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Southwestern Electric Power Company

2018 Energy Efficiency Plan and Report

16 Tex. Admin. Code §§ 25.181 and 25.183

Amended May 1, 2018

Project No. 48146



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INTRODUCTION

Southwestern Electric Power Company (SWEPCO or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Tex. Admin. Code §§ 25.181 and 25.183 (TAC) (EE Rule), implementing Public Utility Regulatory Act (PURA) § 39.905. As mandated by this section of PURA, the EE Rule requires that each investor-owned electric utility achieve the following minimum goals through market-based standard offer programs (SOPs), targeted market transformation programs (MTPs) or other utility self-delivered programs. 16 TAC § 25.181(e)(1) provides in pertinent part as follows:

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

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

EEPR ORGANIZATION

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

Executive Summary

- Summarizes SWEPCO's plans for achieving its goals and projected energy efficiency savings for Program Years 2018 and 2019 and highlights SWEPCO's achievements for Program Year 2017.

Energy Efficiency Plan

- Section I describes SWEPCO's program portfolio. It details how each program will be implemented and presents related informational and outreach activities.
- Section II explains SWEPCO's targeted customer classes and describes the estimated size of each class and the method used in determining those class sizes.
- Section III presents SWEPCO's demand and energy goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes SWEPCO's proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

Energy Efficiency Report

- Section V documents SWEPCO's demand reduction goal for each of the previous five years (2013-2017) based on its weather-adjusted peak demand.
- Section VI compares SWEPCO's projected energy and demand savings to its reported and verified savings by program for calendar years 2016 and 2017.
- Section VII details SWEPCO's incentive and administration expenditures for each of the previous five years (2013-2017) detailed by program for each customer class.
- Section VIII compares SWEPCO's actual 2017 expenditures with its 2017 budget by program for each customer class. It identifies funds committed but not expended and funds remaining and not committed. It also explains any cost deviations of more than 10% from SWEPCO's overall program budget.
- Section IX describes the results from SWEPCO's MTPs.
- Section X documents SWEPCO's Research and Development activities.
- Section XI documents SWEPCO's 2018 Energy Efficiency Cost Recovery Factor (EECRF).
- Section XII provides a summary of the 2017 EECRF.
- Section XIII documents SWEPCO's Underserved Counties.
- Section XIV describes SWEPCO's Performance Bonus calculation for Program Year 2017.

Acronyms

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

Appendices

- Appendix A – Reported and Verified Demand and Energy Reduction by County.
- Appendix B – Program Templates.
- Appendix C – Existing Contracts or Obligations.
- Appendix D – Optional Supporting Documentation.

EXECUTIVE SUMMARY

The Energy Efficiency Plan (Plan) portion of this EEPR discusses how SWEPCO intends to achieve savings of at least a 30% reduction in its annual growth in demand of residential and commercial customers by December 31, 2018. SWEPCO's Plan addresses achieving the corresponding calculated energy savings goal, which is derived from its demand savings goal each year using a 20% conservation load factor [16 TAC § 25.181(e)(4)]. The goals, budgets, and implementation procedures that are included in this Plan are consistent with the requirements of the EE Rule, using lessons learned from past experience and customer participation in the various historical energy efficiency programs. A summary of SWEPCO's projected annual goals and budgets is presented in Table 1.

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

Calendar Year	Average Growth in Demand (MW)	Average Peak Demand (MW)	Goal Metric: 30% Growth (MW)	Goal Metric: 0.4% Peak Demand (MW)	Peak Demand Goal (MW)	Energy Goal (MWh)	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)	Projected Budget (000's)
2018	2.56	1,235	0.77	4.94	5.6	9,811	10.80	14,463	\$4,227
2019	-12.19	1,223	-3.66	4.89	5.6	9,811	9.93	13,950	\$4,020

* The 2018 and 2019 Projected Budget includes costs associated with Evaluation, Measurement & Verification costs.

The Energy Efficiency Report portion demonstrates that in 2017 SWEPCO cost-effectively implemented SOPs and MTPs as provided for by PURA §39.905. SWEPCO exceeded its demand reduction goal to be achieved by December 31, 2017 by procuring 13,626 kW of peak demand savings at a total cost of \$4,284,022. Programs in 2017 included the Commercial Solutions MTP, Commercial SOP, Hard-to-Reach SOP, Load Management SOP, On-Line Home Energy Checkup, Residential SOP, Schools Conserving Resources MTP, Residential LED Retail Pilot, and the Open MTP.

¹ Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Table 6.

