#### DOCKET NO. \_\_\_\_

APPLICATION OF SOUTHWESTERN § PUBLIC UTILITY COMMISSION PUBLIC SERVICE COMPANY FOR §

AUTHORITY TO CHANGE RATES § OF TEXAS

# OF RUTH M. SAKYA

on behalf of

#### SOUTHWESTERN PUBLIC SERVICE COMPANY

(Filename: SakyaRRDirect.doc)

#### **Table of Contents**

GLOS	SAR	Y OF ACRONYMS AND DEFINED TERMS	2
LIST (	OF A	TTACHMENTS	3
I.	WI	TNESS IDENTIFICATION AND QUALIFICATIONS	4
II.		SIGNMENT AND SUMMARY OF TESTIMONY AND COMMENDATIONS	7
III.	BA	CKGROUND	9
IV.		S'S PROPOSAL FOR THE PROSPECTIVE TREATMENT OF XAS RECS	12
	A.	PROPOSAL TO UPDATE THE IMPUTED PRICE FOR BUNDLED RECS FROM \$0.27 PER REC TO \$0.60 PER REC	14
	B.	CALCULATION OF REC SALES REVENUE CREDIT	15
	C.	PROPOSAL TO RETURN HALE AND SAGAMAORE WIND FACILITY REC SALES REVENUE	16
	D.	REQUEST FOR AFFIRMATION THE COMMISSION AND THE NMPRC WILL ESTABLISH WIND REC PRICES FOR GENERATION IN THEIR RESPECTIVE STATES AND REC EXPENSES AND REVENUES BE DIRECTLY ASSIGNED TO THE TEXAS AND NEW MEXICO RETAIL JURISDICTIONS	19
AFFIL	)AV		20

#### GLOSSARY OF ACRONYMS AND DEFINED TERMS

#### **Acronym/Defined Term** Meaning

Commission Public Utility Commission of Texas

FoF Findings of Fact

MW megawatt

MWh megawatt-hour

NMPRC New Mexico Public Regulation Commission

PPA purchased power agreement

PURA Public Utility Regulatory Act

REC Renewable Energy Credit

RPS Renewable Portfolio Standard

RFP Rate Filing Package

Rule 25.173 16 Tex. Admin. Code 25.173

SPS Southwestern Public Service Company, a New

Mexico corporation

Test Year April 1, 2018 through March 31, 2019

Update Period April 1, 2019 through June 30, 2019

XES Xcel Energy Services Inc.

## LIST OF ATTACHMENTS

<b>Attachment</b>	<u>Description</u>
RMS-RR-1	List of Prior Testimony (Filename: RMS-RR-1.xlsx)
RMS-RR-2	Annual REC Expense Calculation (Filename: RMS-RR-2.xls)
RMS-RR-3	Annual REC Revenue Credit (Filename: RMS-RR-3.xlsx)
RMS-RR-4	REC Market Prices (Filename: RMS-RR-4.xlsx)

#### DIRECT TESTIMONY OF RUTH M. SAKYA

1		I. <u>WITNESS IDENTIFICATION AND QUALIFICATIONS</u>
2	Q.	Please state your name and business address.
3	A.	My name is Ruth M. Sakya. My business address is 119 E. Marcy Street, Suite 202,
4		Santa Fe, NM 87505.
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.
9	Q.	By whom are you employed and in what position?
10	A.	I am employed by SPS, as Manager, Regulatory Administration.
11	Q.	Please briefly outline your responsibilities as Manager, Regulatory
12		Administration.
13	A.	I am responsible for determining the appropriate regulatory policy for SPS. In this
14		role, I direct and prepare comments, testimony, and briefing materials for policy
15		matters that impact SPS. Among my responsibilities are SPS's renewable energy,
16		energy efficiency, and load management matters before the Public Utility
17		Commission of Texas ("Commission") and the New Mexico Public Regulation
18		Commission ("NMPRC"). Included in these responsibilities is participating in
19		rulemakings or other matters that change the Commission's rules related to
20		renewable energy, energy efficiency, load management, and cost recovery riders. I

- 1 am thus familiar with the Commission's procedural and substantive rules and the
- 2 Public Utility Regulatory Act ("PURA")<sup>1</sup> affecting these areas.
- 3 Q. Please describe your educational background.
- 4 A. I graduated from the University of Wyoming in 1998 with a Bachelor of Science
  5 degree in Finance. In 2001, I received a Master of Science degree in Finance, with
- an emphasis in Regulatory Economics, also from the University of Wyoming. I
- 7 completed the coursework and successfully passed the qualifying exams toward a
- 8 Ph.D. in Public Affairs from the University of Colorado, Denver.
- 9 Q. Please describe your professional experience.
- I began my career in 1999 as an intern with the Illinois Commerce Commission and 10 A. 11 in 2000 joined the Commission as a Senior Policy Analyst. I have held various other 12 positions, including Rate Analyst at a multi-jurisdictional electric and gas utility, and 13 Senior Analyst and then Supervising Analyst with a consulting firm specializing in 14 services to regulatory agencies and municipal entities. In 2004, I accepted a position 15 with Xcel Energy Services Inc. ("XES") as Senior Rate Analyst. In 2007, I accepted 16 a position with XES as Manager, Regulatory Policy. Beginning January 1, 2012, my position as Manager, Regulatory Policy was transferred to SPS, where my job 17 18 responsibilities continued to be the same as they had been since 2007. In 2018, I 19 became Manager, Regulatory Administration.

<sup>&</sup>lt;sup>1</sup> PURA is codified at Tex. UTILS. CODE ANN. §§ 11.001 –58.303 (West 2019), §§ 59.001-66.017 (West 2019).

1 Q. Have you testified or filed testimony before any regulatory authorities	1	Q.	Have you	testified	or filed	testimony	before ar	ny regulatory	authoritie	s?
--	---	----	----------	-----------	----------	-----------	-----------	---------------	------------	----

provided in Attachment RMS-RR-1.

