NEW APPLICATION

0000154456

RECEIVED
AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

2014 JUL 1 P 12 54

COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

Arizona Corporation Commission
DOCKETED
JUL 1 2014
DOCKETED BY

ORIGINAL

IN THE MATTER OF THE APPLICATION OF SULPHUR SPRINGS ELECTRIC COOPERATIVE, INC. FOR THE 2014 NET METERING TARIFF WITH THE UPDATED AVOIDED COST AND PROPOSED TARIFF MODIFICATIONS

DOCKET NO. E-01575A-14-0232

APPLICATION

Sulphur Springs Valley Electric Cooperative, Inc. ("SSVEC") hereby submits this application to 1) approve a Net Metering Tariff to accurately and fairly determine the avoided cost of energy used for the reconciliation of Net Metered Customers, 2) add a Fixed Cost Recovery Fee and 3) set September as the "True Up" month.

I. Background.

- SSVEC is certificated to provide electric service as a public service corporation in the State of Arizona.
- On June 28, 2013, SSVEC filed an application for approval to update the avoided cost that is contained in its Net Metering Tariff. SSVEC's Net Metering Tariff was approved by the Commission in Decision No. 74038.

- Net Metering allows electric utility customers to be compensated for generating their own energy from renewable resources, fuel cells, or Combined Heat and Power. If the customer's energy production exceeds the energy supplied by SSVEC during a billing period, the: customer's bill for subsequent billing periods is credited for the excess generation. That is, the excess kWh generated during the billing period is used to reduce the kWh billed by SSVEC during subsequent billing periods.

- Currently each September or March (or for a customer's final bill upon discontinuance of service), SSVEC credits the customer for the balance of any remaining excess kWh. The payment for the purchase of these excess kWh is at SSVEC's annual average avoided cost, which is specified in the Net Metering Tariff. R14-2-2302(1) defines avoided cost as "the incremental cost to an Electric Utility for electric energy or capacity or both which, but for the purchase from the Net Metering facility, such utility would generate itself or purchase from another source." SSVEC also proposes to no longer offer the March true up option for systems installed after January 1, 2015.

- SSVEC's Net Metering Tariff provides for the annual average avoided cost to be determined by the average wholesale fuel and energy cost per kWh charged by SSVEC's wholesale power suppliers during the previous 12 months calculated with the receipt of the May wholesale power bills. SSVEC is required to file its updated avoided cost calculations with the Commission no later than July 1 of each year. This updated avoided cost, after approval by the Commission, would become effective on September 1.

- As stated in R14-2-2305. Any additional charges proposed for Net Metering Customers would have to be fully supported by the utility with documentation from a cost of service

study and benefit/cost analyses. In attachment C SSVEC has provided appropriate support for an additional charge to recover a portion of the losses of fixed cost expenses that are recovered through the "distribution cost adder" as shown in the "Access" cost in the unbundled rates and supported by the cost of service study used in the most recent rate case Docket E-01575A-13-0296 (Decision #74381).

- Decision 72552 requires that SSVEC file avoided cost updates for the Net Metering tariff as new applications filed in new dockets.

II. Application

SSVEC is applying for three changes to the currently approved Net Metering Tariff.

1. Avoided Cost Update:

   SSVEC's current approved avoided cost rate is $0.0364 per kWh. Based on the calculations provided in Attachment A, SSVEC requests that the rate be changed to $0.0307 per kWh.

2. Fixed Cost Recovery Fee:

   The rates approved in Decision 74381 are "unbundled" and clearly show a portion of the kWh charge is for the recovery of fixed costs and margins above the cost of energy. SSVEC's Service Availability Charge of $10.25 per month is lower than other electric utilities in AZ which contribute to the need for the $0.047404 "Access" charge in the total charge of $0.126038 per kWh. The proposed Fixed Cost Recovery Fee does not attempt to make a full recovery of lost fixed costs but reduces the loss by about 13% (varies by rate class) to reduce the impact of Net Metering until utility rates are modified (over time)

to more closely resemble the "de-coupled" rate models where fixed costs are recovered with fixed charges and the energy is a "pass through" charge. The analyses are detailed and discussed in Attachments B and E.

SSVEC is requesting the monthly Fixed Cost Recovery Fee (FCRF) apply to all solar PV customers using a fee schedule based upon the installation date of the PV system. For PV systems installed prior to January 1, 2015 would be applied at $0.50 per kW of DC panel rating. Systems installed after January 1, 2015 (Since on or about 1 January 2014 where Customers have signed the ACC suggested "PV Disclaimer" shown as Attachment D prior to committing to a solar installation), a FCRF of $1.00 per kW of DC panel rating. For residential Customers having the $0.50 FCRF this will result in a monthly charge ranging from $0.18 to $12.50 with the average being $2.95 (5.9 kW average). For residential Customers installed after January 1, 2015 (using the 2013 installs as a sample) applying the $1.00 FCRF, the resulting charges would range between $3.00 and $24.96 with the average being $6.00. The FCRF for Commercial Customers would range from $0.16 to $42.00 with an average of $7.37

3. <u>September "True Up"</u>

In compliance with R14-2-2306 (F): SSVEC wishes to use September as the "Once each calendar year" month to "True Up" the Net metered accounts.

