Southwestern Public Service Company

Amended 2019 Energy Efficiency Plan and Report

Substantive Rules §§ 25.181, 25.182, and 25.183

May 1, 2019

Project No. 49297

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE

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Introduction

Southwestern Public Service Company ("SPS") presents this Amended Energy Efficiency Plan and Report ("EEPR") to comply with 16 Tex. Admin. Code ("TAC") §§ 25.181, 25.182, and 25.183 (collectively sometimes referred to herein as the "EE Rules"), which are the Public Utility Commission of Texas's ("Commission") rules implementing Public Utility Regulatory Act ("PURA") § 39.905.[1] As mandated by this section of PURA, 16 TAC § 25.181(e)(1) requires that each investor-owned electric utility achieve the following minimum goal through market-based standard offer programs ("SOPs"), targeted market transformation programs ("MTPs"), or utility self-delivered programs:

- A utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
- A utility may have a different demand reduction goal if the demand reduction goal of 30% of its annual growth in demand is equivalent to at least four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers. This is also known as the "trigger."
- Once the trigger is satisfied, 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.

[1] PURA is codified at Tex. Util. Code Ann. §§ 11.001–66.016.

Energy Efficiency Plan and Report Organization

This EEPR consists of an executive summary and two main components: the Energy Efficiency Plan ("EEP") and the Energy Efficiency Report ("EER").

- The Executive Summary highlights SPS's reported achievements for 2018 and SPS's plans for achieving its 2019 and 2020 projected energy efficiency savings goals.

Energy Efficiency Plan

- Section I describes SPS's program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and introduces any programs not included in SPS's previous EEP.
- Section II explains SPS's targeted customer classes, specifying the size of each class and the method for determining those sizes.
- Section III presents SPS's projected energy efficiency savings for the prescribed planning period broken out by program for each customer class.
- Section IV describes SPS's proposed energy efficiency budgets for the prescribed planning period broken out by program for each customer class.

Energy Efficiency Report

- Section V documents SPS's actual weather-adjusted demand savings goals and energy targets for the previous five years (2014-2018).
- Section VI compares SPS's projected energy and demand savings to its reported and verified savings by program for calendar years 2017 and 2018.
- Section VII documents SPS's incentive and administration expenditures for the previous five years (2014-2018) broken out by program for each customer class.
- Section VIII compares SPS's actual program expenditures for 2018 to its 2018 budget categorized by program for each customer class.
- Section IX describes the results from SPS's MTPs.
- Section X details SPS's current Energy Efficiency Cost Recovery Factor ("EECRF") collection.
- Section XI reflects SPS revenue collected through the 2018 EECRF.
- Section XII breaks out the over/under-recovery of energy efficiency program costs.

Appendices

- Appendix A – Reported kilowatt ("kW") and kilowatt-hour ("kWh") savings listed by county for each program.

Executive Summary

SPS submits this EEPR to comply with the EE Rules for Program Years ("PY") 2019 and 2020. The EEP portion of this EEPR details SPS's efforts to achieve reductions in peak demand and energy use among its residential and commercial customers. For PYs 2019 and 2020, SPS has developed energy efficiency portfolios designed to meet goals prescribed by 16 TAC § 25.181.

EEP Summary

The following table presents SPS's 2019 and 2020 goals and budgets under PURA § 39.905 and the EE Rules.

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

Calendar Year	2019	2020
Average Growth in Demand (MW)	(21.094)	41.236
Goal Metric: 30% Growth (MW)	(6.328)	12.371
Goal Metric: 0.4% Peak Demand (MW)	6.463	6.454
Goal Metric: 0.4% Peak Demand (MW)[2]	5.830	5.994
Demand Goal (MW)	5.495	5.994
Goal Metric: 30% Peak Energy (MWh)	(11,087)	21,674
Goal Metric: 0.4% Peak Energy (MWh)	10,213	10,502
Energy Goal (MWh)	9,627	10,502
Budget[3]	$4,126,865	$4,479,378

Table 1 shows SPS's goal(s) calculations for PY 2019 and 2020.[4]

SPS is required to achieve a demand reduction equivalent to 30% of its average in residential and commercial demand growth, measured at its annual system peak, until that goal is equivalent to at least four-tenths of 1% (the trigger) of SPS's summer weather-adjusted peak demand for the

[2] In Table 1, the Goal Metric presents SPS's actual, calculated values as prescribed in 16 TAC § 25.181(e)(1). The "Demand Goal (MW)" and "Energy Goal (MWh)" presents SPS's actual goals as prescribed in 16 TAC § 25.181(e)(3). The second row for "Goal Metric: 0.4% Peak Demand (MW)" is provided consistent with SPS's response to Staff RFI No. 3-1 from Docket No. 45916, as well as Section F of the Unopposed Stipulation in Docket No. 45916.

[3] Projected Budget amounts are set forth in Table 7.

[4] All kW/megawatt ("MW") and kWh/megawatt hour ("MWh") figures in Table 1 are given "at Meter."

combined residential and commercial customers for the previous program year. Once the trigger is reached, SPS 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. Demand reduction goals are calculated based on the average growth rate for the prior five years.

SPS calculated the 2020 demand goal as 30% of the historical five-year annual growth in demand pursuant to 16 TAC § 25.181(e).[5] The calculated demand reduction goal for 2020 yields a goal metric of 12.371 MW. Because the calculated demand reduction goal 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—i.e., the trigger has been met—SPS is using 5.994 MW as its demand goal for 2020.

