, Measurement & Verification activities.

<sup>2</sup> Average Peak Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Tables 6 and 7.

## **EXECUTIVE SUMMARY – ENERGY EFFICIENCY REPORT (REPORT)**

The Central Division achieved demand and energy reductions of 50,448 kW and 59,258,548 kWh, respectively, in 2020. The total energy efficiency cost for achieving these savings was \$14,189,139. The Central Division's achievement exceeded the 2020 mandated energy efficiency goals of 16,380 kW and 28,698,000 kWh.

The North Division achieved demand and energy reductions of 5,792 kW and 12,767,733 kWh, respectively, in 2020. The total energy efficiency cost for achieving these savings was \$3,279,662. The North Division's achievement exceeded the 2020 mandated energy efficiency goals of 4,260 kW and 7,464,000 kWh.

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

# ENERGY EFFICIENCY PLAN

## I. 2021 Programs

### A. 2021 Program Portfolio

AEP Texas has implemented a variety of programs in 2021 to enable it to meet its goals in a manner that complies with PURA § 39.905 and the EE Rule. These programs target broad market segments and specific market sub-segments with significant opportunities for cost-effective energy savings.

Table 2 summarizes the programs and targeted customer class markets for Program Year 2021. The programs listed in Table 2 are described in further detail in Subsection B. AEP Texas maintains a web site containing information on participation, forms required for project submission, and program manuals at [www.AEPTexasEfficiency.com](http://www.AEPTexasEfficiency.com). This site is the primary method of communication used to provide program updates and information to Retail Electric Providers (REPs), potential Energy Efficiency Service Providers (EESPs), and other interested parties.

### **Implementation Process**

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

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

AEP Texas monitors projects being submitted so as to not accept duplicate enrollments for the same measures in multiple programs.



**Outreach Activities**

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

**Table 2: 2021 Energy Efficiency Program Portfolio**

<b>Program</b>	<b>Division</b>	<b>Target Market</b>	<b>Application</b>
Commercial Solutions MTP	Central & North	Commercial	Retrofit & New Construction
Commercial SOP	Central & North	Commercial	Retrofit & New Construction
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	Central	Commercial & Residential	Retrofit
Hard-to-Reach SOP	Central & North	Residential Hard-to-Reach	Retrofit & New Construction
High-Performance New Homes MTP	Central	Residential	New Construction
Load Management SOP	Central & North	Commercial	Retrofit
Open MTP	Central & North	Commercial	Retrofit
Residential Pool Pump Pilot MTP	Central	Residential	Retrofit & New Construction
Residential SOP	Central & North	Residential	Retrofit & New Construction
SCORE/CitySmart MTP	Central & North	Commercial	Retrofit & New Construction
SMART Source <sup>SM</sup> Solar PV MTP	Central & North	Commercial & Residential	Retrofit & New Construction
Targeted Low-Income Energy Efficiency Program	Central & North	Low-Income Residential	Retrofit

## ***B. Existing Programs***

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

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

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

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

### **CoolSaver<sup>SM</sup> A/C Tune-Up Market Transformation Program (CoolSaver<sup>SM</sup> MTP) (Central Division)**

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

- Training and certifying A/C technicians on the tune-up and air flow correction services and protocols.
- Paying incentives to A/C contactors for the successful implementation of A/C tune-up and air flow correction services.
- Paying incentives to A/C contractors who replace existing residential air conditioners and/or heat pumps with new high efficiency units of 16 SEER or higher. Additional incentives are paid for early retirement of operational equipment and for “right-sizing” replacement units.

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

The HTR SOP targets residential customers with total annual household incomes at or below 200% of current federal poverty guidelines. Incentives are paid to project sponsors for eligible measures installed in new and retrofit applications that result in verifiable demand and energy savings. Project

comprehensiveness is encouraged and customer education materials regarding energy conservation behavior are distributed by project sponsors.

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

The New Homes MTP targets several market participants, primarily homebuilders and consumers. The program's goal is to create conditions in which consumers demand energy-efficient homes, and homebuilders supply them. Incentives are paid to homebuilders who construct homes to strict energy-efficient building guidelines and that are at least 5% above the Texas Baseline Reference Home and meet all minimum energy code requirements. The program has a tiered design that uses a combination of mandatory, additional elective, and innovative measures to promote market transformation and drive deep energy savings. ENERGY STAR® and complete foam encapsulated homes are offered as alternative pathways to Tiers. Bonus incentives are offered for installed ENERGY STAR connected thermostats and to builders who switch from electric resistance furnaces to heat pumps. Each home results in verifiable demand and energy savings. In addition to homebuilder and consumer outreach, the New Homes MTP targets key market actors in the homebuilding production and sales cycle: home energy raters, homebuilder sales agents, real estate agents, HVAC contractors, mortgage lenders, product manufacturers, homebuilder associations, and media outlets.

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

The LM SOP targets commercial customers with a peak electric demand of 500 kW or more; but any non-residential customer that can deliver at least 50 kW of peak demand savings is eligible to participate. Incentive payments are based on measured and verified load (demand) curtailment reduction during the summer peak period. Load management events are dispatched by AEP Texas, providing a 30 minute advance notification or load reduction periods of one to four hours in duration. Customer, or Market Actors initiate and implement the load curtailments as called upon to do so by AEP Texas.

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

The Open MTP targets traditionally underserved small commercial customers who may not employ knowledgeable personnel with a focus on energy efficiency, who are limited in the ability to implement energy efficiency measures, and/or who typically do not actively seek the help of a professional EESP. Small commercial customers with a peak demand not exceeding 150 kW in the previous twelve consecutive billing months may qualify to participate in the program. Available incentives are paid directly to the contractor, thereby reducing a portion of the project cost for the customer.

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

### **Residential Standard Offer Program (RSOP)**

The RSOP targets all residential customers, paying incentives to project sponsors for eligible measures installed in new and retrofit applications that result in verified demand and energy savings. Project comprehensiveness is encouraged.

### **Residential Pool Pump Pilot Market Transformation Program (MTP) (Central Division)**

The Residential Pool Pump Pilot MTP provides incentives to pool pump distributors for the installation of high-efficiency ENERGY STAR® certified variable speed pool pumps in new and existing single-family properties. Compared to conventional pool pumps that use the same high pump speed regardless of the task assigned, a variable speed pump can significantly reduce the energy required and financial cost associated with the filtration, cleaning and circulation of swimming pool water. Variable speed pumps also provide for greater operational flexibility, quieter operation and a significantly longer useful life.

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

The SCORE/CS MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. In addition to educational facilities, SCORE/CS MTP provides these same solutions to local, state, county and federal government customers. This program is designed to help educate and assist these customers

in lowering their energy use by facilitating the integration of energy efficiency into their short- and long-term planning, budgeting, and operational practices. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

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

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

### **Targeted Low-Income Energy Efficiency Program (TLIP)**

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

### ***C. New Programs for 2021***

There are no new programs for 2021.