6

A. Yes. I have filed testimony before the Commission, the NMPRC, and the Colorado

Public Utilities Commission. I have testified before each of these regulatory

authorities regarding, among other things, the topics discussed in this direct

testimony. A complete list of the proceedings in which I have provided testimony is

1 2		II. <u>ASSIGNMENT AND SUMMARY OF TESTIMONY AND</u> <u>RECOMMENDATIONS</u>
3	Q.	What is your assignment in this proceeding?
4	A.	In my direct testimony, I present SPS's proposal to change the imputed price of
5		Texas-generated wind Renewable Energy Credits ("REC") from \$0.27 to \$0.60 per
6		megawatt-hour ("MWh"). I explain how the \$0.60 value is more reflective of the
7		current market value for these RECs. I also present SPS's proposed REC sales
8		revenue credit of \$332,167, which uses the proposed \$0.60 imputed price. Next, I
9		address SPS's proposal to return 100 percent of the Hale and Sagamore wind
10		facilities REC sales margins to SPS's Texas customers through base rates, either
11		through creation of a regulatory liability or a base rate rider. Finally, I address SPS's
12		request that the Commission continue its long-standing practice of establishing the
13		value of Texas-generated RECs and recognizing the value of New Mexico-generated
14		RECs established by the NMPRC.
15		In addition, I co-sponsor Schedule G-11 (Deferred Expenses from Prior
16		Dockets) of SPS's Rate Filing Package ("RFP") with SPS witnesses Arthur P. Freitas
17		and Bryan R. Davis. I specifically sponsor the deferred renewable energy costs.
18		Finally, I sponsor information included in the Executive Summary relating to
19		topics addressed in my direct testimony.
20	Q.	Please summarize the recommendations and conclusions in your testimony.

- 21 For the reasons discussed in my testimony, I recommend the Commission: A.

22

23

24

authorize a change to the imputed price of Texas-generated wind (1) RECs from \$0.27 to \$0.60 per REC and the resulting \$2,875,276 REC expense component to be included in base rates;

1 (2) authorize a REC sales credit of \$332,167.03 be included in the 2 requested revenue requirement, which reflects the \$0.60 imputed 3 price proposed herein; 4 (3) authorize SPS to return 100 percent of the Texas retail allocation of the REC sales margins from the Hale and Sagamore wind facilities 5 through base rates; and 6 7 (4) affirm that the Commission will continue to recognize that both the 8 Commission and the NMPRC shall establish the value of RECs 9 generated in their respective states. 10 Were Attachments RMS-RR-1 through RMS-RR-4 prepared by you or under Q. 11 your direct supervision and control? 12 A. Yes. 13 Q. Was the portion of the RFP Schedule that you co-sponsor prepared by you or 14 under your supervision and control? 15 A. Yes. 16 0. Do you incorporate the RFP Schedule and the portion of the Executive 17 Summary to be sponsored or co-sponsored by you into your testimony? 18 A. Yes. 19 Will your testimony be updated for actual costs incurred in the three months, Q. 20 April through June 2019, following the Test Year, April 1, 2018 through March 21 31, 2019? 22 Yes. As discussed by SPS witness William A. Grant, SPS will file an update 45 days A. 23 after SPS files this application. The update will include actual costs incurred to 24 replace the estimates provided in the application for the time period of April 1, 2019 25 through June 30, 2019, referred to as the "Update Period." The REC costs and REC 26 sales credit I quantify in my testimony will be updated to account for generation and 27 REC prices through the Update Period.

#### III. <u>BACKGROUND</u>

2 (	).	Is SPS	subject to	any	renewable energy	mandates	in '	Texas	?
-----	----	--------	------------	-----	------------------	----------	------	-------	---

- 3 A. Yes. PURA § 39.904 and 16 Tex. Admin. Code §25.173 ("Rule 25.173") specify 4 how an electric utility operating in Texas should meet statewide renewable energy 5 goals. Among other provisions, the renewable energy statute and rule are designed 6 to encourage the development, construction, and operation of renewable energy 7 resources in Texas and to protect and enhance the quality of the environment through 8 increased use of renewable energy resources. The minimum standard for statewide 9 installation of renewable energy resources is a target of 10,000 megawatts ("MW") 10 of installed renewable energy capacity by January 1, 2025 (see PURA § 39.904(a)). 11 On an annual basis, SPS is allocated a proportionate share of the statewide total (which is converted to a MWh basis). In 2017, SPS was allocated 502,661 MWh and 12 13 in 2018 SPS was allocated 532,117 MWh.
- 14 Q. How does SPS comply with the renewable energy mandate?
- 15 A. SPS complies with the mandate by retiring RECs.
- 16 **Q.** What is a REC?

- A. A REC represents one MWh of renewable energy that is physically metered and verified in Texas and meets the other requirements set forth in Rule 25.173(e).
- 19 Q. Please describe how SPS obtains its RECs.
- A. Currently, SPS obtains its RECs through purchased power agreements ("PPA"). The projects producing the renewable energy are located in Texas and New Mexico. SPS

has four long-term wind PPAs that total approximately 522 MW. <sup>2</sup> Under the
contract terms, SPS takes possession of both the energy and RECs. In addition, SPS
has one purchase from a qualifying facility in New Mexico, where SPS receives the
RECs as part of its avoided cost payment to the facility. <sup>3</sup>

SPS has two primary types of contracts: (i) those in which the price of energy and RECs are unbundled (that is, the price of energy and RECs is separately stated); and (ii) those in which the price of energy and RECs are bundled (that is, there is no separately stated price for the RECs). Of the long-term contracts, one is unbundled (Wildorado) and the remaining are bundled (Spinning Spur, Caprock, and San Juan).