List of Attachments

Attachment A: Avoided Cost Calculations (available electronically on request)
Attachment B: Determining Fixed Cost Recovery Fee
Attachment C: The proposed 2014 NET Metering Tariff showing:

- The revised Avoided Cost per kWh (Page 2, Section 1, Paragraph 4, line 4).
- The new Fixed Cost Recover Fee (Page 2, Section 2)
- September as the "True Up" month (Page 2, Section 1, Paragraph 4, line 1)

Attachment D: Copy of the ACC recommended PV Disclaimer
Attachment E: Pre-Filed testimony of questions that might be asked by Staff.
Attachment F: Member Opinion Survey on Solar Power Issues.
Attachment G: SSVEC Board Resolution for Net Metering Tariff

III. Conclusion

SSVEC respectfully requests the Commission issue an Order:

1) Approving the 2014 Net Metering Tariff as submitted.

RESPECTFULLY SUBMITTED this 1st day of July 2014.

Sulphur Springs Valley Electric Cooperative, Inc.

By David Bane
David Bane
SunWatts Program Manager
Key Account Manager

Original and thirteen (13) copies
filed this 1st day of July, 2014
with:

Docket Control
Arizona Corporation Commission
1200 W. Washington,
Phoenix, AZ 85007

Attachment A

Avoided Cost Calculations

Month	6	7	8	9	10	11	12	1	2	3	4	5
Year	13	13	13	13	13	13	13	14	14	14	14	14
kWh Purchased												
AEPCO	84,100,729	82,087,282	82,130,062	65,873,157	57,405,830	68,525,399	77,995,292	77,633,341	70,589,744	54,988,409	64,395,934	79,318,669
AEPCO - MSSA	10,810,000	3,439,000	6,039,000	7,998,000	5,754,000	325,000		665,000	208,000	12,848,000	7,762,000	2,068,000
3rd Party	12,425,632	10,686,000	11,071,818	2,414,126	272,080	188,346	192,317	207,553	224,242	528,689	323,431	2,411,000
Total kWh Purchased	107,336,361	96,212,282	99,240,880	76,285,283	63,431,910	69,038,745	78,187,609	78,505,894	71,021,986	68,365,098	72,481,365	83,797,669
Total Cost of Purchases												
kWh Sold												
Non-member sales	11,000	2,625,000	1,907,000	1,424,000	4,972,000	16,094,000	16,549,000	18,532,000	15,879,000	5,313,000	7,691,000	5,661,000
Residential Sales	29,941,570	38,486,788	34,348,851	35,101,082	27,666,076	22,070,454	26,477,938	32,032,830	27,401,645	22,611,613	21,915,101	64,712,426
Commercial Sales (Small)	8,663,478	9,607,965	9,041,658	9,454,236	8,330,138	7,076,591	7,190,184	7,868,559	7,434,569	6,989,047	7,166,612	
Commercial Sales (Large)	17,508,335	19,125,536	18,594,846	20,209,298	16,846,339	14,837,553	15,532,367	15,038,900	14,431,018	14,306,552	14,705,087	
Irrigation Sales	29,500,633	26,530,193	26,058,652	19,510,007	10,633,050	4,871,021	2,045,333	2,874,680	6,133,014	11,438,564	17,886,075	
Other Sales	182,575	182,971	182,971	183,241	182,971	182,971	182,971	182,971	182,971	182,971	182,971	
Total kWh Sold	85,807,591	96,558,453	90,133,978	85,881,864	68,630,574	65,132,590	67,977,793	76,529,940	71,462,217	60,841,747	69,546,846	70,373,426
Avoided Cost of Energy												
AEPCO Firm Energy	$ 2,662,657.70	$ 2,512,041.89	$ 2,497,066.33	$ 1,985,290.92	$ 1,713,443.92	$ 1,920,827.71	$ 2,320,359.94	$ 2,312,505.50	$ 2,100,044.88	$ 1,672,230.46	$ 1,789,859.31	$ 2,214,733.05
AEPCO Purchase Power & Fuel Adjuster												
AEPCO MSSA Energy	$	$ 119,206.36	$ 193,903.26	$ 279,292.37	$ 167,094.08	$ 6,573.00	$	$ 22,526.53	$ 10,134.73	$ 458,504.90	$ 283,624.02	$ 103,634.30
3rd Party Purchases	$ 1,008,598.12	$ 558,607.20	$ 579,161.35	$ 121,203.41	$ 9,950.35	$ 6,908.54	$ 7,035.90	$ 7,559.14	$ 8,163.87	$ 19,217.67	$ 11,803.03	$ 111,749.20
Shell Energy												
Powerex Energy												
Total Avoided Cost of Energy	$ 3,671,256	$ 3,189,855	$ 3,270,131	$ 2,385,787	$ 1,890,488	$ 1,934,309	$ 2,327,396	$ 2,342,591	$ 2,118,343	$ 2,149,953	$ 2,085,286	$ 2,430,117
Avoided Cost per kWh Purchased	$ 0.0342	$ 0.0332	$ 0.0330	$ 0.0313	$ 0.0298	$ 0.0280	$ 0.0298	$ 0.0298	$ 0.0298	$ 0.0314	$ 0.0288	$ 0.0290
Avoided Cost used as of 9/1/09	$ 0.0491											
Avoided Cost used as of 9/1/10	$ 0.0377											
Avoided Cost used as of 9/1/11	$ 0.0367											
Avoided Cost used as of 9/1/12	$ 0.0364											
Avoided Cost used as of 9/1/13	$ 0.0359											
Proposed Avoided Cost as of 9/1/14	$ 0.0307											

