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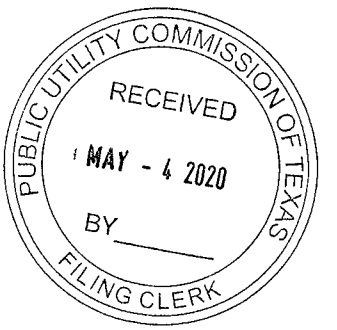

Southwestern Public Service Company

2020 Energy Efficiency Plan and Report

Substantive Rules §§ 25.181, 25.182, and 25.183

May 1, 2020

Project No. 50666

Xcel Energy℠
SOUTHWESTERN PUBLIC SERVICE

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Introduction

Southwestern Public Service Company ("SPS") presents this Energy Efficiency Plan and Report ("EEPR") to comply with 16 Tex. Admin. Code ("TAC") §§ 25.181, 25.182, and 25.183 (collectively 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 2019 and SPS's plans for achieving its 2020 and 2021 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 (2015-2019).
- Section VI compares SPS's projected energy and demand savings to its reported and verified savings by program for calendar years 2018 and 2019.
- Section VII documents SPS's incentive and administration expenditures for the previous five years (2015-2019) broken out by program for each customer class.
- Section VIII compares SPS's actual program expenditures for 2019 to its 2019 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 2019 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") 2020 and 2021. 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 2020 and 2021, SPS has developed energy efficiency portfolios designed to meet goals prescribed by 16 TAC § 25.181.

EEP Summary

The following table presents SPS's 2020 and 2021 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	2020	2021
Average Growth in Demand (MW)	41.236	8.139
Goal Metric: 0.4% Peak Demand (MW)	5.994	6.027
Demand Goal (MW)	5.994	6.027
Goal Metric: 0.4% Peak Energy (MWh)	10,502	10,559
Energy Goal (MWh)	10,502	10,559
Budget[3]	$4,479,378	$4,480,825

Table 1 shows SPS's goal(s) calculations for PY 2020 and 2021.[4] SPS's PY 2020 Demand and Energy goals were approved in Commission Docket No. 49495.

[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."

In 2019, SPS met the trigger described in 16 TAC § 25.181(e)(1)(B). As a result, SPS was required to achieve a demand reduction in PY 2020 equivalent to four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year. In accordance with 16 TAC § 25.181(e)(3)(B), SPS calculated its PY 2020 demand reduction goal using the average growth rate for the previous five years (2014-2018), yielding a demand reduction goal of 5.994 MW for PY 2020. Because the trigger has been met, SPS calculated its demand reduction goal for PY 2021 similarly, using four-tenths of 1% of its summer weather-adjusted five-year average (2015-2019) peak demand for the combined residential and commercial customers. This calculation yields a goal metric of 6.027 MW.

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;
- Refrigerator Recycling MTP;
- Hard-to-Reach SOP;
- Low-Income Weatherization;
- Small Commercial MTP;
- Large Commercial SOP;
- Load Management SOP; and
- Retro-Commissioning MTP.

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 2019, SPS achieved 9,573 kW of reduction in demand and 23,327,577 kWh of energy savings, which equals 174% and 242%, respectively, of SPS's demand goal of 5,495 kW and energy savings goal of 9,627,240 kWh.

The expenditures for these 2019 programs were $3,850,714,[5] which was 93% of SPS's budget. To meet the goal of a four-tenths of 1% reduction in the summer weather-adjusted peak demand 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; Small Commercial MTP, Smart Thermostat Program; and the Refrigerator Recycling MTP. Table 2 below compares the 2019 projected savings and budget to the reported and verified savings as well as actual expended funds for 2019.

Table 2: Summary of 2019 Projected Savings and Budget, Reported/Verified Savings, and Expended Funds

Calendar Year	2019
Demand Goal (MW)	5.495
Energy Goal (MWh)	9,627
Projected MW Savings	8.13
Projected MWh Savings	18,196
Reported MW Savings	9.57
Reported MWh Savings	23,328
Total Funds Budgeted	$4,126,865
Total Funds Expended	$3,850,714

[5] This number includes costs associated with all 2018 Evaluation, Measurement, and Verification ("EM&V") activities and SPS's 2019 EECRF expenses.

Energy Efficiency Plan

I. 2020 and 2021 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 2021, 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	Residential	Buydown
Refrigerator Recycling MTP	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 2020 and 2021

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 2021, SPS is planning to investigate the viability of a Codes & Standards program offering for potential future inclusion into the portfolio.

C. Existing Programs for 2021

SPS will continue to offer the following pre-existing programs in 2021:

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 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 include 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 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 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 2021

SPS does not propose any new or modified programs for the 2021 plan year.