# Q. Does SPS have new generation facilities that could be used to comply with the renewable energy statute and rule?

A. Yes. In Docket No. 46936, the Commission issued a CCN for the construction of two wind facilities, Hale (located in Texas) and Sagamore (located in New Mexico). Because the facilities are renewable energy resources, each MWh of generation will produce a REC. SPS will annually assign its Texas retail customers their proportionate share of RECs based on energy usage. SPS proposed to add the facilities based on the favorable economics (i.e., reduction to customer costs), *not* 

<sup>&</sup>lt;sup>2</sup> Wildorado, 161 MW, located in Texas; Spinning Spur, 161 MW, located in Texas; Caprock, 80 MW, located in New Mexico; and San Juan, 120 MW, located in New Mexico.

<sup>&</sup>lt;sup>3</sup> Mesaland, 1 MW, located in New Mexico.

<sup>&</sup>lt;sup>4</sup> Application of Southwestern Public Service Company for: A Certificate of Convenience and Necessity Athorizing Construction and Operation of Wind Generation and Associated Facilities in Texas and New Mexico, and Related Ratemaking Principles; and Approval of a Purchased Power Agreement to Obtain Wind-Generated Energy, Docket No. 46936, Order (May 25, 2018).

because the facilities were needed for renewable energy compliance obligations
under existing PURA standards. However, SPS intends to use its best efforts to sell
the RECs and further reduce customer costs. Consistent with the Final Order in
Docket No. 46936, SPS will return 100 percent of the Texas-retail allocation to its
retail customers through base rates. I discuss how SPS proposes to return the
margins later in my testimony.

1 2		IV. SPS'S PROPOSAL FOR THE PROSPECTIVE TREATMENT OF TEXAS RECS
3	Q.	What is the current regulatory treatment of SPS's REC costs at the
4		Commission?
5	A.	Payments for unbundled RECs are excluded from eligible fuel. For bundled
6		contracts, SPS agreed in Docket No. 29801 to calculate and "impute" (i.e., assign) a
7		value for the Texas retail jurisdictional share of RECs. <sup>5</sup> The imputed values are
8		deducted from eligible fuel expense. The Commission's Final Order in Docket No.
9		47527 established an imputed value of \$0.27 per Texas-generated RECs effective
10		June 1, 2018. <sup>6</sup>
11		In a prior SPS base rate case, Docket No. 43695, the Commission's Final
12		Order, <sup>7</sup> reflected the following treatment of RECs:
13 14		<ul> <li>established an imputed value for Texas-generated RECs and REC sales credits based on then-current market prices;</li> </ul>
15 16 17 18 19		<ul> <li>credited REC sales revenues through base rates based upon the difference between the average RECs required for SPS's Renewable Portfolio Standard ("RPS") compliance in calendar years 2013 and 2014 and the amount of RECs generated for the Test Year, which for Docket No. 43695 was July 1, 2013 to June 30, 2014;</li> </ul>
20 21 22		<ul> <li>determined the Commission will establish the value for Texas-generated bundled RECs, and the Commission will recognize the value the NMPRC establishes for New Mexico-generated bundled RECs; and</li> </ul>

<sup>&</sup>lt;sup>5</sup> Application of Southwestern Public Service Company for: (1) Reconciliation of its Fuel and Purchased Power Costs for 2002 and 2003; (2) a Finding of Special Circumstances; and (3) Related Relief, Docket No. 29801, Findings of Fact ("FoF") 38-41 (Dec. 19, 2005).

<sup>&</sup>lt;sup>6</sup> Application of Sourthwestern Public Service Company for Authority to Change Rates, Docket No. 47527, FoF 90–91 (Dec. 10, 2018).

<sup>&</sup>lt;sup>7</sup> Application of Southwestern Public Service Company for Authority to Change Rates, Docket No. 43695, FoF 198 – 198C (Dec. 18, 2015).

1	•	authorized for base rate purposes the direct assignment of REC expenses and
2		revenues to the New Mexico and Texas retail jurisdictions respectively.

In both SPS's 2016 and 2017 base rate cases, Docket Nos. 45524 and 47527, SPS followed the REC methodology established in the Commission's Final Order in Docket No. 43695, including updated imputed REC values (for both base rate expenses and revenue credit purposes). SPS proposes to use the same Commission-approved methodology, including updated imputed REC prices, in this proceeding.

#### 8 Q. What value does SPS propose for the imputed bundled REC prices?

9 A. SPS is proposing to update the imputed price for bundled RECs and REC sales from \$0.27 per REC—the imputed value established in Docket No. 47527—to \$0.60 per REC.

#### 12 Q. Please summarize SPS's proposals with respect to RECs.

A.

As I mentioned, SPS proposed to utilize the methodology adopted by the Commission in Docket No. 43695. Specifically, SPS proposes to: (1) recover REC expense in base rates using the \$0.60 imputed price for bundled RECs and \$5.00 per REC for the unbundled RECs; (2) establish a REC sales revenue credit, using the \$0.60 imputed price, to base rates based upon the difference between the average RECs required for SPS's RPS compliance in calendar years 2017 and 2018 and the amount of RECs generated for the current Test Year; (3) allow each state regulatory commission to establish the value of RECs generated in that state; and (4) authorize the direct assignment of REC expenses and revenues to the Texas and New Mexico retail jurisdictions, respectively. In addition, SPS proposes to return 100 percent of

- the net Texas retail REC sales margins from the Hale and Sagamore wind facilities through a base rate mechanism – either a regulatory liability or a base rate rider.
- 3 A. Proposal to Update the Imputed Price for Bundled RECs from \$0.27 4 per REC to \$0.60 per REC
- 5 Q. How has SPS calculated the current REC expense to be included in base rates?
- A. In order to calculate the current REC expense to include in its base rates, SPS multiplied the Test Year generation<sup>8</sup> from the Texas renewable energy generators by the proposed REC price. The resulting amount to be included in the cost of service study is \$2,875,276. I provided this calculation to Mr. Freitas, who incorporated the amount into the cost of service study he presents. Please refer to Attachment RMS-RR-2 for the calculation.
- 12 Q. What is SPS's proposal regarding the pricing of RECs?
- 13 A. Consistent with SPS's long-standing, Commission-approved practice, SPS proposes
  14 to update the imputed wind REC price to reflect current market conditions for RECs.
  15 Specifically, SPS proposes to assign a value of \$0.60 per bundled wind REC, for all
  16 Texas-generated RECs, beginning with the effective date of the final base rates in
  17 this case. The unbundled RECs from the Wildorado PPA will remain at \$5.00 per
  18 REC, consistent with the contract terms.
- 19 Q. What is the basis for the proposed bundled Texas wind RECs valuation?
- 20 A. The proposed price is based upon the trend of Texas compliance wind-REC market prices, as demonstrated by the Texas compliance REC market data. Please refer to

<sup>&</sup>lt;sup>8</sup> Less transfers to wholesale customers.