Electronic version available in Excel by request to dbane@ssvec.com

Attachment B

Determining Fixed Cost Recovery Fee

To determine the impact to SSVEC from PV, the first step is to estimate the reduction in kWh sold because of the production of the connected PV systems (DG). Using the data from the annual Net Metering Report, we can estimate the amount of kWh sales lost due to solar PV. If we view the Net Meter Customers as a group, to be a single customer they are not at a "Net Zero" size and only produced about 81% of their annual needs.

PV impact Estimation Analysis			
Total grid connected PV capacity installed through end of 2013		6,926	kW
PV capacity installed in 2013		2,260	kW
2013 est. kWh production from PV		12,693,019	see assumptions
2013 kWh delivered to Customers	+	7,391,328	from Net Meter Report
2013 kWh received from Customers	-	4,434,360	from Net Meter Report
Total kWh consumed by Net Meter Customers		15,649,987	
Net kWh reduction in sales (production from PV)		12,693,019	kWh Sales lost due to Solar
kWh sales to meet the needs of the Customer		2,956,968	

Assumptions: 1) 2,260 kW of solar installed throughout the year was only active 50% of year
2) Name plate production times 6 hours per day is our production estimate
3) Res Distribution Adder = $ 0.047404 (as of 4/1/14)
4) GS Distribution Adder = $ 0.041279 (as of 4/1/14)
5) 73.5% of PV are residential installations
6) weighted average of Distribution adders = 0.045781 per kWh

SSVEC does not own any conventional generation assets and the power contract we have with our major supplier (AEPCO) has a large fixed monthly fee that is not modified based on our peak kW demand, total kWh needs for the month, or kWh needs at "peak" periods. If overall sales are higher than projected we have additional collections for both fixed costs and margins. On the other hand if sales are less than projected the first impact to SSVEC is to reduce margins followed by failure to recover fixed costs.

To illustrate this range of impact the following table shows a low sales (100% toward fixed costs), average (90% toward fixed costs), and high sales impact (80% towards fixed costs). The Demand Charge from our Transmission Supplier is a percentage of our proportional cost for the month so when stated as a Cost per kW it varies based on Southwest Transco's system peak. Through April 2014 the annual average was $4.44 per kW. Looking at the summer peaking months, where PV has the potential to provide some savings, the average cost was $4.38 per kW which produces an estimated annual savings of $115,313 which was used to offset losses shown below (details on page 3 of attachment B).

Fixed Cost to Margin Ratio based on Sales Volume	Low Sales	Average	High Sales	
Fixed Cost Percentage	100%	90%	80%	
Margin Percentage	0%	10%	20%	
Range of Fixed Cost Recovery Lost to Solar production				
Fixed Cost and Margin loss (Distribution Adder)	$ 581,099	$ 581,099	$ 581,099	per year
Fixed Cost Losses	$ 581,099	$ 522,989	$ 464,879	per year
Margin Reduction	$ -	$ 58,110	$ 116,220	per year
Estimated Demand Savings from PV	$ (115,313)	$ (115,313)	$ (115,313)	per year
Loss per kW	$ 67.25	$ 67.25	$ 67.25	per kW per year
Fixed Cost losses	$ 67.25	$ 60.53	$ 53.80	per kW per year
Reduction in Margins	$ -	$ 6.73	$ 13.45	per kW per year

Using the preceding annual loss calculations, the next step is to determine the financial impact on a monthly basis. Also shown is the average monthly impact of the Fixed Cost Recover Charge.

Estimated PV charge to recover fixed costs per installed kW	Low Sales	Average	High Sales	
Fixed cost recover per kW per month	$ 5.60	$ 5.04	$ 4.48	
Average PV system is 5.6kW	$ 31.38	$ 28.25	$ 25.11	per month charge

Customer Impact of proposed Fixed Cost Recovery Fee

SSVEC realizes that collecting a per kW fee ranging from the $4.48 to $5.60 based on the table above for a full cost recovery is not feasible at this time.

In lieu of full cost recovery, SSVEC is proposing a $0.50 per kW (DC) Fixed Cost Recovery Fee for those systems installed prior to January 1, 2015. For systems installed after January 1, 2015, the Fixed Cost Recovery Fee will be assessed at $1.00 per kW (DC) of system capacity. The following table estimates the range of impact on current SSVEC Customers.

