

SOUTHWESTERN PUBLIC SERVICE COMPANY

**CALCULATION OF EECRF LINE LOSS-ADJUSTED kWh -
COMMERCIAL CUSTOMER CLASSES**

Based upon kWh Forecast for 2016

	Forecasted 2016 Metered kWh	Less: Opt-out kWh	Net EECRF kWh	Multiplied by: kWh Line Loss Factor	Net Line Loss- adjusted EECRF kWh
<u>Commercial EECRF Class</u>					
Small General Service	271,077,084	(424,609)	270,652,475	1.121893	303,643,118
Secondary General Service	2,131,358,021	(34,533,784)	2,096,824,237	1.118223	2,344,717,088
Primary General Service	2,490,956,787	(262,305,685)	2,228,651,102	1.099263	2,449,873,696
Small Municipal and School Service	18,403,699	-	18,403,699	1.121893	20,646,982
Large Municipal Service	173,576,684	-	173,576,684	see below	194,194,496
Large School Service	194,208,176	-	194,208,176	see below	217,090,297
	<u>5,279,580,451</u>	<u>(297,264,078)</u>	<u>4,982,316,372</u>		<u>5,530,165,677</u>
Large Municipal Service	149,715,861	-	149,715,861	1.121893	167,965,176
Large Municipal Service - primary	23,860,823	-	23,860,823	1.099263	26,229,320
Total Large Municipal Service	<u>173,576,684</u>	<u>-</u>	<u>173,576,684</u>	<u>1.118782</u>	<u>194,194,496</u>
Large School Service	190,107,362	-	190,107,362	1.118223	212,582,424
Large School Service - primary	4,100,814	-	4,100,814	1.099263	4,507,873
Total Large School Service	<u>194,208,176</u>	<u>-</u>	<u>194,208,176</u>	<u>1.117823</u>	<u>217,090,297</u>

SOUTHWESTERN PUBLIC SERVICE COMPANY

CALCULATION OF 4 CP - COMMERCIAL CLASSES FOR PROGRAM YEAR 2016

Based upon kWh Forecast for 2016

	June	July	August	September	4 CP
<u>Commercial EECRF Class</u>					
Small General Service	24,108,004	31,029,947	26,218,050	21,732,554	
Less: Opt-out kWh	(35,665)	(34,383)	(35,032)	(31,954)	
	24,072,339	30,995,564	26,183,018	21,700,600	
divided by: load factor at peak	0.5869	0.7642	0.7416	0.7228	
	41,016,082	40,559,493	35,306,120	30,022,966	
divided by: number of hours	720	744	744	720	
= peak kW	56,967	54,515	47,454	41,699	
multiplied by: line-loss factor	1.164118	1.164118	1.164118	1.164118	
Coincident Peak kW Demand	66,316	63,462	55,243	48,542	58,391
Secondary General Service	188,268,384	243,072,936	208,189,495	180,811,620	
Less: Opt-out kWh	(5,102,553)	(3,011,149)	(2,934,769)	(2,326,559)	
	183,165,831	240,061,787	205,254,726	178,485,061	
divided by: load factor at peak	0.7046	0.7588	0.7732	0.7462	
	259,957,183	316,370,305	265,461,364	239,191,988	
divided by: number of hours	720	744	744	720	
= peak kW	361,052	425,229	356,803	332,211	
multiplied by: line-loss factor	1.158647	1.158647	1.158647	1.158647	
Coincident Peak kW Demand	418,331	492,690	413,409	384,915	427,336
Primary General Service	185,959,344	213,394,727	187,955,966	192,033,226	
Less: Opt-out kWh	(21,148,799)	(22,287,248)	(20,739,662)	(19,321,845)	
	164,810,544	191,107,479	167,216,304	172,711,381	
divided by: load factor at peak	0.9434	0.9752	0.9779	0.9639	
	174,698,478	195,967,472	170,995,300	179,179,771	
divided by: number of hours	720	744	744	720	
= peak kW	242,637	263,397	229,832	248,861	
multiplied by: line-loss factor	1.127359	1.127359	1.127359	1.127359	
Coincident Peak kW Demand	273,539	296,943	259,104	280,555	277,535
Service Agreement 4	12,833,828	14,045,024	13,835,515	10,987,797	
divided by: load factor at peak	0.9617	1.0454	0.9476	0.8168	
	13,344,939	13,435,072	14,600,585	13,452,249	
divided by: number of hours	720	744	744	720	
= peak kW	18,535	18,058	19,624	18,684	
multiplied by: line-loss factor	1.127359	1.127359	1.127359	1.127359	
Coincident Peak kW Demand	20,895	20,358	22,124	21,063	21,110
Service Agreement 8	3,234,441	3,672,554	3,212,211	3,516,090	
divided by: load factor at peak	1.0382	1.1350	1.3637	0.9937	
	3,115,432	3,235,730	2,355,511	3,538,382	
divided by: number of hours	720	744	744	720	
= peak kW	4,327	4,349	3,166	4,914	
multiplied by: line-loss factor	1.127359	1.127359	1.127359	1.127359	
Coincident Peak kW Demand	4,878	4,903	3,569	5,540	4,723
Small Municipal and School Service	1,711,410	1,643,909	1,813,435	1,733,222	
divided by: load factor at peak	0.8486	0.7585	0.8025	0.6945	
	2,016,746	2,167,315	2,259,733	2,495,639	
divided by: number of hours	720	744	744	720	
= peak kW	2,801	2,913	3,037	3,466	
multiplied by: line-loss factor	1.164118	1.164118	1.164118	1.164118	
Coincident Peak kW Demand	3,261	3,391	3,536	4,035	3,556
Large Municipal Service	13,922,489	13,373,356	14,752,471	14,099,923	
divided by: load factor at peak	0.9548	0.9119	0.7867	0.7809	
	14,581,576	14,665,375	18,752,346	18,055,991	
divided by: number of hours	720	744	744	720	
= peak kW	20,252	19,712	25,205	25,078	