### ***D. Discontinued Programs***

There are no discontinued programs for 2021.

## **II. Customer Classes**

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

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

Table 3 summarizes the number of customers in each customer class and the Residential Hard-to-Reach sub-class. The numbers listed are the actual number of active electric service accounts by class served for the month of January 2021. These numbers were used to determine goal and budget allocations for each customer class and program. It should be noted, however, that the actual distribution of the annual goal and budget required to achieve the goal must remain flexible based upon the conditions of the marketplace, the potential interest a customer class may have in a specific program, and the overriding objective of meeting the mandated demand and energy reduction goals in total. AEP Texas offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

**Table 3: Summary of Customer Classes**

<b>Customer Class</b>	<b>Number of Customers</b>
Commercial	195,763
Residential	961,590
Hard-to-Reach <sup>3</sup>	280,784

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

<sup>3</sup> According to the U.S. Census Bureau’s 2020 Current Population Survey, 29.2% of Texas families fell below 200% of the poverty threshold in 2019. Applying that percentage to AEP Texas’ residential customer base of 961,590, the number of HTR customers is estimated to be 280,784.

### **III. Energy Efficiency Goals and Projected Savings**

AEP Texas' 2021 annual demand and energy reduction goals to be achieved are 20.60 MW and 36,091 MWh. AEP Texas' 2022 annual goals are 20.83 MW and 36,494 MWh. These goals have been calculated as prescribed by the EE Rule.

The 2021 goal was calculated by applying four-tenths of 1% (0.004) of the summer weather-adjusted peak demand for its residential and commercial customers to the five year average (2015-2019) peak demand at the meter of 5,150 MW. This resulted in a calculated goal of 20.60 MW.

The 2022 demand goal is calculated by applying four-tenths of 1% (0.004) of the summer weather-adjusted peak demand for its residential and commercial customers to the five year average (2016-2020) peak demand at the meter of 5,207 MW. This results in a calculated goal of 20.83 MW.

As stated in 16 TAC § 25.181(e)(4), a utility's energy savings goals is calculated from its demand savings goal, using a 20% conservation load factor.

Table 4 presents historical annual growth in demand data for the previous five years that was used to calculate AEP Texas' goals. Table 5 presents the projected demand and energy savings for Program Years 2021 and 2022 by program, for each customer class with fully-deployed program budgets.

**Table 4: Annual Growth in Demand and Energy Consumption – AEP Texas**

Calendar Year	Peak Demand (MW) @ Source						Energy Consumption (GWh) @ Meter				Energy Efficiency Goal Calculations		
	Total System		Residential & Commercial				Total System		Residential & Commercial				
	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt-Out	Peak Demand at Source Net Opt-outs	Actual	Weather Adjusted	Actual	Weather Adjusted	Peak Demand at Meter	5 year Average Peak Demand at Meter	Goal Metric: 0.4% Peak Demand at Meter
2015	6,236	6,140	5,703	5,608	-24	5,584	30,640	30,286	24,855	25,501	5,034	NA	NA
2016	6,412	6,270	5,910	5,768	-75	5,693	31,604	31,224	25,791	25,411	5,134	4,936	NA
2017	6,391	6,234	5,879	5,722	-101	5,621	31,553	31,334	25,072	24,853	5,069	4,956	NA
2018	6,350	6,349	5,828	5,827	-109	5,718	32,020	31,680	25,693	25,353	5,265	5,002	NA
2019	6,515	6,364	5,958	5,807	-106	5,701	31,962	31,564	25,675	25,275	5,248	5,043	NA
2020	6,451	6,417	5,875	5,841	-75	5,766	31,746	31,767	25,194	25,214	5,317	5,112	NA
2021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,150	20.60
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,207	20.83

\*Line losses are derived from the loss factors determined in the most recent line loss study for the AEP Texas (Central Division and North Division).



**Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for 2021 and 2022 (at the Meter) – AEP Texas**

2021 Customer Class and Program	Projected Savings 2021		Projected Savings 2022	
	kW	kWh	kW	kWh
<b>Commercial</b>				
Commercial Solutions MTP	1,433	8,709,280	1,664	7,458,262
Commercial SOP	3,067	13,639,318	2,793	12,391,447
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,393	4,376,124	4,047	8,047,475
Load Management SOP	22,261	22,261	22,261	22,261
Open MTP	1,184	4,660,806	1,215	5,234,159
SCORE/CitySmart MTP	2,061	9,680,000	2,463	8,259,385
SMART Source <sup>SM</sup> Solar PV MTP	541	787,477	278	901,737
<b>Residential</b>				
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,017	3,223,609	1,852	6,250,000
High-Performance New Homes MTP	1,272	1,785,040	2,054	2,872,024
Residential Pool Pump Pilot MTP	127	1,017,810	173	1,203,872
Residential SOP	2,134	3,520,650	1,775	2,936,911
SMART Source <sup>SM</sup> Solar PV MTP	265	696,076	615	2,101,421
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	1,551	2,418,835	1,551	2,418,835
Targeted Low-Income Energy Efficiency	966	1,517,843	966	1,517,843
<b>Total Annual Projected Savings</b>	<b>39,272</b>	<b>56,055,129</b>	<b>43,708</b>	<b>61,615,632</b>

#### IV. Program Budgets

Tables 6 and 7 present total proposed budget allocations required to meet AEP Texas’ projected demand and energy savings to be achieved for Program Year 2021 and 2022. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in the EE Rule, allocation of demand goals, and the incentive levels by customer class. The budget allocations are detailed by customer class, program, and in the following budget categories: incentives, administration, research and development (R&D), and evaluation, measurement and verification (EM&V).

**Table 6: Projected Annual Budget by Program for Each Customer Class  
for 2021 AEP Texas**

<b>2021</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>EM&amp;V</b>	<b>Total Budget</b>
<b>Commercial</b>					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$2,063,762	\$238,895			\$2,302,657
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$596,700	\$66,300			\$663,000
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,134,300	\$133,310			\$1,267,610
SMART Source <sup>SM</sup> Solar PV MTP	\$287,310	\$35,017			\$322,327
<b>Residential</b>					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$675,000	\$75,000			\$750,000
High-Performance New Homes MTP	\$765,000	\$85,000			\$850,000
Residential Pool Pump Pilot MTP	\$150,300	\$16,700			\$167,000
Residential SOP	\$3,359,298	\$395,198			\$3,754,496
SMART Source <sup>SM</sup> Solar PV MTP	\$326,000	\$38,007			\$364,007
<b>Hard-to-Reach</b>					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,799,159	\$187,144			\$1,986,303
<b>Research and Development</b>					
R&D			\$545,125		\$545,125
<b>Evaluation, Measurement &amp; Verification (EM&amp;V)</b>					
EM&V				\$206,948	\$206,948
<b>Total Budget</b>	<b>\$15,423,378</b>	<b>\$1,779,155</b>	<b>\$545,125</b>	<b>\$206,948</b>	<b>\$17,954,606</b>