ENERGY EFFICIENCY PLAN

I. 2018 PROGRAMS

A. 2018 Program Portfolio

SWEPCO has implemented a variety of programs in 2018 to enable the Company 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 below summarizes SWEPCO’s programs and targeted customer class markets for Program Year 2018. The programs are described in further detail in Subsections B through E. SWEPCO maintains a web site containing all of the requirements for energy efficiency service provider (EESP) or project sponsor participation, forms required for project submission, and links to the program manuals at www.swepcogridsmart.com. This site is the primary method of communication to provide program updates and information to customers, potential EESPs, and other interested parties.

Table 2: 2018 Energy Efficiency Program Portfolio

Program	Target Market	Application	Link to Program Manual
Commercial Solutions Market Transformation Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html
Commercial Standard Offer Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html
Hard-to-Reach Standard Offer Program	Residential Income-Qualified	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
Load Management Standard Offer Program	Commercial	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
On-Line Home Energy Checkup	Residential	Education	https://www.swepco.com/save/residential/calculate/OnlineEnergyCheckup.aspx
Open Market Transformation Program	Commercial	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
Residential Standard Offer Program	Residential	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
Schools Conserving Resources Market Transformation Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html

B. Implementation Process

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

Standard Offer Programs (SOPs) are administered by utility with project sponsors providing eligible program measures. Project sponsors are usually EESPs or SWEPCO customers. A SWEPCO customer can act as an EESP if it is a commercial customer with a peak load equal to or greater than 50 kW. SWEPCO monitors projects being submitted so as to not accept duplicate enrollments.

C. Outreach Activities

Various outreach activities are conducted, depending on the targeted program. Many of these activities are the same for several programs. For this reason, SWEPCO's outreach activities are grouped together below.

- Maintain internet web site with detailed project eligibility, end-use measures, incentives, procedures, and application forms;
- Utilize mass e-mail notifications to inform and update potential project sponsors on SWEPCO energy efficiency program opportunities;
- Participate in local, regional, and industry-related outreach activities as may be necessary;
- Target SWEPCO customers with demand and energy savings opportunities;
- Conduct workshops, as necessary, to explain the program, project sponsor implementation, reporting requirements, and incentive information;
- Contract with a third-party implementer to conduct outreach, planning activities and recruit additional subcontractors;
- Conduct specific project sponsor training sessions, as necessary, based on the energy efficiency programs being implemented; and
- Facilitate media opportunities to spotlight successful projects and/or interesting stories as applicable.

Additional outreach activities occur as the opportunity arises.

D. Description of Existing Programs

Commercial Solutions Market Transformation Program (CS MTP)

SWEPSCO's CS MTP targets commercial customers (other than public schools) served by SWEPSCO that do not have the in-house capability or 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. The CS MTP facilitates the identification of demand and energy savings opportunities, general operating characteristics, long-range energy efficiency planning, and overall measure acceptance by the targeted customers. Incentives are paid to EESPs or 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 (other than public schools) of all sizes, providing incentives for new construction and retrofit installation of measures that reduce demand and save energy in non-residential facilities. The CSOP encourages electric energy efficiency improvements that go above and beyond the efficiency gains typically achieved in retrofit or replacement projects. Energy and demand savings will be based only on reductions that exceed current state and federal minimum efficiency standards, if such standards apply. Incentives are paid to EESPs or customers on the basis of deemed savings or verified demand and energy savings.

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

The HTR SOP targets residential customers in existing homes with total annual household incomes at or below 200% of current federal poverty guidelines and who have properly completed a Public Utility Commission of Texas (PUCT) approved income verification form, or who have been designated as HTR-eligible through another PUCT-approved verification methodology. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verifiable demand and energy savings. Project comprehensiveness is encouraged and customer education regarding energy conservation behavior is provided by materials distributed by project sponsors.

Load Management Standard Offer Program (LM SOP)

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

On-Line Home Energy Checkup (Home Energy Checkup)

The Home Energy Checkup is designed to provide a web-based, do-it-yourself home energy audit that equips residential customers with valuable information to help them manage their energy use and cost. .

The tool provides functionality that produces a printer-friendly report that:

- Factors in weather and local electricity prices;
- Uses the customer's actual historic energy usage in savings calculations;
- Estimates monthly and annual energy usage and costs; and
- Provides customized energy saving recommendations and potential savings for implemented measures.

At this time, it is not anticipated that SWEPCO will report savings associated with the use of this Home Energy Checkup.

Open Market Transformation Program (Open MTP)

The Open MTP has been developed to offer energy efficiency services to small commercial customers with peak demands less than 100 kW. This customer group is the segment least served by SWEPCO's SOPs or MTPs. The Open MTP is designed to overcome barriers unique to small commercial customers that prevent them from participating in energy efficiency programs proven to be successful for larger business owners. These barriers include:

- Minimal technical knowledge among small business owners;
- Concerns about performance uncertainty and hidden costs;
- Owner/tenant challenges;
- Lack of capital, expertise, and staff; and
- Adequate information or the ability to research costs.