General Implementation Plan

Program Implementation

SPS will implement its energy efficiency programs in a non-discriminatory and cost-effective manner. For PY 2020 and 2021, SPS intends to conduct programs using the following activity schedule:

- On January 9, 2020, SPS conducted kick-off meetings for each program, and allowed sponsors to submit applications by January 17th for the 2020 PY, which were reviewed and accepted in the order of receipt.

- Throughout 2020, 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, 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.

- No later than January 1, 2021, SPS will announce its 2021 energy efficiency programs and open its website application pages to assist EESPs in preparing project applications for PY 2021. The application process gives sponsors feedback on whether particular projects are eligible and the level of incentives for which they may qualify.

- Throughout 2021, 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, 2021. 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 2020 and 2021, 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.xcelenergyefficiency.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 2021, 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 2020 and 2021 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[6]
Commercial	< 69 kV service voltage	53,179
Residential	Non-Hard-To-Reach Residential	206,136
Hard-to-Reach[7]	Hard-To-Reach Income Requirements	30,714

III. Projected Energy Efficiency Savings and Goals

As prescribed by 16 TAC § 25.181(e)(3), SPS's 2021 demand reduction goal is calculated by applying four-tenths of 1% (0.004) to the five year average (2015-2019) peak demand, for residential and commercial customers combined, at the meter of 1,507 MW. This results in a calculated demand goal of 6.027 for PY 2021.

Table 5 provides the peak load data used to calculate the demand reduction projection for the demand goal for PY 2021, as required by the EE Rules. To calculate this goal, SPS applied an

[6] Commercial and Residential number of customers reflect actual SPS customer counts as of December 2019. Hard-to-Reach customers were estimated based on the most recently available U.S. Census data. In 2018, 14.9% of Texans were below the poverty threshold.
https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-46.html

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

average line loss factor of 9.70%[8] 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 for the combined residential and commercial customers for the previous five years (2015-2019). As shown in Table 5, during the previous five year period, SPS has experienced an average summer weather-adjusted peak demand for the combined residential and commercial customers at the meter of 1,507 MW.

[8] 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)[9]

Calendar Year	Peak Demand (MW) @ Source						Energy Consumption (MWh) @ Meter				Energy Efficiency Goal Calculation		
	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
2013	2,468	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
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
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
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
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
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
2019	2,483	2,510	1,702	1,729	37	1,692	14,037,836	13,944,983	7,465,519	7,372,666	1,528	1,457	5 83
2020	N/A	N/A	N/A	1,740	N/A	N/A	N/A	N/A	N/A	7,664,093	N/A	1,499	5 99
2021	N/A	N/A	N/A	1,735	N/A	N/A	N/A	N/A	N/A	7,646,325	N/A	1,507	6 03

[9] New line loss factors for 2019 were approved for SPS in Docket No. 47527.

For 2020 and 2021, 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)

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**
2021	**Projected Savings**	
	MW	**MWh**
Commercial	**6.42**	**11,759**
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	0.59	2,069
Residential	**2.92**	**10,459**
Residential SOP	0.90	2,300
Home Lighting MTP	1.97	6,926
Smart Thermostat MTP Pilot	-	838
Refrigerator Recycling MTP	0.05	395
Hard-to-Reach	**0.90**	**2,465**
Hard-to-Reach SOP	0.65	1,700
Low-Income Weatherization	0.25	765
Total Annual Projected	**10.24**	**24,682**

IV. Program Budgets

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

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

2021	Incentives	Admin	R&D	EM&V	Total
Commercial	$ 1,952,445	$ 78,330	$ -	$ -	$2,030,775
Commercial SOP	390,200	44,730	-	-	434,930
Retro-Commissioning MTP	977,600	-	-	-	977,600
Load Management SOP	167,000	27,405	-	-	194,405
Small Commercial MTP	400,000	5,460	-	-	405,460
Home Lighting MTP	17,645	735	-	-	18,380
Residential	1,140,251	61,324	-	-	1,201,575
Residential SOP	600,000	34,965	-	-	634,965
Home Lighting MTP	335,251	13,969	-	-	349,220
Smart Thermostat MTP	30,000	3,675	-	-	33,675
Refrigerator Recycling MTP	175,000	8,715	-	-	183,715
Hard-to-Reach	950,000	19,110	-	-	969,110
Hard-to-Reach SOP	500,000	19,110	-	-	519,110
Low-Income Weatherization	450,000	-	-	-	450,000
Research & Development	-	-	40,000	-	40,000
General Administration	-	205,100	-	-	203,070
Evaluation, Measurement, & Verification	-	-	-	34,265[10]	34,265
Rider Expenses	-	-	-	-	-
Grand Total	**$ 4,042,696**	**$ 363,864**	**$ 40,000**	**$ 34,265**	**$4,480,825**

[10] SPS is using the actual expenses incurred in 2019 for review of the 2018 PY as an estimate of costs for the 2021 PY. The actual 2021 PY expenses may differ from those incurred in 2019 for review of the 2018 PY expenses.