SOUTHWESTERN PUBLIC SERVICE COMPANY

CALCULATION OF 4 CP - COMMERCIAL CLASSES FOR PROGRAM YEAR 2016

Based upon kWh Forecast for 2016

	June	July	August	September	4 CP	
<u>Commercial EECRF Class</u>						
multiplied by: line-loss factor	1.164118	1.164118	1.164118	1.164118		
Coincident Peak kW Demand	<u>23,576</u>	<u>22,947</u>	<u>29,341</u>	<u>29,193</u>	26,264	
Large Municipal Service (primary voltage)	2,218,883	2,131,366	2,351,161	2,247,162		
divided by: load factor at peak	<u>0.9548</u>	<u>0.9119</u>	<u>0.7867</u>	<u>0.7809</u>		
	2,323,925	2,337,280	2,988,637	2,877,656		
divided by: number of hours	<u>720</u>	<u>744</u>	<u>744</u>	<u>720</u>		
= peak kW	3,228	3,142	4,017	3,997		
multiplied by: line-loss factor	1.127359	1.127359	1.127359	1.127359		
Coincident Peak kW Demand	<u>3,639</u>	<u>3,542</u>	<u>4,529</u>	<u>4,506</u>	4,054	30,318
Large School Service	17,678,605	16,981,323	18,732,506	17,903,909		
divided by: load factor at peak	<u>0.6680</u>	<u>0.6647</u>	<u>0.7350</u>	<u>0.6465</u>		
	26,464,977	25,547,349	25,486,403	27,693,595		
divided by: number of hours	<u>720</u>	<u>744</u>	<u>744</u>	<u>720</u>		
= peak kW	36,757	34,338	34,256	38,463		
multiplied by: line-loss factor	1.158647	1.158647	1.158647	1.158647		
Coincident Peak kW Demand	<u>42,588</u>	<u>39,785</u>	<u>39,691</u>	<u>44,565</u>	41,657	
Large School Service (primary voltage)	381,346	366,305	404,080	386,206		
divided by: load factor at peak	<u>0.6680</u>	<u>0.6647</u>	<u>0.7350</u>	<u>0.6465</u>		
	570,877	551,083	549,768	597,380		
divided by: number of hours	<u>720</u>	<u>744</u>	<u>744</u>	<u>720</u>		
= peak kW	793	741	739	830		
multiplied by: line-loss factor	1.127359	1.127359	1.127359	1.127359		
Coincident Peak kW Demand	<u>894</u>	<u>835</u>	<u>833</u>	<u>935</u>	874	42,532
						<u>865,500</u>



Section No. IV
Sheet No. IV-195
Revision No. 5

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ELECTRIC TARIFF

ENERGY EFFICIENCY COST RECOVERY FACTOR RIDER

APPLICABILITY: To all Texas retail Customers taking service at a metered Point of Delivery less than 69 kV, and to all non-profit Customers and governmental entities, including educational customers, in addition to all other charges under the applicable rate schedule. Not applicable to Industrial Customers that have timely provided appropriate Identification Notice to the Company, as described in P.U.C. SUBST. R. 25.181(w).

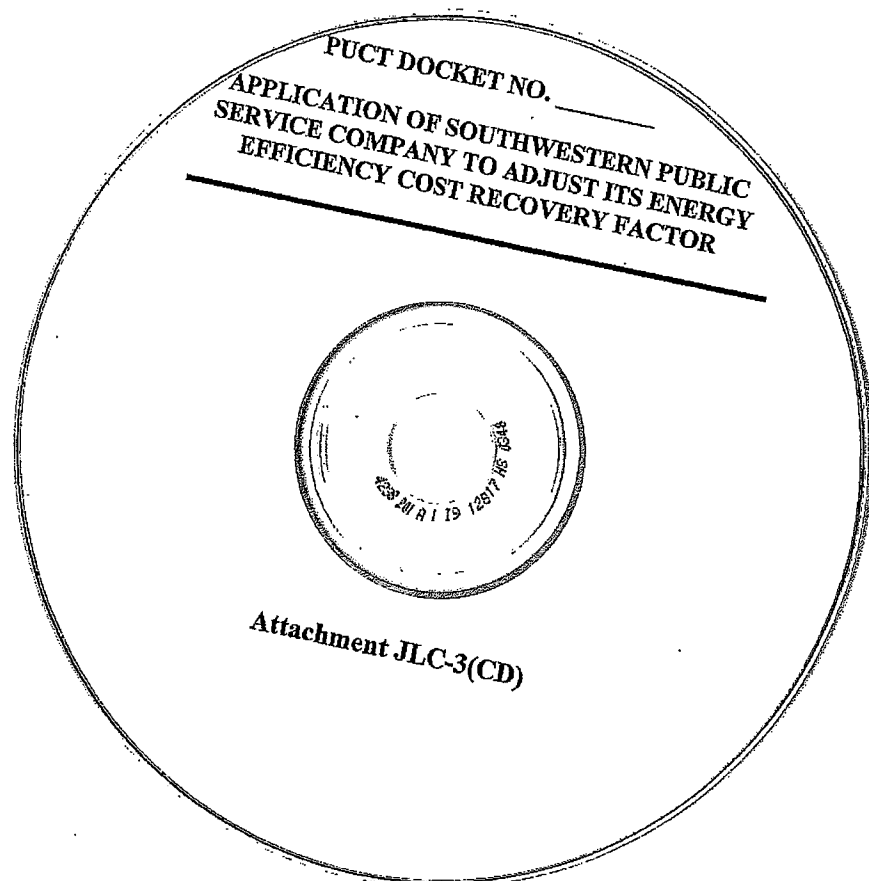
RATE: All estimated or metered kWh is charged the rate applicable to the EECRF rate class, as listed below:

Rate Schedule		\$/kWh
Residential Service	\$	0.000735 (I)
Small General Service	\$	0.000352 (I)
Secondary General Service	\$	0.000166 (R)
Primary General Service ¹	\$	0.000141 (I)
Small Municipal and School Service	\$	0.000338 (R)
Large Municipal Service	\$	0.000155 (R)
Large School Service	\$	0.001495 (I)

¹ Primary General Service includes Service Agreement Summaries IV-61, IV-99 and IV-199.

Effective January 1, 2016

MANAGER, PRICING AND PLANNING



DOCKET NO. **44698**

APPLICATION OF SOUTHWESTERN § PUBLIC UTILITY COMMISSION
PUBLIC SERVICE COMPANY TO §
ADJUST ITS ENERGY EFFICIENCY §
COST RECOVERY FACTOR § OF TEXAS

DIRECT TESTIMONY
of
J. DEREK SHOCKLEY

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

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PUBLIC UTILITY COMMISSION
FILED CLERK

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
Commission	Public Utility Commission of Texas
EECRF	Energy Efficiency Cost Recovery Factor
EEPR	Energy Efficiency Plan and Report
EESP	Energy Efficiency Service Provider
EM&V	Evaluation, Measurement, and Verification
EUL	Estimated Useful Life
HTR	Hard-to-Reach
KP&L	Kansas Power and Light Company
kW	Kilowatt
kWh	Kilowatt-hour
MTP	Market Transformation Program
MW	Megawatt
MWh	Megawatt-hour
PURA	Public Utility Regulatory Act
PY	Program Year
R&D	research and development
Rule 25.181	P.U.C. SUBST. R. 25.181
SOP	Standard Offer Program
SPS	Southwestern Public Service Company, a New Mexico corporation
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
JDS-1	SPS's Amended 2015 Energy Efficiency Plan and Report (Filename: Attachment JDS-1.doc)
JDS-2	Costs per kW and kWh for 2013-2016 (Filename: Attachment JDS-2.xls)
JDS-3(CONF)	Energy Efficiency Service Providers and EESPs Receiving Five Percent of More of Incentive Payments (Filename: Attachment JDS-3(CONF).pdf)
JDS-4	Master Estimated Useful Life Spreadsheet through TRM 2.1 (Filename: Attachment JDS-4.xls)

**DIRECT TESTIMONY
OF
J. DEREK SHOCKLEY**

1 **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

2 **Q. Please state your name and business address.**

3 A. My name is J. Derek Shockley. My business address is 1800 Larimer Street,
4 Denver, Colorado, 80202.

5 **Q. On whose behalf are you testifying in this proceeding?**

6 A. I am filing testimony on behalf of Southwestern Public Service Company, a New
7 Mexico corporation ("SPS") and wholly-owned electric utility subsidiary of Xcel
8 Energy Inc. ("Xcel Energy"). Xcel Energy is a registered holding company that
9 owns several electric and natural gas utility operating companies, a regulated
10 natural gas pipeline company, and transmission development companies.¹

11 **Q. By whom are you employed and in what position?**

12 A. I am employed by Xcel Energy Services Inc. ("XES"), the service company
13 subsidiary of Xcel Energy, as Manager, Product Portfolio Supervision.