To overcome these barriers, the program offers a "turnkey" approach in which marketing, energy education, site-specific energy analysis, financial incentives, equipment procurement, and installation can be provided.

Residential Standard Offer Program (RSOP)

The RSOP targets residential customers in existing homes. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verified demand and energy savings. Project comprehensiveness is encouraged. The following requirements must be reported in order to claim early retirement savings from residential HVAC projects:

- Photos of gauges showing the existing unit in full functional status;
- The age of the existing unit (maximum age of 24 years);
- Photo of the existing unit nameplate
- Model number, serial number and manufacturer of the existing unit;
- The sizing of the new unit must be less than or equal to that of the existing unit; and

- Customer responses to a survey questionnaire documenting the condition of the existing unit and customer motivation for unit replacement.

Schools Conserving Resources Market Transformation Program (SCORE MTP)

The SCORE MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. This program is designed to help educate and assist these customers in lowering their energy use by integrating energy efficiency into their short- and long-term planning, budgeting, and operational practices. The program assists with the identification of demand and energy savings opportunities, provides detailed energy use, detailed building operational characteristics, and provides long-range energy efficiency planning. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that provide verifiable demand and energy savings.

E. New Programs for 2018

SWEPSCO has no new programs for 2018.

F. Discontinued Programs

Residential LED Retail Lighting Pilot Program

The Residential LED Retail Lighting Pilot program was an Upstream LED Lighting Markdown program designed to achieve residential energy savings. The program was designed to increase awareness and sales of ENERGY STAR® qualified LEDs through financial incentives delivered directly to customers via a reduction in cost at the retailers' point of purchase. SWEPSCO has discontinued this program in 2018.

II. CUSTOMER CLASSES

SWEPCO's energy efficiency programs target residential and commercial customer classes. SWEPCO's energy efficiency programs also target customer sub-classes, including Low-Income and Schools. 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)(A). Table 3 summarizes the number of active customers in each eligible customer class at SWEPCO in the month of January 2018. It should be noted that the actual distribution of the annual goal to be achieved 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 SWEPCO's mandated demand reduction goal in total. SWEPCO offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

Table 3: Summary of Customer Classes

Customer Class	Number of Customers
Commercial	35,128
Residential	150,120
Hard-to-Reach ²	47,588*

* The Hard-to-Reach customer count is a subset of the Residential total.

² According to the U.S. Census Bureau's 2016 Current Population Survey, 31.7% of Texas families fall below 200% of the poverty threshold. Applying that percentage to SWEPCO's residential customer base of 150,120, the number of HTR customers is estimated to be 47,588.

III. ENERGY EFFICIENCY GOALS AND PROJECTED SAVINGS

As prescribed by the EE Rule, SWEPCO's annual demand reduction goal is specified as a percent of its historical, weather-normalized, five-year average growth in demand. SWEPCO's 2018 goal is calculated based upon the average annual growth in peak demand for the years 2012 through 2016, inclusive (the most recent historical load growth data available). SWEPCO's 2019 goal is calculated based upon the average annual growth in peak demand for the years 2013 through 2017, inclusive (the most recent historical load growth data available).

SWEPCO's demand reduction goal to be achieved is prescribed by the EE Rule to be at least 30% of this calculated annual growth in demand of residential and commercial customers. The corresponding annual energy savings goal is determined by applying a 20% conservation load factor to the applicable demand reduction goal for the Program Year. A utility's demand reduction goal in megawatts for any year cannot be less than the previous year's goal.

Table 4 presents the actual historical annual growth in demand for the previous five years used to calculate SWEPCO's goals.

Table 4: Annual Growth in Demand and Energy Consumption

Calendar Year	Peak Demand (MW) @ Source						Energy Consumption (MWh) @ Meter				Energy Efficiency Goal Calculations @ Meter			
	Total System		Residential & Commercial				Total System		Residential & Commercial		Peak Demand at Meter	Load Growth at Meter	5 year Average Growth at Meter	30% Growth at Meter
	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt-Out	Peak Demand at Source Net Opt-outs	Actual	Weather Adjusted	Actual	Weather Adjusted				
2012	1,696	1,631	1,556	1,491	-109	1,382	7,521	7,457	5,527	5,462	1,277	36 02	NAP	NAP
2013	1,567	1,603	1,396	1,432	-104	1,328	7,588	7,572	5,503	5,486	1,227	-49 88	NAP	NAP
2014	1,511	1,626	1,328	1,442	-106	1,336	7,798	7,823	5,505	5,530	1,234	7 39	NAP	NAP
2015	1,607	1,579	1,428	1,399	-118	1,281	7,893	7,844	5,896	5,847	1,183	-50 86	NAP	NAP
2016	1,488	1,543	1,411	1,466	-109	1,357	7,076	7,067	5,302	5,294	1,253	70 15	NAP	NAP
2017	1,417	1,551	1,284	1,418	-102	1,316	7,142	7,191	5,280	5,329	1,216	-37 76	NAP	NAP
2018	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	2 56	0 77
2019	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	-12 19	-3 66

*Line losses are derived from the loss factors determined in SWEPCO's most recent line loss study.

