

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

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) CASE NO. 18-00_____-UT
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,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT.)
_____)

DIRECT TESTIMONY

of

RUTH M. SAKYA

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

September 28, 2018

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
AC	Alternating Current
CCAЕ	Coalition for Clean Affordable Energy
Commission	New Mexico Public Regulation Commission
DG	Distributed Generation
FPPCAC	Fuel and Purchased Power Cost Adjustment Clause
kW	Kilowatt
kWh	Kilowatt hour
MWh	Megawatt hour
NMAG	New Mexico Attorney General
PPA	Purchased Power Agreement
PUCT	Public Utility Commission of Texas
REA	Renewable Energy Act
RPS	Renewable Portfolio Standard
RPS Report	Annual Renewable Energy Portfolio Report
Rule 572	Commission’s Renewable Energy Rule
SoCore	SoCore Energy, LLC

<u>Acronym/Defined Term</u>	<u>Meaning</u>
Solar*Connect	Solar*Connect Community
SPS	Southwestern Public Service Company
Staff	Commission’s Utility Division Staff
Texico PPA	PPA with Llano Estacado Wind Ranch
WRA	Western Resource Advocates
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
RMS-1	Windsorce Tariff
RMS-2	Proposed Solar*Connect Community Tariff
RMS-3	Example of Solar*Connect Premium Calculation and Bill Presentation
RMS-4	Illustration of Solar*Connect Cost Recovery
RMS-5	Workpapers

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1 **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

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

3 A. My name is Ruth M. Sakya. My business address is 1400 Ducale Drive SE, Rio
4 Rancho, New Mexico 87124.

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”).

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
14 this role, I direct and prepare comments, testimony, and briefing materials for
15 policy matters impacting SPS and advocate on behalf of SPS and its customers
16 before the Southwest Power Pool Inc. Among my responsibilities are SPS’s
17 renewable energy matters before the New Mexico Public Regulation Commission
18 (“Commission”), including SPS’s annual renewable portfolio standard (“RPS”)

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1 plans and reports and cost recovery under the RPS Rider. In carrying out my
2 responsibilities regarding these renewable energy matters, I have become familiar
3 with the Commission’s Renewable Energy Rule¹ (“Rule 572”), the Renewable
4 Energy Act² (“REA”), the Public Utility Act³, and other statutes and Commission
5 rules affecting renewable energy and ratemaking.

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

7 A. I graduated from the University of Wyoming in 1998 with a Bachelor of Science
8 degree in Finance and, in 2001, with a Master of Science degree in Finance, with
9 an emphasis in Regulatory Economics. I completed the coursework and
10 successfully passed the qualifying exams toward a Ph.D. in Public Affairs from
11 the University of Colorado, Denver.

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

13 A. I began my career in 1999 as an intern with the Illinois Commerce Commission
14 and in 2000 joined the Public Utility Commission of Texas (“PUCT”) as a Senior
15 Policy Analyst. I have held various other positions, including Rate Analyst at a
16 multi-jurisdictional electric and gas utility, and Senior Analyst and then

¹ 17.9.572 NMAC (as revised April 2014).

² 1978 NMSA, §§ 62-16-1 through 62-16-10.

³ 1978 NMSA, §§ 62-3-1 *et seq.*

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1 Supervising Analyst with a consulting firm specializing in services to regulatory
2 agencies and municipal entities. In 2004, I accepted a position with Xcel Energy
3 Services Inc. (“XES”) as Senior Rate Analyst. In 2007, I accepted a position with
4 XES as Manager, Regulatory Policy. Beginning January 1, 2012, my position as
5 Manager, Regulatory Policy was transferred to SPS, where my job responsibilities
6 continued to be the same as they were since 2007. In April 2018, I became
7 Manager, Regulatory Administration.

8 **Q. Have you testified or filed testimony before any regulatory authorities?**

9 A. Yes. I have filed testimony with the Commission, the PUCT, and the Colorado
10 Public Utilities Commission in numerous cases, including SPS’s RPS Plan filings.
11 I have also testified before each of these regulatory authorities regarding, among
12 other things, the topics discussed in this direct testimony.

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1 **II. ASSIGNMENT AND SUMMARY OF TESTIMONY**

2 **Q. Please describe the purpose of this case.**

3 A. In accordance with Section 62-16-7⁴ of the REA and Rule 572.18, SPS is
4 requesting Commission approval of its proposed voluntary renewable energy
5 purchase program and associated rider, Solar*Connect Community
6 (“Solar*Connect”), which will replace SPS’s existing program, Windsource.⁵
7 Under Rule 572.18, SPS is required to offer a voluntary renewable energy tariff
8 for those customers who want the option to purchase additional renewable
9 energy.⁶ Currently, SPS satisfies this mandate through its Windsource program.

10 SPS also seeks Commission approval of a purchased power agreement
11 (“PPA”), the “Solar*Connect PPA,” that it has executed with SoCore Clovis 1
12 LLC (“SoCore”) to supply renewable energy for purchase under the proposed
13 Solar*Connect program. The Solar*Connect PPA provides for the purchase of all
14 of the net energy, including renewable energy certificates, from a 1.98 megawatts

⁴ Section 62-16-7 of the REA provides that the Commission may require utilities to offer a voluntary program for purchasing additional renewable energy under a separate Commission-approved rate.

⁵ The Windsource program and its corresponding tariff, the Renewable Energy Rate Rider, were originally approved by the Commission in Case No. 2771 and implemented in 1998. *See In the Matter of Southwestern Public Service Company’s Advice Notice No. 179 for Proposed Renewable Energy, Photovoltaic Pumping Systems, and Interruptible Irrigation Rates*, Case No. 2771, Final Order Approving Recommended Decision and Certification of Stipulation (Mar. 16, 1998).

⁶ *See* 17.9.572.18 NMAC.

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1 (“MW”) alternating current (“ac”) solar powered electric generating facility (the
2 “SoCore Solar Facility”) that will be developed by SoCore near Clovis, New
3 Mexico.

4 Finally, SPS seeks approval of its proposed: (1) methodology for
5 calculating the customer premium under the Solar*Connect program; (2)
6 treatment of the costs of and revenues from the proposed Solar*Connect program;
7 and (3) plan for notifying and transitioning then-existing Windsource customers
8 to the proposed Solar*Connect program.

9 **Q. What is the purpose of your direct testimony?**

10 A. My testimony will:

- 11 • provide an overview of the topics to be covered by other SPS witnesses,
12 Bennie F. Weeks, Tara R. Fowler, and Ryan A. Matley;
- 13 • provide a brief description and overview of SPS’s current voluntary
14 renewable program, Windsource;
- 15 • describe SPS’s proposed voluntary renewable program, Solar*Connect,
16 which will replace the Windsource program, and present SPS’s proposed
17 Solar*Connect Rate Rider tariff;
- 18 • discuss SPS’s compliance with agreements made in Case No. 17-00294-
19 UT to address potential cross-subsidization related to the recovery of costs
20 associated with its proposed Solar*Connect program and to present its
21 proposed rate methodology for the Solar*Connect program to the Case
22 No. 17-00294-UT Stipulation signatories in advance of this filing;

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- 1 • discuss SPS’s proposed methodology for determining the Solar*Connect
2 charge and credit for participating customers;
- 3 • provide the estimated customer bill impacts for customers choosing to
4 participate in Solar*Connect; and
- 5 • discuss: (1) the underlying policy of the REA and Rule 572 in regards to
6 Solar*Connect; and (2) SPS’s efforts to address and minimize any cross-
7 subsidization between Solar*Connect participants and non-participants.