The "Energy (MWh) Goal" is calculated from the demand goal using a 20% conservation load factor, as mandated in 16 TAC § 25.181(e)(4). Thus, the "Energy (MWh) Goal" is 20% of the product of the "Demand Goal (MW)" and 8,760 (the number of hours in a typical year).

SPS will implement the following SOPs, MTPs, and Low-Income Weatherization programs in 2020:

- Residential SOP;
- Residential Home Lighting MTP;
- Smart Thermostat Pilot MTP Pilot;
- Refrigerator Recycling MTP Pilot;
- Hard-to-Reach SOP;
- Low-Income Weatherization;
- Small Commercial MTP;
- Large Commercial SOP;
- Load Management SOP; and
- Retro-Commissioning MTP.

[5] For a calculation of Average Growth in Demand, see Table 5.

The projected savings, budgets, and implementation plans included in this EEPR comply with the EE Rules and incorporate lessons learned from energy efficiency service providers ("EESP") and customer participation in the various energy efficiency programs. The projected savings reported in this document assume that all of the available funds for energy efficiency programs are reserved by contractors and/or for self-delivered Market Transformation programs and expended energy efficiency projects.

EER Summary

The EER portion of this EEPR demonstrates that in 2018, SPS achieved 9,573 kW of reduction in demand and 18,894 kWh of energy savings, which equals 174% and 196%, respectively, of SPS's demand goal of 5,495 kW and energy savings goal of 9,627,240 kWh.

The expenditures for these 2018 programs were $3,874,058,[6] which was 98% of SPS's budget. To meet the goal of a 30% reduction in demand growth through energy efficiency, SPS implemented: the Residential SOPs for single- and multi-family residences; the Large Commercial SOP; the Load Management SOP; the Hard-to-Reach SOP for low-income, single- and multi-family residences; the Low-Income Weatherization program; the Home Lighting MTP; the Retro-Commissioning MTP; and Small Commercial MTP. Table 2 below compares the 2018 projected savings and budget to the reported and verified savings as well as actual expended funds for 2018.

Table 2: Summary of 2018 Projected Savings and Budget, Reported/Verified Savings, and Expended Funds

Calendar Year	2018
Demand Goal (MW)	5.495
Energy Goal (MWh)	9,627
Projected MW Savings	7.78
Projected MWh Savings	13,217
Reported MW Savings	9.57
Reported MWh Savings	18,908
Total Funds Budgeted	$3,995,074
Total Funds Expended	$3,874,058

[6] This number includes costs associated with all 2017 Evaluation, Measurement, and Verification ("EM&V") activities and SPS's 2018 EECRF expenses.

Energy Efficiency Plan

I. 2019 and 2020 Programs

A. Program Portfolios

PURA § 39.905 and 16 TAC § 25.181 establish peak demand reduction goals and program guidelines for investor-owned electric utilities in Texas. SPS is committed to offering cost-effective energy efficiency programs to ensure that its Texas retail customers are offered the same energy efficiency services that are available to consumers in other areas of the state.

This EEP reflects SPS's continued commitment to provide its customers with energy efficiency opportunities. For PY 2020, SPS proposes to offer multiple SOPs, multiple MTPs, and a weatherization program to its residential and commercial customer classes to meet the requirements under the EE Rules. The following EEP outlines SPS's planned efforts to encourage its residential and commercial customers to participate in its energy efficiency programs, including a discussion of proposed programs, budgets, and program impact estimates.

Table 3 below summarizes the programs and targeted customer classes.

Table 3: Energy Efficiency Program Portfolio

Program	Target Customer Class	Application
Large Commercial SOP	Large Commercial	Retrofit; New Construction
Small Commercial MTP	Small Commercial	Retrofit; New Construction
Load Management SOP	Commercial	Curtailable Load
Retro-Commissioning MTP	Large Commercial	Retrofit
Residential SOP	Residential	Retrofit; New Construction
Smart Thermostat MTP Pilot	Residential	Buydown
Refrigerator Recycling MTP Pilot	Residential	Retrofit
Home Lighting MTP	Residential	Buydown
Hard-to-Reach SOP	Residential Hard-to-Reach	Retrofit
Low-Income Weatherization	Low-Income	Retrofit

The programs listed in Table 3 are described in further detail below. SPS also maintains a website describing all of the requirements for project participation, the forms required for project submission, and the current available funding. That website, which can be accessed at *http://www.xcelefficiency.com/*, is the primary method by which SPS communicates with potential project sponsors about program updates and information.

B. Administrative and Research Costs for 2019 and 2020

SPS's administrative costs are incurred to support the development and implementation of its programs, as well as the regulatory compliance requirements associated with PURA § 39.905 and 16 TAC § 25.181. The costs include, but are not limited to employee labor and loading costs, employee travel expenses, the purchase of supplies, updating program databases, and legal costs. SPS monitors these costs on an ongoing basis and will make regular corrections to administrative spending, wherever possible, to ensure cost-effectiveness and regulatory compliance.

Research and Development ("R&D") costs include those costs for conducting studies and analyses to identify new programs or measures to enhance the energy efficiency or load management offerings and meet future energy and demand goals. For 2019 SPS will commission a study to investigate the viability of a separate Residential Solar Program offering for potential inclusion into the portfolio.

C. Existing Programs for 2020

SPS will continue to offer the following pre-existing programs in 2020:

Large Commercial Standard Offer Program

The Large Commercial SOP targets commercial customers with single-meter demand of at least 100 kW or aggregate meter demand of at least 250 kW. Incentives are paid to project sponsors based on verified deemed savings for a wide range of measures installed in new or retrofit applications. Typical eligible measures include light emitting diode ("LED") lighting, lighting controls, commercial cooling and ventilation, commercial refrigeration enhancements, building envelope measures, and industrial process upgrades.