Based on System Size			
Residential Stats (5/1/14)	C&I Stats (5/1/14)	Range of Impact	
1034 PV Systems	176 PV Systems	Residential	Commercial
Smallest = 360Watts	Smallest = 320 watts	$ 0.18	$ 0.16
Average =5,905	Aveage =14,730watts	$ 2.95	$ 7.37
Maximum = 25,000 watts	Maximum = 84,000 watts	$ 12.50	$ 42.00

Estimate of impact on installs after the effective date.

Estimated Residential Stats	Estimated C&I Stats	Estimated Range of Impact	
(based on 2013 installs)	(Based on 2013 installs)	Residential	Commercial
Smallest = 3000 Watts	Smallest = 3000 watts	$ 3.00	$ 3.00
Median = 6,000 Watts	Median = 17,800 watts	$ 6.00	$ 17.80
Maximum = 24,960 watts	Maximum = 40,211 watts	$ 24.96	$ 40.21

Based on installations as of 5/1/14, this will reduce the losses of Fixed Costs by the following amounts.

Estimated Fixed Cost Recovery			
PV Installed to 5/1/14	9,186 kW		
Increase collections =	$ 55,119	$ 55,119	$ 55,119
Percentage of losses recovered=	11.8%	13.5%	15.8%

As you can see the surcharge recovers just a small portion of the uncollected Fixed Costs.

Benefits to SSVEC from PV

To be fair to our solar members, SSVEC included the estimated value PV has for SSVEC in the form of demand reduction. SSVEC does not own any generation facilities and purchases 80% of our annual power needs from Arizona Electric Power Cooperative, Inc. (AEPCO). Our power contract with AEPCO has a fixed monthly charge that makes up about 45% to 51% of the monthly bill which distributed generation has no positive effect. The other 20% of our power needs are purchased on the "open market" and historically has been at or less than the kWh cost of our power purchased from AEPCO. Which is illustrated by the Avoided Cost being less than $0.04 per kWh since Net metering was approved in 2009.

The other portion of our energy cost is the transmission of the power purchased. This chart maps out the SSVEC peak time over a period of years. Clearly PV is not able to help with lower Peak requirements in the winter months, with limited help during fall and spring, and measurable assistance in lowering the system Peak in the summer. The Demand cost for the year averaged $4.44 per kW and only averaged $4.32 per kW in the summer period where PV has the potential to reduce the Peak Demand. This data supports reducing the losses shown above by the $115,313 per year from lower demand costs.

	Times of Monthly Peak				Solar	Demand
	2010	2011	2012	2013	De-Rate	Savings
Jan	8:00	7:00	7:30	7:30		$ -
Feb	7:30	7:30	7:30	7:30		$ -
Mar	7:00	20:00	18:00	19:30		$ -
Apr	18:00	17:00	17:30	17:00	30%	$ 9,104
May	17:00	17:00	17:00	17:00	70%	$ 21,242
Jun	17:00	16:00	16:00	15:30	90%	$ 27,311
Jul	16:00	17:00	16:00	17:00	90%	$ 27,311
Aug	16:00	16:00	16:30	15:00	70%	$ 21,242
Sep	15:00	16:00	15:30	15:00	30%	$ 9,104
Oct	16:00	15:00	16:30	16:00		$ -
Nov	20:00	18:30	18:30	18:30		$ -
Dec	19:00	7:30	7:30	19:30		$ -
				Estimated Annual Savings =		$ 115,313

Assumptions:

- Based on installed capacity of 6,926 kW as of 5/1/14
- Average Summer Demand charge is $4.38 per kW
- Solar De-rated slightly due to low angle of light at time of peak.

Attachment C

ELECTRIC RATES

SULPHUR SPRINGS VALLEY ELECTRIC COOPERATIVE, INC.
350 N. Haskell Ave
Willcox, Arizona 85643
Filed By: Creden Huber
Title: General Manager/CEO

Effective Date: September 1, 2014

STANDARD OFFER TARIFF

NET METERING TARIFF
SCHEDULE NM

Availability

Net Metering service is an option for all customers of the Cooperative with a qualifying Net Metering Facility. Participation under this schedule is subject to availability of enhanced metering and billing system upgrades. The electric energy generated by or on behalf of the member from a qualifying Net Metering Facility and delivered to the Cooperative's distribution facilities may be used to offset electric energy provided by the Cooperative during the applicable billing period.

Net Metering Facility means a facility for the production of electricity that:

a. Is operated by or on behalf of the customer and is located on the customer's premises;
b. Is intended to provide part or all of the customer's requirements for electricity;
c. Uses Renewable Resources, a Fuel Cell or CHP (as defined below);
d. Has a generating capacity less than or equal to 125% of the customer's total connected load, or in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
e. Is interconnected with and can operate in parallel in phase with the Cooperative's existing distribution system.

Service under this tariff is available provided the rated capacity of the customer's Net Metering Facility does not exceed the Cooperative's service capacity. The customer shall comply with all of the Cooperative's interconnection standards. The customer is also required to sign and complete the Net Metering Application prior to being provided Net Metering Service. This service is also referred to as Partial Requirements Service.