14 **Q. Please describe your duties as Manager, Product Portfolio Supervision.**

15 A. I am responsible for supervising the energy efficiency and load management
16 programs in Texas. In that capacity, I analyze the cost-effectiveness of current
17 program offerings and delivery methods, evaluate potential energy efficiency and

¹ Xcel Energy is the parent company of the following four wholly-owned electric and gas utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and SPS. Xcel Energy's natural gas pipeline subsidiary is WestGas Interstate, Inc. SPS also has two transmission-only operating companies, Xcel Energy Southwest Transmission Company, LLC, and Xcel Energy Transmission Development Company, both of which are regulated by the Federal Energy Regulatory Commission.

1 load management programs, and assist the product development group, which
2 creates programs and offerings for the Xcel Energy subsidiaries. In addition, I
3 oversee programs and manage the trade outreach activities for commercial
4 demand side management efforts throughout Colorado.

5 **Q. Please describe your educational background.**

6 A. I have a Bachelor of Business Administration – Emphasis Finance degree from
7 Washburn University in Topeka, Kansas.

8 **Q. Please describe your professional experience.**

9 A. I began my career with Kansas Power and Light Company (“KP&L”) (now
10 Westar Energy) and spent ten years in roles that included the development and
11 management of company-wide electric marketing, demand side management, and
12 energy efficiency programs. In 1996, I became Director of Project Management
13 for a subsidiary of KP&L and worked with energy-related new business start-ups.
14 I then became Vice President of Onsite Business Services, where I managed two
15 wholly-owned subsidiaries and oversaw acquisition activities for the Kansas
16 division. In 2000, I became a majority owner and Secretary/Treasurer of
17 Mid-States Energy Works, where my responsibilities included business
18 management, sales, and marketing for the company. I joined Xcel Energy in 2008
19 as the Trade Relations Manager for the Business Demand Side Management
20 programs in Colorado. In 2011, I accepted my current position as Manager,
21 Product Portfolio Supervision. As I testified above, I am currently responsible for
22 oversight of the energy efficiency and load management programs and contractors
23 in Texas.

- 1 **Q. Have you testified or filed testimony before any regulatory authorities?**
- 2 A. Yes. I have submitted prefiled testimony before the Public Utility Commission of
- 3 Texas (“Commission”) on behalf of SPS in the last three Energy Efficiency Cost
- 4 Recovery Factor (“EECRF”) proceedings, Docket Nos. 40293, 41446, and 42454.

1
2 **II. ASSIGNMENT**

3 **Q. What are your assignments in this proceeding?**

4 A. My assignments in this proceeding are to:

- 5 (1) describe the energy efficiency programs that SPS will offer in
6 Program Year ("PY") 2016;
7 (2) quantify the projected costs for the PY 2016 energy efficiency
8 programs and demonstrate that those costs are reasonable;
9 (3) demonstrate that the costs and achievements are consistent with
10 previous years' costs and achievements;
11 (4) provide the Estimated Useful Life ("EUL") for each measure in
12 each program;
13 (5) discuss the bidding and engagement process that SPS undertakes
14 for contracting with energy efficiency service providers ("EESP");
15 (6) identify the EESPs with whom SPS does business, including each
16 EESP that was paid five percent or more of the incentive payments
17 made by SPS in PY 2014; and
18 (7) discuss the barriers to achieving full implementation of energy
19 efficiency programs in PY 2014.

20 **Q. Do you sponsor any attachments?**

21 A. Yes, I sponsor four attachments. I am sponsoring Attachment JDS-1, which is
22 SPS's Amended 2015 Energy Efficiency Plan and Report ("EEPR") filed on May
23 1, 2015 under Project No. 44480. The Amended EEPR describes SPS's PY 2015
and 2016 programs and projected costs. I am sponsoring Attachment JDS-2,

1 which provides the cost per Kilowatt (“kW”) and Kilowatt-hour (“kWh”) for PYs
2 2013-2016. I am sponsoring Attachment JDS-3(CONF), which lists the EESPs
3 eligible in PY 2014 and to whom SPS paid more than five percent of the total
4 incentive payments in PY 2014. I also sponsor, Attachment JDS-4, which is the
5 Master Estimated Useful Life Spreadsheet through TRM 2.1 for energy efficiency
6 measures.

7 **Q. Please summarize your testimony in this proceeding.**

8 A. SPS offers an array of energy efficiency programs, available to all eligible Texas
9 customers in accordance with P.U.C. SUBST. R. 25.181 (“Rule 25.181”). The
10 costs of those energy efficiency programs are reasonable, as evidenced by the
11 cost-effectiveness test discussed by SPS witness Michael V. Pascucci and by
12 comparison to costs in prior years. SPS has a transparent process for engaging
13 eligible EESPs and for approving payments to those EESPs after they complete
14 approved projects. Finally, SPS projects that it will exceed its energy and demand
15 goals in PY 2016.

1 **III. PROGRAM YEAR 2016 ENERGY EFFICIENCY AND LOAD**
2 **MANAGEMENT PROGRAMS**

3 **Q. To whom will SPS offer energy efficiency and load management programs in**
4 **PY 2016?**

5 A. In PY 2016, SPS will make energy efficiency programs available to all eligible
6 customers, which are defined in Rule 25.181(c)(11) as residential and commercial
7 customers.

8 **Q. How does Rule 25.181 distinguish between commercial and industrial**
9 **customers?**

10 A. Rule 25.181(c)(4) defines a “commercial customer” as a non-residential customer
11 taking service at distribution voltage during the prior program year. It also
12 includes non-profit customer(s) or governmental entities, including educational
13 institution(s). Rule 25.181(c)(30) defines industrial customers as a “for-profit
14 entity engaged in an industrial process taking service at transmission voltage, or a
15 for-profit entity engaged in an industrial process taking electric service at
16 distribution voltage that qualifies for a tax exemption under Tax Code § 151.317
17 and has submitted an identification notice pursuant to subsection (w) of this
18 section.”

19 **Q. What are the eligible customer classes for SPS’s energy efficiency programs?**

20 A. The following customers are eligible to participate in SPS’s energy efficiency
21 programs:

- 22 ▪ Residential;
- 23 ▪ Residential Hard-To-Reach;
- 24 ▪ Small Commercial; and
- 25 ▪ Large Commercial

1 **Q. Are all customers within those classes considered to be eligible customers?**

2 A. No. Rule 25.181(w) allows industrial customers receiving service at distribution
3 voltage to opt out of participation in the energy efficiency programs if they
4 possess a Texas tax exemption certificate and make a timely request to the utility.
5 Mr. Pascucci discusses in his direct testimony the number of customers who have
6 opted out and the affect those customers have had on SPS's goals.