Small Commercial Market Transformation Program

The Small Commercial MTP is designed to assist small business customers with identifying and implementing cost-effective energy efficiency solutions for their workplace. Small business customers often encounter greater barriers to participation in energy efficiency programs that are not experienced by larger commercial and industrial ("C&I") customers. Often the two biggest barriers are lack of access to capital and a lack of information about what energy efficiency measures and strategies are the most cost-effective for the customer's individual situation. The Small Commercial MTP seeks to assist customers in overcoming these challenges by providing increased guidance throughout the decision-making process to help small business customers plan for, prioritize, and implement energy efficient measures. Successful program measures in 2018 include LED lighting, lighting controls, and HVAC measures.

Load Management Standard Offer Program

The Load Management SOP was developed in 2012 in accordance with 16 TAC § 25.181, which authorizes participating project sponsors (customers or third-party sponsors) to provide on-call, voluntary curtailment of electricity consumption during peak demand periods in return for incentive payments. Incentives are based on verified demand savings that occur at SPS distribution sites taking primary or secondary service or at eligible institutional customers' sites because of calls for curtailment. Customers are not required to produce a specific level of curtailed load, but they will receive payments for only the amount of load curtailed.

Residential Standard Offer Program

The Residential SOP provides incentives to service providers for retrofit and new construction installations of residential measures that provide verifiable demand and energy savings. Successful measures in 2018 included insulation, infiltration, duct efficiency, and LED lighting measures. This program has two components, one for single-family residences and one for multi-family residences. Incentives and savings are tracked separately for these components but are reported together in this EEPR.

Home Lighting Market Transformation Program

The Home Lighting MTP offers SPS's customers point-of-sale rebates to reduce the cost of purchasing new, efficient LED bulbs through qualifying retailers. Point-of-sale rebates occur when the bulb manufacturer, retailer, and SPS combine funds to offer instant rebates on a variety of bulb models, targeted for residential use, enabling customers to purchase discounted LEDs without completing rebate forms. Since the program was rolled out in late 2016 as part of the Company's R&D effort, the program has become one of SPS's most cost effective and popular programs to retail customers.

Hard-to-Reach Standard Offer Program

Hard-to-Reach customers are defined by 16 TAC § 25.181(c)(27) as customers with an annual household income at or below 200% of federal poverty guidelines. The Hard-to-Reach SOP provides incentives for the comprehensive retrofit installations of a wide range of measures that reduce demand and save energy. This program is split into two segments, one for single-family residences and one for multi-family residences. Incentives and savings are tracked separately for these segments but are reported together in this EEPR.

Low-Income Weatherization Market Transformation Program

SPS's Low-Income Weatherization program is designed to cost-effectively reduce the energy consumption and energy costs of SPS's low-income customers. Under this program, one or more program implementers contract with sub-recipients and other not-for-profit community action and government agencies to provide weatherization services to SPS residential customers who meet the current Department of Energy income-eligibility guidelines. Customers also must have electric air conditioning to be eligible for the program. Implementation of SPS's Low-Income Weatherization program provides eligible residential customers appropriate weatherization measures and basic on-site energy education and satisfies the requirements of 16 TAC § 25.181(p).

Retro-Commissioning Market Transformation Program

The Retro-Commissioning MTP is a program designed for identifying and implementing low-cost/no-cost measures, as well as capital projects to optimize and enhance existing facility systems by improving performance, reducing peak demand (kW), and saving energy (kWh). The program is flexible as to facility size, but caters to facilities with significant savings potential, which typically requires a minimum of 50,000 square feet of air-conditioned space.

Refrigerator Recycling Market Transformation Pilot Program

The Refrigerator Recycling MTP Pilot is a program designed to decrease the number of inefficient primary or secondary refrigerators and freezers in residential households. The program reduces energy usage by allowing customers to dispose of their operable, inefficient appliances in an environmentally safe and convenient manner. Customers will receive an incentive and free pick-up and recycling of their old freezer or refrigerator.

Smart Thermostat Market Transformation Pilot Program

The Smart Thermostat MTP Pilot is a program designed to provide customers discounts on ENERGY STAR® Connected Thermostats through Xcel Energy's online storefront, which is owned and managed by an independent third party. A discount will be applied at the point of sale to qualifying customers. All SPS residential customers will be eligible to participate in this upstream offering.

D. New and Modified Programs for 2020

SPS does not propose any new or modified programs for the 2020 plan year.

General Implementation Plan

Program Implementation

SPS will implement its energy efficiency programs in a non-discriminatory and cost-effective manner. For 2019 and 2020, SPS intends to conduct programs using the following activity schedule:

- On December 4, 2018, SPS conducted kick-off meetings for each program, and allowed sponsors to submit applications by January 4th for the 2019 program year, which were reviewed and accepted in the order of receipt.
- Throughout 2019, SPS has and will offer approved EESPs contracts to implement projects. After contract execution, the EESP may begin implementation and reporting of measures. All projects must be completed and results reported to SPS before November 15, 2019. SPS will continue to inform the EESP community of pertinent news and updates by posting program notices on its energy efficiency website, offering local and Internet-based workshops (if necessary), and sending email notices to various energy service company associations.
- No later than January 1, 2020, SPS will announce its 2020 energy efficiency programs and open its website application pages to assist EESPs in preparing project applications for PY 2020. The application process gives sponsors feedback on whether particular projects are eligible and the level of incentives for which they may qualify.
- Throughout 2020, SPS will offer contracts to approved EESPs to implement energy efficiency projects. After contract execution, the EESP may begin implementation and reporting of measures. All projects must be completed and results reported to SPS before November 15, 2020. SPS will continue to inform the EESP community of pertinent news and updates by posting program notices on its energy efficiency website, offering local and Internet-based workshops (if necessary), and sending email notices to various energy service company associations.
- During 2019 and 2020, the Retro-Commissioning Program, Small Commercial MTP, Home Lighting MTP, and Refrigerator Recycling MTP pilot will utilize third-party program implementers who will conduct a wide range of activities to facilitate and enable customer participation in these programs.