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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 (2015-2019) 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)
2019	5.49	9,627	9.573	23,328
2018	5.49	9,627	9.57	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

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 2018 and 2019. Table 9 shows the savings for SOPs, MTPs, and the Low-Income Weatherization program. SPS's 2018 programs produced 9,574 kW demand savings or 174% of the statutory goal of 5,495 kW. In 2019, SPS's programs produced 9,573 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. 47527, SPS's 2019 programs produced 10.60 MW of demand savings at the source.

Table 9: Projected versus Reported/Verified Savings for 2018 and 2019 (at Meter)

2018	Projected Savings		Reported/Verified 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**
2019	**Projected Savings**		**Reported Savings**	
	kW	**kWh**	**kW**	**kWh**
Commercial	5,314	8,674,000	5,985	12,846,135
Commercial SOP	650	3,000,000	623	3,142,792
Retro-Commissioning MTP	900	4,500,000	1,214	6,552,893
Load Management SOP	3,500	14,000	3,417	27,312
Small Commercial MTP	220	1,000,000	316	1,420,641
Home Lighting MTP	44	160,000	415	1,702,497
Residential	1,916	7,056,600	2,632	8,219,484
Residential SOP	900	2,300,000	899	2,134,339
Home Lighting MTP	836	3,040,000	1,683	5,650,639
Smart Thermostat MTP	-	363,000	-	36,322
Refrigerator Recycling MTP	180	1,353,600	50	398,184
Hard-to-Reach	900	1,565,910	956	2,261,958
Hard-to-Reach SOP	650	890,910	691	1,531,446
Low-Income Weatherization	250	675,000	265	730,512
Total Annual Savings Goals	**8,130**	**18,195,600**	**9,573**	**23,327,577**

VII. Historical Program Expenditures

This section documents SPS's incentive and administrative expenditures for the previous five years (2015-2019) 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 2015 through 2019[11]

Program	2019		2018		2017		2016		2015	
	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)	Incent. (000s)	Admin (000s)
Commercial	$ 1,684	$ 43	$ 1,784	$ 43	$ 1,615	$ 48	$ 1,501	$ 132	$ 1,501	$ 132
Large Commercial SOP	231	27	264	30	243	41	598	96	598	96
Small Commercial SOP	-	-	-	-	-	-	43	16	43	16
Retro-Commissioning MTP	869		882		796	-	647	2	647	2
Load Management SOP	171	13	227	13	166	6	213	17	213	17
Small Commercial MTP	400	-	400	-	400	1	-	-	-	-
Home Lighting MTP	13	2	12	-	10	-	-	-	-	-
Residential	875	78	805	35	795	37	556	42	556	42
Residential SOP	568	27	584	30	597	31	556	42	556	42
Home Lighting MTP	251	39	221	5	199	6	-	-	-	-
Smart Thermostat MTP	1	-	-	-	-	-	-	-	-	-
Refrigerator Recycling MTP	55	11	-	-	-	-	-	-	-	-
Hard-to-Reach	918	27	905	30	899	31	710	76	710	76
Hard-to-Reach SOP	497	27	496	30	500	31	352	23	352	23
Low-Income Weatherization	421	-	410	-	399	-	358	54	358	54
Research & Development	-	16	-	25	-	-	-	3	-	3
General Administration	-	148	-	167	-	167	-	62	-	62
Evaluation, Measurement, & Verification	-	34	-	34	-	34	-	35	-	35
Rider Expenses	-	27	-	47	-	49	-	109	-	109
Total Expenditures	**$ 3,477**	**$ 374**	**$ 3,495**	**$ 379**	**$ 3,310**	**$ 366**	**$ 2,767**	**$ 459**	**$ 2,767**	**$ 459**

[11] 2019 expenditures from Project No. 50666; 2018 expenditures from Project No. 49297; 2017 expenditures from Project No. 48146; 2016 expenditures from Project No. 46907; 2015 expenditures from Project No. 45675.

VIII. Program Funding for Calendar Year 2019

As shown in Table 11, SPS spent a total of $3,850,714[12] on its energy efficiency programs in 2019, which is $274,039 less than SPS's 2019 approved budget of $4,126,865.