7 **Q. What are SPS's PY 2016 energy efficiency goals?**

8 A. As discussed in more detail by Mr. Pascucci, SPS's 2016 demand reduction goal
9 is 5.495 megawatts ("MW") and the energy savings goal is 9,627 megawatt-hours
10 ("MWh"). SPS projects, however, that it will achieve as much as 7.1 MW in
11 demand reductions and 11,300 MWh in energy savings because of the mix of
12 programs offered in PY 2016.

13 **Q. Why is SPS offering a mix of programs that it expects will achieve higher**
14 **levels of demand and energy savings levels than its PY 2016 goals?**

15 A. SPS's programs are designed to ensure not only that both the demand and energy
16 goals are met, but also that the offerings are broad enough to appeal to many
17 different types of customers, thereby increasing customer participation in energy
18 efficiency and load management programs. The energy efficiency programs
19 benefit the participating customers by reducing their monthly electric bills. In
20 addition, the programs benefit both participants and non-participants by adding
21 cost-effective components to SPS's resource mix. Therefore, all customers are
22 better off when SPS exceeds the statutory minimum through cost-effective
23 programs that do not exceed the cost caps.

- 1 **Q. SPS did not achieve its Commission-approved demand savings goal for PY**
2 **2014. Why does SPS believe it will meet and exceed its goal in PY 2016?**
- 3 A. SPS projects to exceed its goals in part because participation in the Residential,
4 Residential Hard-to-Reach (“HTR”), and Low-Income Weatherization programs
5 are expected to remain strong. SPS also expects to see increased participation in
6 the Retro-Commissioning program in 2016 as projects are completed. Although
7 the pump-off controller incentive was implemented too late in PY 2014 to result
8 in program achievement for that year, SPS expects that participation in the
9 Commercial Standard Offer Program (“SOP”) in PY 2016 due to the full-year
10 availability of that incentive.
- 11 **Q. Have the Legislature and the Commission given any indication that they**
12 **want utilities to exceed the minimum goals?**
- 13 A. Yes. In Section 39.905(b)(2) of the Public Utility Regulatory Act (“PURA”), the
14 Legislature directed the Commission to “establish an incentive under PURA §
15 36.204 to reward utilities administering programs under this section that *exceed*
16 the minimum goals established by this section.”² And in Rule 25.181(d), the
17 Commission has provided that utilities “are encouraged to achieve demand
18 reduction and energy savings through a portfolio of cost-effective programs that
19 *exceed* each utility’s energy efficiency goals while staying within the cost caps
20 established in subsection (f)(7) of this section.”

² PURA is codified at TEX. UTIL. CODE ANN. §§ 11.001-66.016 (Vernon 2008 and Supp. 2014).

- 1 **Q. Please provide a brief description of the energy efficiency and load**
2 **management programs that SPS will offer customers in PY 2016.**
- 3 A. In order to reach its projected demand and energy savings, SPS will offer the
4 following SOPs and Market Transformation Programs (“MTPs”), as well as the
5 Low-Income Weatherization Program, in PY 2016:
- 6 • Large Commercial SOP – Targets commercial customers with an annual single
7 meter demand of 100 kW or more or aggregate meter demand of 250 kW or
8 more. Incentives are paid to project sponsors for certain measures installed in
9 new or retrofit applications that provide verifiable demand and energy savings.
10 Examples include incentives for cooling, pump-off controllers, custom projects,
11 heat pumps, lighting, motors, and new construction.
- 12 • Small Commercial SOP – Targets commercial customers with an annual single
13 meter demand less than 100 kW or aggregate meter demand of less than 250 kW.
14 As with the Large Commercial SOP, incentives are paid to project sponsors for
15 measures installed in new or retrofit applications that provide verifiable demand
16 and energy savings. These incentives are also available for cooling, pump-off
17 controllers, custom projects, heat pumps, lighting, motors, and new construction.
- 18 • Residential SOP – Targets residential single-family and multi-family customers
19 by providing incentives for cooling, heat pumps, duct sealing, insulation,
20 refrigerator upgrade/recycling, water heating, Energy Star appliances, Energy
21 Star windows, air infiltration reduction, and photovoltaic upgrades.
- 22 • Hard-to-Reach SOP – Targets customers with an annual household income at or
23 below 200 percent of federal poverty guidelines. The program pays incentives

1 for measures such as energy efficient showerheads, insulation, duct sealing,
2 cooling, refrigerator replacement and recycling, solar screens, water heating, and
3 compact fluorescent lighting.

4 • Low-Income Weatherization Program – Provides funding to not-for-profit
5 community action and government agencies to provide weatherization services
6 to residential SPS customers who meet current Department of Energy income
7 eligibility guidelines.

8 • Load Management SOP – Targets small- to medium-sized businesses that can
9 reduce demand during peak summer months. Customers can either manage the
10 interruptions themselves or work with third-party service providers and receive
11 an incentive based on total reduced demand.

12 • Retro-Commissioning MTP – Targets non-residential customers interested in
13 learning more about their energy usage and willing to commit to recommended
14 energy saving activities on a timely basis. The program includes a systematic
15 evaluation of the customer's buildings and systems, implementation of low-cost
16 and no-cost measures to improve system operation, and recommendations of
17 larger energy efficiency upgrades. The retro-commissioning services are fully
18 paid by the program and additional incentives may be available to participating
19 customers.

20 These programs, which are the same as those offered by SPS in PY 2015, are
21 discussed in more detail in Section I of the Amended EEPR, which is Attachment
22 JDS-1 to my testimony.

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A. Yes. Rule 25.181(f)(12) states that in a proceeding to establish or adjust an EECRF, the utility must show that the costs to be recovered through the EECRF are “reasonable estimates of the costs necessary to provide energy efficiency programs and to meet the utility’s goals...”

A. Rule 25.181(f)(1) states that an EECRF shall be calculated to recover four elements of costs:

- Q. What amounts comprise the forecasted energy efficiency program expenditures?**

A. The forecasted annual energy efficiency program expenditures are comprised of projected incentive payments, administrative costs, research and development (“R&D”), and EM&V costs.

1 **Q. What are incentive payments?**

2 A. Rule 25.181(c)(29) defines an “incentive payment” as the payment made by an
3 electric utility to an EESP, an end-use customer, or a third-party contractor to
4 implement and attract customers to energy efficiency programs, including
5 standard offer, market transformation, and self-delivered programs. Rule
6 25.181(g) provides the requirements applicable to incentive payments by a utility.

7 **Q. What are administrative costs?**

8 A. Administrative costs include all reasonable and necessary costs incurred by a
9 utility in carrying out its responsibilities under Rule 25.181(i), including, among
10 other things:

- 11 1. conducting informational activities designed to explain the SOPs and
12 MTPs to EESPs, retail electric providers, and vendors;
13
- 14 2. providing informational programs to improve customer awareness of
15 energy efficiency programs and measures;
16
- 17 3. reviewing and selecting energy efficiency programs in accordance
18 with Rule 25.181;
19
- 20 4. providing regular and special reports of energy and demand savings to
21 the Commission; and
22
- 23 5. carrying out any other activities that are necessary and appropriate for
24 successful program implementation.