**Table 7: Projected Annual Budget by Program for Each Customer Class  
for 2022 AEP Texas**

<b>2022</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>EM&amp;V</b>	<b>Total Budget</b>
<b>Commercial</b>					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$1,875,762	\$218,467			\$2,094,229
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,192,300	\$141,884			\$1,334,184
SMART Source <sup>SM</sup> Solar PV MTP	\$287,310	\$35,017			\$322,327
<b>Residential</b>					
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High-Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Residential Pool Pump Pilot MTP	\$150,300	\$16,700			\$167,000
Residential SOP	\$2,764,357	\$326,368			\$3,090,725
SMART Source <sup>SM</sup> Solar PV MTP	\$670,941	\$79,059			\$750,000
<b>Hard-to-Reach</b>					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,799,159	\$187,144			\$1,986,303
<b>Research and Development</b>					
R&D			\$353,646		\$353,646
<b>Evaluation, Measurement &amp; Verification (EM&amp;V)</b>					
EM&V				\$211,359	\$211,359
<b>Total Budget</b>	<b>\$15,593,378</b>	<b>\$1,800,634</b>	<b>\$353,646</b>	<b>\$211,359</b>	<b>\$17,959,017</b>

## ENERGY EFFICIENCY REPORT

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

Table 8 contains the demand and energy reduction goals and actual savings achieved for the previous five years (2016-2020) calculated in accordance with the EE Rule.

**Table 8: Historical Demand and Energy Goals\* and Savings Achieved (at the Meter)**

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Savings Achieved (MW)	Savings Achieved (MWh)
<b>Central Division</b>				
<b>2020</b>	16.38	28,698	50.45**	59,259
<b>2019</b>	16.14	28,277	39.70	58,398
<b>2018</b>	15.99	28,014	43.81	62,417
<b>2017</b>	15.83	27,734	45.87	64,971
<b>2016</b>	15.73	27,559	39.30	67,714
<b>North Division</b>				
<b>2020</b>	4.26	7,464	5.79***	12,768
<b>2019</b>	4.26	7,464	6.58	11,968
<b>2018</b>	4.26	7,464	8.95	12,669
<b>2017</b>	4.26	7,464	6.79	12,038
<b>2016</b>	4.26	7,464	6.38	10,817

\* Actual Weather Adjusted MW and MWh Goals as reported in the EEPRs filed in years 2016-2020.

\*\* Reported savings achieved at the source are 63.06 MW ( $50.45 \times \frac{1}{1-7.28\%} = 63.06$  MW).

\*\*\* Reported savings achieved at the source are 6.25 MW ( $5.79 \times \frac{1}{1-9.96\%} = 6.25$  MW).

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

**Table 9: Projected versus Reported and Verified Savings for 2020 and 2019 (at the Meter) – Central Division**

Customer Class and Program	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
<b>2020</b>				
<b>Commercial</b>				
Commercial Solutions MTP	992	5,500,000	1,008	4,400,927
Commercial SOP	2,810	11,716,682	2,567	12,631,053
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,393	4,376,124	3,025	6,017,714
Load Management SOP	19,517	105,081	27,720	27,720
Open MTP	830	3,250,000	848	3,628,153
SCORE/CitySmart MTP	1,850	8,000,000	1,869	6,605,627
SMART Source <sup>SM</sup> Solar PV MTP	489	618,735	299	1,025,296
<b>Residential</b>				
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,017	3,223,609	1,511	5,082,376
High-Performance New Homes MTP	539	1,631,874	1,936	2,706,448
Residential Pool Pump Pilot MTP	127	1,017,810	22	162,577
Residential SOP	5,327	8,203,500	6,273	11,083,793
SMART Source <sup>SM</sup> Solar PV MTP	215	528,891	190	647,166
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	1,785	2,604,482	2,352	3,918,443
Targeted Low-Income Energy Efficiency Program	800	1,144,413	829	1,321,256
<b>Total Annual Savings</b>	<b>37,691</b>	<b>51,921,201</b>	<b>50,448</b>	<b>59,258,548</b>
<b>2019</b>				
<b>Commercial</b>				
Commercial Solutions MTP	992	5,500,000	998	5,469,877
Commercial SOP	3,023	16,151,031	3,147	14,268,008
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,393	4,376,124	2,884	5,898,609
Load Management SOP	24,100	24,100	17,612	103,072
Open MTP	830	3,250,000	862	3,482,628
SCORE/CitySmart MTP	1,850	8,000,000	1,907	6,741,698
SMART Source <sup>SM</sup> Solar PV MTP	489	618,735	189	608,392
<b>Residential</b>				
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	1,017	3,223,609	1,202	3,937,486
High-Performance New Homes MTP	539	1,631,874	1,530	2,037,375
Residential Pool Pump Pilot MTP	127	1,017,810	13	99,067
Residential SOP	5,573	8,299,603	6,218	10,489,450
SMART Source <sup>SM</sup> Solar PV MTP	215	528,891	161	571,131
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	1,673	2,491,684	2,106	3,340,316
Targeted Low-Income Energy Efficiency Program	729	1,084,997	869	1,350,919
<b>Total Annual Savings</b>	<b>42,550</b>	<b>56,198,458</b>	<b>39,698</b>	<b>58,398,027</b>

**Table 10: Projected versus Reported and Verified Savings for 2020 and 2019(at the Meter) – North Division**

Customer Class and Program	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
<b>2020</b>				
<b>Commercial</b>				
Commercial Solutions MTP	441	3,209,280	599	2,771,306
Commercial SOP	446	1,919,103	606	2,595,689
Load Management SOP	2,180	14,045	1,931	1,931
Open MTP	354	1,410,806	359	1,568,088
SCORE/CitySmart MTP	211	1,680,000	449	2,120,000
SMART Source <sup>SM</sup> Solar PV MTP	52	168,742	54	177,760
<b>Residential</b>				
Residential SOP	974	1,568,751	970	1,832,879
SMART Source <sup>SM</sup> Solar PV MTP	50	167,185	108	348,748
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	451	688,730	574	1,067,923
Targeted Low-Income Energy Efficiency	110	170,095	143	283,409
<b>Total Annual Savings</b>	<b>5,269</b>	<b>10,996,737</b>	<b>5,792</b>	<b>12,767,733</b>
<b>2019</b>				
<b>Commercial</b>				
Commercial Solutions MTP	441	3,209,280	615	3,227,496
Commercial SOP	400	2,104,603	469	2,213,656
Load Management SOP	2,175	2,175	2,935	20,550
Open MTP	354	1,410,806	322	1,316,351
SCORE/CitySmart MTP	211	1,680,000	328	1,680,000
SMART Source <sup>SM</sup> Solar PV MTP	52	168,742	49	153,060
<b>Residential</b>				
Residential Pool Pump Pilot MTP	33	210,663	0	0
Residential SOP	1,154	1,515,956	1,054	1,844,161
SMART Source <sup>SM</sup> Solar PV MTP	50	167,185	87	318,434
<b>Hard-to-Reach</b>				
Hard-to-Reach SOP	542	711,750	600	994,684
Targeted Low-Income Energy Efficiency	114	169,771	119	199,824
<b>Total Annual Savings</b>	<b>5,526</b>	<b>11,350,931</b>	<b>6,578</b>	<b>11,968,217</b>

## VII. Historical Program Expenditures

This section documents the Central and North Division’s incentive and administration expenditures for the previous five years (2016-2020) detailed by program for each customer class.