Table 11: Program Funding for Calendar Year 209

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	$ 1,703,900	11,259	$ 1,684,270	$ 42,869	$1,729,278	101%
Large Commercial SOP	292,600	73	231,418	27,449	258,867	88%
Retro-Commissioning MTP	800,000	29	868,781		868,781	109%
Load Management SOP	193,100	7	170,850	13,383	184,233	95%
Small Commercial MTP	405,200	53	400,000	-	400,000	99%
Home Lighting MTP	13,000	11,097	13,221	2,064	15,285	118%
Residential	1,217,100	212,107	874,983	77,586	952,568	78%
Residential SOP	633,300	887	567,783	27,452	595,235	94%
Home Lighting MTP	247,000	210,841	251,197	39,222	290,418	118%
Smart Thermostat MTP	53,500	26	1,300	-	1,300	2%
Refrigerator Recycling MTP	283,300	353	54,700	10,915	65,615	23%
Hard-to-Reach	938,200	1,151	917,895	27,449	945,345	101%
Hard-to-Reach SOP	518,200	922	496,980	27,449	524,429	101%
Low-Income	420,000	229	420,916	-	420,916	100%
Research & Development	40,000	-	-	16,086	16,086	40%
General Administration	193,400	-	-	148,469	148,469	77%
Evaluation, Measurement, & Verification	34,265	-	-	34,265	34,265	N/A
EECRF Rider Expenses	-	-	-	26,815	26,815	N/A
Total	$ 4,126,865	224,517	$ 3,477,145	$ 373,568	$ 3,850,714	93%

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, four programs met this criterion: Large Commercial SOP, Home Lighting MTP, Smart Thermostat MTP and the Refrigerator Recycling MTP.

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

- During program year 2019, specific program management adjustments were made as actual achievement for the newer program offerings of Refrigeration Recycling and Smart T-Stats were underperforming compared to forecasts. Funding from these programs were moved to Home Lighting in an effort to replace the associated achievement and maintain goal attainment for the portfolio.

Table 12: Expenditures for Targeted Low-Income Program

2019 Budget	Required Expenditures	Actual Expenditures	% of Budget
$ 4,126,865	$412,687	$420,916	10%

As shown in Table 12, SPS spent approximately 10% of its 2019 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 2019, SPS completed 11 projects that resulted in a reduction of 1,214 kW and 6,552,893 kWh. SPS expects additional, similar projects to be completed in 2020.

SPS launched its Small Commercial MTP in January 2017. In 2019, SPS completed 53 projects that resulted in a reduction of 316 kW and 1,420,641 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 in January 2017. In 2019, SPS had over 221,938 bulbs sold in its upstream lighting program that resulted in a reduction of 2,098 kW and 7,353,136 kWh.

[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.

SPS launched its Smart Thermostat MTP on January 1, 2019. In its initial year as a program, SPS sold 26 Thermostats on its online marketplace that resulted in a reduction of 36,322 kWh.

SPS launched its Refrigerator Recycling MTP on January 1, 2019. In its initial year as a program, SPS recycled 353 old refrigerators within the service territory that resulted in a reduction of 50 kW and 398,184 kWh.

X. 2019 Energy Efficiency Cost Recovery Factor (EECRF)

On September 27, 2018, in Docket No. 48324, the Commission approved SPS's 2019 EECRF to recover a total of $4,973,592 in expenses associated with its 2019 energy efficiency programs, effective January 1, 2019.

Table 13: 2019 EECRF Rates

Rate Schedule	$/kWh
Residential Service	$0.001208
Small General Service	$0.000407
Secondary General Service	$0.000772
Primary General Service	$0.000079
Small Municipal and School Service	$0.005928
Large Municipal Service	$0.000202
Large School Service	$0.000290

XI. Revenue Collected through EECRF (2019)

SPS collected $5,114,825 through its 2019 EECRF, which became effective January 1, 2019.

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

SPS recovered $447,240 more than what was approved in EECRF Docket No. 48324 as shown in Table 14 below.