25 In addition, Rule 25.181(f)(10)(I) includes “affiliate costs and EECRF proceeding
26 expenses” as a part of a utility’s administrative costs.

27 **Q. What are R&D costs?**

28 A. R&D costs are typically those costs incurred to develop and test new energy
29 efficiency programs.

- 1 **Q. What are EM&V costs?**
- 2 A. EM&V costs are the costs allocated to SPS by the Commission for the efforts
- 3 undertaken by the independent program evaluator to update the deemed savings in
- 4 the Technical Reference Manual and review program performance.
- 5 **Q. Has SPS included these types of forecasted costs in its EECRF request?**
- 6 A. Yes. As shown on Table 7 of Attachment JDS-1, SPS has included the incentive
- 7 payments that it will make under SOP and MTP programs and the costs of
- 8 administering those programs. In addition, SPS has included R&D costs and
- 9 EM&V costs in its EECRF request for PY 2016.
- 10 **Q. What is SPS's projected PY 2016 energy efficiency and load management**
- 11 **program budget?**
- 12 A. SPS projects total program expenditures of \$3,390,063 for PY 2016.
- 13 **Q. What are the costs of SPS's individual programs in PY 2016?**
- 14 A. Table JDS-1 below reflects SPS's forecasted costs of its 2016 energy efficiency
- 15 and load management programs. This table also is included in Attachment JDS-1
- 16 as Table 7.

Table JDS-1: Proposed 2016 Budget

2016	Incentives	Admin	R&D	EM&V	Total Budget
Commercial	\$ 1,495,200	\$ 62,009	\$ -	\$ -	\$ 1,557,209
Commercial SOP	\$ 906,100	\$ 28,221	\$ -	\$ -	\$ 934,321
Small Commercial SOP	\$ 53,300	\$ 5,000	\$ -	\$ -	\$ 58,300
Recommissioning MTP	\$ 385,800	\$ 4,000	\$ -	\$ -	\$ 389,800
Load Management SOP	\$ 150,000	\$ 24,788	\$ -	\$ -	\$ 174,788
Residential	\$ 632,500	\$ 21,538	\$ -	\$ -	\$ 654,038
Residential SOP	\$ 632,500	\$ 21,538	\$ -	\$ -	\$ 654,038
Hard-to-Reach	\$ 875,000	\$ 53,894	\$ -	\$ -	\$ 928,894
Hard-to-Reach SOP	\$ 500,000	\$ 16,394	\$ -	\$ -	\$ 516,394
Low-Income Weatherization	\$ 375,000	\$ 37,500	\$ -	\$ -	\$ 412,500
Research & Development	\$ -	\$ -	\$ 40,000	\$ -	\$ 40,000
General Administration	\$ -	\$ 175,165	\$ -	\$ -	\$ 175,165
Evaluation, Measurement & Verification	\$ -	\$ -	\$ -	\$ 34,756	\$ 34,756
Rider Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 3,002,700	\$ 312,606	\$ 40,000	\$ 34,756	\$ 3,390,063

Q. What are SPS's energy efficiency and load management program cost estimates based upon?

A. The cost estimates for SPS's energy efficiency programs are based upon the historic levels of administrative and incentive costs that SPS incurred to implement these programs, as well as adjustments to account for changing market conditions and the program offering mix. In addition, SPS reviews the costs of similar programs being offered by other Texas utilities and on forecasts made by Frontier Associates, which administers and coordinates a number of these programs for Texas utilities.

Q. Does SPS's budget for PY 2016 comply with the cost caps established in Rule 25.181(i)?

A. Yes:

- the administrative cost for the programs offered in PY 2016 is projected to be lower than 15 percent of the program's total costs;

- 1 • the cost of R&D is projected to be lower than 10 percent of the
- 2 previous program year's total costs; and
- 3 • the administrative costs and the R&D costs together add up to less than
- 4 20 percent of total program budget for PY 2016.

5 **Q. How do SPS's forecasted energy efficiency costs for PY 2016 compare to**
6 **energy efficiency costs in prior years?**

7 A. As reflected in Attachment JDS-2,³ SPS's forecasted energy efficiency total costs
8 in PY 2016 are similar to PY 2015 on a dollar-per-kW and dollar-per-kWh basis.
9 For PY 2016, SPS increased the cost per kW and kWh for the commercial
10 customer class in order to offset changes to lighting baseline standards.

11 The Commission approved the PY 2015 costs in Docket No. 42454. On a
12 dollar-per-kW basis and dollar-per kWh basis, the projected overall program cost
13 for PY 2016 is similar to PY 2015 projections. Forecasted overall program costs
14 on a dollar-per-kW and dollar-per-kWh basis for PY 2016 as compared to PY
15 2013 and PY 2014 reflect a general trend towards higher costs primarily due to
16 the costs associated with acquiring energy savings. As baselines and standards
17 have increased, the ongoing trend has been higher incentive costs to acquire
18 savings.

³ The "total costs" for the Commercial, Residential, and Hard-to-Reach line items include only direct program administration and incentives. The "total costs" for the Totals line item includes all program incentive, program administration, general administration, EM&V, and R&D costs. EECRF expenses and performance bonus costs are excluded from the calculation.

1 **Q. To support the recovery of energy efficiency costs, Rule 25.181(f)(11)(I)**
2 **includes consideration of how a utility's forecasted energy efficiency**
3 **incentive costs compares to costs in other markets with similar conditions.**
4 **Does the market within which SPS operates allow for a meaningful**
5 **comparison to other markets?**

6 A. No. It is not feasible to make a meaningful comparison of SPS's forecasted
7 energy efficiency costs for PY 2016 to the costs incurred by utilities for markets
8 in other states because the regulatory requirements in each state are so different.
9 Furthermore, even within Texas the utilities' service areas do not necessarily
10 qualify as "markets with similar conditions." Because of the proximity of
11 customers and the access to materials, EESPs that operate in densely-populated
12 areas can often provide services more economically than EESPs that operate in
13 sparsely populated areas, which is characteristic of much of the SPS service area.

14 However, SPS has conducted two studies to compare the incentives
15 offered by SPS to those offered by other Texas utilities. The 2012 study reviewed
16 SPS's residential incentives and the 2014 study reviewed SPS's commercial
17 incentives. Both studies found that SPS's incentives were low compared to other
18 utilities. SPS increased its residential incentives to a comparable level in 2013
19 and achievement in the residential programs has been strong since that change.
20 SPS increased its commercial incentives for 2016 in an effort to improve
21 performance in those programs since they have underperformed and have been
22 underspent in recent years.

1 **V. ENERGY EFFICIENCY SERVICE PROVIDERS**

2 **Q. What do you discuss in this section of your testimony?**

3 A. I discuss the portion of Rule 25.181(f)(10)(H) that requires the utility to identify
4 each EESP receiving more than five percent of the utility's overall incentive
5 payments and the percentage of the utility's incentives received by those
6 providers. I also discuss Rule 25.181(f)(10)(K), which requires a discussion of
7 the utility's bidding and engagement process for contracting with EESPs,
8 including a list of all EESPs that participated in the utility's programs and
9 contractors paid with funds collected through the EECRF.