Table 5 presents the projected demand reduction and energy savings, by program, for each customer class and for each of the years 2018 and 2019. Projected savings reflect the estimated demand and energy savings that SWEPCO's programs are expected to achieve with fully-developed program budgets for each of the years shown.

Table 5: Projected Demand and Energy Savings by Program for Each Customer Class For 2018 and 2019 (at the Meter)

2018	Projected Savings	
Customer Class and Program	Demand (kW)	Energy (kWh)
Commercial	7,599	8,860,837
Commercial Solutions MTP	490	2,112,775
Commercial SOP	743	3,579,086
Load Management SOP	5,625	27,101
Open MTP	251	1,029,100
SCORE MTP	490	2,112,775
Residential	1,773	3,105,818
Residential SOP	1,773	3,105,818
Hard-to-Reach Residential	1,425	2,496,600
Hard-to-Reach SOP	1,425	2,496,600
Total Annual Projected Savings	10,797	14,463,255

2019	Projected Savings	
Customer Class and Program	Demand (kW)	Energy (kWh)
Commercial	6,945	8,720,169
Commercial Solutions MTP	490	2,112,775
Commercial SOP	714	3,441,429
Load Management SOP	5,000	24,090
Open MTP	251	1,029,100
SCORE MTP	490	2,112,775
Residential	1,818	3,185,455
Residential SOP	1,818	3,185,455
Hard-to-Reach Residential	1,167	2,044,000
Hard-to-Reach SOP	1,167	2,044,000
Total Annual Projected Savings	9,930	13,949,624

IV. PROGRAM BUDGETS

Table 6 presents total projected budget allocations required to meet SWEPCO's projected demand and energy savings to be achieved for the Program Years 2018 and 2019. 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 among customer classes, and the incentive levels by customer class. Table 6 budget allocations are detailed by customer class, program, and in the following budget categories: incentive payments; administration; research and development (R&D); and evaluation, measurement and verification (EM&V).

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

2018	Incentives	Admin	R&D & EM&V	Total
Commercial	\$1,615,000	\$283,078	\$0	\$1,898,078
Commercial Solutions MTP	\$310,000	\$57,353		\$367,353
Commercial SOP	\$520,000	\$100,888		\$620,888
Load Management SOP	\$225,000	\$39,706		\$264,706
SCORE MTP	\$250,000	\$27,778		\$277,778
Open MTP	\$310,000	\$57,353		\$367,353
Residential	\$975,000	\$172,059	\$0	\$1,147,059
Residential SOP	\$975,000	\$172,059		\$1,147,059
Hard-to-Reach Residential	\$855,000	\$138,850	\$0	\$993,850
Hard-to-Reach SOP	\$855,000	\$138,850		\$993,850
Research & Development			\$125,000	\$125,000
TOTAL PROGRAM BUDGET	\$3,445,000	\$593,987	\$125,000	\$4,163,987
EM&V			\$62,740	\$62,740
TOTAL BUDGET	\$3,445,000	\$593,987	\$187,740	\$4,226,727

2019	Incentives	Admin	R&D & EM&V	Total
Commercial	\$1,570,000	\$260,719	\$0	\$1,830,719
Commercial Solutions MTP	\$310,000	\$54,706		\$364,706
Commercial SOP	\$500,000	\$88,235		\$588,235
Load Management SOP	\$200,000	\$35,294		\$235,294
Open MTP	\$250,000	\$27,778		\$277,778
SCORE MTP	\$310,000	\$54,706		\$364,706
Residential	\$1,000,000	\$176,470	\$0	\$1,176,470
Residential SOP	\$1,000,000	\$176,470		\$1,176,470
Hard-to-Reach Residential	\$700,000	\$123,529	\$0	\$823,529
Hard-to-Reach SOP	\$700,000	\$123,529		\$823,529
Research & Development			\$125,000	\$125,000
TOTAL PROGRAM BUDGET	\$3,270,000	\$560,718	\$125,000	\$3,955,718
EM&V			\$63,903	\$63,903
TOTAL BUDGET	\$3,270,000	\$560,718	\$188,903	\$4,019,621

ENERGY EFFICIENCY REPORT

V. HISTORICAL DEMAND AND ENERGY SAVINGS GOALS FOR THE PREVIOUS FIVE YEARS

Table 7 contains SWEPCO's actual demand and energy goals and actual savings achieved for the previous five years (2013-2017) calculated in accordance with the EE Rule.