**Table 11: Historical Program Incentive and Administrative Expenditures for 2016 through 2020 (000’s) – Central Division**

Central	2020		2019		2018		2017		2016	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Commercial</b>										
Commercial Solutions MTP	\$507.57	\$45.11	\$504.95	\$47.65	\$522.38	\$46.59	\$429.78	\$41.01	\$464.67	\$52.42
Commercial SOP	\$1,485.87	\$171.47	\$1,725.05	\$194.85	\$1,883.33	\$220.66	\$1,686.17	\$216.08	\$1,763.34	\$194.48
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$595.50	\$49.42	\$647.82	\$53.34	\$604.06	\$45.81	\$597.57	\$41.72	\$561.47	\$46.54
Load Management SOP	\$760.82	\$50.57	\$497.63	\$40.06	\$602.19	\$73.52	\$611.07	\$78.27	\$573.06	\$50.03
Open MTP	\$787.62	\$73.13	\$795.31	\$79.08	\$793.06	\$67.03	\$793.80	\$53.07	\$785.45	\$61.03
SCORE/CitySmart MTP	\$904.22	\$81.56	\$924.14	\$87.11	\$915.76	\$78.71	\$1,005.20	\$74.42	\$971.10	\$88.69
SMART Source <sup>SM</sup> Solar PV MTP	\$204.00	\$19.64	\$201.04	\$14.94	\$194.87	\$15.22	\$51.80	\$4.12	\$182.70	\$14.86

(Table continued on next page)

**Table 11: Historical Program Incentive and Administrative Expenditures for 2016 through 2020 (000's) – Central Division  
(Continued)**

Central	2020		2019		2018		2017		2016	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Residential</b>										
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$673.00	\$55.85	\$696.41	\$57.31	\$667.18	\$50.61	\$638.96	\$44.83	\$672.78	\$55.82
Efficiency Connection Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$90.16	\$11.20
High-Performance New Homes MTP	\$909.56	\$78.92	\$807.36	\$73.92	\$750.25	\$88.73	\$753.15	\$94.84	\$636.50	\$67.45
Reliant DR Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$3.88	\$0.38
Residential Pool Pump Pilot MTP	\$65.90	\$13.11	\$58.35	\$5.64	NAP	NAP	NAP	NAP	NAP	NAP
Residential SOP	\$2,897.65	\$261.04	\$2,735.84	\$309.59	\$2,726.52	\$301.63	\$2,500.42	\$269.54	\$2,591.75	\$242.54
SMART Source <sup>SM</sup> Solar PV MTP	\$195.32	\$19.11	\$200.45	\$14.93	\$210.42	\$16.47	\$206.76	\$16.46	\$204.81	\$17.43
Whisker Labs* Res DR Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	\$150.00	\$8.77	\$123.35	\$9.07
<b>Hard-to-Reach</b>										
Hard-to-Reach SOP	\$1,237.39	\$113.89	\$1,087.49	\$93.04	\$1,086.67	\$123.76	\$970.66	\$103.83	\$1,115.74	\$112.50
Targeted Low-Income Energy Efficiency Program	\$1,432.34	\$104.75	\$1,468.49	\$149.63	\$1,276.34	\$109.37	\$1,403.99	\$107.39	\$1,265.06	\$103.44
<b>Research and Development (R&amp;D)</b>	NAP	\$211.56	NAP	\$281.18	NAP	\$185.48	NAP	\$134.25	NAP	\$327.31
<b>Evaluation and Measurement Verification (EM&amp;V)</b>	NAP	\$183.27	NAP	\$180.20	NAP	\$176.88	NAP	\$176.88	NAP	\$161.05
<b>Total Expenditures</b>	<b>\$12,656.74</b>	<b>\$1,532.4</b>	<b>\$12,350.33</b>	<b>\$1,682.47</b>	<b>\$12,233.03</b>	<b>\$1,600.47</b>	<b>\$11,799.33</b>	<b>\$1,465.50</b>	<b>\$12,005.81</b>	<b>\$1,616.24</b>

\*Previously Earth Networks



**Table 12: Historical Program Incentive and Administrative Expenditures for 2016 through 2020 (000's) – North Division**

North	2020		2019		2018		2017		2016	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Commercial</b>										
Commercial Solutions MTP	\$361.50	\$52.04	\$395.36	\$59.44	\$423.86	\$42.97	\$365.58	\$39.63	\$330.00	\$32.97
Commercial SOP	\$312.65	\$44.57	\$249.43	\$37.68	\$260.54	\$27.14	\$244.35	\$41.09	\$187.96	\$22.88
Load Management SOP	\$67.59	\$11.17	\$87.00	\$9.97	\$87.00	\$12.55	\$87.00	\$16.71	\$80.58	\$10.52
Open MTP	\$417.86	\$61.24	\$400.29	\$65.51	\$418.74	\$41.23	\$418.04	\$40.43	\$417.06	\$47.98
SCORE/CitySmart MTP	\$217.75	\$24.79	\$187.50	\$26.31	\$160.18	\$29.51	\$158.37	\$23.02	\$153.27	\$17.41
SMART Source <sup>SM</sup> Solar PV MTP	\$50.47	\$8.16	\$83.95	\$7.72	\$79.89	\$5.07	\$69.02	\$4.94	\$49.81	\$5.37

(Table continued on next page)

**Table 12: Historical Program Incentive and Administrative Expenditures for 2016 through 2020 (000's) – North Division  
(Continued)**

North	2020		2019		2018		2017		2016	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Residential</b>										
Efficiency Connection Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$81.76	\$7.59
Residential Pool Pump Pilot MTP	NAP	NAP	\$18.35	\$4.04	NAP	NAP	NAP	NAP	NAP	NAP
Residential SOP	\$548.15	\$65.26	\$524.90	\$54.21	\$557.68	\$53.77	\$528.86	\$69.31	\$415.69	\$60.11
SMART Source <sup>SM</sup> Solar PV MTP	\$97.86	\$11.93	\$99.80	\$9.18	\$106.55	\$6.76	\$101.79	\$7.29	\$88.34	\$9.52
Whisker Labs* Res DR Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	\$14.56	\$1.06	\$15.51	\$1.49
<b>Hard-to-Reach</b>										
Hard-to-Reach SOP	\$387.52	\$62.07	\$365.95	\$34.67	\$369.59	\$36.90	\$314.03	\$42.42	\$162.14	\$25.46
Targeted Low-Income Energy Efficiency Program	\$338.79	\$37.43	\$344.58	\$33.53	\$320.44	\$32.60	\$283.62	\$40.77	\$255.66	\$32.68
<b>Research and Development (R&amp;D)</b>	NAP	\$68.54	NAP	\$105.78	NAP	\$50.28	NAP	\$53.25	NAP	\$82.69
<b>Evaluation and Measurement Verification (EM&amp;V)</b>	NAP	\$32.33	NAP	\$31.79	NAP	\$31.21	NAP	\$31.21	NAP	\$28.41
<b>Total Expenditures</b>	<b>\$2,800.13</b>	<b>\$479.53</b>	<b>\$2,757.11</b>	<b>\$479.82</b>	<b>\$2,784.47</b>	<b>\$369.99</b>	<b>\$2,585.22</b>	<b>\$411.12</b>	<b>\$2,237.76</b>	<b>\$385.08</b>