10 **Q. Please describe SPS's bidding and engagement process for contracting with**
11 **EESPs.**

12 A. With the exceptions of the Retro-Commissioning MTP and Load Management
13 SOP, which I will discuss below, SPS's bidding and engagement process for
14 contracting with EESPs is the same for all programs. SPS posts its program
15 manuals and budgets for the upcoming program year online, and potential EESPs
16 are invited to apply. If the EESPs apply and meet the requisite criteria, they are
17 approved as participants and are eligible to sponsor projects that qualify for
18 incentive payments. When the EESP identifies a potential project, it submits a
19 request that SPS reviews and evaluates to determine whether it satisfies the
20 program requirements. If it does, then SPS approves the project and enters into a
21 standard contract with the EESP to undertake the work.

- 1 **Q. How does the payment process work?**
- 2 A. When the EESP completes work on a project, it submits a request for payment.
- 3 SPS reviews the final documentation for completed work and payment request,
- 4 conducts final inspections when applicable, and processes payment to the EESP.
- 5 **Q. How does the bidding and engagement process for the Retro-Commissioning**
- 6 **MTP and Load Management SOP differ?**
- 7 A. The processes for both the Retro-Commissioning MTP and the Load Management
- 8 SOP incorporate an element of bidding to determine the most economical
- 9 provider. For the Retro-Commissioning MTP offering, SPS conducted a formal,
- 10 competitive Request for Proposal process to select a third-party administrator for
- 11 this program. For the Load Management SOP offering, the program manual is
- 12 posted in a similar fashion to other SOP programs, but customers or EESPs bid
- 13 their potential interruptible load into the program via an “open auction” system.
- 14 Interruptible loads are accepted up to the point that the established maximum load
- 15 sought for that program year is achieved.
- 16 **Q. Please identify all EESPs that participated in SPS’s energy efficiency**
- 17 **programs.**
- 18 A. My Attachment JDS-3(CONF) lists all of the EESPs that participated in PY 2014
- 19 programs.
- 20 **Q. Did any EESP receive more than five percent of SPS’s overall incentive**
- 21 **payments?**
- 22 A. Yes. Seven EESPs, which are identified on Attachment JDS-3(CONF), received
- 23 more than five percent of SPS’s overall incentive payments.

- 1 **Q. Why did those EESPs receive more than five percent of SPS's overall**
2 **incentive payments?**
- 3 A. These seven EESPs completed projects similar to those in past years, but at a
4 higher volume. That resulted in incentive payments above five percent of the
5 total incentive payments paid by SPS.
- 6 **Q. Did the payment of more than five percent of the overall incentive payment**
7 **budget to those EESPs leave SPS with a shortfall to pay for other potential**
8 **projects?**
- 9 A. No. All projects submitted from participating EESPs were approved and paid for
10 in PY 2014.

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VII. BARRIERS TO ACHIEVING FULL IMPLEMENTATION IN PY 2014

Q. How did SPS's projected energy and demand savings compare to its reported savings PY 2014?

A. The table below shows SPS's projected energy and demand savings compared to its reported savings in PY 2014. This table is also shown in Section VI of Attachment JDS-1.

Table JDS-2: PY 2013 and 2014 Demand and Energy Savings

2013	Projected Savings		Verified Savings	
	MW	MWh	MW	MWh
Commercial	5.87	8,288	3.23	3,487
Commercial SOP	2.11	5,265	0.80	2,870
Small Commercial SOP	0.20	887	0.14	592
Recommissioning MTP	0.56	2,136	-	-
Load Management SOP	3.00	-	2.29	25
Residential	0.70	2,128	1.11	2,974
Residential SOP	0.70	2,128	1.11	2,974
Hard-to-Reach	0.54	1,396	0.76	1,488
Hard-to-Reach SOP	0.44	1,051	0.64	1,100
Low-Income Weatherization	0.10	345	0.12	388
Total Annual Savings Goals	7.11	11,812	5.11	7,949
2014	Projected Savings		Verified Savings	
	MW	MWh	MW	MWh
Commercial	5.47	7,629	3.73	7,071
Commercial SOP	1.90	4,993	1.53	5,069
Small Commercial SOP	0.30	660	0.19	797
Recommissioning MTP	0.26	1,976	0.22	1,195
Load Management SOP	3.00	-	1.79	9
Residential	1.04	1,813	0.74	2,979
Residential SOP	1.04	1,813	0.74	2,979
Hard-to-Reach	0.71	1,247	0.55	1,851
Hard-to-Reach SOP	0.59	1,037	0.45	1,517
Low-Income Weatherization	0.12	210	0.10	334
Total Annual Savings Goals	7.21	10,689	5.02	11,900

1 **Q. Were there any circumstances in SPS's service area that affected SPS's**
2 **ability to achieve its Commission-approved goals in PY 2014?**

3 A. Yes, under-performance in the commercial programs resulted in demand
4 reduction that was less than SPS's Commission-approved goal.

5 **Q. What were the reasons for underperformance in the commercial programs?**

6 A. SPS believes that its incentives were not sufficient to entice more commercial
7 customers to participate in its energy efficiency programs. SPS conducted a
8 review of its commercial program incentives versus those of other Texas utilities
9 which found that SPS's incentives were on the low end of what was offered by
10 other utilities. Therefore, SPS is proposing to increase its incentives for
11 commercial customers in 2016 to increase participation by EESPs and customers.
12 In addition, SPS's The Load Management SOP was underspent because cooler
13 temperatures resulted in lower claimed savings' baselines prior to called
14 interruptions in 2014 as compared to nominated loads.

15 Section VIII of Attachment JDS-1 provides an explanation of the
16 underspent amounts in each program.

17 **Q. Did the Residential programs perform as anticipated?**

18 A. Yes. The Residential and Residential HTR, and Low-Income Weatherization
19 Programs performed well, and they all achieved more than 100 percent of the
20 projected energy savings levels.

1 **Q. Did SPS spend the full amount that it was authorized to spend for energy**
2 **efficiency programs in PY 2014?**

3 A. No. As shown in Table 11 of Attachment JDS-1, SPS had a total projected
4 budget of \$3,404,994 in PY 2014 but spent only \$2,560,647 in that year. SPS
5 also spent less than anticipated on R&D projects in PY 2014. Initially, SPS
6 anticipated using its 2014 R&D budget to begin a pilot program to offer new
7 products to customers. However, because of market changes, SPS determined
8 this was not necessary and instead undertook a comprehensive review of its and
9 other utilities' programs to determine if there are additional programs that would
10 be valuable additions to its portfolio in future years. This study was completed in
11 2014 and SPS plans to use the results of the study to implement new programs or
12 pilot projects in future years as market conditions allow and goal levels increase.