Metering

Metering installed for the service provided under this tariff shall be capable of registering and accumulating the kilowatt-hours (kWh) of electricity flowing in both directions in a billing period.

The customer requesting Net Metering shall pay for the incremental cost difference of the bi-directional meter required for Net Metering and the standard meter, with a monthly fee of $2.70.

Monthly Billing

If the kWh supplied by the cooperative exceeds the kWh that are generated by the customer's Net Metering Facility and delivered back to the cooperative during the billing period, the customer shall be billed for the net kWh supplied by the Cooperative in accordance with the rates and charges under the customer's standard rate schedule.

If the electricity generated by the customer's Net Metering Facility exceeds the electricity supplied by the Cooperative in the billing period, the customer shall be credited during the next billing period for the excess kWh generated. That is, the excess kWh during the billing period will be used to reduce the kWh supplied (not kW or kVA demand or customer charges) and billed by the Cooperative during the following billing period.

Customers taking service under time-of-use rates who are to receive credit in a subsequent billing period for excess kWh generated shall receive such credit during the next billing period during the on- or off- peak periods corresponding to the on- or off- peak periods in which the kWh were generated by the Customer.

In the September "true up" month or when the account is closed, the Cooperative shall issue a check or billing credit to customers with Net Metering Facilities for the balance of any credit due in excess of amounts owed by the customer to the Cooperative for Non-Firm Power. The payment for any remaining credits shall be at the Cooperative's Annual Average Avoided Cost which is $0.0307 per kWh. Amounts over $100.00 will be paid by check lesser amounts will be a billing credit. The Customer may also elect to donate the payment to the SSVEC Foundation or Operation RoundUP. Any payment for Firm Power will be pursuant to a separate contract.

Fixed Cost Recovery Fee

To recover a portion of the fixed cost that is included in the kWh charge, Net Meter Accounts will be accessed the following Fixed Cost Recovery Fee.

For Renewable Systems installed prior to 1/1/15	$0.50 per kW of DC capacity
For Renewable Systems installed after 1/1/15	$1.00 per kW of DC capacity

Definitions

1. Annual Average Avoided Cost is defined as the average wholesale fuel and energy cost per kWh charged by the Cooperative's wholesale power supplier(s) during the previous 12 months calculated with the receipt of the May wholesale power bills. The Annual Average Avoided Cost will then be applied in the "true up" month or when a NET Meter Account is closed during the Calendar Year. SSVEC will submit an updated NET Meter tariff prior to July 1st to the ACC for approval of the Average Avoided Cost for an updated Net Meter Tariff to be effective on September 1st each year.

2. Renewable Resource means natural resources that can be replenished by natural processes, including Biomass, Biogas, Geothermal, Hydroelectric, Solar or Wind as defined in A.A.C. R14-2-2302(2) &(3).

3. Combined Heat and Power or CHP (also known as cogeneration) means a system that generates electricity and useful thermal energy in a single, integrated system such that the useful power output of the facility plus one-half the useful thermal energy output during any 12-month period must be no less than 42.5 percent of the total energy input of fuel to the facility.

4. Fuel Cell means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. The source of the chemical reaction must be from Renewable Resources.

5. Determining the customers125% capacity from load data:

    a. In the absence of demand data (for residential and small business) the highest 12 months (calendar year) kWh consumption in the previous three years, will be divided by 2190 (average annual PV production hours) to determine the 100% capacity level in kW which will achieve a "net zero" home or business. To which the 125% will be applied
    b. For customers with a demand history it will be 125% of the highest demand in the most current 12 month period. Demand history can be obtained by a billing meter with a demand register or demand data acquired by the Automatic Meter Reading (AMR) system.

6. Partial Requirements Services- Electric service provided to a customer that has an interconnected Net Metering Facility whereby the output form its electric generator(s) first supplies its own electric requirements and any excess energy (over and above its own requirements at any point in time) is then provided to the Company. The Company supplies the customer's supplemental electric requirements (those not met by their own generation facilities). This configuration may also be referred to as the "parallel mode" of operation.

7. Non-Firm Power- Electric power which is supplied by the Customer's generator at the Customer's option, where no firm guarantee is provided, and the power can be interrupted by the Customer at any time.

8. Firm Power- Power available, upon demand, at all times (except for forced outages) during the period covered by the Purchase Agreement from the customer's facilities with an expected or demonstrated reliability which is greater than or equal to the average reliability of the Company's firm power sources.

9. Standard Rate Schedule- Any of the Company's retail rate schedules with metered kWh charges.

10. Time Periods- Mountain Standard Time shall be used in the application of this rate schedule. Because of potential differences of the timing devices, there may be a variation of up to 15 minutes in timing for the pricing periods. On-peak and off-peak time periods will be determined by the applicable Standard Retail Rate Schedule.

Attachment D

Sulphur Springs Valley Electric Cooperative, Inc.