8 **Q. Please summarize the conclusions reached in your testimony.**

9 A. As I discuss below, I conclude as follows:

- 10 • SPS’s proposal to replace Windsource is reasonable;
- 11 • SPS has complied with Case No. 17-00294-UT obligations;
- 12 • the terms and conditions of participation in Solar*Connect program are
13 reasonable;
- 14 • the proposed rate methodology reasonably provides for recovery of SPS’s
15 costs and is fair to Solar*Connect subscribers, non-participants, and SPS,
16 and is consistent with the goals of the REA and Rule 572.18; and
- 17 • SPS’s plan for implementing the Solar*Connect Rate Rider is reasonable.

18 Consequently, I urge the Commission to adopt SPS’s proposal.

19 **Q. Please identify the other SPS witnesses in this case and briefly describe the
20 areas covered in their respective testimonies.**

21 A. SPS is presenting the following witnesses:

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1 **Ms. Bennie F. Weeks:**

- 2 • provides an overview of SPS's 2017 Solar*Connect Request for Proposals
3 to supply generation for the proposed Solar*Connect program;
- 4 • provides the basis for selecting the Solar*Connect bid; and
- 5 • addresses certain impacts of the Solar*Connect PPA on SPS and its
6 customers.

7 **Ms. Tara R. Fowler:**

- 8 • describes SPS's negotiations with SoCore regarding the execution of the
9 Solar*Connect PPA;
- 10 • presents and describes the key terms and conditions of the Solar*Connect
11 PPA; and
- 12 • describes the SoCore Solar Facility.

13 **Mr. Ryan A. Matley:**

- 14 • demonstrates that there is sufficient demand in SPS's New Mexico service
15 territory to support the proposed Solar*Connect program;
- 16 • describes SPS's proposed marketing and customer education plan, and
17 concludes they are prudent and will facilitate SPS's goal of ensuring the
18 program is fully subscribed within a reasonable time period;
- 19 • provides an overview of administrative costs associated with the
20 Solar*Connect program; and
- 21 • concludes that SPS's planned consumer education program complies with
22 Rule 572.

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- 1 **Q. Is Attachment RMS-1 a true and correct copy of SPS's Windsource Tariff?**
- 2 A. Yes.
- 3 **Q. Were Attachments RMS-2 through RMS-5 prepared by you or under your**
- 4 **direct supervision and control?**
- 5 A. Yes.

1 **III. BACKGROUND**

2 **A. Policy Considerations**

3 **Q. What goals are met through the offering of a voluntary renewable energy**
4 **program?**

5 A. Public policy goals related to voluntary renewable energy programs were
6 established by the Legislature through the REA § 62-16-7(B). Specifically:

7 The Commission may require that a public utility offer its retail
8 customers a voluntary program for purchasing renewable
9 energy that is in addition to energy provided by the public
10 utility pursuant to the renewable portfolio standard, under rates
11 and terms that are approved by the Commission.

12 Further, in § 62-16-6(A), the REA expressly provides that: “A public utility that
13 procures or generates renewable energy shall recover, through the rate-making
14 process, the reasonable costs of complying with the renewable portfolio standard.
15 Costs that are consistent with commission approval of procurement plans or
16 transitional procurement plans shall be deemed to be reasonable.”

17 Acting on this authority, the Commission adopted Rule 572.18, which
18 *requires* utilities to offer a voluntary program to customers in Rule 572.18.

19 The underlying goals of the Legislature and Commission’s actions appear
20 to be two-fold: (1) encourage the development of renewable generation in New
21 Mexico beyond what is required under the RPS; and (2) allow customers the

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1 opportunity to choose to have its electric service come from renewable resources
2 beyond what is required by the RPS.

3 **Q. Does SPS currently offer a voluntary renewable energy purchase program?**

4 A. Yes. SPS's current voluntary program, Windsource, allows customers to
5 purchase additional amounts of renewable energy for a premium above base rates.
6 Since Windsource's inception, SPS has supplied the program with wind energy
7 purchased through a PPA with the Llano Estacado Wind Ranch in Texico, New
8 Mexico ("Texico PPA"). In Case No. 17-00294-UT, the Commission adopted a
9 Certification of Stipulation recommending approval of the extension of the Texico
10 PPA through December 14, 2020.⁷ The Windsource program will terminate upon
11 the expiration of the Texico PPA. Consequently, to comply with Rule 572, SPS is
12 proposing a new program, Solar*Connect, which I discuss later in my testimony.

13 **Q. As part of the Case No. 17-00294-UT Stipulation, did SPS make any**
14 **commitments related to this filing?**

15 A. Yes. In the Case No. 17-00294-UT Stipulation, SPS agreed to address potential
16 cross-subsidies related to the recovery of costs associated with its new voluntary

⁷ *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, Case No. 17-00294-UT, Final Order Adopting Certification of Stipulation (Aug. 15, 2018).*

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1 renewable purchase program, Solar*Connect. In this regard, SPS agreed to
2 present its proposed rate methodology for the new program to the Stipulation
3 Signatories, as well as the Coalition for Clean Affordable Energy (“CCAIE”) and
4 Western Resource Advocates (“WRA”)⁸, in advance of this filing.

5 **Q. Has SPS complied with its agreement to address potential cross-subsidies**
6 **related to the recovery of costs associated with the Solar*Connect program?**

7 A. Yes. I address SPS’s proposed rate design and the issue of cross-subsidization
8 later in my testimony.

9 **Q. Did SPS present the proposed Solar*Connect rate methodology to Staff, the**
10 **NMAG, CCAIE, and WRA?**

11 A. Yes. On August 17, 2018, SPS hosted a conference to present the details of its
12 proposed Solar*Connect rate methodology. Representatives of Staff, the NMAG,
13 CCAIE, and WRA attended and participated in the conference.

⁸ The Signatories are the Commission’s Utility Division Staff (“Staff”) and the New Mexico Attorney General (“NMAG”), and WRA and CCAIE were parties to the case who did not oppose the Stipulation.

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1 **B. Windsource**

2 **Q. Please describe SPS's existing voluntary renewable energy purchase**
3 **program, Windsource.**

4 A. Windsource is a voluntary program available to all New Mexico retail customers
5 who wish to purchase additional renewable energy at a premium above SPS's
6 base cost of energy. Customers can choose between 100 kilowatt hour (" kWh")
7 blocks at \$3.00 per block, or 100 percent of their monthly energy at \$0.03 per
8 kWh. These charges are in addition to the basic rates under which the customer
9 takes service, except that Windsource customers do not pay Fuel and Purchased
10 Power Cost Adjustment Clause ("FPPCAC") charges associated with the amount
11 of renewable energy purchased under the program. Please refer to Attachment
12 RMS-1 for a copy of the Windsource tariff (the Renewable Energy Rate Rider).

13 **Q. How many customers participate in the Windsource program?**

14 A. In 2017, 851 residential and 84 non-residential customers participated in the
15 Windsource program and purchased 3,794 megawatt hour ("MWh") of wind
16 energy.

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1 **Q. How does SPS account for the costs and revenues of the Windsource**
2 **program?**

3 A. SPS passes all Windsource costs and revenues through the FPPCAC, provided
4 that program costs and/or revenues do not exceed 2.5 percent of eligible fuel
5 costs, in accordance with the Final Order in Case No. 07-00319-UT.⁹ The
6 revenues are derived from the premiums charged to Windsource customers. Such
7 reconciliation ensures that SPS neither profits nor suffers losses as a result of its
8 Windsource program.

9 The primary difficulty with the Windsource program is balancing supply
10 and demand and the resulting imbalances between Windsource costs and
11 revenues. Customers are neither required to provide a long-term commitment,
12 nor is there any way to enforce a long-term commitment. SPS, however, is
13 required to offer a voluntary renewable energy program under Rule 572.

14 Thus, in regards to cost recovery, consistent with Section 62-16-6(A) of
15 the REA, the Commission reasonably allowed for a relatively small safety-net in

⁹ *In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates Under Advice Notice Nos. 208 and 209 and all Associated Approvals; Case No. 07-00319-UT; Final Order Partially Approving Recommended Decision (Aug. 26, 2008).*

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1 which, as noted above, Windsorce costs not recovered through the Windsorce
2 rate could be collected in the FPPCAC up to 2.5 percent of eligible fuel costs.