1		Attachment RMS-RR-3. Near the end of 2017, Texas compliance REC prices started
2		to increase, and since that time, have averaged around \$0.60.
3	Q.	Is \$0.60 per REC a reasonable value?
4	A.	Yes, \$0.60 per REC is a reasonably balanced price based on market trends, and
5		neither over-states nor under-states the REC price. The \$0.60 is based on average
6		market prices since the end of 2017, when REC prices changed significantly. SPS
7		has no influence over the fluctuation of REC market prices. SPS will provide an
8		update soon for the Update Period, and the REC prices can be re-evaluated in context
9		of then-current market information.
0	В.	Calculation of REC Sales Revenue Credit
1	Q.	Please describe how SPS calculated the REC sales revenue credit.
2	A.	Consistent with the Commission's Final Order in Docket No. 43695, in order to
13		calculate the REC sales revenue credit, I:
14		<ul> <li>determined the amount of RECs generated for the Test Year, less wholesale transfers;</li> </ul>
16 17		<ul> <li>determined the average RECs required for SPS's RPS compliance in calendar years 2017 and 2018;</li> </ul>
18		<ul> <li>calculated the RECs available for sale, by subtracting the average compliance obligation from the annual generation; and</li> </ul>
20 21		<ul> <li>multiplied the RECs available for sale by the imputed REC sales value of \$0.60 per REC.</li> </ul>
22		Based on these calculations, I provided a REC sales revenue credit of \$332,167 to
23		Mr. Freitas, who incorporated the credit into the revenue requirement. Please refer
24		to Attachment RMS-RR-4.

1	Q.	<b>Discuss further</b>	why you used:	(1) the average	RECs required for	or SPS's RPS
---	----	------------------------	---------------	-----------------	-------------------	--------------

- 2 compliance in calendar years 2017 and 2018; and (2) the amount of RECs
- **generated for the Test Year.**
- 4 A. As I noted above, this approach reflects the steps for calculating the REC sales
- 5 revenue credits the Commission approved in Docket No. 43695. The calendar years
- and Test Year, however, have been updated to reflect the timing of this rate case.
- 7 Q. Rule 25.173(j) authorizes transmission-level voltage customers to opt-out from
- 8 paying for the costs incurred by utilities to comply with the renewable energy
- 9 requirement. Has SPS accounted for the REC opt-out customers in
- determining the base rate estimate for REC sales?
- 11 A. Yes. Consistent with that cost treatment, SPS witness Evan D. Evans has applied the
- revenue credit in the same manner as REC costs. This approach will ensure that
- 13 REC opt-out customers will not receive a credit associated with REC sales and
- appropriately matches the treatment of costs and revenues.
- 15 C. Proposal to Return Hale and Sagamaore Wind Facility REC Sales
- 16 **Revenue**
- 17 Q. When the Commission approved the CCN for the Hale and Sagamore wind
- 18 facilities, did it include requirements on how SPS should treat REC sales?
- 19 A. Yes. In summary, SPS agreed to return 100 percent of the Texas retail allocation of
- Hale and Sagamore REC sales margins through base rates. Section XI of the
- 21 Stipulation provides that 100 percent of the Texas retail jurisdictional portion of the
- 22 margins from the sale of RECs generated from the Hale and Sagamore projects after

- the first 60 days following each project's commercial operation date will be credited
- 2 to SPS's Texas retail customers through base rates.
- Q. Does SPS provide a proposal to return the Texas retail allocation REC sales
   margins from the Hale and Sagamore wind facilities?
- 5 A. SPS is presenting two alternative proposals, both of which would return the Texas
  6 retail allocation of the REC sales margins through base rates. Both proposals meet
  7 the requirements of the Commission's Final Order and are reasonable and
  8 appropriate options. The decision regarding which option the Commission should
  9 choose is a matter of policy.
- 10 Q. Please describe SPS's first proposal.

11

12

13

14

15

16

17

18

19

20

21

22

23

Α.

SPS's first proposal would be to create a regulatory liability to track the Texas-retail share of REC sales margins from the Hale and Sagamore wind facilities. In each rate case, SPS will amortize and return the revenue. There are several benefits to this approach: (i) regulatory liabilities are a recognized and traditional ratemaking mechanism; (ii) any large transactions (e.g., unusual markets opportunities which SPS is able to take advantage of) will always be accounted for and returned to customers; and (iii) amortization periods can be used to "smooth" out revenue and help reduce customer rates. At the same time, regulatory liabilities do have inherent disadvantages, including decreased flexibility and precision. Finally, at times regulatory liabilities benefit customers (i.e., customers will receive more than 100 percent of the margins), while at other times regulatory liabilities will be to the detriment of customers (i.e., customers will receive less than 100 percent of the margins).