Table 7: Historical Demand and Energy Goals* and Savings Achieved

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Actual Demand Reduction (MW)	Actual Energy Savings (MWh)
2013	5.60	9,811	14.07	18,778
2014	5.60	9,811	12.58	17,494
2015	5.60	9,811	9.88	15,262
2016	5.60	9,811	11.94	20,648
2017	5.60	9,811	13.63	18,864

* Actual weather-adjusted MW and MWh goals as reported in SWEPCO's EEPRs filed in years 2013-2017.

VI. PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY SAVINGS

**Table 8: Projected versus Reported and Verified Savings for 2017 and 2016
(at the Meter)**

2017	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
Customer Class and Program				
Commercial	11,854	11,654,508	10,122	11,941,308
Commercial Solutions MTP	441	2,042,664	587	3,303,542
Commercial SOP	960	6,174,799	993	5,419,346
LED Retail Pilot	10	79,400	7	28,482
Load Management SOP	9,653	115,658	7,878	37,964
Open MTP	251	1,029,100	256	1,129,190
SCORE MTP	539	2,212,886	401	2,022,784
Residential	1,987	4,556,721	1,894	3,989,497
LED Retail Pilot	193	1,508,600	126	541,151
Residential SOP	1,794	3,048,121	1,768	3,448,346
Hard-to-Reach Residential	1,465	2,586,260	1,610	2,933,009
Hard-to-Reach SOP	1,465	2,586,260	1,610	2,933,009
Total Annual Savings	15,305	18,797,489	13,626	18,863,814

2016	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
Customer Class and Program				
Commercial	8,636	11,518,596	8,953	11,299,350
Commercial Solutions MTP	423	2,077,826	456	2,489,513
Commercial SOP	1,200	6,307,200	842	5,413,907
Load Management SOP	6,250	68,989	6,935	83,251
Open MTP	231	1,355,775	236	1,082,679
SCORE MTP	532	1,708,806	484	2,230,001
Residential	1,611	4,232,708	1,769	5,412,215
Residential SOP	1,611	4,232,708	1,769	5,412,215
Hard-to-Reach Residential	1,208	3,173,815	1,217	3,936,540
Hard-to-Reach SOP	1,208	3,173,815	1,217	3,936,540
Total Annual Savings	11,455	18,925,119	11,939	20,648,105

VII. HISTORICAL PROGRAM EXPENDITURES

This section documents SWEPCO's incentive and administration expenditures for the previous five years (2013-2017) detailed by program for each customer class.

Table 9: Historical Program Incentive and Administrative Expenditures for 2013 through 2017 (\$000's)

	2017		2016		2015		2014		2013	
	Incent	Admin	Incent	Admin	Incent	Admin	Incent	Admin	Incent	Admin
Commercial										
CS MTP	\$418.46	\$32.17	\$307.77	\$43.71	\$237.46	\$40.72	\$523.45	\$59.24	\$263.40	\$48.20
CSOP	\$622.81	\$74.45	\$622.51	\$118.23	\$329.17	\$85.75	\$331.42	\$87.27	\$469.50	\$110.40
Load Management SOP	\$307.79	\$16.41	\$187.79	\$31.00	\$145.26	\$25.42	\$256.11	\$42.39	\$229.50	\$37.00
Open MTP	\$249.24	\$21.80	\$249.99	\$28.43	\$249.67	\$33.12	\$380.25	\$47.74	\$409.90	\$38.50
SCORE MTP	\$220.80	\$28.42	\$284.58	\$44.18	\$209.54	\$37.76	\$251.38	\$34.11	\$344.10	\$51.80
SMART SourceSM MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$151.80	\$14.50
SWEPCO Care\$	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$7.20	\$0.80
Residential										
Appliance Rebate Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	\$9.74	\$0.89	\$89.60	\$9.80
CoolSaverSM MTP	NAP	NAP	NAP	NAP	\$151.03	\$13.38	\$152.65	\$19.02	\$164.40	\$17.00
Home Energy Checkup	NAP	NAP	NAP	NAP	NAP	NAP	\$7.80	\$0.71	\$8.50	\$0.70
LED Instore Rebate	\$187.25	\$9.03								
RSOP	\$845.14	\$117.23	\$989.96	\$80.52	\$809.46	\$85.07	\$630.76	\$92.54	\$765.10	\$102.90
SMART SourceSM MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$84.80	\$8.10
Hard-to-Reach Residential										
HTR SOP	\$834.95	\$100.97	\$864.97	\$70.95	\$584.98	\$65.07	\$562.36	\$80.54	\$605.30	\$86.20
HomeSavers	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$386.50	\$37.00
R & D	NAP	\$134.38	NAP	\$174.82	NAP	\$108.17	NAP	\$112.06	NAP	\$101.80
Evaluation, Measurement & Verification	NAP	\$62.73	NAP	\$57.11	NAP	\$78.82	NAP	\$108.18	NAP	\$120.50
Total Expenditures	\$3,686.44	\$597.58	\$3,507.57	\$648.95	\$2,716.57	\$573.26	\$3,105.90	\$684.68	\$3,979.60	\$785.20