3 **Q. Has reliance on the FPPCAC for Windsorce cost and revenue reconciliation**
4 **created the potential for cross-subsidization between Windsorce**
5 **participants and non-participants?**

6 A. Yes, although in reality, such cross-subsidization has been virtually non-existent.
7 Between 2013 and 2017 (refer to Attachment RMS-5, page 1), the actual
8 carry-over to the FPPCAC was 0.03 percent (a total of \$191,426 over the entire
9 four-year period).

1 **IV. SPS’S PROPOSED SOLAR*CONNECT PROGRAM**

2 **Q. Please describe, at a high level, the Solar*Connect program.**

3 A. The Solar*Connect program will replace the Windsource program and allow
4 customers the opportunity to purchase additional amounts of solar energy above
5 the renewable energy currently in SPS’s system resource portfolio. SPS will
6 supply the program with solar energy purchased under the Solar*Connect PPA,
7 which, as discussed above, provides for the purchase of all of the energy from the
8 1.98 MWac SoCore Solar Facility. SPS expects the SoCore Solar Facility to be
9 commercially operational on or before January 1, 2021.

10 **A. Program Terms and Conditions**

11 **Q. Please describe how SPS’s proposed Solar*Connect program will work.**

12 A. Participating customers will have the option to purchase generation shares of the
13 Solar*Connect PPA. Specifically, customers will have the option to purchase a
14 minimum 0.5 kilowatt (“kW”) share of the Solar*Connect PPA generation and
15 can purchase 0.1 kW increments available above the minimum. In addition to the
16 charges they pay under their applicable SPS retail electric service tariff (including
17 FPPCAC charges), customers will be charged a monthly premium for the solar
18 energy generated from their Solar*Connect subscription based on the incremental

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1 cost of the Solar*Connect PPA. Please refer to Attachment RMS-2 for a copy of
2 the proposed Solar*Connect tariff.

3 Although customers will be subscribing to the Solar*Connect program
4 based on an overall generation share (per kW) of the Solar*Connect PPA, they
5 will be billed on a per kWh basis. The decision to allow customers to subscribe
6 based on generation shares of the overall project is a change from Windsource,
7 which was made to ensure that generation from the SoCore Solar Facility
8 supplying the Solar*Connect program will match the subscribed demand. This
9 proposed approach allows SPS to precisely measure when the Solar*Connect
10 program is fully subscribed. Thus, it eliminates a major cause of potential
11 cross-subsidization under the Windsource program.

12 **Q. Please describe how the premium will be calculated.**

13 A. The Solar*Connect premium will be the net of the Solar*Connect Charge less the
14 Solar*Connect Credit. SPS proposes to update the Solar*Connect Charge and
15 Solar*Connect Credit calculations annually.

16 **Q. Please describe the Solar*Connect Charge.**

17 A. The Solar*Connect Charge is the annual contract price of the solar energy
18 purchased under the Solar*Connect PPA, which is \$39/MWh (\$0.039/kWh) for

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1 the first year of commercial operation (expected to be 2021), and thereafter
2 escalating by two percent per calendar year. Ms. Fowler discusses the key terms
3 and conditions of the Solar*Connect PPA and provides a general description of
4 the SoCore Solar Facility.

5 **Q. Please describe the Solar*Connect Credit.**

6 A. The Solar*Connect Credit is the value, measured on a \$/MWh (\$/kWh) basis, of
7 the forecasted avoided costs to the SPS system as a result of the Solar*Connect
8 PPA. The Solar*Connect Credit will be updated annually. I discuss the
9 calculation of the Solar*Connect Credit and the underlying rationale for this
10 methodology in the next section of my testimony.

11 **Q. Please describe how the monthly cost of a Solar*Connect subscription is**
12 **determined.**

13 A. Although the annual Solar*Connect premium (\$/kWh) is the same for all
14 subscribers, the monthly cost of an individual subscription will vary based on the
15 kW amount of the subscriber's generation share of the Solar*Connect PPA. To
16 determine the monthly cost of an individual subscription, SPS will take the
17 following steps:

18 (1) Determine the Solar*Connect subscriber's generation share
19 percentage, which is the ratio of the subscriber's generation share

1 (kW) subscription to the total capacity of the Solar*Connect PPA
2 (1.98 MWac).

3 (2) Measure the total monthly generation from the Solar*Connect PPA.

4 (3) Determine the subscriber's monthly energy (kWh) allocation by
5 multiplying the subscriber's generation share percentage by the total
6 monthly generation from the Solar*Connect PPA (Step 1 x Step 2).

7 (4) Determine the subscriber's total monthly Solar*Connect Charge by
8 multiplying the subscriber's monthly energy allocation by the annual
9 Solar*Connect PPA price (Step 3 x annual Solar*Connect PPA price).

10 (5) Determine the subscriber's total monthly Solar*Connect Credit by
11 multiplying the subscriber's monthly energy allocation by the annual
12 Solar*Connect Credit (Step 3 x annual Solar*Connect Credit).

13 (6) Determine subscriber's total monthly premium by subtracting
14 subscriber's total monthly Solar*Connect Credit from the subscriber's
15 total monthly Solar*Connect Charge (Step 4 – Step 5).

16 Please refer to Attachment RMS-3 for an illustrative example of a
17 Solar*Connect subscriber's monthly premium calculation and an illustration of
18 the bill presentation.

19 **Q. How will Solar*Connect customers be billed?**

20 A. As illustrated in Attachment RMS-3, SPS will bill Solar*Connect subscribers on a
21 monthly basis for the applicable calendar month's generation from the Solar PPA.

22 A Solar*Connect subscriber's bill will mostly remain the same as what they are
23 paying as a standard New Mexico retail customer. The subscriber's monthly

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1 usage and standard charges will be unaffected by participation in the program.
2 The bill will include additional lines presenting a summary of the subscriber's
3 subscription and the amount of solar energy that was allocated to them in the
4 preceding month. The bill will then show the calculation of the total
5 Solar*Connect Charge and Credit and the net premium. Finally, the bill standard
6 charges and the Solar*Connect premium will be totaled at the bottom of the bill.
7 Pages 2 and 3 of Attachment RMS-3 demonstrate the impact of a Solar*Connect
8 subscription on the bills of an average residential and Small General Service
9 customer.

10 **Q. Will there be a minimum enrollment period for customers who transition or**
11 **elect to purchase renewable energy under the Solar*Connect program?**

12 A. Yes, consistent with existing minimum enrollment periods for Windsorce
13 customers, the program will require a minimum commitment of one year for
14 residential customers. After one year, residential customers will be on a
15 month-to-month basis and may terminate their subscription after providing SPS
16 with one-month prior notice. Commercial customers' initial commitment is for a
17 minimum of three years and thereafter will be on a year-to-year basis and may
18 terminate their subscription with one-year prior notice to SPS.

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1 **Q. Can customers increase their Solar*Connect commitments?**

2 A. Yes. Unless the program is fully subscribed, customers can increase their
3 Solar*Connect subscription at any time. The Solar*Connect program will be
4 temporarily closed to new customers when it is fully subscribed. When the
5 program is closed, customers may sign up on a waiting list.

6 **Q. When will the Solar*Connect program subscribers begin to receive the solar
7 energy?**

8 A. SPS is planning for the Solar*Connect program to be effective on January 1,
9 2021, shortly after the termination of the Windsource program. Specifically, the
10 program will be open to customers on the first calendar day of the first month
11 after the SoCore Solar Facility is commercially operational.