#### Q. Please describe SPS's second proposal.

1

2

3

4

5

6

7

8

9

11

A. SPS's second proposal is to implement a base rate rider, which would be used to reduce customer base rates. On a periodic basis (e.g., annual basis), SPS would return the Texas retail allocation of the Hale and Sagamore wind facility REC sales margins as a base rate credit through a rider. The main benefit to this approach is the timely return of sales revenue to customers and the ability to true-up deviations such that customers receive exactly 100 percent of the margins (in contrast to a regulatory liability). The main disadvantage to this approach is that because margins will vary from year to year, customer bill credits will vary, which may be confusing to 10 customers.

#### Q. When would the approved proposal become effective?

12 SPS proposes to begin accounting for the REC sales margins effective with the first A. 13 REC sale from the Hale and/or Sagamore facilities. SPS would return the margins 14 according to the approved regulatory treatment once a final Commission order is 15 received.

#### 16 Q. Will any timing considerations need to be accounted for during a final true-up?

17 A. Yes. Similar to previous Commission-approved REC recovery mechanisms, any final true-up will need to account for the three-year life of a REC and thus will take 18 19 time for final disposition.

- D. Request for Affirmation the Commission and the NMPRC will
  Establish Wind REC Prices for Generation in their Respective States
  and REC Expenses and Revenues be Directly Assigned to the Texas
  and New Mexico Retail Jurisdictions
- 5 Q. How do you propose to value New Mexico-generated RECs?
- 6 A. I propose the Commission continue with the practice of allowing each state
- 7 commission to determine the REC values for RECs generated in its respective state.
- 8 That is, this Commission would continue to establish the value for Texas-generated
- 9 RECs and the NMPRC would continue to establish the value for New
- Mexico-generated RECs. The NMPRC follows the same practice.
- 11 Q. Why is this treatment appropriate?
- 12 A. RECs are state-generated creations. Consequently, it is appropriate for each state to 13 determine the value of RECs generated within that state. States have the authority to 14 determine important characteristics of RECs. For example, each state determines the eligibility of RECs for use in that state's RPS (e.g., in-state or out-of-state RECs for 15 16 retirement), REC lives (e.g., in Texas, RECs have a three-year life, whereas in New 17 Mexico, RECs have a four-year life), and whether qualifying facilities or utilities 18 retain REC ownership. The REC markets are also vastly different among the various 19 states. Accordingly, each state should set the price for RECs generated in that state. 20 Additionally, this treatment ensures that SPS neither profits nor loses due to timing

Does this conclude your pre-filed direct testimony?

issues when updating REC prices.

23 A. Yes.

Q.

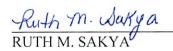
21

#### **AFFIDAVIT**

STATE OF NEW MEXICO	)
	)
COUNTY OF SANTA FE	)

RUTH M. SAKYA, first being sworn on her oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and the accompanying attachment(s) and am familiar with the 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.



Subscribed and sworn to before me this 31st day of July, 2019 by RUTH M. SAKYA.



Notary Public, State of New Mexico

My Commission Expires: 9/30/22

Year	Regulatory Commission	Docket/Case Number	Description of Proceeding	Party on Whose Behalf Testimony was Submitted
2008	PUCT	35580	Application of Southwestern Public Service Company for Authority to Implement a Voluntary Customer Load Reduction Program and Request for Expedited Implementation	SPS
2008	PUCT	35668	SPS Application for Authority to (1) Revise its Interruptible Credit Option Tariff; (2) Implement a New Saver's Switch Tariff; and Related Relief	SPS
2008	PUCT	35738	SPS Application for Approval of Energy Efficiency Cost Recovery Factor Rider and Related Exception	SPS
2008	PUCT	35763	SPS Application for Authority to Change Rates and to Reconcile Fuel and Purchased Power Costs for 2006 and 2007 and to Provide a Credit for Fuel Cost Savings	SPS
2010	PUCT	38147	SPS Application for Authority to Change Rates and to Reconcile Fuel and Purchased Power Costs for 2008 and 2009	SPS
2010	PUCT	38849	SPS Application for Authority to Implement a Summer Only Interruptible Credit Option Program and Voluntary Customer Load Reduction Programs	SPS
2011	PUCT	39364	SPS Application for Approval of Energy Efficiency Cost Recovery Factor	SPS
2012	PUCT	40824	SPS Application for Authority to Change Rates and to Reconcile Fuel and Purchased Power Costs for the Period July 1, 2012 through June 30, 2013	SPS
2014	PUCT	43695	Application of Southwestern Public Service Company to Change Rates	SPS
2016	PUCT	45524	Application of Southwestern Public Service Company for Authority to Change Rates	SPS
2016	PUCT	45916	Application of Southwestern Public Service Company to Adjust its Energy Efficiency Cost Recovery Factor	SPS
2017	PUCT	47527	Application of Southwestern Public Service Company for Authority to Change Rates	SPS
2008	NMPRC	08-00024-UT	Energy Efficiency Rulemaking (Rule 17.7.2)	SPS
2008	NMPRC	08-00153-UT	SPS Application for Authority to Implement a Voluntary Customer Load Reduction Program	SPS
2008	NMPRC	08-00222-UT	SPS Application for its 2007 Annual Renewable Portfolio Report and its 2008 Annual Renewable Energy Portfolio Procurement Plan	SPS
2008	NMPRC	08-00333-UT	SPS Application for Approval of its 2009 Energy Efficiency Programs	SPS
2009	NMPRC	09-00258-UT	SPS Application for its 2008 Annual Renewable Portfolio Report and its 2009 Annual Renewable Energy Portfolio Procurement Plan	SPS
2009	NMPRC	09-00352-UT	SPS Application for Approval of its 2010/2011 Energy Efficiency Programs	SPS
2010	NMPRC	10-00015-UT	SPS Application for Approval of SunEdison Purchased Power Agreement	SPS
2010	NMPRC	10-00161-UT	SPS Application to Recover its Disincentives and Incentives Associated with its Energy Efficiency Programs for 2010	SPS
2010	NMPRC	10-00197-UT	SPS Application to Recover its Disincentives and Incentives Associated with its Energy Efficiency Programs for 2011	SPS
2010	NMPRC	10-00388-UT	SPS Application for Approval of Cielo Wind Purchased Power Agreement	SPS
2010	NMPRC	10-00395-UT	SPS Application for Revision of its Retail Rates	SPS
2011	NMPRC	11-00218-UT	Renewable Cost Threshold Rulemaking (Rule 17.9.572)	SPS