VIII. PROGRAM FUNDING FOR CALENDAR YEAR 2017

As shown in Table 10, the Total Projected Budget for 2017 was \$4,740,144. Total Funds Expended for 2017 were \$4,284,022. This is an overall total program expenditure difference of less than 10% from the amount budgeted. The Commercial SOP, Load Management SOP and SCORE MTP were under budget by more than 10% due to lower than expected participation levels. SCORE MTP funds were shifted to the Commercial Solutions MTP due to higher than expected participation and exceeding the budget by more than 10%.

Table 10: Program Funding for Calendar Year 2017

2017	Number of Participating ESI ID Accounts	Total Projected Budget	Actual funds Expended (Incentives)	Admin	EM&V	Total funds Expended
Commercial	190	\$ 2,221,026	\$ 1,828,459	\$ 173,595		\$ 2,002,054
Commercial Solutions MTP	41	\$ 369,318	\$ 418,459	\$ 32,173		\$ 450,632
Commercial SOP	61	\$ 835,294	\$ 622,812	\$ 74,455		\$ 697,267
Load Management SOP	9	\$ 369,318	\$ 307,785	\$ 16,410		\$ 324,195
Open MTP	67	\$ 277,778	\$ 249,245	\$ 21,800		\$ 271,044
SCORE MTP	12	\$ 369,318	\$ 220,795	\$ 28,416		\$ 249,211
LED Retail Pilot*	NAP		\$ 9,362	\$ 341		\$ 9,704
Residential	965	\$ 1,397,430	\$ 1,023,029	\$ 125,915		\$ 1,148,944
LED Retail Pilot*	NAP	\$ 326,842	\$ 177,887	\$ 8,684		\$ 186,570
Residential SOP	965	\$ 1,070,588	\$ 845,142	\$ 117,231		\$ 962,374
Hard-to-Reach Residential	1,034	\$ 996,688	\$ 834,952	\$ 100,970		\$ 935,922
Hard-to-Reach SOP	1,034	\$ 996,688	\$ 834,952	\$ 100,970		\$ 935,922
Total Program Expenditures		\$ 4,615,144	\$ 3,686,440	\$ 400,480		\$ 4,086,920
Research & Development		\$ 125,000		\$ 134,375		\$ 134,375
EM&V					\$ 62,727	\$ 62,727
Total Expenditures	2,189	\$ 4,740,144	\$ 3,686,440	\$ 534,856	\$ 62,727	\$ 4,284,022

*EM&V team recommends five % of upstream lighting program benefits and costs be allocated to commercial customers with the remaining 95 percent allocated residential customers

IX. MARKET TRANSFORMATION PROGRAM RESULTS

SCORE MTP

The SCORE MTP that is implemented by a third party contractor provided non-cash incentives, such as building energy analyses, technical assistance, communications support, and monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use. In 2017, SWEPCO projected to acquire 539 kW in demand savings from this program. SWEPCO has verified and reported savings of 401 kW. This included participation by 12 customers in eight counties.

Commercial Solutions MTP

SWEPCO contracted with a third-party program implementer for the Commercial Solutions MTP to provide commercial facilities non-cash incentives, such as technical assistance to identify energy efficiency opportunities, education in promoting best practices, and communication support services. Program participants received cash incentives for the installation of documented energy efficiency measures that reduced peak demand and energy consumption. For 2017, SWEPCO projected to acquire 441 kW of demand savings from this program. SWEPCO's verified and reported results are 587 kW. This included participation by 41 customers in twelve different counties.

Open MTP

The Open MTP contractor provided small commercial customers with less than 100 kW demand non-cash incentives such as technical assistance to identify energy efficiency opportunities and education in promoting best practices. The direct install program provided a turn-key approach providing participants cash incentives for the installation of documented energy efficiency measures that reduced peak demand and energy consumption. For 2017, SWEPCO projected 251 kW of demand savings from this program. SWEPCO's verified and reported results are 256 kW. This included participation by 67 customers in five different counties.