12 **Q. Has SPS developed a plan for transitioning then-existing Windsource
13 customers to the new Solar*Connect program?**

14 A. Yes, then-existing Windsource customers will have the first opportunity to
15 purchase a subscription share of the Solar*Connect program. Mr. Matley presents
16 SPS's plan for noticing and transitioning then-existing Windsource customers to
17 the Solar*Connect program.

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1 **Q. How will customers learn about the Solar*Connect program?**

2 A. As described in Mr. Matley’s testimony, SPS has developed and will implement a
3 marketing and educational program designed to promote the benefits and
4 availability of the Solar*Connect program, and motivate customers to enroll in the
5 program. SPS will begin actively marketing the Solar*Connect program during
6 the final quarter of 2020.

7 **B. Projected Rate and Bill Impact Analysis**

8 **Q. What is the forecasted Solar*Connect premium?**

9 A. SPS estimates that the premium—i.e. the net of the Solar*Connect Charge
10 (annual price of Solar*Connect PPA) and the Solar*Connect Credit (annual
11 avoided costs)—will be \$0.013764/kWh in Year 1 of the Solar*Connect PPA.
12 Please refer to Attachment RMS-3.

13 **Q. Please describe the estimated bill impact for a typical Windsource customer
14 who transferred their subscription to Solar*Connect.**

15 A. The estimated average monthly bill impact of participation in the Solar*Connect
16 program for a Residential customer taking 300 kWh under the Windsource
17 program, which includes the standard energy charge on those kWh as well as their
18 remaining usage (531 kWh), would be \$4.13. For the average Small General

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1 Service customer taking 700 kWh under the Windsorce program as well as their
2 remaining usage (400 kWh), the average monthly bill impact of the
3 Solar*Connect program would be \$5.50.

1 **V. PROGRAM RATE DESIGN**

2 **Q. Please describe the overall framework used to develop the Solar*Connect**
3 **rate.**

4 A. Overall, SPS is balancing the requirements of the REA and Rule 572 to offer a
5 voluntary program to its customers, while being mindful of impacts to
6 non-participating customers. SPS has designed a program that balances the
7 competing interests of participating customers (for example, low prices and price
8 stability) and will use its best efforts to market and fully subscribe the program.
9 At the same time, SPS has designed the cost recovery consistent with Section
10 62-16-6(A) of the REA.

11 More specifically, SPS began by developing a cost recovery methodology
12 that would largely ensure that non-participants are indifferent to the
13 Solar*Connect PPA (assuming full program subscription). That is, SPS's
14 proposed rate design largely addresses the cross-subsidization issue required by
15 the Final Order in Case No. 17-00294-UT (in addition to generation share design
16 feature discussed earlier). As I'll describe in more detail, the methodology
17 utilizes the FPPCAC to incorporate the costs of the Solar*Connect PPA and the
18 premium revenues received from program participants. At the same time, as

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Direct Testimony
of
Ruth M. Sakya

1 described more fully by Mr. Matley, SPS's marketing team closely analyzed the
2 projected premium to ensure customers would be willing to subscribe to the
3 Solar*Connect program.

4 **Q. Please describe how the cost recovery would work.**

5 A. SPS would begin by placing the entire amount of the Solar*Connect PPA in the
6 FPPCAC, just as it currently does for the Texico PPA used to serve the
7 Windsource program. As an offsetting credit, SPS will reduce the FPPCAC for
8 the revenues received from program participants. The net result, or the amount
9 remaining in the FPPCAC (assuming full subscription) is the avoided cost, or
10 those costs that would have been incurred but for the Solar*Connect PPA.

11 **Q. Why is consideration of SPS's avoided costs necessary?**

12 A. As I mentioned earlier, when SPS adds a resource – in this case, the energy from
13 the Solar*Connect PPA – other resources are not utilized. Thus, it is reasonable
14 and necessary to first determine those costs non-participating customers would
15 have paid but for the Solar*Connect PPA (i.e., the avoided costs). In this manner,
16 participant costs are approximately the same as they would have been absent the
17 Solar*Connect PPA.

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1 **Q. Why is SPS proposing to utilize the FPPCAC for the Solar*Connect PPA**
2 **costs and the program revenue?**

3 A. In order to make non-participants indifferent between a system with and without
4 the Solar*Connect PPA, SPS must utilize the FPPCAC because that is the
5 mechanism where all fuel and purchased power costs are captured. Accordingly,
6 the FPPCAC is the appropriate mechanism to include the Solar*Connect PPA
7 costs and offsetting revenues (in other words, the FPPCAC will only include the
8 costs customers would have paid absent the Solar*Connect PPA).

9 **Q. Please explain how the Solar*Connect program revenues will offset the**
10 **increased FPPCAC charges to non-participants.**

11 A. Assuming the program is fully subscribed, the costs above the avoided FPPCAC
12 costs would be entirely recovered through the Solar*Connect premium collected
13 from subscribers and applied to the FPPCAC as a credit. By flowing the
14 Solar*Connect premiums back through the FPPCAC, the non-participating
15 customers are effectively paid back for the increased FPPCAC charges resulting
16 from the Solar*Connect PPA. In other words, non-participants are indifferent to
17 the Solar*Connect program.

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1 **Q. Can you provide an illustration of how FPPCAC charges for Solar*Connect**
2 **subscribers and non-participants will be impacted by the Solar*Connect**
3 **program design?**

4 A. Yes. Please refer to Attachment RMS-4.

5 **Q. How will avoided costs be calculated?**

6 A. The avoided costs will be forecasted on an annual basis, using a conservative (*i.e.*,
7 low) forecast of gas prices. The forecasted avoided costs will be calculated on an
8 hourly basis using a production costing model, Plexos. SPS runs the model both
9 with and without the Solar*Connect PPA to determine the costs that would have
10 been incurred but for the PPA.

11 **Q. Why is SPS proposing to use a low-gas price in the avoided cost calculation?**

12 A. In pricing the Solar*Connect premium, SPS is seeking to balance the interests of
13 subscribers and non-participants. Subscribers themselves have competing needs –
14 for example, between the desire for the lowest premium reasonable and price
15 certainty. Non-participants wish to minimize program subsidization to the extent
16 practical.

17 SPS is proposing that it not true-up the forecasted avoided costs. From a
18 subscriber perspective, this provides price certainty (particularly when customers

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1 first sign up, because they have one-year and three-year contract terms for
2 residential and commercial customers, respectively), while keeping the premium
3 at a reasonable level to ensure that the program is fully subscribed (*see* Mr.
4 Matley’s testimony, where he discusses market research indicating the importance
5 of premium levels on fully subscribing the proposed program). At the same time,
6 non-participants are largely protected because it is very unlikely that gas prices
7 will fall below forecasted low gas prices. In this manner, SPS has appropriately
8 balanced the interests of non-participants by protecting them from subsidizing the
9 program and at the same time providing price certainty for subscribing customers
10 while reasonably determining the incremental costs of program participation.

11 **Q. Does the potential for subsidization remain?**

12 A. A small amount of subsidization will remain possible if the program is not fully
13 subscribed, as shown in Table RMS-1.

14 **Table RMS-1: Remaining Annual Costs at Differing Subscription Levels**

Subscription Levels	Subsidization Amounts*
95%	\$6,000
90%	\$10,000
85%	\$14,000
65%	\$32,000
50%	\$45,000

*Amounts are rounded.

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1 However, as described by Mr. Matley, based on SPS’s existing program and
2 experience in other jurisdictions, SPS believes it can fully subscribe the program
3 in the three years following program launch. Indeed, SPS expects that roughly 65
4 percent of existing subscribers will continue participation in the Solar*Connect
5 program. Accordingly, any subsidization in the interim is likely to be small and is
6 reasonable in light of the REA and Rule 572 policy goals related to renewable
7 energy and voluntary programs. For example, pursuant to the REA and Rule 572,
8 SPS offers incentives to distributed generation (“DG”) customers. The DG
9 customers directly benefit through incentives, which reduces overall costs of the
10 DG system, while all customers pay for the incentives in order to encourage the
11 development of renewable resources. Thus, SPS’s program appropriately
12 addresses the issue of cross-subsidization and should be adopted.