1 **VIII. CONCLUSION**

2 **Q. Are Attachments JDS-1 and JDS-4 true and correct copies of the documents**
3 **they are represented to be?**

4 **A. Yes.**

5 **Q. Were Attachments JDS-2 and JDS-3(CONF) prepared by you or under your**
6 **direct supervision and control?**

7 **A. Yes.**

8 **Q. Does this conclude your pre-filed direct testimony?**

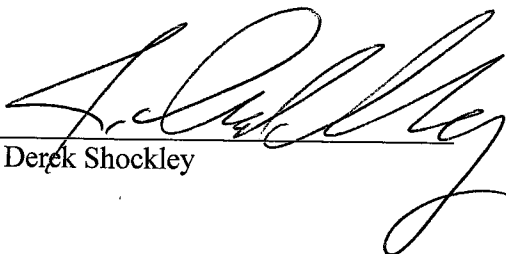
9 **A. Yes.**

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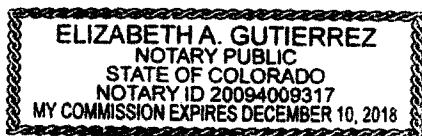
STATE OF COLORADO)
)
DENVER COUNTY)

J. DEREK SHOCKLEY, first being sworn on his oath, states:

I am the witness identified in the preceding prepared direct testimony. I have read the testimony and the accompanying attachments and am familiar with their contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.


J. Derek Shockley

Subscribed and sworn to before me today, April 23 2015.




Notary Public, State of Colorado

My Commission Expires: 12-10-2018

CERTIFICATE OF SERVICE

I certify that on the 1st day of May 2015, a true and correct copy of the foregoing instrument was served on all parties of record by hand delivery, Federal Express, regular first class mail, certified mail, electronic mail, or facsimile transmission.



Southwestern Public Service Company Amended 2015 Energy Efficiency Plan and Report

Substantive Rules § 25.181 and § 25.183

May 1, 2015

Project No. 44480



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Introduction

Southwestern Public Service Company (“SPS”) presents this Energy Efficiency Plan and Report (“EEPR”) to comply with P.U.C. SUBST. R. 25.181 and 25.183 (“EE Rule”), which are the Public Utility Commission of Texas’ (“Commission”) rules implementing Public Utility Regulatory Act (“PURA”) § 39.905.¹ As mandated by this section of PURA, P.U.C. SUBST. R. 25.181(e)(1) of 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 utility self-delivered programs:

- Beginning in 2013, 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”.
- When a utility satisfies the trigger, the utility shall acquire four-tenths of one percent 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 (Vernon 2008 and Supp. 2013).

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 2014 and SPS’s plans for achieving its 2015 and 2016 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 provides an introduction to 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 (2010-2014).
- Section VI compares SPS’s projected energy and demand savings to its reported and verified savings by program for calendar years 2013 and 2014.
- Section VII documents SPS’s incentive and administration expenditures for the previous five years (2010-2014) broken out by program for each customer class.
- Section VIII compares SPS’s actual program expenditures for 2014 to its 2014 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 2014 EECRF.
- Section XII breaks out the over/under-recovery of energy efficiency program costs.
- Section XIII discusses SPS’s performance bonus.

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 Rule for Program Years (“PY”) 2015 and 2016. 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 2015 and 2016, SPS has developed energy efficiency portfolios designed to meet goals prescribed by P.U.C. SUBST. R. 25.181.

EEP Summary

The following table presents SPS’s 2015 and 2016 goals and budgets under PURA §39.905 and the EE Rule.

Table 1: Summary of Goals, Projected Savings, and Projected Budgets (at Meter)²

Calendar Year	Average Growth in Demand (MW)	Goal Metric: 30% Growth (MW)	Goal Metric: 0.4% Peak Demand (MW)	Demand Goal (MW)	Goal Metric: 30% Energy (MWh)	Energy Goal (MWh)	Budget
2015	(10.580)	(3.170)	5.540	5.495	(5,560)	9,627	\$ 3,195,897
2016	(0.975)	(0.293)	6.315	5.495	(513)	9,627	\$ 3,390,063

Table 1 shows SPS’s goal calculations for program years 2015 and 2016. The goal for program year 2015 was set in Docket No. 42454. SPS calculated the demand goal as 30% of the historical five-year annual growth in demand pursuant to P.U.C. SUBST. R. 25.181(e)(1).³ The calculated demand reduction goal for 2016 yields a goal metric of -0.972 MW because SPS’s historical five-year annual growth in demand is negative. Therefore, SPS is using the previous year’s demand reduction goal of 5.495 MW pursuant to P.U.C. SUBST. R. 25.181(e)(3)(D). The “Energy (MWh) Goal” is calculated from the demand goal using a 20% conservation load factor, as mandated in P.U.C. SUBST. R. 25.181(e)(4). Thus, the “Energy (MWh) Goal” is 20% of the product of the “Demand (MW) Goal” and 8,760 (the number of hours in a year).

SPS will implement the following SOPs, MTP, and Low-Income Weatherization programs in 2015 and 2016:

² In Table 1, the Goal Metric presents SPS’s actual, calculated values as prescribed in P.U.C. SUBST. R. 25.181(e)(1). The “Demand Goal (MW)” and “Energy Goal (MWh)” presents SPS’s actual goals as prescribed in P.U.C. SUBST. R. 25.181(e)(3)(D).

³ For a calculation of Average Growth in Demand, see Table 5; and Projected Budget amounts are from Table 7. All kW/MW and kWh/MWh figures in this table, and throughout this EEPR, are given “at Meter.”

- Commercial & Industrial SOP (Large and Small);
- Load Management SOP;
- Retro-Commissioning MTP;
- Residential SOP;
- Hard-to-Reach SOP; and
- Low-Income Weatherization.

The SOPs and MTP, in addition to the weatherization program, will ensure that all eligible customer classes have access to energy efficiency opportunities.

The projected savings, budgets, and implementation plans included in this EEPR comply with the EE Rule and incorporate lessons learned regarding energy efficiency service providers 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 programs and expended energy efficiency projects.

EER Summary

The EER portion of this EEPR demonstrates that in 2014 SPS achieved 5.01 MW reduction in demand and 11,990 MWh of energy savings, which were 93% and 126%, respectively, of SPS's demand goal of 5.393 MW and energy savings goal of 9,449 MWh.

The expenditures for these 2014 programs were \$2,560,647,⁴ which was greater than 75% 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 Commercial SOP, the Load Management SOP, the Hard-to-Reach SOP for low-income, single- and multi-family residences, and the Low-Income Weatherization program. The MTP program was SPS's Retro-Commissioning program, which targeted qualifying commercial class customers. Table 2 below compares the 2014 projected savings and budget to the reported and verified savings and actual expended funds for 2014.

⁴ This number includes costs associated with all 2014 EM&V activities and SPS's 2014 EECRF expenses.

Table 2: Summary of 2014 Projected Savings and Budget, Reported/Verified Savings, and Expended Funds

Calendar Year	Demand Goal (MW)	Energy Goal (MWh)	Projected MW Savings	Projected MWh Savings	Reported and Verified MW Savings	Reported and Verified MWh Savings	Total Funds Budgeted	Total Funds Expended
2014	5,393	9,448,536	7,212	10,688,740	5,019	11,900,129	\$ 3,404,994	\$ 2,560,647

Energy Efficiency Plan

I. 2015 and 2016 Programs

A. Program Portfolios

PURA § 39.905 and P.U.C. SUBST. R. 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 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 2016, SPS proposes to offer multiple SOPs, a MTP, and a weatherization program to its residential and commercial customer classes to meet the requirements under the EE Rule. 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 impacts estimates.

Table 3 below summarizes the programs and target customer classes.