Program Tracking

SPS uses an online database to track program activity in its SOPs. The online database is accessible to project sponsors, implementers, and administrators. All program data can be entered in real-time, capturing added customer information (class, location by county, and utility account), installed measures (quantity, deemed or measured, serial numbers, and paid incentives), authorized incentives, inspection results (including adjustments), invoice requests, and payments. The database allows SPS to guard against duplicate incentive requests to SPS's programs.

SPS uses separate databases to track program activity for the Retro-Commissioning, Home Lighting MTP, and Low-Income Weatherization programs. The Smart Thermostat MTP Pilot and Refrigerator Recycling MTP Pilot also utilize separate databases. These databases are managed by the third-party implementers for the programs.

Measurement and Verification

Many of the projects implemented under these programs will report demand and energy savings utilizing "deemed savings estimates" reviewed by the Independent Evaluator and approved by the Commission. If deemed savings have not been approved for a particular installation, such savings will be reported using an approved measurement and verification approach as allowed under 16 TAC § 25.181(o).

The International Performance Measurement and Verification Protocol will be used in the following situations:

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

Outreach and Research Activities

SPS anticipates that outreach to a broad range of EESPs and market segments will be necessary to meet the savings goals required by PURA § 39.905 and the EE Rules. SPS markets the availability of its programs by maintaining its website (*http://www.xcelefficiency.com/*), which is the primary method of communication used to provide potential project sponsors with program updates and information. It contains detailed information regarding requirements for project participation, project eligibility, end-use measure eligibility, incentive levels, application procedures, and current available funding. All application forms required for project submission are available for download on the website.

SPS offers outreach workshops for the Residential and Hard-to-Reach SOPs. These workshops are held in person or via webinar. SPS invites air conditioning contractors, weatherization service providers, lighting vendors, big-box retailers, and national energy service companies to participate in the workshops. These workshops explain program elements, such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process. SPS coordinates the timing of its workshops to avoid overlap with other utilities' schedules. These workshops increase accessibility to EESPs who may work in several areas.

SPS participates in statewide outreach activities and attends industry-related meetings to generate awareness and interest in its energy efficiency programs. In addition, SPS sends mass email notifications to keep potential project sponsors interested and informed.

SPS uses a mix of large C&I customer account management staff and third-party implementation staff to educate customers about the Load Management SOP and Retro-Commissioning MTP. In 2020, the account management team and third-party implementation staff will continue their efforts to hold customer meetings and use marketing materials to explain the program and the requirements for participation.

II. Customer Classes

SPS targets the Commercial, Residential, and Hard-to-Reach customer classes with its energy efficiency programs. Table 4 summarizes the number of customers in each of the target customer classes. The annual budgets are allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account 16 TAC § 25.181(e)(3)(F), which states that no less than 5% of the utility's total demand goal should be achieved through programs for Hard-to-Reach customers. SPS has relied on historical achievements to determine the budget allocations for the 2019 and 2020 PYs. Although these guidelines have been set, the actual distribution of the budget must remain flexible based upon the response of the marketplace and the potential interest that a customer class may have in a specific program.

Table 4: Summary of Customer Classes

Customer Class	Qualifications	Number of Customers[7]
Commercial	< 69 kV service voltage	53,337
Residential	Non-Hard-To-Reach Residential	143,486
Hard-to-Reach[8]	Hard-To-Reach Income Requirements	69,086

III. Projected Energy Efficiency Savings and Goals

As prescribed by 16 TAC § 25.181(e)(3), SPS's 2020 demand reduction goal is calculated by applying four-tenths of 1% (0.004) to the five year average (2014-2018) peak demand, for residential and commercial customers combined, at the meter of 1,499 MW. This results in a calculated demand goal of 5.994 for program year 2020.

Table 5 provides the peak load data used to calculate the demand reduction projection for the demand goal for 2020, as required by the EE Rules. To calculate this goal, SPS applied an average line loss factor of 9.70%[9] to the weather-normalized peak demand value for residential and commercial customers. SPS then removed the peak demand of opt-out customers from the residential and commercial peak demand values. Finally, SPS calculated the average peak demand growth and the average peak demand for the combined residential and commercial customers for the previous five years (2014-2018). As shown in Table 5, during the previous five year period, SPS has experienced average peak demand growth of 41 MW including opt-out customers, and average summer weather-adjusted peak demand for the combined residential and commercial customers at the meter of 1,499 MW.

[7] Commercial and Residential number of customers reflect actual SPS customer counts as of December 2018. Hard-to-Reach customers were estimated based on the most recently available U.S. Census data. In 2017, 32.5% of Texans were below the poverty threshold.
https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-46.html

[8] Hard-to-Reach customer counts are a subset of the Residential customer counts.