A Touchstone Energy® Cooperative

DISCLAIMER

POSSIBLE FUTURE RULES and/or RATE CHANGES

AFFECTING YOUR PHOTOVOLTAIC SYSTEM

Interconnection to the SSVEC distribution system is subject to the following in addition to the published physical interconnection requirements.

- SSVEC's electricity rates, basic charges and service fees are subject to change. Future adjustments to these items may positively or negatively impact any potential savings or the value of your photovoltaic system.
- You will be responsible for paying any future increases to electricity rates, basic charges or service fees from SSVEC.
- Your photovoltaic system is subject to the current rates, rules and regulations established by the Arizona Corporation Commission ("Commission "). The Commission may alter its rules and regulation and/or change rates in the future, and if this occurs, your system is subject to those changes.
- Any future electricity rate projections presented to you are not approved by SSVEC or the Commission. They are based on projections formulated by external third parties not affiliated with SSVEC or the Commission.

By signing below, you acknowledge that you have read and understand the above disclaimer,

Name:_____

Date: _____

This has been included in our SunWatts Information packet and required forms since January 2014.

Attachment E

To expedite the review process, SSVEC offers the following pre-filed testimony with questions SSVEC anticipates would be asked regarding the proposed changes to the Net Metering Tariff.

Question #1: **How did you determine the reduction in kWh sales due to the installation of PV systems?**

Response:

SSVEC does not require the use of production meters on all PV systems. Therefore SSVEC has used an ACC Staff approved "rule of thumb" for reporting purposes where the production is based on the assumption that "on average" the PV system will produce its rated capacity for 6 hours per day 365 days per year. SSVEC has checked this assumption by looking at systems that are receiving their SunWatts Incentive in the form of a Performance Based Incentive where a PV production meter was installed and monitored by SSVEC and it has validated the "rule of thumb".

This provides SSVEC with the first portion of the calculation to determine total kWh consumption. Using 6,926 kW – 1,130 kW (partial year production) X 6 hours X 365 days = 12,693,019kWh produced.

The second piece of data needed is how many kWh were purchased by the PV Customers when their PV was non-operational. This can be found in the annual Net Metering Report as the Delivered kWh (7,391,328 kWh).

The third piece of data is the amount of Excess kWh that was "pushed" back onto the grid for future credits for the PV owners. This can also be found in the annual Net Metering Report (4,434,360 kWh).

Using the formula:

SSVEC Generated + Customer Generated - Customer Excess = kWh Consumed.

If you treat the PV "community" as a single Customer they generated about 81% of their needs. So, it follows that the "lost kWh sales" would equal the amount of Customer Generated kWh produced by the PV systems.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #2: **Can you explain how you calculated the fixed cost losses?**

Response:

SSVEC's rates were presented and approved by the Commission in our three rate cases (1992, 2008, and 2013) in an "unbundled" format with the most current rate shown below:

Monthly Rate

STANDARD RATE R								
	Power Supply		Distribution Charges					Total Rate
			Metering	Meter Reading	Billing	Access		
Service Availability Charge ($/Customer/Mo)			$3.67	$0.10	$6.04	$0.44	$10.25	$10.25
Energy Charge ($/kWh/Month) All kWh	$0.078634					$0.047404	$0.047404	$0.126038

The Cost of Service Study determined the "Energy Cost" for rate R is $0.078634 per kWh and the "distribution adder" needed to be $0.047404 per kWh so the Cooperative could recover fixed costs and to collect sufficient "Margins" to meet the debt service of the Cooperative. The distribution adder for Commercial accounts (GS with Demand) is $0.041279 per kWh. Based on the relative number of residential and commercial installations I used a "weighted average" of $0.045781 for the loss calculations.

If the rates were to be "de-coupled" the energy cost would be a true kWh cost and the rate would either have a larger Service Availability Charge or some other approved method of collecting fixed costs either via a demand charge or separate line item based on kWh consumed.

Using this methodology to quantify the reduction in kWh sales from PV production, results in an estimated $581,099 reduction in contributions to fixed costs and margins for 2013.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #3: **Can you explain the Fixed Cost to Margin Ratio based on Sales Volume chart?**

Response:

Mr. Jim Gross, the SSVEC Controller/Accounting Manager, explained to me that if total energy sales is below the amount projected in the rate case, the distribution adder may not even be sufficient to cover fixed costs much less contribute to any margins to cover debt service. (i.e. 100% of the distribution adder is applied to fixed cost recovery)

By the same logic when sales are equal to or higher than projections used in the rate case, the distribution adder can provide sufficient funds to cover fixed costs and contribute to margins. In this situation the distribution adder fully coves the fixed cost of the wholesale bill and the remainder contributes to margins (debt service).

The purpose of showing these calculations is to show the range of the impact of PV on cost recovery, which can vary by the amount of annual sales which are dictated more by the weather and economic strengths of the Customers (i.e. higher disposable funds = more comfortable thermostat settings = higher kWh sales) than say the number of Customers.

Because not all the PV systems are the same size having a single monthly fee would not be fair to the customers that have small systems (not sized to Net Zero the bill), using the system size to determine the monthly fee is fair to all Customers as the fee is proportional to their impact on the fixed cost losses.