	Regulatory	Docket/Case		Party on Whose Behalf Testimony was
Year	Commission	Number	Description of Proceeding	Submitted
2011	NMPRC	11-00264-UT	SPS Application for its 2010 Annual Renewable Portfolio Report and its 2011 Annual Renewable Energy Portfolio Procurement Plan	SPS
2012	NMPRC	12-00111-UT	SPS Application for Deferred Renewable Cost Rider	SPS
2012	NMPRC	12-00219-UT	SPS Application for its 2011 Annual Renewable Portfolio Report and its 2012 Annual Renewable Energy Portfolio Procurement Plan	SPS
2012	NMPRC	12-00323-UT	SPS Application for Approval of Windsource Purchased Power Agreement	SPS
2012	NMPRC	12-00350-UT	SPS Application for Revision of its Retail Rates	SPS
2013	NMPRC	13-00031-UT	SPS Interim Report on its Participation in the Southwest Power Pool Regional Transmission Organization	SPS
2014	NMPRC	14-00198-UT	SPS Application Requesting: (1) Acceptance of its 2013 Annual Renewable Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for 2015; and (3) Other Associated Relief	SPS
2015	NMPRC	15-00083-UT	SPS Application for NextEra Solar PPA Approval, Cost Recovery, and Shared Savings Mechanism	SPS
2015	NMPRC	15-00119-UT	SPS Application Requesting: (1) Acceptance of its 2014 EE Report; (2) Approval of its 2016 Energy Efficiency Plan: (3) Approval of a Financial Incentive for 2016; and (4) Approval of its Cost Recovery Tariff Rider; and (5) a Determination whether a Separate Process Should be Established to Analyze a Smart-Meter Pilot Project	SPS
2015	NMPRC	15-00208-UT	SPS Application Requesting: (1) Acceptance of its 2014 Annual Renewable Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for 2016; and (3) Other Associated Relief	SPS
2015	NMPRC	15-00376-UT	In the Matter of Southwestern Public Service Company's Application for: (1) Authorization to Implement a Surcharge Through its Energy Efficiency Rider to Collect Under-recoveries of 2013-2014 Program Costs and Incentives; and (2) Other Appropriate Relief	SPS
2016	NMPRC	16-00110-UT	In the Matter of Southwestern Public Service Company's Application Requesting Approval of: (1) its 2017 Energy Efficiency and Load Management Plan and Associated Programs; (2) Continuation of its Energy Efficiency Tariff Rider and Recovery of the Difference between SPS's Plan Year 2015 Collections and Expenditures through its Energy Efficiency Tariff Rider; and (3) a Financial Incentive for Plan Year 2017 and Recovery of the Incentive through its Energy Efficiency Tariff Rider	SPS

Year	Regulatory Commission	Docket/Case Number	Description of Proceeding	Party on Whose Behalf Testimony was Submitted
2016	NMPRC	16-00183-UT	In the Matter of Southwestern Public Service Company's Application Requesting: (1) Acknowledgement of its Filing of the 2015 Annual Renewable Energy Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for Plan Year 2017; (3) Approval of the Proposed Rate for its 2017 Renewable Portfolio Standard Rider; (4) Approval of its Proposal to Calculate the Avoided Energy Related to the SunEdison, LLC Purchased Power Agreements; and (5) Other Associated Relief	SPS
2017	NMPRC	17-00159-UT	In the Matter of Southwestern Public Service Company's Energy Efficiency Compliance Application that Requests Authorization to: (1) per Approved Variance, Continue its: (A) 2017 Energy Efficiency and Load Management Programs for Plan Year 2018; (B) 2017 Energy Savings Goal for Plan Year 2018; (C) Energy Efficiency Tariff Rider to Recover the Three Percent Funding Level for Plan Year 208 and Reconciliation of 2016 Expenditures and Collections; and (D) 2017 Financial Incentive for Plan Year 2018 and Recover the Incentive Through its Energy Efficiency Tariff Rider; and (2) Recover the 2016 Reconciled Financial Incentive Through the Energy Efficiency Tariff Rider.	SPS
2017	NMPRC	17-00161-UT	In the Matter of Southwestern Public Service Company's Application Requesting: (1) Acknowledgement of its Filing of the 2016 Annual Renewable Energy Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for Plan Year 2018; (3) Approval of the Proposed Rate for its 2018 Renewable Portfolio Standard Rider; (4) Approval of Variance from Requirements of Rule 572.14(C)(1) NMAC; and (5) Other Associated Relief	SPS
2017	NMPRC	17-00294-UT	In the Matter of Southwestern Public Service Company's Application for: (1) Authorization to Enter into a Two-Year Extension of the Current Purchased Power Agreement for the Purchase of Non-Firm Energy for Windsource; (2) Authorization to Implement a Cost-Based Rate Methodology for Calculating an Annual Windsource Rate; and (3) Flow Through All Windsource Costs and Revenues Through its Fuel and Purchased Power Cost Adjustment Clause	SPS
2018	NMPRC	18-00201-UT	In the Matter of Southwestern Public Service Company's Application Requesting: (1) Acknowledgement of its Filing of the 2017 Annual Renewable Energy Portfolio Report; (2) Approval of its Annual Renewable Energy Portfolio Procurement Plan for Plan Year 2019; (3) Approval of the Proposed Rate for its 2019 Renewable Portfolio Standard Rider; (4) Approval of its Proposed Treatment of Renewable Energy Certificates Associated with the Sagamore and Hale Wind Facilities; and (5) Other Associated Relief	SPS