[9] SPS's most recently approved line loss study can be found in Docket No. 47527. For purposes of the EEPR, SPS used a simple average of line losses for all levels from the source to the meter.

Table 5: Annual Growth in Demand and Energy Consumption (at Meter)[10]

Calendar Year	Peak Demand (MW) @ Source						Energy Consumption (MWh) @ Meter				Energy Efficiency Goal Calculation			Previous Goal Metric		
	Total System		Residential & Commercial				Total System		Residential & Commercial							
	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Opt-Out	Peak Demand @ Source Net Opt-Outs	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Peak Demand @ Meter (9.7% Line Losses)	5-Year Average Peak Demand @ Meter	Goal Metric: 0.4% Peak Demand at Meter	Load Growth at Meter	5 Year Average Growth at Meter	30% Growth at Meter
2013	2,2468	2,425	1,656	1,633	81	1,553	13,994,646	13,859,306	7,764,906	7,629,565	1,402	1,516	6.06	-146	10.08	3.02
2014	2,506	2,497	1,711	1,702	55	1,647	14,061,579	14,038,723	7,712,573	7,689,717	1,487	1,525	6.10	85	8.78	2.63
2015	2,405	2,478	1,618	1,691	52	1,639	14,032,058	14,004,866	7,621,821	7,594,628	1,480	1,499	6.00	-7	-25.83	-7.75
2016	2,499	2,449	1,727	1,677	43	1,634	13,958,248	13,905,333	7,498,352	7,445,437	1,475	1,497	5.99	-5	-1.61	-0.48
2017	2,464	2,434	1,675	1,645	47	1,597	13,844,659	13,912,071	7,358,371	7,425,783	1,442	1,491	5.96	-33	-6.56	-1.97
2018	2,583	2,567	1,848	1,832	51	1,781	14,297,147	14,100,463	7,723,000	7,526,316	1,608	1,478	5.91	166	-12.15	-3.64
2019	N/A	N/A	N/A	1,789	N/A	N/A	N/A	N/A	N/A	7,660,918	N/A	1,457	5.83	N/A	-21.09	-6.33
2020	N/A	N/A	N/A	1,787	N/A	N/A	N/A	N/A	N/A	7,690,387	N/A	1,499	5.99	N/A	41.24	12.37

[10] New line loss factors for 2018 were approved for SPS in Docket No. 47527.

For 2019 and 2020, SPS developed budgets to meet the energy and demand goals in a cost-effective manner, as prescribed by 16 TAC § 25.181. Details of these budgets, including the allocation of funds to specific programs, are given in Section IV.

SPS calculated the projected savings of its energy efficiency programs from these proposed budgets, using the cost per kW of demand reduction achieved in previous SPS programs and the budget allocation for each program. SPS then calculated the expected energy savings from the projected demand reductions using the average load factors from previous PYs (with adjustments for market conditions and other potential changes). Table 6 shows the projected demand and energy savings broken out by program.

Table 6: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)

2019	Projected Savings	
	MW	**MWh**
Commercial	**5.31**	**8,674**
Commercial SOP	0.65	3,000
Retro-Commissioning MTP	0.90	4,500
Load Management SOP	3.50	14,000
Small Commercial MTP	0.22	1,000
Home Lighting MTP	0.04	160
Residential	**1.92**	**7,057**
Residential SOP	0.90	2,300
Home Lighting MTP	0.84	3,040
Smart Thermostat MTP Pilot	-	363
Refrigerator Recycling MTP	0.18	1,354
Hard-to-Reach	**0.90**	**2,465**
Hard-to-Reach SOP	0.65	1,700
Low-Income Weatherization	0.25	765
Total Annual Projected	**8.13**	**18,196**
2020	**Projected Savings**	
	MW	**MWh**
Commercial	**6.06**	**10,694**
Commercial SOP	1.02	3,826
Retro-Commissioning MTP	1.10	4,850
Load Management SOP	3.50	14
Small Commercial MTP	0.22	1,000
Home Lighting MTP	0.23	1,004
Residential	**2.19**	**7,493**
Residential SOP	0.90	2,300
Home Lighting MTP	1.11	3,476
Smart Thermostat MTP Pilot	-	363
Refrigerator Recycling MTP	0.18	1,354
Hard-to-Reach	**0.90**	**2,465**
Hard-to-Reach SOP	0.65	1,700
Low-Income Weatherization	0.25	765
Total Annual Projected	**9.15**	**20,652**

IV. Program Budgets

Table 7: Proposed Annual Budget Broken Out by Program for Each Cost Class

2019	Incentives	Admin	R&D	EM&V	Total
Commercial	$ 1,629,500	$ 74,400	$ -	$ -	$1,703,900
Commercial SOP	250,000	42,600	-	-	292,600
Retro-Commissioning MTP	800,000	-	-	-	800,000
Load Management SOP	167,000	26,100	-	-	193,000
Small Commercial MTP	400,000	5,200	-	-	405,200
Home Lighting MTP	12,500	500	-	-	13,000
Residential	1,162,500	54,600	-	-	1,217,100
Residential SOP	600,000	33,300	-	-	633,300
Home Lighting MTP	237,500	9,500	-	-	247,000
Smart Thermostat MTP Pilot	50,000	3,500	-	-	53,500
Refrigerator Recycling MTP Pilot	275,000	8,300	-	-	283,300
Hard-to-Reach	920,000	18,200	-	-	938,200
Hard-to-Reach SOP	500,000	18,200	-	-	518,200
Low-Income Weatherization	420,000	-	-	-	420,000
Research & Development	-	-	40,000	-	40,000
General Administration	-	193,400	-	-	193,400
Evaluation, Measurement, & Verification	-	-	-	34,265	34,265
Rider Expenses	-	-	-	-	-
Grand Total	**$ 3,712,000**	**$ 340,600**	**$ 40,000**	**$ 34,265**	**$4,126,865**