\*Previously Earth Networks

## **VIII. Program Funding for Program Year 2020**

Throughout the year AEP Texas monitors each program's success status and transfers funds as necessary to maximize participation in each of our programs. Programs were monitored even more closely in 2020 due to the potential impacts of the COVID-19 pandemic. Funding was reallocated as necessary to ensure overall energy efficiency savings goals were achieved.

### **Central Division**

As shown in Table 13, the total projected budget for the Central Division in 2020 was \$14,574,615 and the actual total funds expended were \$14,189,139. This is an overall total program expenditure difference of less than 3% from the amount budgeted.

The following individual program expenditures differed from their respective proposed budgets by more than 10% as explained below.

The Commercial SOP was under budget due to several large projects not being completed. At least one project did not get approved by the local governing body as anticipated, and the timeline on several other projects was pushed back .

The Load Management SOP budget was increased as funding was reallocated to gain additional commercial savings and ensure overall energy efficiency savings goals were met.

The High Performance New Homes MTP budget was increased as funding was reallocated to gain additional residential savings and ensure overall energy efficiency savings goals were met. The home construction industry was not impacted by the COVID-19 pandemic as much as other trades; and due to a strong environment for building energy efficient homes, builders were able to increase their participation in this program.

The Residential Pool Pump Pilot MTP was under budget due to supply chain impacts caused by the COVID-19 pandemic. The unavailability and backlog of pumps and parts resulted in fewer installations than projected.

The Hard to Reach SOP budget was increased as funding was reallocated to gain additional residential savings and ensure overall energy efficiency savings goals were met.

The combined 2020 expenditures for the TLIP and the HTR SOP constituted 20% of the energy efficiency budget. The 2020 expenditure for the TLIP constituted 11% of the energy efficiency budget.

## **North Division**

As shown in Table 14, the total projected budget in 2020 was \$3,388,642 and the actual total funds expended were \$3,279,662. This is an overall total program expenditure difference of less than 4% from the amount budgeted.

The Commercial SOP budget was increased as funding was reallocated to gain additional commercial savings and ensure overall energy efficiency savings goals were met.

The Load Management SOP was under budget due to participant underperformance caused by the COVID-19 pandemic. Participants had limited ability to reduce their energy consumption when called on to do so.

The SCORE/CitySmart MTP budget was increased as funding was reallocated to gain additional commercial savings and ensure overall energy efficiency savings goals were met.

The SMART Source<sup>SM</sup> Solar PV MTP commercial class was under budget due to material supply shortages, as a result of the COVID-19 pandemic. This resulted in a smaller volume of projects participating in the program.

The HTR SOP budget was increased as funding was reallocated to gain additional residential savings and ensure overall energy efficiency savings goals were met.

The combined 2020 expenditures for the TLIP and the HTR SOP constituted 24% of the energy efficiency budget. The 2020 expenditure for the TLIP constituted 11% of the energy efficiency budget.

**Table 13: Program Funding for Program Year 2020– Central Division**

	Total Projected Budget <sup>4</sup>	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research and Development (R&D)	Evaluation and Measurement Verification (EM&V)	Total Funds Expended
<b>Commercial</b>							
Commercial Solutions MTP	\$565,000	60	\$507,572	\$45,114			\$552,686
Commercial SOP	\$2,015,000	127	\$1,485,869	\$171,471			\$1,657,340
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$663,000	564	\$595,495	\$49,418			\$644,913
Load Management SOP	\$723,000	83	\$760,815	\$50,566			\$811,381
Open MTP	\$882,000	175	\$787,619	\$73,130			\$860,749
SCORE/CitySmart MTP	\$1,052,000	77	\$904,220	\$81,562			\$985,782
SMART Source <sup>SM</sup> Solar PV MTP	\$226,667	8	\$204,000	\$19,640			\$223,640
<b>Residential</b>							
CoolSaver <sup>SM</sup> A/C Tune-Up MTP	\$750,000	2,248	\$672,996	\$55,850			\$728,846
High-Performance New Homes MTP	\$850,000	915	\$909,558	\$78,917			\$988,476
Residential Pool Pump Pilot MTP	\$167,000	59	\$65,900	\$13,111			\$79,011
Residential SOP	\$3,096,220	4,908	\$2,897,646	\$261,037			\$3,158,684
SMART Source <sup>SM</sup> Solar PV MTP	\$226,667	38	\$195,318	\$19,107			\$214,425
<b>Hard-to-Reach</b>							
Hard-to-Reach SOP	\$1,208,400	1,592	\$1,237,391	\$113,891			\$1,351,282
Targeted Low-Income Energy Efficiency	\$1,601,269	403	\$1,432,344	\$104,748			\$1,537,092
<b>Research and Development</b>	\$365,125				\$211,564		\$211,564
<b>EM&amp;V</b>							
Statewide EM&V Contractor	\$183,267					\$183,267	\$183,267
<b>Total</b>	<b>\$14,574,615</b>	<b>11,257</b>	<b>\$12,656,743</b>	<b>\$1,137,565</b>	<b>\$211,564</b>	<b>\$183,267</b>	<b>\$14,189,139</b>

<sup>4</sup> Projected Budget from the revised EEPR filed May 2020 Project No. 50666.

**Table 14: Program Funding for Program Year 2020– North Division**

	Total Projected Budget <sup>5</sup>	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research and Development (R&D)	Evaluation and Measurement Verification (EM&V)	Total Funds Expended
<b>Commercial</b>							
Commercial Solutions MTP	\$453,733	66	\$361,497	\$52,035			\$413,533
Commercial SOP	\$287,657	21	\$312,650	\$44,569			\$357,219
Load Management SOP	\$100,000	21	\$67,585	\$11,175			\$78,760
Open MTP	\$482,000	73	\$417,858	\$61,239			\$479,096
SCORE/CitySmart MTP	\$215,610	35	\$217,750	\$24,788			\$242,538
SMART Source <sup>SM</sup> Solar PV MTP	\$95,000	2	\$50,474	\$8,162			\$58,636
<b>Residential</b>							
Residential SOP	\$658,276	511	\$548,154	\$65,260			\$613,414
SMART Source <sup>SM</sup> Solar PV MTP	\$118,000	23	\$97,859	\$11,929			\$109,788
<b>Hard-to-Reach</b>							
Hard-to-Reach SOP	\$361,000	301	\$387,515	\$62,070			\$449,585
Targeted Low-Income Energy Efficiency	\$385,034	69	\$338,793	\$37,428			\$376,221
<b>Research and Development</b>	\$200,000				\$68,540		\$68,540
<b>EM&amp;V</b>							
Statewide EM&V Contractor	\$32,332					\$32,332	\$32,332
<b>Total</b>	<b>\$3,388,642</b>	<b>1,122</b>	<b>\$2,800,135</b>	<b>\$378,655</b>	<b>\$68,540</b>	<b>\$32,332</b>	<b>\$3,279,662</b>

<sup>5</sup> Projected Budget from the revised EEPF filed May 2020 Project No. 50666.