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1 **Q. Please describe SPS's proposal for annual informational filings.**

2 A. An annual update of the Solar*Connect Premium will be necessary to provide the
3 annual avoided cost credit calculation. SPS proposes to file these informational
4 filings, along with an advice notice, with its RPS filings, beginning in 2020. The
5 advice notice will include the revised Solar*Connect Rate Rider and the
6 applicable credit for the upcoming year. The informational filing will also
7 include workpapers supporting the calculation of the Solar*Connect Credit.

8 **Q. Why is SPS proposing to submit the Solar*Connect informational filings**
9 **with its annual RPS filings?**

10 A. Beyond administrative efficiency, combining the informational filings with the
11 RPS filings makes sense for two reasons. First, the requirements that SPS offer a
12 voluntary renewable purchase program, such as Solar*Connect, and file an annual
13 Renewable Energy Act Plan to comply with the RPS both arise from Rule 572.

14 Second, Rule 572 requires SPS's RPS filings be made on July 1 of each
15 year and provides for a Commission decision on the filing by December 31 of the
16 filing year. This period will afford the Staff and intervenors the opportunity to
17 review and raise concerns regarding the calculation of the Solar*Connect Credit,

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1 and if the concerns cannot be addressed by SPS, have those concerns decided by
2 the Commission in time for implementation on January 1 of the following year.

3 **Q. Is the Commission's approval of the updated Solar*Connect Credit tied to or**
4 **conditioned upon the Commission's approval of SPS's RPS Plan?**

5 A. No. In terms of Commission approval, SPS's RPS filing and its Solar*Connect
6 informational filing are completely independent. SPS is proposing combining the
7 filings solely for administrative efficiency.

8 **Q. Please describe further the opportunity for review of the Solar*Connect**
9 **informational filing under the proposed process.**

10 A. In conjunction with SPS's annual RPS filing, Staff and the intervenors will be
11 served with a copy of the Solar*Connect Rate Rider informational filing and
12 updated Solar*Connect Credit. Because the Commission would have already
13 approved the methodology for calculating the Solar*Connect Credit and the costs
14 underlying the Solar*Connect PPA, the scope of the review of the informational
15 filing would be limited to:

- 16 • whether SPS has properly applied the approved methodology to calculate
17 the updated Solar*Connect Credit; and
- 18 • whether the data included in the informational filing is accurate and
19 otherwise proper.

Case No. 18-00____-UT
Direct Testimony
of
Ruth M. Sakya

1 **Q. Please explain how the updated Solar*Connect Rate Rider will become**
2 **effective.**

3 A. As proposed, the Commission Staff and intervenors will have 30 days to review
4 the Solar*Connect informational filing and identify issues. If no issues are raised
5 following review of the informational filing, then the updated Solar*Connect Rate
6 Rider will be deemed approved and become effective for implementation on
7 January 1 of the following year.

8 If issues are submitted to the Commission for resolution, then the updated
9 Solar*Connect Rate Rider will become effective upon the issuance of a final order
10 by the Commission, but no later than January 1 of the following year.

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

12 A. Yes.

VERIFICATION

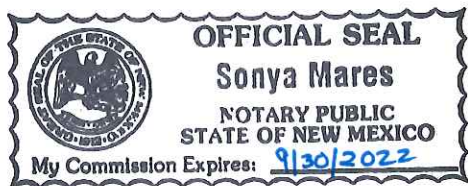
STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

Ruth M. Sakya, first being first 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 their contents. Based upon my personal knowledge, the facts stated in the direct testimony are true. In addition, in my judgement and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

Ruth m. Sakya
RUTH M. SAKYA

SUBSCRIBED AND SWORN TO before me this 28th day of September, 2018.



Sonya Mares
Notary Public, State of New Mexico
My Commission Expires: 9/30/2022

SOUTHWESTERN PUBLIC SERVICE COMPANY

**THIRD REVISED RATE NO. 33
CANCELING SECOND RATE NO. 33**

FILED IN OFFICE OF
NM PUBLIC REG. COMM. X
DEC 22 2015 X

RENEWABLE ENERGY RATE RIDER

Tariff No. 7202.3

X

Page 1 of 2

APPLICABILITY: This rate rider is available as an option to all Customers taking retail electric service from Company.

TERRITORY: Area served by Company in New Mexico.

RATE: The following charges are applicable to service provided to Customers who choose to purchase Renewable Energy:

Energy Charge per 100 kWh block = \$3.00

Energy Charge when contracting for
100% of monthly energy = \$0.03 per kWh

These charges are in addition to the charge assessed under Customer's standard tariff rate.

FUEL COST ADJUSTMENT: The fuel cost adjustment is not applicable to kWh purchased under this rate rider.

TAX ADJUSTMENT: Billings under this Rate Rider may be increased by an amount equal to the sum of the taxes payable under the Gross Receipts and Compensating Tax Act and of all other taxes, fees, or charges (exclusive of ad valorem, state, and federal income taxes) payable by the utility and levied or assessed by any governmental authority on the public utility service rendered, or on the right of privilege of rendering the service, or on any object or event incidental to the rendition of the service.

CONTRACT PERIOD: A minimum of one year for residential Customers. Month to month thereafter until one month prior notification is received by Company. A minimum of three years for commercial Customers. Year to year thereafter until one year prior notification is received by Company.

259

X

Advice Notice No.



REGIONAL VICE PRESIDENT RATES AND
REGULATORY AFFAIRS

EFFECTIVE

JAN - 1 2016

REPLACED BY NMPRC

BY Final Order Case No. 15-00208-UT

SOUTHWESTERN PUBLIC SERVICE COMPANY

**THIRD REVISED RATE NO. 33
CANCELING SECOND RATE NO. 33**

X
X

RENEWABLE ENERGY RATE RIDER

Tariff No. 7202.3

X

Page 2 of 2

CONTRACT PERIOD (cont.): This rate rider shall at all times be subject to change or modification by order of the New Mexico Public Regulation Commission or successor agency.

This Tariff will be temporarily closed to new Customers when Windsource is fully subscribed. During times this tariff is closed, Customers may sign up on a waiting list.

When a participating Windsource customer ends service at one address and starts electric service at a new address within Xcel Energy service territory, that customer's Windsource subscription will automatically transfer to the new address. In the event the customer chooses to cancel their Windsource subscription, they may do so when they notify Xcel Energy of their move.

X
|
X

LINE EXTENSIONS: Company will make line extensions in accordance with its standard line extension policy.

FRANCHISE FEE: All current and future franchise fees not included in base rates shall be separately assessed in the municipality where the excess franchise fee is authorized. Bills computed under the above rate will be increased by the additional franchise fees imposed by the appropriate municipality or taxing authority in which jurisdiction Customer's consuming facility resides, when applicable. The franchise fee will appear on the bill as a separate item.

RULES, REGULATIONS AND CONDITIONS OF SERVICE: Service supplied under this schedule is subject to the terms and conditions set forth in Company's Rules, Regulations and Conditions of Service on file with the New Mexico Public Regulation Commission.

Effective Date January 1, 2016 – Case No. 15-00208-UT

259

X

Advice Notice No.



REGIONAL VICE PRESIDENT RATES AND
REGULATORY AFFAIRS

EFFECTIVE

JAN - 1 2016

REPLACED BY NMPRC
BY Final Order Case No. 15-00208-UT

SOLAR*CONNECT COMMUNITY RATE RIDER

Tariff No. _____

Page 1 of 5

APPLICABILITY: This rate rider is available as an option to all Customers taking retail electric service from Company.