2020	Incentives	Admin	R&D	EM&V	Total
Commercial	$ 1,946,680	$ 78,095	$ -	$ -	$2,024,775
Commercial SOP	390,200	44,730	-	-	434,930
Retro-Commissioning MTP	977,600	-	-	-	977,600
Load Management SOP	167,000	27,405	-	-	194,405
Small Commercial MTP	400,000	5,460	-	-	405,460
Home Lighting MTP	11,880	500	-	-	12,380
Residential	1,150,720	56,855	-	-	1,207,575
Residential SOP	600,000	34,965	-	-	634,965
Home Lighting MTP	225,720	9,500	-	-	235,220
Smart Thermostat MTP Pilot	50,000	3,675	-	-	53,675
Refrigerator Recycling MTP Pilot	275,000	8,715	-	-	283,715
Hard-to-Reach	920,000	19,110	-	-	939,110
Hard-to-Reach SOP	500,000	19,110	-	-	519,110
Low-Income Weatherization	450,000	-	-	-	450,000
Research & Development	-	-	40,000	-	40,000
General Administration	-	203,070	-	-	203,070
Evaluation, Measurement, & Verification	-	-	-	34,848	34,265
Rider Expenses	-	-	-	-	-
Grand Total	**$ 4,047,400**	**$ 357,130**	**$ 40,000**	**$ 34,848**	**$4,479,378**

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

Table 8 documents SPS's demand and energy reduction goals for the previous five years (2014-2018) calculated in accordance with 16 TAC § 25.181 and actual demand reduction and energy savings achieved.

Table 8: Historical Demand and Energy Savings Goals and Achievements (at the Meter)

Calendar Year	Adjusted Demand Goal (MW)	Adjusted Energy Goal (MWh)	Actual Demand Reduction (MW)	Actual Energy Savings (MWh)
2018	5.49	9,627	9.574	18,908
2017	5.49	9,627	7.75	16,871
2016	5.49	9,627	8.19	14,451
2015	5.49	9,627	8.17	14,537
2014	5.39	9,449	5.02	11,900

VI. Projected Versus Reported and Verified Demand and Energy Savings

This section documents SPS's projected savings and its reported and verified savings for PYs 2017 and 2018. Table 9 shows the savings for SOPs, MTPs, and the Low-Income Weatherization program. SPS's 2017 programs produced 7,750 kW demand savings or 141% of the statutory goal of 5,495 kW. In 2018, SPS's programs produced 9,574 kW of demand savings at the meter or 174% of the statutory goal of 5,495 kW. Taking into account line losses approved in Docket No. 47117, SPS's 2018 programs produced 10.60 MW of demand savings at the source.

Table 9: Projected versus Reported/Verified Savings for 2017 and 2018 (at Meter)

2017	Projected Savings		Reported/Verified Savings	
	kW	kWh	kW	kWh
Commercial	5,001	7,265,800	5,135	9,377,897
Commercial SOP	700	2,452,800	631	3,188,139
Retro-Commissioning MTP	3,500	-	3,323	13,292
Load Management SOP	200	800,000	219	1,029,446
Small Commercial MTP	600	4,000,000	922	5,003,942
Home Lighting MTP	1	13,000	40	143,079
Residential	1,124	3,426,880	1,703	5,061,514
Residential SOP	1,100	3,179,880	935	2,343,021
Home Lighting MTP	24	247,000	768	2,718,493
Hard-to-Reach	1,025	3,007,640	912	2,431,223
Hard-to-Reach SOP	800	2,312,640	659	1,665,792
Low-Income Weatherization	225	695,000	254	765,432
Total Annual Savings Goals	**7,150**	**13,700,320**	**7,750**	**16,870,635**
2018	**Projected Savings**		**Reported Savings**	
	kW	**kWh**	**kW**	**kWh**
Commercial	5,605	9,133,770	6,598	10,888,164
Commercial SOP	1,060	2,870,600	652	3,655,048
Retro-Commissioning MTP	835	5,388,170	907	4,950,639
Load Management SOP	3,500	-	4,544	18,176
Small Commercial MTP	200	800,000	268	1,212,389
Home Lighting MTP	10	75,000	227	1,051,912
Residential	1,170	2,517,590	2,012	5,666,879
Residential SOP	980	1,092,590	945	2,135,877
Home Lighting MTP	190	1,425,000	1,067	3,531,002
Hard-to-Reach	1,005	1,565,910	964	2,353,251
Hard-to-Reach SOP	755	890,910	682	1,551,080
Low-Income Weatherization	250	675,000	282	800,172
Total Annual Savings Goals	**7,780**	**13,217,270**	**9,574**	**18,908,294**

VII. Historical Program Expenditures

This section documents SPS's incentive and administrative expenditures for the previous five years (2014-2018) broken out by program for each customer class. Table 10 shows expenditures for SOPs, MTPs, and the Low-Income Weatherization Program.