We realize that adding a fee of $4.48 or higher per kW of panel capacity would have a significant negative impact on the solar community. By using the $0.70 per kW charge the ACC approved for APS as a starting point and getting input from our Member/Owners, we are proposing a $0.50 and $1.00 per kW "Fixed Cost Recovery Fee". The lower fee would be assessed to Customers who installed prior to 1/1/15 and the higher to those who installed after 1/1/15 with the approval of the tariff. Even with the rate being retro-active with fees both higher and lower than that approved for APS, it provides a recovery of less than 16% of the estimated loss.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #4: **Why do you want to change to a single "True up" month?**

Response:

When the Net Metering rules were being developed and the requirement of an annual "True up" was determined to be part of the rules, we were not sure how hard it would be to modify our billing system to handle not only with the Net Metering itself but the "True up" requirements.

In anticipation of something going wrong I asked our Accounting Manager which month could I get the most support from his department to manually fix the bills if the "True up" created a "crash" of the billing system. His response was that September was between the fiscal and calendar years and is when he would have the most time and resources available to help.

During the Open Meeting to approve our Net Metering Tariff, one Customer in attendance expressed their desire to "True up" in March since their higher consumption period was in the winter not the summer. So an amendment by a Commissioner was made to have us offer two "True up" months instead of one.

The good news is the billing system did not crash. But now we are the only utility that has two "True up" months for the Customer to select which they would rather have. Choice is good but in practice this has led to Customer confusion as they forget which month they picked or thought that it was "Trued up" twice per year. This is further complicated by the PV Installation Contractors who work with the other electric utilities in the State, are used to having a "True up" once per year and they don't remember to advise their Customers on which month to choose or forget to indicate on the sign up form which month to use for the "True up".

So, our request is made to eliminate confusion and to simplify things for SSVEC, the Solar Installers, and SSVEC Customers by having a single "True up" like the rest of the electric utilities in AZ. Customers that already have March as a True UP may continue to use March. The single September True Up would be for New Net Metered Customers.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #5: **In your chart that shows the savings from demand reduction by the installation of PV you only give the solar a maximum of 90% of the rated capacity. Why is that?**

Response:

There are two primary reasons, 1) The panels produce their highest output when the light strikes the panel at a 90 degree angle and the late afternoon sun angle is going to be something less than 90 degrees which lowers the output and 2) in spite of best intentions not all solar panels were installed with a perfect exposure to the southern sky. Physical limitations such as the angle of the house to true south were beyond the control of customers and installers to receive the maximum benefit from PV.

In addition, because we are not trying to recover the full "fixed cost losses" spending time to further quantify the savings to a higher level of accuracy is not justified at this time. The time spent would not provide value to the Co-op or the Customer.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #6: **Why do you want the Fixed Cost Recovery Fee to be based on 1/1/15 installation date?**

Response:

It is never easy to determine when to implement a new fee. Having a fee at two different levels based on a date complicates the process even more. For the past year, Customer who reserve a SunWatts reservation have sign the notice recommended by the ACC Staff that there may be changes in the rates that might have a negative impact on the cost recovery of their PV systems.

We have held small focus group meeting of Customers who already have solar installed and did not have to sign the disclaimer about future rate policy changes, to talk about the impact that Net Metering has on the Co-op. They agree that they are getting a "benefit" for the ability to use the grid to act like a battery storage system. After some discussion many felt it was "fair" for them to contribute to supporting the grid and felt somewhat reluctantly, that the $0.50 per kW was a reasonable charge that most could support. This was further supported by a phone survey of Solar Customers by our polling contractor.

SSVEC feels that given this feedback from our Members and having the support of our Board, making the Fixed Cost Recover Fee with two different pricing levels and basing the difference on the installed date of 1/1/15 is fair and reasonable.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #7: **Have you done any estimating of long range costs (losses) due to Net Metering and under collection of Fixed Costs?**

Response:

Using the assumptions in estimating the impact of 2013 and looking back and to 2025 shows the full potential impact of the current Net Meter policy. In this table I did assume a revised rate case on a 5 year basis with a declining "kWh adder". This table is to illustrate potential impact and is not meant to apply for future rate cases or fees.