This tariff defines the procedure by which the Solar*Connect Rate Rider may be annually updated subject to the jurisdiction of the New Mexico Public Regulation Commission (“Commission”). The annual update Solar*Connect Rate Rider procedure will not become effective until an Informational Filing is made, as discussed herein.

This rate rider shall at all times be subject to change or modification by order of the Commission or successor agency.

TERRITORY: Area served by Company in New Mexico.

DEFINITIONS:

Solar*Connect Allocation: The share of Solar*Connect Resource that a subscriber has signed up for, measured in kW.

Solar*Connect Charge: For calendar year 2021, the Solar*Connect Charge is \$39/MWh (\$0.039/kWh).

Following calendar year 2021, the Solar*Connect Charge will be increased two percent (2%) per calendar year, which will take effect beginning January 1 of each calendar year.

Solar*Connect Credit: The value, on a \$/kWh basis, of fossil fuel, variable operating and maintenance costs, and purchased energy that is expected to be saved through the addition of solar generation to the Company system, based on a methodology approved by the Commission as may be changed subsequently by the Commission. The Solar*Connect Credit will be updated annually. The Solar*Connect Credit for 2021 is \$ /MWh (\$ /kWh).

SOLAR*CONNECT COMMUNITY RATE RIDER

Tariff No. _____

Page 2 of 5

DEFINITIONS (cont.):

Solar*Connect Resource: A long-term PPA between Company and SoCore Clovis 1 LLC (“SoCore”) for the purchase of all of the capacity and net energy, including renewable energy certificates (“RECs”), from a 1.98 MWac solar-powered electric generating facility to be developed by SoCore and located near Clovis, New Mexico.

Solar*Connect Subscriber: A Customer of the Company who subscribes to receive additional photovoltaic energy through the Solar*Connect Rate Rider.

Solar*Connect Subscriber Monthly Generation: The product of the total monthly Solar*Connect Resource generation in kWh and a Solar*Connect Subscriber’s Capacity Ratio.

Solar*Connect Subscriber Monthly Premium: The net cost of a customer’s Solar*Connect Subscriber Monthly Generation—the Solar*Connect Subscriber’s total monthly Solar*Connect Charge less the subscriber’s total monthly Solar*Connect Credit.

Solar*Connect Subscriber Capacity Ratio: The ratio of a Solar*Connect Subscriber’s Solar*Connect Allocation to the total capacity of the Solar*Connect Resource.

SUBSCRIPTIONS: Customers will have the option to purchase a minimum of 0.5 kW of the capacity (with 0.1 kW increments available above the minimum) of the Solar*Connect Resource.

Solar*Connect Subscribers have the right to increase their subscription option at any point during their obligation term without penalty, so long as there is available unsubscribed capacity from the Solar*Connect Resource for the subscription.

The Solar*Connect Rate Rider will be temporarily closed to new Solar*Connect Subscribers when the Solar*Connect Resource is fully subscribed.

SOLAR*CONNECT COMMUNITY RATE RIDER

Tariff No. _____

Page 3 of 5

DETERMINATION OF SOLAR*CONNECT SUBSCRIBER MONTHLY PREMIUM: The Solar*Connect Subscriber Monthly Premium for individual subscribers will be determined as follows:

Solar*Connect Subscriber Monthly Premium = (A x B) – (B x C), where:

A = Solar*Connect Charge (\$/kWh)

B = Solar*Connect Subscriber Monthly Generation (kWh)

C = Solar*Connect Credit (\$/kWh)

CONTRACT PERIOD: A minimum of one year for residential customers. Month to month thereafter until one month prior notification is received by Company. A minimum of three years for commercial customers. Year to year thereafter until one year prior notification is received by Company.

When a participating Solar*Connect Subscriber ends service at one address and starts electric service at a new address within Company's service territory, that subscriber's Solar*Connect subscription will automatically transfer to the new address. In the event that the Solar*Connect Subscriber chooses to cancel a subscription, the Solar*Connect Subscriber may do so by notifying the Company prior to a move.

SOLAR*CONNECT COMMUNITY RATE RIDER

Tariff No. _____

Page 4 of 5

ANNUAL SOLAR*CONNECT RATE RIDER UPDATE FILINGS:

1. Filing Date: Each year, beginning in 2020, Company shall file an Informational Filing in conjunction with its annual Renewable Portfolio Standard proceeding. The Informational Filing will contain:
 - a. The updated Solar*Connect Credit for the upcoming calendar year.
2. Review Period:
 - a. The Commission Staff and intervenors shall receive a copy of the Informational Filing.
 - b. The Commission Staff and intervenors will have 30 calendar days to review the Informational Filing to identify issues upon which further information is required from Company. The scope of review will be limited to:
 - i. whether SPS has properly applied the Commission-approved methodology for calculating the updated Solar*Connect Credit; and
 - ii. whether the data included in the informational filing is accurate.
 - c. Commission staff and intervenors will formally communicate any issues (“Disputed Issues”) in writing to Company and other parties.
3. Effectiveness of updated Solar*Connect Rate Rider:
 - a. If no Disputed Issues are raised within 30 calendar days of the submittal of the Informational Filing, the updated Solar*Connect Rate Rider will be deemed approved and become effective for implementation on January 1 of the upcoming calendar year.
 - b. If Disputed Issues are raised and submitted to the Commission for resolution, then the updated Solar*Connect Rate Rider will become effective upon the issuance of a final order by the Commission, but no later than January 1 of the following year.

SOLAR*CONNECT COMMUNITY RATE RIDER

Tariff No. _____

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TAX ADJUSTMENT: Billings under the rate rider may be increased by an amount equal to the sum of the taxes payable under the Gross Receipts and Compensating Tax Act and of all other taxes, fees, or charges (exclusive of ad valorem, state, and federal income taxes) payable by the utility and levied or assessed by any governmental authority on the public utility service rendered, or on the right of privilege of rendering the service, or on any object or event incidental to the rendition of the service.

LINE EXTENSIONS: Company will make line extensions in accordance with its standard line extension policy.

FRANCHISE FEE: All current and future franchise fees not included in base rates shall be separately assessed in the municipality where the excess franchise fee is authorized. Bills computed under the above rate will be increased by the additional franchise fees imposed by the appropriate municipality or taxing authority in which Customer's consuming facility resides, when applicable. The franchise fee will appear on the bill as a separate item.

RULES, REGULATIONS AND CONDITIONS OF SERVICE: Service supplied under this schedule is subject to the terms and conditions set forth in Company's Rules, Regulations and Conditions of Service on file with Commission.

Southwestern Public Service Company
Illustrative Example of Solar*Connect Premium Calculation

Line No.	Description	Calculation
1	<u>Step 1: Calculation of Customer's Generation Share</u>	
2	Customer's Solar*Connect Generation Share (in kW)	3.4
3	Total PPA Capacity (in kW)	1,980
4	Customer's Generation Share - % of Total (L2/L3)	<u>0.17%</u>
5		
6	<u>Step 2: Solar*Connect Monthly Generation</u>	
7	Monthly Solar*Connect Generation (in kWh)	478,900
8		
9	<u>Step 3: Customer's Allocation Share in kWh</u>	
10	Customer's Generation Allocation in kWh (L4*L7)	822
11		
12	<u>Step 4: Customer's Solar*Connect Charge</u>	
13	Customer's Generation Allocation in kWh (Line 10)	822
14	Solar*Connect PPA Charge (per PPA) (\$/kWh)	<u>\$ 0.03900</u>
15	Solar*Connect Charge (L13*L14)	<u>\$ 32.07</u>
16		
17	<u>Step 5: Customer's Solar*Connect Credit</u>	
18	Customer's Generation Allocation in kWh (Line 10)	822
19	Solar Connect PPA Credit (Forecasted Avoided Cost) (\$/kWh)	<u>\$ 0.02524</u>
20	Solar*Connect Credit (L18*L19)	<u>\$ 20.76</u>
21		
22	<u>Step 6: Customer's Solar*Connect Premium</u>	
23	Net Premium (L15-L20)	\$ 11.31