Table 10: Historical Program Incentive and Administrative Expenditures for 2014 through 2018[11]

Program	2018		2017		2016		2015		2014	
	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)
Commercial	$ 1,784	$ 43	$ 1,615	$ 48	$ 1,501	$ 132	$ 1,501	$ 132	$ 905	$ 56
Large Commercial SOP	264	30	243	41	598	96	598	96	523	26
Small Commercial SOP	-	-	-	-	43	16	43	16	66	5
Retro-Commissioning MTP	882		796	-	647	2	647	2	227	1
Load Management SOP	227	13	166	6	213	17	213	17	89	25
Small Commercial MTP	400	-	400	1	-	-	-	-	-	-
Home Lighting MTP	12	-	10	-	-	-	-	-	-	-
Residential	805	35	795	37	556	42	556	42	531	19
Residential SOP	584	30	597	31	556	42	556	42	531	19
Home Lighting MTP	221	5	199	6	-	-	-	-	-	-
Hard-to-Reach	905	30	899	31	710	76	710	76	618	41
Hard-to-Reach SOP	496	30	500	31	352	23	352	23	355	14
Low-Income Weatherization	410	-	399	-	358	54	358	54	263	28
Research & Development	-	25	-	-	-	3	-	3	-	30
General Administration	-	167	-	167	-	62	-	62	-	172
Evaluation, Measurement, & Verification	-	34	-	34	-	35	-	35	-	60
Rider Expenses	-	47	-	49	-	109	-	109	-	129
Total Expenditures	**$ 3,495**	**$ 379**	**$ 3,310**	**$ 366**	**$ 2,767**	**$ 459**	**$ 2,767**	**$ 459**	**$ 1,777**	**$ 472**

[11] 2018 expenditures from Project No. 49297; 2017 expenditures from Project No. 48146; 2016 expenditures from Project No. 46907; 2015 expenditures from Project No. 45675; 2014 expenditures from Project No. 44480.

VIII. Program Funding for Calendar Year 2018

As shown in Table 11, SPS spent a total of $3,882,640[12] on its energy efficiency programs in 2018, which is $72,435 less than SPS's 2018 approved budget of $3,955,074.

Table 11: Program Funding for Calendar Year 2018

Customer Segment and Program	Total Projected Budget	Participants	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Total Funds Expended	Budget and Expenditure Variance
Commercial & Industrial	$ 1,926,385	7,434	$ 1,783,959	$ 42,645	$ 1,826,604	95%
Large Commercial SOP	397,456	103	263,532	29,570	293,102	74%
Retro-Commissioning MTP	907,716	24	881,579		881,579	97%
Load Management SOP	202,182	7	227,200	12,807	240,007	119%
Small Commercial MTP	406,676	103	400,000	-	400,000	98%
Home Lighting MTP	12,355	7,197	11,648	268	11,917	96%
Residential	864,002	137,619	805,344	34,666	840,009	97%
Residential SOP	629,256	870	584,023	29,571	613,594	98%
Home Lighting MTP	234,746	136,749	221,321	5,095	226,416	96%
Hard-to-Reach	935,988	939	905,464	29,571	935,034	100%
Hard-to-Reach SOP	523,452	731	495,747	29,571	525,317	100%
Low-Income Weatherization	412,536	208	409,717	-	409,717	99%
Research & Development	40,000	-	-	25,182	25,182	63%
General Administration	188,700	-	-	166,593	166,593	88%
Evaluation, Measurement, & Verification	-	-	-	33,634	33,634	N/A
EECRF Rider Expenses	-	-	-	47,001	47,001	N/A
Total	$ 3,955,074	$ 145,992	$ 3,494,766	$ 379,292	$ 3,874,058	98%

Pursuant to 16 TAC § 25.181(l)(2)(Q), SPS is required to provide an explanation of annual program spending variance from budgets if the variance exceeds a positive or negative 10%. In 2018, two programs met this criterion: Large Commercial SOP, and Load Management SOP.

- The Large Commercial SOP was below budgeted spending primarily due to a reduction in participation. SPS experienced several project delays on one large multi-site project and

[12] This number includes SPS's direct program costs, as well as indirect programs costs including R&D, EM&V, and EECRF rate case expenses.

received several project applications that did not meet the qualifying criteria of the program.

- The Load Management SOP was overspent primarily due to performance based incentive payments coming in slightly higher than budgeted. This was a result of kW achievement coming in higher than originally forecasted.

Table 12: Expenditures for Targeted Low-Income Program

2018 Budget	Required Expenditures	Actual Expenditures	% of Budget
$ 3,955,074	$395,507	$409,717	10%

As shown in Table 12, SPS spent approximately 10% of its 2018 approved portfolio budget on its targeted low-income energy efficiency program.

IX. Market Transformation Program Results

SPS launched its Commercial Retro-Commissioning MTP in April 2013. In 2018, SPS completed 21 projects that resulted in a reduction of 907 kW and 4,950,639 kWh. SPS expects additional, similar projects to be completed in 2019.

SPS launched its Small Commercial MTP in January 2017. In 2018, SPS completed 36 projects that resulted in a reduction of 268 kW and 1,212,389 kWh. This new program has proven to be effective at increasing participation amongst small commercial customers which was the focus for this new offering.

SPS launched its Home Lighting MTP Pilot in January 2017. In 2018, SPS had over 136,749 bulbs sold in its upstream lighting program that resulted in a reduction of 1,067 kW and 3,531,002 kWh.

X. 2018 Energy Efficiency Cost Recovery Factor (EECRF)

On September 29, 2017, in Docket No. 47117, the Commission approved SPS's 2018 EECRF to recover a total of $4,798,345 in expenses associated with its 2018 energy efficiency programs, effective January 1, 2018.