## **IX. Market Transformation Program Results 2020**

### **Commercial Solutions MTP**

The Commercial Solutions MTP goal for Central Division was to acquire 992 kW demand savings. A total of 1,008 kW was achieved by participation of 60 customers.

The Commercial Solutions MTP goal for North Division was to acquire 3,209,280 kWh of energy savings. A total of 2,771,306 kWh was achieved by participation of 66 customers.

### **CoolSaver<sup>SM</sup> MTP (Central Division Only)**

The CoolSaver<sup>SM</sup> MTP verified and reported 4,536 kW. This included participation by 2,812 residential and commercial customers.

### **High-Performance New Homes MTP (New Homes) (Central Division Only)**

In 2020, 915 high-performance homes were constructed in the New Homes program with a savings of 1,936 kW. The favorable home construction environment in 2020 increased the number of program homes and customers learning about and benefiting from energy efficient homes. The program provided continuing education courses and other training opportunities for contractors, homebuilders, home energy raters, HVAC contractors and other market actors on the advantages of High-Performance and ENERGY STAR homes and building practices. Training for HVAC market actors focused on Manual J training to re-emphasize the importance of performing load calculations for correctly sizing HVAC systems. AEP Texas continued their partnership with the Environmental Protection Agency's (EPA) ENERGY STAR program and received the ENERGY STAR Partner of the Year Sustained Excellence award.

### **Open MTP**

The Open MTP goal for Central Division was to acquire 830 kW demand savings. A total of 848 kW was achieved with 175 small commercial customers and 10 participating contractors.

The Open MTP goal for North Division was to acquire 354 kW demand savings. A total of 359 kW was achieved with 73 small commercial customers and 9 participating contractors.

### **Residential Pool Pump Pilot MTP**

The Residential Pool Pump Pilot MTP was projected to acquire 127 kW demand savings for Central Division. A total of 22 kW was achieved. This included participation by 59 customers.

### **SCORE/CitySmart MTP**

The SCORE/CitySmart MTP was projected to acquire 1,850 kW demand savings for Central Division. A total of 1,869 kW was achieved. This included participation by 77 customers. To date, the program has benchmarked 1,287 facilities for 42 school districts, 4 higher education and 13 government customers.

The SCORE/CitySmart MTP was projected to acquire 211 kW demand savings for North Division. A total of 449 kW was achieved. This included participation by 35 customers. To date, the program has benchmarked 486 facilities for 19 school districts, 3 higher education and 8 government customers.

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

The PV MTP projected to acquire 704 kW in demand savings and 1,147,626 kWh in energy savings from the residential and non-residential components for Central Division. A total of 46 residential and non-residential solar PV projects were completed within the program, resulting in a peak demand reduction of 489 kW and 1,672,462 kWh of energy savings.

The PV MTP projected to acquire 102 kW in demand savings and 335,927 kWh in energy savings from the residential and non-residential components for North Division. A total of 25 residential and non-residential solar PV projects were completed within the program, resulting in a peak demand reduction of 162 kW and 526,508 kWh of energy savings.



## **X. Administrative Costs and Research and Development**

### **Administrative Costs**

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

### **Program Research and Development**

R&D activities are intended to help meet future energy efficiency goals by researching new technologies and program options and developing better, more efficient ways to administer current programs. The following is a summary of the R&D activities for 2020.

AEP Texas dedicated resources in 2020 to improve its program website functionality and make it easier for customers and market actors to obtain program information. Resources were also allocated to evaluate possible impacts of TRM changes to the 2021 Residential and Hard-to-Reach SOPs and to determine incentive levels for those programs. In addition, AEP Texas participated with Electric Utility Marketing Managers of Texas (EUMMOT) in researching potentially new deemed savings measures for various programs.

In late 2020, AEP Texas initiated a market research and analysis study to explore residential and commercial (fleet) opportunities for inclusion of an Electric Vehicle measure in its energy efficiency program portfolio in 2021 or 2022. An R&D project to conduct a market analysis of the AEP Texas service territory was also begun to assess the potential of implementing a commercial food service market transformation program in 2021 or 2022.

### **Informational Activities**

AEP Texas continues its best effort to encourage and facilitate the involvement of REPs and EESPs in the delivery of its programs to customers.

## XI. 2021 Energy Efficiency Cost Recovery Factor (EECRF)

AEP Texas' 2021 EECRF was approved by the PUCT in Docket No. 50892 and includes \$20,431,463 for AEP Texas as shown in Table 15. The adjusted factors are shown in Table 16.

**Table 15: 2021 EECRF**

2021 Projected Costs	\$17,647,659
Performance Bonus for 2019 results	\$3,475,676
Over-recovery, returned to customers with interest	(\$948,163)
EECRF proceeding expenses	\$44,303
Projected EM&V costs	\$211,988
Total EECRF	\$20,431,463

**Table 16: 2021 EECRF Factors**

Customer Class	AEP Texas
Residential Service	\$0.000932 per kWh
Secondary Service (less than or equal to 10 kW)	\$0.000622 per kWh
Secondary Service (greater than 10 kW)	\$0.000792 per kWh
Primary Service	\$0.000306 per kWh
Transmission Service	(\$0.000221) per kW

## XII. 2020 EECRF Summary

### Central Division

#### 2020 Collections for Energy Efficiency

The Central Division collected \$2,796,254 through its 2020 base rates, including \$2,639,562 expressly included in base rates and an adjustment for load growth in the amount of \$156,692, and \$12,983,798 through its 2020 EECRF for a total of \$15,780,052. A performance bonus of 2,243,583 for exceeding its 2018 energy efficiency goals and \$404,302 returned to customers are reflected in the total amount collected for energy efficiency in 2020.

#### Energy Efficiency Program Costs Expended

The Central Division expended a total of \$14,189,139 for its 2020 energy efficiency programs. The amount expended is \$385,476 less than the 2020 projected budget of \$14,574,615 for energy efficiency programs.