	Dlata	Da alaat/Ca		Party on Whose Behalf
Year	Regulatory Commission	Docket/Case Number	Description of Proceeding	Testimony was Submitted
2018	NMPRC	18-00139-UT	In the Matter of Southwestern Public Service Company's Compliance Filing Seeking Commission Determination of an Appropriate Energy Efficiency and Load Management Filing	
2018	NMPRC	18-00308-UT	In the Matter of Southwestern Public Service Company's Application for: (1) Authorization to Establish the Voluntary Solar*Connect Community Program ("Solar*Connect") and Enter into a Purchased Power Agreement for the Purchase of 1.98 MW of Nominal Solar Capacity and Associated Energy for Solar* Connect; (2) Approval of the Proposed Methodology for Calculating And Annually Adjusting the Solar*Connect Rate; and (3) Authorization to Flow Through All Solar*Connect Costs and Revenues Through the Solar*Connect Rider and its Fuel and Purchased Power Cost Adjustment Clause	SPS
2019	NMPRC	19-00140-UT	In the Matter of Southwestern Public Service Company's Triennial Energy Efficiency Plan Application Requesting Approval of: (1) SPS's 2020-2022 Energy Efficiency Plan and Associated Programs; (2) a Financial Incentive for Plan Year 2020; (3) Recovery of the Costs Associated with a Potential Energy Efficiency Study over a Two-Year Time Period; and (4) Continuation of SPS's Energy Efficiency Tariff Rider to Recover its Annual Program Costs and Incentives	SPS
2006	CPUC	06A-478E	Application of Public Service Company of Colorado for Approval of its 2007 Renewable Energy Standard Compliance Plan	PSCo
2006	CPUC	06A-534E	Application of Public Service Company of Colorado for an Order Approving its Solar Energy Purchase Agreement with Sune Alamosa1, LLC	PSCo

Southwestern Public Service Company

Calculation of Annual REC Expense

338,145 2,875,276 2,537,132 **Total Annual** REC Costs E = C \* D5.00 0.60 **REC Price** (\$/MMh) 507,426 563,574 ,071,001 **Net Annual** Generation  $\mathbf{C} = \mathbf{A} - \mathbf{B}$ (MWh) 2018 Wholesale 129,989 141,164 271,153 Less Actual Transfers (MWh) 2 637,415 704,738 1,342,154 Generation TY Gross (MMh) Spinning Spur Description Wildorado Total Line Š Š 2 8

Note: Test Year is 12 months ended 3/31/2019.

### REC Sales Revenue Credit For Test Year Ended March 31, 2017

#### Line

No.	Description	Calculation
1	TY Actual Net Generation (MWh) (RMS-RR-2, Col C, Line 3)	1,071,001
2	Less Average Retirements (MWh)	
3	2017 Actual Retirements	502,661
4	2018 Actual Retirements	532,117
5	Average Retirements (Avg. Line 3 & Line 4)	517,389
6	RECs to be Sold (MWh) (Line 1 - Line 5)	553,612
7	Current Year REC Price (\$/MWh)	\$ 0.60
8	REC Sales Credit (Line 6 * Line 7)	\$ 332,167.03

Line No.	Line No. Report Date		rrent r Price l/Last)
1	5/17/2019	\$	0.54
2	5/10/2019	\$	0.54
3	5/3/2019	\$	0.54
4	4/26/2019	\$	0.54
5	4/18/2019	\$	0.58
6	4/12/2019	\$	0.58
7	4/5/2019	\$	0.59
8	3/29/2019	\$	0.59
9	3/22/2019	\$	0.59
10	3/15/2019	\$	0.59
11	3/8/2019	\$	0.60
12	3/1/2019	\$	0.54
13	2/22/2019	\$	0.55
14 15	2/15/2019	\$ \$	0.61
16	2/8/2019 2/1/2019	\$	0.62 0.63
17	1/25/2019	\$	0.65
18	1/18/2019	\$	0.70
19	1/11/2019	\$	0.70
20	1/4/2019	\$	0.72
21	12/28/2018	\$	0.74
22	12/21/2018	\$	0.76
23	12/14/2018	\$	0.75
24	12/7/2018	\$	0.76
25	11/30/2018	\$	0.71
26	11/23/2018	\$	0.67
27	11/16/2018	\$	0.66
28	11/9/2018	\$	0.61
29	11/2/2018	\$	0.52
30	10/26/2018	\$	0.51
31 32	10/19/2018 10/12/2018	\$ \$	0.46 0.45
33	10/5/2018	\$	0.43
34	9/28/2018	\$	0.49
35	9/21/2018	\$	0.51
36	9/14/2018	\$	0.53
37	9/7/2018	\$	0.56
38	8/31/2018	\$	0.58
39	8/24/2018	\$	0.64
40	8/17/2018	\$	0.65
41	8/10/2018	\$	0.70
42	8/3/2018	\$	0.76
43	7/27/2018	\$	0.73
44 45	7/20/2018 7/13/2018	\$ \$	0.72 0.80
	7/6/2018		
46 47	6/29/2018	\$ \$	0.80 0.80
48	6/22/2018	\$	0.80
49	6/15/2018	\$	0.80
50	6/8/2018	\$	0.78
51	6/1/2018	\$	0.70
52	5/252018	\$	0.70
53	5/182018	\$	0.72
54	5/112018	\$	0.70
55	5/4/2018	\$	0.70
56	4/27/2018	\$	0.78
57	4/20/2018	\$	0.72
58	4/13/2018	\$	0.58
59 60	4/6/2018	\$	0.55
60 61	3/29/2018 3/23/2018	\$ \$	0.50 0.50
62	3/16/2018	\$ \$	0.50
02	5, 10, 2010	Ψ	0.50