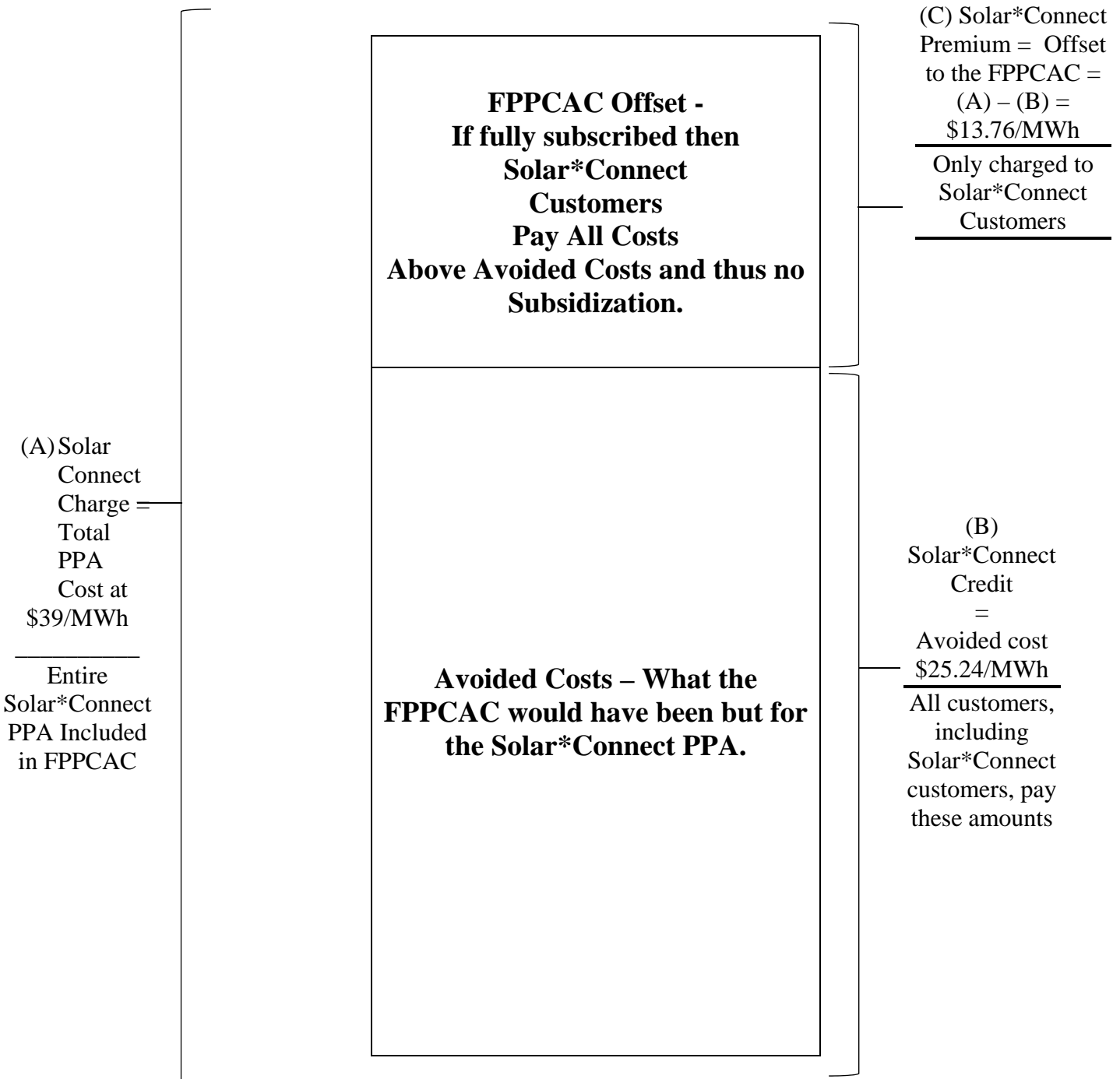
Southwestern Public Service Company
Sample Bill Presentation
Residential Customer Taking 100% of Total Usage

	Usage	Units	Rate	Charge
Service Availability Charge		Per Bill	\$ 8.75	\$ 8.75
Summer Energy Charge	831	kWh	\$ 0.074312	\$ 61.75
Fuel Cost Factor (FPPCAC)	831	kWh	\$ 0.018628	\$ 15.48
Energy Efficiency Rider (% of Bill)			3.50%	\$ 3.14
Renewable Portfolio Standard (RPS)	831	kWh	\$ 0.004609	\$ 3.83
<i>Subtotal</i>				\$ 92.95
Solar*Connect Community Subscription	3.4	kW		
Allocation of Total Solar Energy	822	kWh		
Solar*Connect Charge	822	kWh	\$ 0.039000	\$ 32.07
Solar*Connect Credit	822	kWh	\$ (0.025240)	\$ (20.76)
<i>Total Solar*Connect Charge (Credit)</i>				\$ 11.31
Total Bill				\$ 104.26

Southwestern Public Service Company
Sample Bill Presentation
Small General Service Customer Taking 100% of Total Usage

	Usage	Units	Rate	Charge
Service Availability Charge		Per Bill	\$ 14.40	\$ 14.40
Summer Energy Charge	1,100	kWh	\$ 0.055737	\$ 61.31
Fuel Cost Factor (FPPCAC)	1,100	kWh	\$ 0.018628	\$ 20.49
Energy Efficiency Rider (% of Bill)			3.50%	\$ 3.54
Renewable Portfolio Standard (RPS)	1,100	kWh	\$ 0.004609	\$ 5.07
<i>Subtotal</i>				\$ 104.81
Solar*Connect Subscription	4.5	kW		
Allocation of Total Solar Energy	1,100	kWh		
Solar*Connect Charge	1,100	kWh	\$ 0.039000	\$ 42.90
Solar*Connect Credit	1,100	kWh	\$ (0.025240)	\$ (27.76)
<i>Total Solar*Connect Charge (Credit)</i>				\$ 15.14
Total Bill				\$ 119.95