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

The Central Division's actual 2020 energy efficiency program costs (including EM&V costs) less municipal rate case expenses are \$14,162,018 for the determination of the over/under-recovery; and actual energy efficiency program revenues are \$13,940,771. These associated 2020 costs and revenues result in an over-recovery of energy efficiency costs of \$221,247. Including interest of \$7,056, the over-recovery is \$228,803. This is the amount that the Central Division will request be returned to customers within its 2022 EECRF.

### **North Division**

#### **2020 Collections for Energy Efficiency**

The North Division collected \$594,568 through its 2020 base rates, including \$539,346 expressly included in base rates and an adjustment for load growth in the amount of \$55,222, and \$2,869,747 through its 2020 EECRF for a total of \$3,464,315. A performance bonus of \$482,617 for exceeding its 2018 energy efficiency goals and \$171,676 returned to customers are reflected in the total amount collected for energy efficiency in 2020.

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

The North Division expended a total of \$3,279,662 for its 2020 energy efficiency programs. The amount expended is \$108,980 less than the 2020 projected budget of \$3,388,642 for energy efficiency programs.

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

The North Division's actual 2020 energy efficiency program costs (including EM&V costs) less municipal rate case expenses are \$3,272,315 for the determination of the over/under-recovery; and actual energy efficiency program revenues are \$3,153,374. These associated 2020 costs and revenues result in an over-recovery of energy efficiency costs of \$118,941. Including interest of \$3,793, the over-recovery is \$122,735. This is the amount that the North Division will request be returned to customers within its 2022 EECRF.

### **XIII. Underserved Counties**

AEP Texas has defined Underserved Counties as any county in the service territory for which no demand or energy savings were reported through any of its 2020 SOPs or MTPs. Per 16 TAC § 25.181(l)(2)(U), a list of the Underserved Counties is shown in Table 17:

**Table 17: Underserved Counties**

<b>Central Division</b>	<b>North Division</b>	
Caldwell	Baylor	Kent
DeWitt	Brown	King
Edwards	Coleman	Knox
Gonzales	Crane	Mason
Guadalupe	Dickens	McCullouch
Jim Hogg	Eastland	Nolan
Kenedy	Edwards	Schleicher
McMullen	Fisher	Stephens
Real	Foard	Stonewall
Wilson	Gillespie	Throckmorton

## ACRONYMS

<b>CSOP</b>	Commercial Standard Offer Program
<b>CS MTP</b>	Commercial Solutions Market Transformation Program
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EECRF</b>	Energy Efficiency Cost Recovery Factor
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EE Rule</b>	Energy Efficiency Rule, 16 TAC §§ 25.181, 25.182 and 25.183
<b>EESP</b>	Energy Efficiency Service Providers
<b>EPA</b>	Environmental Protection Agency
<b>EUMMOT</b>	Electric Utility Marketing Managers of Texas
<b>HTR</b>	Hard-To-Reach
<b>HTR SOP</b>	Hard-to-Reach Standard Offer Program
<b>LM SOP</b>	Load Management Standard Offer Program
<b>MTP</b>	Market Transformation Program
<b>NAP</b>	Not Applicable
<b>New Homes</b>	High-Performance New Home Market Transformation Program
<b>Open MTP</b>	Open Market Transformation Program

## **Acronyms (Continued)**

<b>PUC</b>	Public Utility Commission of Texas
<b>PURA</b>	Public Utility Regulatory Act
<b>PV</b>	Photovoltaic
<b>PV MTP</b>	SMART Source <sup>SM</sup> Solar PV Market Transformation Program
<b>R&amp;D</b>	Research and Development
<b>REP</b>	Retail Electric Provider
<b>RES</b>	Residential
<b>RSOP</b>	Residential Standard Offer Program
<b>SCORE</b>	Schools Conserving Resources
<b>SCORE/CS MTP</b>	SCORE/CitySmart Market Transformation Program
<b>SOP</b>	Standard Offer Program
<b>TCC</b>	AEP Texas Central Company (now the Central Division of AEP Texas)
<b>TDU</b>	Transmission and Distribution Utility
<b>TLIP</b>	Targeted Low-Income Energy Efficiency Program
<b>TRM</b>	Texas Technical Reference Manual

**APPENDIX A:**  
**REPORTED AND VERIFIED DEMAND AND ENERGY  
REDUCTION BY COUNTY**

### Reported and Verified Demand and Energy Reduction by County: Central Division

County	Commercial Solutions MTP		Commercial SOP		CoolSaver MTP		Hard-to-Reach SOP		High-Performance New Homes MTP		Load Management SOP	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Aransas			62.1	241,420			0.6	1,165	142.8	187,933	8.0	8
Atascosa	9.4	36,411										
Bee	2.3	12,044							1.5	4,034	93.0	93
Brooks	10.7	41,765					0.9	1,763				
Caldwell												
Calhoun			50.0	194,399					15.9	21,287	2.0	2
Cameron	51.1	237,242	564.5	2,468,196	532.4	1,243,899	310.0	447,293	0.8	1,777	2,022.0	2,022
Colorado	31.1	144,187										
DeWitt												
Dimmitt	8.3	44,381									56.0	56
Duval												
Edwards												
Frio	2.7	14,253	4.5	23,892							16.0	16
Goliad									0.4	937		
Gonzales												
Guadalupe												
Hidalgo	180.9	852,706	527.5	1,986,904	3,533.8	8,802,335	1,111.3	1,878,028	229.7	382,155	4,783.0	4,783
Jackson												
Jim Hogg												
Jim Wells	1.2	5,160	25.9	106,542					7.3	10,827	180.0	180
Karnes	2.1	13,594	4.2	6,736							83.0	83
Kenedy												
Kinney												
Kleberg	105.1	461,032	1.1	6,065	3.2	10,776	11.1	20,885			79.0	79
La Salle							1.9	2,776				
Live Oak							0.6	813				
Matagorda							5.4	8,820	1.0	2,363	200.0	200
Maverick	6.0	23,967	5.8	124,650	2.2	4,326	111.4	214,271			195.0	195
Medina												
McMullen												
Nueces	164.5	512,487	42.6	297,652	337.0	695,484	342.6	563,394	1,120.1	1,464,175	3,293.0	3,293
Real												
Refugio			1.4	7,277	2.8	9,592			18.6	23,270		
San Patricio			199.7	2,695,721	9.4	32,873	22.0	38,389	264.8	350,981	8,939.0	8,939
Starr	6.3	33,718	618.8	2,224,443	48.8	114,459	123.2	217,832			113.0	113
Uvalde			4.5	23,777							130.0	130
Val Verde	6.0	23,293	3.3	17,650							88.0	88
Victoria	122.2	599,055	50.2	263,540	1.3	2,524	19.0	21,775	21.0	49,215	3,118.0	3,118
Webb	297.8	1,345,632	401.5	1,942,189	48.2	146,774	292.3	501,239	111.8	207,494	3,429.0	3,429
Wharton											48.0	48
Willacy					16.7	37,048					845.0	845
Wilson												
Zavala												
Zapata												
<b>Total</b>	<b>1,007.6</b>	<b>4,400,927</b>	<b>2,567.4</b>	<b>12,631,053</b>	<b>4,535.9</b>	<b>11,100,090</b>	<b>2,352.3</b>	<b>3,918,443</b>	<b>1,935.6</b>	<b>2,706,448</b>	<b>27,720.0</b>	<b>27,720</b>