Table 14: Over/Under Recovery (2019)

2019 Program Costs	$	3,789,634
AIP Reduction		(3,041)
2018 EM&V Costs		34,265
2017 Net Under Recovery		216,761
2017 Rate Case Expenses (D. 47117)		49,025
2017 Performance Bonus		580,941
Total		**4,667,585**
EECRF Recovery	$	$5,114,825
Net (Over)/Under Recovery	**$**	**(447,240)**

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 2019

Large Commercial SOP			
County	**# of Premises**	**kW**	**kWh**
Cochran	1	8	32,190
Crosby	1	20	77,109
Deaf Smith	1	22	134,333
Gaines	6	62	391,432
Gray	1	8	29,748
Hale	2	7	27,811
Hutchinson	1	2	9,925
Moore	1	8	32,405
Ochiltree	1	8	32,814
Potter	21	334	1,792,436
Randall	7	123	453,174
Terry	7	21	129,415
Total	**50**	**623**	**3,142,792**

Recommissioning MTP			
County	**# of Premises**	**kW**	**kWh**
Castro	1	21	106,833
Gaines	1	4	11,923
Hale	1	4	2,771
Hockley	1	132	595,514
Ochiltree	1	148	664,453
Potter	2	412	2,820,697
Randall	3	482	2,283,034
Wheeler	1	11	67,668
Total	**11**	**1,214**	**6,552,893**

Load Management			
County	**# of Premises**	**kW**	**kWh**
Cochran	1	437	3,492
Moore	2	47	376
Parmer	1	446	3,564
Potter	8	824	6,584
Randall	2	713	5,700
Terry	1	761	6,084
Yoakum	1	189	1,512
Total	**16**	**3,417**	**27,312**

Small Commercial MTP			
County	**# of Premises**	**kW**	**kWh**
Bailey	1	6	24,424
Castro	2	40	209,591
Deaf Smith	2	48	205,614
Hale	1	2	6,910
Moore	1	8	24,051
Parmer	2	4	16,438
Potter	12	84	338,933
Randall	12	122	580,894
Wheeler	1	2	13,786
Total	**34**	**316**	**1,420,641**

Home Lighting MTP			
County	**# of Premises[13]**	**kW**	**kWh**
Deaf Smith	8,240	85	296,289
Gaines	4,324	46	161,336
Gray	17,350	169	590,270
Hale	11,525	115	403,754
Hockley	11,149	111	389,911
Hutchinson	13,400	133	464,365
Moore	11,682	117	407,991
Potter	57,683	539	1,888,112
Randall	86,585	836	2,925,871
Total	**221,938**	**2,151**	**7,527,899**

Residential SOP			
County	**# of Premises**	**kW**	**kWh**
Armstrong	1	2	6,014
Bailey	27	60	145,631
Carson	1	2	5,374
Castro	1	4	9,438
Cochran	2	7	18,830
Crosby	12	24	64,573
Deaf Smith	61	120	270,494
Garza	2	6	16,045
Hale	5	6	10,550
Hockley	22	62	162,982
Lamb	49	116	301,316
Lubbock	7	23	63,123
Parmer	21	54	129,666
Potter	94	216	504,271
Randall	115	196	426,032
Total	**420**	**898**	**2,134,339**

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

Hard-to-Reach SOP			
County	**# of Premises**	**kW**	**kWh**
Bailey	3	7	20,017
Castro	4	10	27,387
Crosby	9	22	56,583
Deaf Smith	46	84	179,587
Garza	4	8	17,580
Hockley	14	30	79,620
Lamb	53	121	306,730
Lubbock	2	5	14,089
Parmer	27	61	136,591
Potter	83	165	338,209
Randall	130	178	355,053
Total	**375**	**691**	**1,531,446**

Low-Income Weatherization			
County	**# of Premises**	**kW**	**kWh**
Potter	99	260	723,178
Randall	7	5	7,334
Total	**106**	**265**	**730,512**

Smart Thermostats			
County	**# of Premises**	**kW**	**kWh**
Armstrong	1	-	1,397
Gray	1	-	1,397
Potter	7	-	9,779
Randall	17		23,749
Total	**26**	**-**	**36,322**

Refrigerator Recycling			
County	**# of Premises**	**kW**	**kWh**
Armstrong	3	0.429	3,384
Bailey	1	0.143	1,128
Carson	2	0.286	2,256
Castro	1	0.143	1,128
Crosby	2	0.286	2,256
Dallam	4	0.572	4,512
Deaf Smith	5	0.715	5,640
Floyd	2	0.286	2,256
Gaines	1	0.143	1,128
Gray	11	1.573	12,408
Hale	12	1.716	13,536
Hansford	3	0.429	3,384
Hockley	12	1.716	13,536
Hutchinson	9	1.287	10,152
Lamb	8	1.144	9,024
Lubbock	6	0.858	6,768
Moore	7	1.001	7,896
Ochiltree	1	0.143	1,128
Oldham	1	0.143	1,128

Parmer	1	0.143	1,128
Potter	105	15.015	118,440
Randall	154	22.022	173,712
Sherman	1	0.143	1,128
Yoakum	1	0.143	1,128
Total	**353**	**50**	**398,184**