Cost Recovery Illustration



Southwestern Public Service Company

Month	Cost to SPS for Texico Purchases (A)	Windsor Revenue per Renewable Energy Rider (Including Fuel in Base) (B)	SPS Cost Greater Than (Less Than) Revenue from Renewable Energy Rider - Amount Recovered Through FPPCAC (C) = (A - B)	Actual Fuel and Purchased Power Costs (D)	Fuel and Purchased Power Costs before Net Texico Cost/Renewable Energy Rider Revenue (E) = (D - C)	Net Texico Percentage of Fuel and Purchased Power (Compare to 2.5% Ceiling) (F) = (C ÷ E)
Dec-17	\$ 18,849.58	\$ 8,210.84	\$ 10,639	\$ 10,877,807	\$ 10,867,168	0.10%
Nov-17	\$ 17,888.46	\$ 8,061.22	\$ 9,827	\$ 11,045,123	\$ 11,035,296	0.09%
Oct-17	\$ 7,091.02	\$ 8,977.97	\$ (1,887)	\$ 11,433,528	\$ 11,435,415	-0.02%
Sep-17	\$ 6,593.11	\$ 9,516.93	\$ (2,924)	\$ 11,227,515	\$ 11,230,439	-0.03%
Aug-17	\$ 2,417.41	\$ 12,606.69	\$ (10,189)	\$ 11,898,059	\$ 11,908,248	-0.09%
Jul-17	\$ 4,625.12	\$ 10,624.67	\$ (6,000)	\$ 13,800,575	\$ 13,806,575	-0.04%
Jun-17	\$ -	\$ 10,049.73	\$ (10,050)	\$ 12,751,548	\$ 12,761,598	-0.08%
May-17	\$ 11,500.32	\$ 8,415.53	\$ 3,085	\$ 11,207,226	\$ 11,204,141	0.03%
Apr-17	\$ 15,821.11	\$ 7,440.99	\$ 8,380	\$ 10,732,135	\$ 10,723,755	0.08%
Mar-17	\$ 11,036.43	\$ 9,232.85	\$ 1,804	\$ 10,439,707	\$ 10,437,903	0.02%
Feb-17	\$ 12,882.68	\$ 9,149.72	\$ 3,733	\$ 10,135,488	\$ 10,131,755	0.04%
Jan-17	\$ 11,755.31	\$ 11,507.39	\$ 248	\$ 13,199,742	\$ 13,199,494	0.00%
Dec-16	\$ 13,444.41	\$ 8,620.75	\$ 4,824	\$ 13,896,842	\$ 13,892,018	0.03%
Nov-16	\$ 15,639.37	\$ 7,390.35	\$ 8,249	\$ 9,326,866	\$ 9,318,617	0.09%
Oct-16	\$ 18,034.05	\$ 8,351.25	\$ 9,683	\$ 12,655,882	\$ 12,646,199	0.08%
Sep-16	\$ 12,557.08	\$ 9,348.54	\$ 3,209	\$ 11,859,710	\$ 11,856,501	0.03%
Aug-16	\$ 14,923.12	\$ 24,189.56	\$ (9,266)	\$ 11,443,842	\$ 11,453,108	-0.08%
Jul-16	\$ 20,786.26	\$ 22,507.83	\$ (1,722)	\$ 14,321,959	\$ 14,323,681	-0.01%
Jun-16	\$ 14,138.60	\$ 19,390.32	\$ (5,252)	\$ 11,194,253	\$ 11,199,505	-0.05%
May-16	\$ 26,742.44	\$ 15,086.63	\$ 11,656	\$ 8,408,652	\$ 8,396,996	0.14%
Apr-16	\$ 26,756.10	\$ 15,645.79	\$ 11,110	\$ 9,520,374	\$ 9,509,264	0.12%
Mar-16	\$ 31,462.94	\$ 18,256.99	\$ 13,206	\$ 9,545,661	\$ 9,532,455	0.14%
Feb-16	\$ 30,560.85	\$ 20,031.06	\$ 10,530	\$ 8,713,631	\$ 8,703,101	0.12%
Jan-16	\$ 27,031.04	\$ 23,921.70	\$ 3,109	\$ 11,211,104	\$ 11,207,995	0.03%
Dec-15	\$ 35,315.24	\$ 17,981.76	\$ 17,333	\$ 9,390,410	\$ 9,373,077	0.18%
Nov-15	\$ 28,085.65	\$ 13,872.00	\$ 14,214	\$ 10,294,275	\$ 10,280,061	0.14%
Oct-15	\$ 19,416.28	\$ 18,863.65	\$ 553	\$ 9,023,122	\$ 9,022,569	0.01%
Sep-15	\$ 17,449.10	\$ 21,469.85	\$ (4,021)	\$ 10,168,068	\$ 10,172,089	-0.04%
Aug-15	\$ 13,453.68	\$ 23,224.47	\$ (9,771)	\$ 12,166,001	\$ 12,175,772	-0.08%
Jul-15	\$ 27,254.93	\$ 22,804.49	\$ 4,450	\$ 12,324,633	\$ 12,320,183	0.04%
Jun-15	\$ (8,390.27)	\$ 19,307.63	\$ (27,698)	\$ 9,306,676	\$ 9,334,374	-0.30%
May-15	\$ 31,915.56	\$ 14,401.98	\$ 17,514	\$ 9,122,624	\$ 9,105,110	0.19%
Apr-15	\$ 31,287.57	\$ 16,371.11	\$ 14,916	\$ 9,478,508	\$ 9,463,592	0.16%
Mar-15	\$ 18,479.59	\$ 20,155.75	\$ (1,676)	\$ 10,202,906	\$ 10,204,582	-0.02%
Feb-15	\$ 25,971.80	\$ 18,353.89	\$ 7,618	\$ 8,925,954	\$ 8,918,336	0.09%
Jan-15	\$ 28,322.08	\$ 21,999.88	\$ 6,322	\$ 10,751,435	\$ 10,745,113	0.06%
Dec-14	\$ 23,988.25	\$ 20,885.27	\$ 3,103	\$ 14,310,875	\$ 14,307,772	0.02%
Nov-14	\$ 32,944.00	\$ 14,170.52	\$ 18,773	\$ 13,026,784	\$ 13,008,011	0.14%
Oct-14	\$ 18,904.58	\$ 19,305.01	\$ (400)	\$ 10,057,125	\$ 10,057,525	0.00%
Sep-14	\$ 11,951.35	\$ 20,997.93	\$ (9,047)	\$ 10,283,418	\$ 10,292,465	-0.09%
Aug-14	\$ 10,993.63	\$ 21,887.42	\$ (10,894)	\$ 15,465,465	\$ 15,476,359	-0.07%
Jul-14	\$ 14,821.80	\$ 23,181.70	\$ (8,360)	\$ 13,001,103	\$ 13,009,463	-0.06%
Jun-14	\$ 25,471.91	\$ 20,885.18	\$ 4,587	\$ 13,444,885	\$ 13,440,298	0.03%
May-14	\$ 29,473.77	\$ 17,191.08	\$ 12,283	\$ 15,424,703	\$ 15,412,420	0.08%
Apr-14	\$ 40,740.97	\$ 18,633.31	\$ 22,108	\$ 14,923,468	\$ 14,901,360	0.15%
Mar-14	\$ 37,988.68	\$ 20,719.23	\$ 17,269	\$ 14,401,052	\$ 14,383,783	0.12%
Feb-14	\$ 28,028.67	\$ 20,999.65	\$ 7,029	\$ 14,237,029	\$ 14,230,000	0.05%
Jan-14	\$ 35,117.01	\$ 27,011.85	\$ 8,105	\$ 14,571,816	\$ 14,563,711	0.06%
Dec-13	\$ 30,203.21	\$ 23,494.03	\$ 6,709	\$ 10,923,914	\$ 10,917,205	0.06%
Nov-13	\$ 27,591.84	\$ 17,000.16	\$ 10,592	\$ 12,045,541	\$ 12,034,949	0.09%
Oct-13	\$ 24,816.15	\$ 22,732.85	\$ 2,083	\$ 11,828,963	\$ 11,826,880	0.02%
Sep-13	\$ 15,703.76	\$ 24,550.29	\$ (8,847)	\$ 12,079,575	\$ 12,088,422	-0.07%
Aug-13	\$ 12,972.98	\$ 26,649.23	\$ (13,676)	\$ 12,463,707	\$ 12,477,383	-0.11%
Jul-13	\$ 16,850.77	\$ 27,801.26	\$ (10,950)	\$ 14,104,732	\$ 14,115,682	-0.08%
Jun-13	\$ 25,883.22	\$ 24,132.91	\$ 1,750	\$ 14,069,753	\$ 14,068,003	0.01%
May-13	\$ 30,009.93	\$ 20,677.36	\$ 9,333	\$ 14,221,504	\$ 14,212,171	0.07%
Apr-13	\$ 29,979.78	\$ 21,260.30	\$ 8,719	\$ 13,116,269	\$ 13,107,550	0.07%
Mar-13	\$ 30,642.18	\$ 21,671.76	\$ 8,970	\$ 11,034,608	\$ 11,025,638	0.08%
Feb-13	\$ 29,626.27	\$ 22,867.37	\$ 6,759	\$ 9,825,445	\$ 9,818,686	0.07%
Jan-13	\$ 28,312.66	\$ 28,640.39	\$ (328)	\$ 11,685,776	\$ 11,686,104	0.00%
			\$ 191,426			0.03%