X. ADMINISTRATIVE AND RESEARCH AND DEVELOPMENT COSTS

Administrative Costs

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

Program Research and Development

R&D activities are intended to help SWEPCO meet future energy efficiency goals by researching new technologies, program options and developing better, more efficient ways to administer current programs. In 2017 SWEPCO dedicated resources to enhance electronic data collection and management system for current programs. In addition, SWEPCO participated with EUMMOT in researching potentially new deemed savings measures for various programs. SWEPCO also used resources in 2017 to update its energy efficiency website www.swepcogridsmart.com.

XI. 2018 ENERGY EFFICIENCY COST RECOVERY FACTOR (EECRF)

In PUCT Docket 47116, SWEPCO received approval to recover the following:

- \$4,163,987 Cost of SWEPCO's Energy Efficiency programs projected for 2018
- \$1,187,074 Performance bonus for 2016 savings achievement
- \$131,038 SWEPCO's under-recovery of its actual energy efficiency program costs for 2016
- \$125,473 EM&V costs for PY2017 and PY2018

Approval was granted for a total revenue requirement of \$5,607,572.

The adjusted rates, as given in Table 11, went into effect on January 1, 2018.

Table 11: 2018 EECRF

Customer Class	Factor per kWh
Residential	\$0.001293
General Service	\$0.000378
Lighting & Power	\$0.000935
Municipal Pumping	\$0.000225
Municipal Service	\$0.002624
Cotton Gin	\$0.000025
Large L & P < 69kV	\$0.000000
Electric Furnace/Metal Melting < 69kV	\$(0.000561)
Oil Field Large Industrial Power	\$(0.000292)
Lighting	\$0.000000

XII. 2017 EECRF SUMMARY

Revenue Collected Through EECRF

Table 12 below outlines a summary of SWEPCO's 2017 EECRF including costs, performance bonus, prior year's over recovery and current years under recovery.

Table 12: Under-Recovery of Energy Efficiency Costs in 2017

	Authorized per Docket No. 45824	Actual Expenses
2017 Program Costs	\$ 4,740,144	\$ 4,221,295
2017 EM&V costs	\$ -	\$ 62,727
2015 (Over)/Under Recovery	\$ (75,010)	\$ (75,010)
2015 Bonus	\$ 832,620	\$ 832,620
2017 Total Costs & Bonus	\$ 5,497,754	\$ 5,041,632
2017 EECRF Revenue		\$ 4,747,870
2017 (Over)/Under		\$ 293,762

XIII. UNDERSERVED COUNTIES

An underserved county is defined by SWEPCO as any county that did not report demand or energy savings through any of the 2017 SOPs or MTPs. . Per 16 TAC § 25.181(n)(2)(U), a list of the Underserved Counties is as follows:

Childress Donley Hopkins Marion Wheeler

XIV. PERFORMANCE BONUS

SWEPCO achieved a 13,626 kW reduction in peak demand from its energy efficiency programs offered in 2017. SWEPCO's demand reduction goal for 2017 was 5,600 kW. This achievement represents 243% of its 2017 demand reduction goal. SWEPCO also achieved energy savings of 18,863,814 kWh, which represents 192% of its 2017 energy goal of 9,811,200 kWh. These results qualify SWEPCO for a Performance Bonus. Per 16 TAC § 25.181(h), SWEPCO is eligible for a Performance Bonus of \$942,590 which it will request within its May 1, 2018 EECRF filing for recovery in 2019.

In 2017, SWEPCO's total spending on energy efficiency programs was \$4,284,022. This includes actual EM&V expenditures to the EM&V team of \$62,727. Per the PUCT, the total program costs to be used in the

performance bonus calculation should include the EM&V cost allocation provided by the EM&V team for the program year 2017, instead of the actual EM&V team expenditures. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the applicable tables in this EEPR. For the purposes of the bonus calculation, SWEPCO's total program costs equaled \$4,284,035.

Table 13: Energy Efficiency Performance Bonus Calculation for 2017

Performance Bonus Calculation

	kW	kWh
2017 Goals	5,600	9,811,000
2017 Savings	13,626	18,863,814
<i>Reported/Verified Hard-to-Reach</i>	1,610	
2017 Program Costs	\$4,284,035	
2017 Performance Bonus	\$942,590	

243% Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
 192% Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
 TRUE Met Requirements for Performance Bonus?
 \$13,709,938 Total Avoided Cost ((Reported kW * PV(Avoided Capacity Cost) + Reported kWh *PV(Avoided Energy Cost))
 \$4,284,035 Total Program Costs
 \$9,425,903 Net Benefits (Total Avoided Cost - Total Expenses)