Table 13: 2018 EECRF Rates

Rate Schedule	$/kWh
Residential Service	$0.000969
Small General Service	$0.000184
Secondary General Service	$0.000599
Primary General Service	$0.000208
Small Municipal and School Service	$0.011795
Large Municipal Service	$0.000273
Large School Service	$0.002247

XI. Revenue Collected through EECRF (2018)

SPS collected $4,883,633 through its 2018 EECRF, which became effective January 1, 2018.

XII. Over/Under-recovery of Energy Efficiency Program Costs

SPS spent $213,294 less than what was recovered by the EECRF as shown in Table 14 below.

Table 14: Over/Under Recovery

2018 Program Costs	$	3,793,423
2016/2017 EM&V Costs	$	67,285
2016 Net Under Recovery	$	1,359
2016 Rate Case Expenses (D. 45916)	$	33,777
2016 Performance Bonus	$	774,495
Total	**$**	**4,670,399**
EECRF Recovery	$	4,883,633
Net (Over)/Under Recovery	**$**	**(213,294)**

Acronyms

C&I	Commercial and Industrial
Commission	Public Utility Commission of Texas
EECRF	Energy Efficiency Cost Recovery Factor
EEP	Energy Efficiency Plan
EEPR	Energy Efficiency Plan and Report
EER	Energy Efficiency Report
EE Rules	Energy Efficiency Rules, 16 Tex. Admin. Code § 25.181, 25.182 and § 25.183
EESP	Energy Efficiency Service Provider
EM&V	Evaluation, Measurement, and Verification
kW	kilowatt
kWh	kilowatt hour
LED	Light Emitting Diode
MTP	Market Transformation Program
MW	Megawatt
MWh	Megawatt hour
PURA	Public Utility Regulatory Act
PY	Program Year
R&D	Research & Development
SOP	Standard Offer Program
SPS	Southwestern Public Service Company
TAC	Texas Administrative Code

APPENDIX A: REPORTED DEMAND AND ENERGY REDUCTION BY COUNTY 2018

Large Commercial SOP			
County	**# of Premises**	**kW**	**kWh**
Castro	1	3	19,238
Gray	1	4	21,237
Hutchinson	2	39	206,307
Lynn	4	34	191,579
Moore	2	8	45,877
Parmer	1	30	136,454
Potter	29	274	1,604,149
Randall	15	189	1,020,803
Sherman	5	71	409,404
Total	**60**	**652**	**3,655,048**

Recommissioning MTP			
County	**# of Premises**	**kW**	**kWh**
Castro	1	19	131,084
Deaf Smith	8	59	398,304
Gray	2	6	7,459
Hutchinson	2	9	63,657
Moore	1	28	198,580
Parmer	1	3	23,622
Potter	9	783	4,127,933
Total	**24**	**907**	**4,950,639**

Load Management			
County	**# of Premises**	**kW**	**kWh**
Cochran	1	689	2,756
Moore	2	145	580
Parmer	1	419	1,676
Potter	8	1,623	6,492
Randall	2	373	1,492
Terry	1	1,121	4,484
Yoakum	1	174	696
Total	**16**	**4,544**	**18,176**

Small Commercial MTP			
County	**# of Premises**	**kW**	**kWh**
Armstrong	1	4	17,300
Dallam	1	4	18,143
Gray	1	10	47,899
Hale	4	4	28,217
Hartley	1	1	7,231
Hemphill	1	11	55,527
Hockley	3	9	40,412
Lamb	3	6	19,787
Potter	10	65	307,198
Randall	12	145	615,423
Sherman	1	1	5,932
Wheeler	1	7	36,180
Total	**36**	**267**	**1,199,249**

Home Lighting MTP			
County	**# of Premises[13]**	**kW**	**kWh**
Deaf Smith	4,731	44	156,552
Floyd	143	1	4,255
Gaines	2,470	26	91,527
Gray	12,944	114	403,199
Hale	8,558	78	275,772
Hockley	6,141	57	202,474
Hutchinson	12,535	111	391,635
Lamb	321	3	9,551
Moore	5,665	54	190,477
Potter	39,286	360	1,272,909
Randall	51,152	479	1,693,768
Total	**143,946**	**1,328**	**4,692,121**

Residential SOP			
County	**# of Premises**	**kW**	**kWh**
Bailey	37	77	176,225
Carson	1	2	4,262
Cochran	5	14	34,824
Deaf Smith	5	11	22,382
Hale	1	1	1,684
Hockley	43	101	258,344
Hutchinson	29	45	96,281
Lamb	7	16	39,673
Moore	2	3	3,733
Oldham	1	1	4,145
Parmer	38	68	169,165
Potter	183	366	840,375
Randall	145	240	484,783
Total	**497**	**945**	**2,135,877**

[13] Sum of individual bulbs sold and not individual premises.

Hard-to-Reach SOP			
County	**# of Premises**	**kW**	**kWh**
Bailey	58	90	209,446
Carson	2	4	7,885
Cochran	9	18	44,716
Deaf Smith	6	16	42,251
Hockley	49	100	261,123
Hutchinson	13	29	59,105
Lamb	5	7	15,489
Lubbock	42	21	22,495
Parmer	33	75	190,128
Potter	136	250	538,542
Randall	35	72	160,792
Total	**388**	**682**	**1,551,971**

Low-Income Weatherization			
County	**# of Premises**	**kW**	**kWh**
Carson	1	1	841
Deaf Smith	1	1	1,000
Hutchinson	1	1	1,260
Oldham	1	0	363
Potter	110	274	792,120
Randall	5	4	4,588
Total	**119**	**282**	**800,172**