Table 3: Energy Efficiency Program Portfolio

Program	Target Customer Class	Application
Large Commercial SOP	Large Commercial	Retrofit; New Construction
Small Commercial SOP	Small Commercial	Retrofit; New Construction
Load Management SOP	Commercial	Curtable Load
Retro-Commissioning MTP	Large Commercial	Retrofit
Residential SOP	Residential	Retrofit; New Construction
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. Existing Programs

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

Commercial Standard Offer Program

The Commercial SOP has two components. The Large Commercial component of the Commercial SOP targets commercial customers with single-meter demand of 100 kW or more or aggregate meter demand of 250 kW or more. The Small Commercial component targets commercial customers with a single-meter demand of less than 100 kW or with a demand less than 250 kW for the sum of commonly-owned meters. Incentives are paid to project sponsors for measures installed in new or retrofit applications that provide verifiable demand and energy savings. The Small Commercial and Large Commercial incentives and savings are tracked and reported separately.

Load Management Standard Offer Program

The Load Management SOP was developed in 2012 in accordance with P.U.C. SUBST. R. 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 as a result 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 a wide range of residential measures that provide verifiable demand and energy savings. 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.

Hard-to-Reach Standard Offer Program

Hard-to-Reach customers are defined by P.U.C. SUBST. R. 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 includes certain measures with less than a 10-year life (e.g., Compact Fluorescent Lights (“CFL”)). 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 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 P.U.C. SUBST. R. 25.181(r).

Retro-Commissioning Market Transformation Pilot Program

The Retro-Commissioning Market Transformation Pilot Program is a program designed for identifying and implementing low-cost/no-cost measures 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.

C. New Programs for 2015 and 2016

SPS does not plan to offer any new programs in 2015 or 2016. However, SPS will continue to investigate the potential for new programs using the recommendations identified in a 2014 Research & Development Study SPS conducted through a third-party. This study identified implementation strategies and potential new programs for inclusion in future program years. As SPS reviews its long-term strategies and requirements, it may begin a pilot offering or other process with the intent of adding programs in future years if necessary to meet statutory goal requirements.

D. General Implementation Plan

Program Implementation

SPS will implement its energy efficiency programs in a non-discriminatory and cost-effective manner. For 2015 and 2016, SPS intends to conduct programs using the following activity schedule:

- In November 2014, SPS allowed sponsors to submit applications, which were reviewed and accepted in the order of receipt.
- Throughout 2015, SPS's approved Energy Efficiency Service Providers ("EESPs") will be offered 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, 2015. 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 broadcasting email notices to various energy service company associations.
- In the fourth quarter of 2015, SPS will announce its 2016 energy efficiency programs and open its website application pages to assist EESPs in preparing project applications for PY 2016. The application process gives sponsors feedback on whether particular projects are eligible and the level of incentives for which they may qualify.
- Throughout 2016, SPS's approved EESPs will be offered 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, 2016. 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 broadcasting email notices to various energy service company associations.

- During 2015 and 2016, the Retro-Commissioning Program will utilize a third-party program implementer who will work with commissioning agents and SPS account management to conduct outreach and identify suitable facilities.

Program Tracking

SPS uses an online database to record all program activity for its energy efficiency programs, except for its Retro-Commissioning Program and the Low-Income Weatherization Program, which use the third-party implementer for tracking purposes. 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.

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 P.U.C. SUBST. R. 25.181(p).

The International Performance Measurement and Verification Protocol ("IPMVP") 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 in order to meet the savings goals required by PURA § 39.905 and the EE Rule. 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 each SOP. 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 its large commercial and industrial customer account management team to educate customers about the Load Management SOP and Retro-Commissioning MTP. In 2016, the account management team will continue its 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 P.U.C. SUBST. R. 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. For 2015 and 2016, SPS has relied on historic achievements to determine the budget allocations. 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 toward a specific program.

Table 4: Summary of Customer Classes

Customer Class	Qualifications	Number of Customers⁵
Commercial	< 69 kV service voltage	48,008
Residential	Non-HTR Residential	199,907
Hard-to-Reach	HTR Income Requirements	74,365

III. Projected Energy Efficiency Savings and Goals

P.U.C. SUBST. R. 25.181 requires that investor-owned utilities administer energy efficiency programs to achieve a demand reduction equivalent to 30% of the utility's average demand growth by December 31, 2015. 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" that shifts utilities' goal metric from 30% of its annual growth in demand to four-tenths of 1% of its summer weather-adjusted peak demand. SPS has determined that it has not reached the "trigger" for 2015 PY nor will it reach the "trigger" for the 2016 PY.

Table 5 provides the peak load data used to calculate the demand reduction projection for the demand goal for 2016, as required by the EE Rule. To calculate this goal, SPS applied an average line loss factor of 9.62%⁶ to the weather-normalized peak demand value for residential and commercial customers. SPS then removed the peak demand of opt-out customers from the

⁵ Commercial and Residential number of customers reflect actual SPS customer counts as of December 2014. Hard-to-Reach customers were estimated based on U.S. Census data. In 2014, 37.2% of Texans were below the poverty threshold. (http://www.census.gov/hhes/www/cpstables/032014/pov/pov46_001_185200.htm).

⁶ SPS's most recently approved line loss study can be found in Docket No. 42004. For purposes of the EEPR, SPS uses a simple average of line losses for all levels from the source to the meter.

residential and commercial peak demand values. Finally, SPS calculated the average peak demand growth for the previous five years (2010-2014). As shown in the average annual growth column, SPS has experienced average negative peak demand growth of -1 MW excluding opt-out customers and 0 MW including opt-outs.

Table 5: Annual Growth in Demand and Energy Consumption (at Meter)⁷

Calendar Year	Peak Demand (MW)					Energy consumption (MWh)										Growth (MW)		Average Growth (MW)			
						Residential & Commercial Excluding Opt Out Customers					Total System					Residential & Commercial					
	Total System		Residential & Commercial			Actual Weather		Opt Out Customers		Actual Weather		Actual Weather		Actual Weather		Actual Weather		Actual Weather		Actual Weather	
	Actual	Weather Adjusted	Actual	Weather Adjusted		Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted
2009	2,343	2,315	1,568	1,543	42	1,501	13,920,045	13,932,332	7,371,821	7,382,989	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	2,320	2,334	1,542	1,550	33	1,518	14,175,553	14,110,580	7,512,089	7,452,380	8	17	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	2,279	2,254	1,608	1,582	40	1,542	14,054,830	13,730,734	7,963,150	7,639,055	32	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	2,381	2,280	1,705	1,604	50	1,555	13,880,058	13,721,135	7,748,839	7,589,916	22	13	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	2,231	2,192	1,497	1,476	44	1,432	13,994,646	13,859,306	7,764,906	7,629,565	(128)	(123)	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	2,281	2,257	1,562	1,538	39	1,499	14,061,579	14,038,723	7,712,573	7,689,717	62	67	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	NA	NA	NA	1,632	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	NA	NA	NA	1,671	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
																				(0.975)	(0.407)

⁷ New line loss factors for 2013 were approved for SPS in Docket No. 42004. The average of these line loss factors is 9.62%. This line loss factor has been applied to all years and therefore previous peak demand values may differ from historic filings. Line loss factors are not applied to the energy savings values.