**Reported and Verified Demand and Energy Reduction by County: Central Division (Continued)**

County	Open MTP		Residential Pool Pump Pilot MTP		Residential SOP		SCORE/CitySmart MTP		SMART <sup>SM</sup> Source Solar PV MTP		Targeted Low-Income Program	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Aransas			1.3	10,003	23.1	52,167			9.5	34,170		
Atascosa									9.9	25,050		
Bee					2.3	5,115	55.4	252,119				
Brooks					9.6	17,383						
Caldwell												
Calhoun					1.5	4,838	428.2	2,521,077				
Cameron	16.8	70,771	1.2	8,706	644.6	1,045,486	31.0	165,051			139.8	211,567
Colorado												
DeWitt												
Dimmitt											52.1	79,853
Duval							103.0	156,099				
Edwards												
Frio												
Goliad					3.5	8,740						
Gonzales												
Guadalupe												
Hidalgo	512.0	2,151,353	0.3	2,367	2,700.0	4,977,132	123.8	278,118	219.0	723,892	44.1	73,348
Jackson												
Jim Hogg												
Jim Wells					20.7	40,816			130.0	472,428		
Karnes												
Kenedy												
Kinney											0.4	498
Kleberg					30.8	61,193						
La Salle					5.3	7,062					94.4	151,536
Live Oak					3.5	5,441						
Matagorda					8.0	14,374			4.3	22,900		
Maverick							662.8	2,083,054			62.2	96,639
Medina							117.0	421,150				
McMullen												
Nueces	211.8	911,220	13.7	104,310	732.4	1,420,503	136.6	329,248	45.5	167,903	87.2	147,341
Real												
Refugio					0.5	3,012						
San Patricio			5.1	37,191	124.3	239,968	204.3	369,694				
Starr	12.1	51,883			715.8	1,253,459			10.1	35,519	2.8	4,628
Uvalde					18.2	21,439						
Val Verde					60.9	88,807					6.7	9,520
Victoria					15.8	25,836	7.0	30,017				
Webb	78.3	331,323			1,144.1	1,778,479			60.4	190,600	316.5	512,728
Wharton												
Willacy					7.7	12,542						
Wilson												
Zavala											22.5	33,598
Zapata	17.1	111,602										
Total	848.0	3,628,153	21.5	162,577	6,272.8	11,083,793	1,869.1	6,605,627	488.7	1,672,462	828.7	1,321,256

**Reported and Verified Demand and Energy Reduction by County: North Division**

County	Commercial Solutions MTP		Commercial SOP		Hard-to-Reach SOP		Load Management SOP		Open MTP	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Baylor										
Brewster					2.4	3,772				
Briscoe					27.6	72,500				
Brown										
Callahan	2.7	10,413			1.7	1,899			18.4	55,581
Childress			7.8	31,664	7.4	19,857				
Coke										
Coleman										
Concho	9.9	38,606							7.6	30,161
Cottle	2.6	10,014			23.5	61,971				
Crane										
Crockett	3.5	27,004			28.7	45,736				
Dickens										
Eastland										
Edwards										
Fisher										
Foard										
Gillespie										
Hall					23.2	60,910				
Hardeman					29.0	76,670				
Haskell										
Irion					3.5	5,787				
Jeff Davis	7.5	29,294								
Jones					4.2	7,647				
Kent										
Kimble	13.6	52,748							22.1	87,466
King										
Knox										
Mason										
McCullouch										
Menard									1.8	7,968
Motley					13.5	35,457				
Nolan										
Pecos										
Presidio	8.2	40,546								
Reagan					48.4	84,181				
Reeves					43.3	68,420				
Runnels					2.6	4,003	32.0	32	8.3	40,538
Schleicher										
Shackelford										
Stephens										
Sterling										
Stonewall										
Sutton									4.8	12,707
Taylor	369.9	1,708,006	425.3	1,903,178	135.4	224,643	1,714.0	1,714	150.9	713,896
Throckmorton										
Tom Green	176.6	838,661	172.8	660,847	153.1	229,201	174.0	174	145.5	619,772
Upton					7.2	12,830				
Wilbarger	4.1	16,014			19.9	52,441	11.0	11		
<b>Total</b>	<b>598.6</b>	<b>2,771,306</b>	<b>605.9</b>	<b>2,595,689</b>	<b>574.5</b>	<b>1,067,923</b>	<b>1,931.0</b>	<b>1,931</b>	<b>359.4</b>	<b>1,568,088</b>

Reported and Verified Demand and Energy Reduction by County: North Division (Continued)

County	Residential SOP		SCORE/CitySmart MTP		SMART <sup>SM</sup> Source Solar PV MTP		Targeted Low-Income Program	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Baylor								
Brewster	6.8	12,653	76.4	374,415	8.5	31,914		
Briscoe								
Brown								
Callahan	10.1	21,807					0.2	306
Childress	14.6	37,747						
Coke	0.8	3,337						
Coleman								
Concho	2.1	3,588						
Cottle	26.0	67,175					3.4	3,638
Crane								
Crockett	110.5	186,414						
Dickens								
Eastland								
Edwards								
Fisher								
Foard								
Gillespie								
Hall	1.2	974						
Hardeman	4.6	13,034						
Haskell							0.5	748
Irion	5.2	9,663						
Jeff Davis								
Jones					6.0	19,186	100.4	212,933
Kent								
Kimble								
King								
Knox								
Mason								
McCulloch								
Menard								
Motley	5.2	13,610						
Nolan								
Pecos	12.2	19,816						
Presidio					16.3	57,627	1.3	2,486
Reagan	106.3	183,607					3.9	7,270
Reeves	23.7	40,349						
Runnels	1.9	2,334						
Schleicher								
Shackelford	2.7	5,650						
Stephens								
Sterling	1.5	2,997						
Stonewall								
Sutton	1.8	2,976						
Taylor	252.6	494,402	166.3	482,115	34.8	108,685	8.0	10,933
Throckmorton								
Tom Green	317.2	574,709	140.3	815,470	96.2	309,096	24.7	44,262
Upton	12.8	22,675						
Wilbarger	49.8	113,360	65.5	448,000			0.9	834
Total	969.7	1,832,879	448.5	2,120,000	161.7	526,508	143.3	283,409

**APPENDIX B:**  
**PROGRAM TEMPLATES**

AEP Texas does not have any Program Templates to report this year.

**APPENDIX C:  
OPTIONAL SUPPORT DOCUMENTATION**



Alpine ISD receives their \$18,720.75 incentive check (virtually) from the AEP Texas North SCORE MTP for the successful completion of multiple energy efficiency projects on their campuses in Alpine, TX.