			ırrent
Line	Line		r Price
No.	Report Date	(Mi	d/Last)
63	3/9/2018	\$	0.50
64	3/2/2018	\$	0.47
65	2/23/2018	\$	0.45
66	2/16/2018	\$	0.46
67	2/9/2018	\$	0.51
68	2/2/2018	\$	0.52
69	1/26/2018	\$	0.45
70	1/19/2018	\$	0.45
71	1/12/2018	\$	0.45
72	1/5/2018	\$	0.43
73	12/29/2017	\$	0.33
74	12/22/2017	\$	0.40
75	12/22/2017	\$	0.40
75 76	12/8/2017	\$	0.40
76 77	12/8/2017		
		\$	0.28
78	11/24/2017	\$	0.28
79	11/17/2017	\$	0.28
80	11/10/2017	\$	0.28
81	11/3/2017	\$	0.28
82	10/27/2017	\$	0.28
83	10/20/2017	\$	0.28
84	10/13/2017	\$	0.28
85	10/6/2017	\$	0.28
86	9/29/2017	\$	0.28
87	9/22/2017	\$	0.28
88	9/15/2017	\$	0.28
89	9/8/2017	\$	0.28
90	9/1/2017	\$	0.28
91	8/25/2017	\$	0.28
92	8/18/2017	\$	0.28
93	8/11/2017	\$	0.28
94	8/4/2017	\$	0.27
95	7/28/2017	\$	0.27
96	7/21/2017	\$	0.27
97	7/14/2017	\$	0.27
98	7/7/2017	\$	0.27
99	6/30/2017	\$	0.27
100	6/23/2017	\$	0.27
101	6/16/2017	\$	0.27
102	6/9/2017	\$	0.27
103	6/2/2017	\$	0.27
103	5/26/2017	\$	0.27
105	5/19/2017	\$	0.27
105	5/12/2017	\$ \$	0.27
107	5/5/2017	\$	0.27
107	3/3/2017 4/28/2017	\$ \$	0.27
109	4/21/2017	\$	0.27
110	4/13/2017	\$	0.27
111	4/7/2017	\$	0.27
112	3/31/2017	\$	0.27
113	3/24/2017	\$	0.27
114	3/17/2017	\$	0.27
115	3/10/2017	\$	0.27
116	3/3/2017	\$	0.27
117	2/24/2017	\$	0.27
118	2/17/2017	\$	0.27
119	2/10/2017	\$	0.27
120	2/3/2017	\$	0.27
121	1/27/2017	\$	0.27
122	1/20/2017	\$	0.27
123	1/13/2017	\$	0.27
124	1/6/2017	\$	0.27

Line No.	Report Date	Yea	urrent ir Price d/Last)	
125	12/30/2016	\$	0.27	
126	12/23/2016	\$	0.27	
127	12/16/2016	\$	0.27	
128	12/9/2016	\$	0.27	
129	12/2/2016	\$	0.27	
130	11/23/2016	\$	0.27	
131	11/18/2016	\$	0.28	
132	11/11/2016	\$	0.30	
133	11/4/2016	\$	0.30	
134	10/28/2016	\$	0.30	
135	10/21/2016	\$	0.30	
136	10/14/2016	\$	0.30	
137	10/7/2016	\$	0.30	
138	9/30/2016	\$	0.30	
139	9/23/2016	\$	0.30	
140	9/16/2016	\$	0.30	
141	9/9/2016	\$	0.30	
142	9/2/2016	\$	0.30	
143	8/26/2016	\$	0.30	
144	8/19/2016	\$	0.32	
145	8/12/2016	\$	0.33	
146	8/5/2016	\$	0.33	
147	7/29/2016	\$	0.33	
148	7/22/2016	\$	0.33	
149	7/15/2016	\$	0.33	
150	7/8/2016	\$	0.33	
151	7/1/2016	\$	0.32	
152	6/24/2016	\$	0.34	
153	6/17/2016	\$	0.34	
154	6/10/2016	\$	0.34	
155	6/3/2016	\$	0.34	
156	5/27/2016	\$	0.34	
157	5/20/2016	\$	0.33	
158	5/13/2016	\$	0.33	
159	5/6/2016	\$	0.33	
160	4/29/2016	\$	0.33	
161	4/22/2016	\$	0.33	
162	4/15/2016	\$	0.33	
163	4/8/2016	\$	0.35	
164	4/1/2016	\$	0.35	
165	3/24/2016	\$	0.35	
166 167	3/18/2016	\$	0.35 0.35	
168	3/11/2016 3/4/2016	\$ \$	0.35	
169	2/26/2016	\$	0.35	
170	2/19/2016		0.35	
171	2/12/2016	\$ \$	0.35	
172	2/5/2016	\$	0.35	
173	1/29/2016	\$	0.35	
174	1/22/2016	\$	0.37	
175	1/15/2016	\$	0.37	
176	1/8/2016	\$	0.38	
177	12/31/2015	\$	0.38	
178	12/24/2015	\$	0.38	
179	12/18/2015	\$	0.38	
180	12/11/2015	\$	0.38	
181	12/4/2015	\$	0.38	
182	11/25/2015	\$	0.39	
183	11/20/2015	\$	0.39	
184	11/13/2015	\$	0.39	
185	11/6/2015	\$	0.39	
186	10/30/2015	\$	0.41	

		Current		
Line		Year Price		
No.	Report Date	(Mi	(Mid/Last)	
187	10/23/2015	\$	0.41	
188	10/16/2015	\$	0.41	
189	10/9/2015	\$	0.41	
190	10/2/2015	\$	0.41	
191	9/25/2015	\$	0.41	
192	9/18/2015	\$	0.45	
193	9/11/2015	\$	0.42	
194	9/4/2015	\$	0.42	
195	8/28/2015	\$	0.42	
196	8/21/2015	\$	0.42	
197	8/14/2015	\$	0.45	
198	8/7/2015	\$	0.50	
199	7/31/2015	\$	0.50	
200	7/24/2015	\$	0.50	
201	7/17/2015	\$	0.50	
202	7/10/2015	\$	0.50	
203	7/2/2015	\$	0.50	
204	6/19/2015	\$	0.45	