Bonus Calculation

\$6,754,943 Calculated Bonus ((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits
 \$942,590 Maximum Bonus Allowed (10% of Net Benefits)
 \$942,590 Bonus (Minimum of Calculated Bonus and Bonus Limit)

ACRONYMS

A/C	Air Conditioning
CS MTP	Commercial Solutions Market Transformation Program
CSOP	Commercial Standard Offer Program
EE Rule	Energy Efficiency Rule, 16 TAC §§ 25.181 and 25.183
EECRF	Energy Efficiency Cost Recovery Factor
EEPR	Energy Efficiency Plan and Report
EESP	Energy Efficiency Service Provider
EM&V	Evaluation, Measurement & Verification
HTR SOP	Hard-to-Reach Standard Offer Program
LM SOP	Load Management Standard Offer Program
MTP	Market Transformation Program
NAP	Not Applicable
PLAN	Energy Efficiency Plan
PUCT	Public Utility Commission of Texas
PURA	Public Utility Regulatory Act
R&D	Research and Development
REPORT	Energy Efficiency Report
RSOP	Residential Standard Offer Program
SCORE MTP	Schools Conserving Resources Market Transformation Program
SOP	Standard Offer Program
SWEPSCO	Southwestern Electric Power Company

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

COMMERCIAL SOLUTIONS

County	Reported and Verified Savings	
	kW	kWh
Bowie	68	215,280
Cass	5	19,060
Collingsworth	15	68,131
Franklin	8	53,323
Gregg	59	227,491
Hall	5	34,908
Harrison	133	808,421
Panola	3	12,495
Rusk	140	907,245
Shelby	21	82,979
Titus	125	838,740
Wood	5	35,469
Total	587	3,303,542

COMMERCIAL STANDARD OFFER

County	Reported and Verified Savings	
	kW	kWh
Bowie	432	2,345,171
Camp	7	29,881
Cass	36	144,899
Gregg	128	621,306
Harrison	224	1,608,501
Panola	18	68,140
Rusk	37	138,541
Shelby	36	144,606
Titus	53	222,928
Upshur	17	66,611
Wood	7	28,762
Total	993	5,419,346

LOAD MANAGEMENT

County	Reported and Verified Savings	
	kW	kWh
Bowie	1,083	5,747
Camp	554	2,517
Gregg	5,690	27,062
Harrison	551	2,638
Total	7,878	37,964

OPEN

County	Reported and Verified Savings	
	kW	kWh
Bowie	146	653,202
Collingsworth	95	399,160
Gregg	3	10,807
Van Zandt	1	5,364
Wood	11	60,657
Total	256	1,129,190

SCORE

County	Reported and Verified Savings	
	kW	kWh
Bowie	13	80,304
Gregg	222	1,077,669
Harrison	25	147,215
Rusk	3	17,151
Smith	43	331,802
Titus	3	15,979
Upshur	89	339,160
Van Zandt	4	13,504
Total	401	2,022,784

LED Retail Pilot Commercial

County	Reported and Verified Savings	
	kW	kWh
Gregg	5	20,586
Harrison	2	7,895
Total	7	28,482

LED Retail Pilot Residential

County	Reported and Verified Savings	
	kW	kWh
Gregg	91	391,139
Harrison	35	150,012
Total	126	541,151

RESIDENTIAL STANDARD OFFER

County	Reported and Verified Savings	
	kW	kWh
Bowie	28	55,783
Camp	65	141,557
Cass	49	113,680
Franklin	222	441,303
Gregg	754	1,449,268
Harrison	110	226,598
Morris	79	133,026
Panola	76	107,131
Red River	0	876
Rusk	68	139,054
Shelby	14	19,522
Smith	10	19,523
Titus	207	438,657
Upshur	35	65,763
Wood	51	96,605
Total	1,768	3,448,346

HARD TO REACH

County	Reported and Verified Savings	
	kW	kWh
Bowie	70	168,349
Camp	32	77,066
Cass	50	75,417
Franklin	43	96,112
Gregg	743	1,247,291
Harrison	145	240,922
Morris	20	43,073
Panola	4	9,207
Red River	1	1,875
Rusk	24	42,224
Shelby	119	177,531
Smith	5	8,654
Titus	286	626,338
Upshur	64	110,338
Wood	5	8,613
Total	1,610	2,933,009

APPENDIX B:

PROGRAM TEMPLATES

SWEPCO does not have any program templates to provide.

APPENDIX C:

EXISTING CONTRACTS OR OBLIGATIONS

SWEPCO does not have any Existing Contracts or Obligation documentation to provide.

APPENDIX D

OPTIONAL SUPPORTING DOCUMENTATION

SWEPCO has no Optional Supporting Documentation to provide.