Program Year	Retail Sales (MWh) from the 2012 PRS	Renewable Goal (%)	Renewable Energy Needed (MWh)	Est. Renewable Capacity needed (MW)	Renwable MWh	Percentage of Goal	Systems Installed (by year)	Actual and Estimated fixed cost in kWh price	% of Distributed Generation	Actual and Est. Loss from reduction in kWh sales	Cumlative Losses
2005 - 2007	796,093	.5%	3,980	1.8	307	8%	102	$ 0.0487	90%	$ 13,438	$ 13,438
2008	819,072	.5%	4,095	1.9	683	17%	90	$ 0.0487	85%	$ 28,284	$ 41,723
2009	834,119	1.00%	8,341	3.8	4,684	56%	298	$ 0.0487	70%	$ 159,692	$ 201,414
2010	822,776	1.25%	10,285	4.7	9,813	95%	153	$ 0.0487	70%	$ 334,525	$ 535,939
2011	840,861	1.50%	12,613	5.8	11,269	89%	158	$ 0.0487	60%	$ 329,280	$ 865,220
2012	853,741	1.75%	14,940	6.8	18,734	125%	273	$ 0.0487	50%	$ 456,165	$ 1,321,385
2013*	874,021	2.00%	19,961	9.1	25,000	125%	200	$ 0.0487	50%	$ 608,750	$ 1,930,135
2014	894,364	2.25%	23,029	10.5				$ 0.0457	50%	$ 526,214	$ 2,456,349
2015	916,825	2.50%	26,188	12.0				$ 0.0457	52%	$ 622,321	$ 3,078,670
2016	940,599	3.00%	32,207	14.7				$ 0.0457	54%	$ 794,796	$ 3,873,466
2017	965,588	3.50%	38,403	17.5				$ 0.0457	54%	$ 947,702	$ 4,821,168
2018	991,628	4.00%	44,893	20.5				$ 0.0457	55%	$ 1,128,380	$ 5,949,547
2019	1,018,648	4.50%	51,734	23.6				$ 0.0400	55%	$ 1,138,158	$ 7,087,706
2020	1,046,693	5.00%	58,826	26.9				$ 0.0400	56%	$ 1,317,696	$ 8,405,402
2021	1,075,657	5.50%	66,120	30.2				$ 0.0400	56%	$ 1,481,092	$ 9,886,494
2022	1,105,508	6.00%	73,731	33.7				$ 0.0400	57%	$ 1,681,061	$ 11,567,555
2023	1,136,264	6.50%	81,552	37.2				$ 0.0400	57%	$ 1,859,376	$ 13,426,931
2024	1,167,957	7.00%	89,678	40.9				$ 0.0300	58%	$ 1,560,394	$ 14,987,326
2025	1,200,655	7.50%	97,904	44.7				$ 0.0300	58%	$ 1,703,537	$ 16,690,862

Note: These losses are for kWh consumption being replaced by PV and does not include overall reduction in kWh sales from Solar Water Heating, SSVEC owned large Scale Generation, and Renewable resources (bio-mass and geo-thermal) that contribute RECs to meet the REST goals but do not impact fixed cost components.

Response by: David Bane
SunWatts Program Manager
dbane@ssve.com
520-515-3472

Attachment E

Question #8: **Can you talk about the Customer Survey you had done to get feedback on the proposed change in fees.**

Response:

The survey was performed by Severson & Associates of North Dakota and the report to the SSVEC Board of Directors is found in attachment F.

Response by: Jack Blair
Chief Member Services Office
jblair@ssvec.com
520-515-3470

Attachment E

Question #9: **Can you explain how the Avoided Cost could drop so much compared to prior years.**

Response:

In 2013 SSVEC changed from using WAPA as the balancing agent to AEPCO. This along with an AEPCO rate change which increased the monthly fixed "service charge" and a lowering the cost per kWh charge. Opportunities to purchase some below market energy also contributed to the overall reduction during the analysis period.

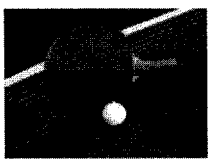
Response by: Jim Gross
Controller
jgross@ssvec.com
520-515-3482

Attachment F

Member Opinion Survey

Sulphur Springs Valley Electric Cooperative

Solar Power Issues
March 2014



Imagine 3000
ping pong balls.

Overview

You're doing a great job on the basics.

Solar / renewables have strong support.

Times are changing/ beware of stereotypes.

You're doing a great job on the basics.

Overall Satisfaction with SSVEC

48% say 10 on a 10-point scale

33% say 8 or 9

Overall satisfaction has improved

2010 - 37% excellent

2011 - 43% excellent

2012 - 44% excellent

2014 - 48% excellent

Overall satisfaction among younger members

2010 (< age 45)

- 26% say 10
- 46% say 8 or 9

2014 (< age50)

- 41% say 10
- 35% say 8 or 9

Member vs. customer

54% member

40% customer

Member identification has improved with younger folks

2010 (< age 45)

- 36% member
- 61% customer

2014 (< age 50)

- 39% member
- 57% customer

Overall Satisfaction - Member vs Customer

Excellent rating (10)

53% of "members" rate you excellent

41% of "customers" rate you excellent

Keeping blinks to a minimum

87% positive

9% average

3% negative

Keeping blinks to a minimum: Member vs Customer

excellent ratings (10)

- member = 60% excellent
- customer = 55% excellent

Working to keep rates low

57% positive

18% average

16% negative

Working to keep rates low: Member vs Customer

excellent+pretty good ratings (10+9+8)

62% of "members" give you top ratings

47% of customers do

How does electric bill affect family budget?

6% serious problem

23% somewhat serious

70% not much/ no problem

Operating with concern for the environment

62% positive

8% average

3% negative

27% don't know

Promoting renewable energy

57% positive

12% average

8% negative

23% don't know

Solar & renewables have strong support.

Attachment F

SSVEC's solar power program

66% positive

10% negative

88% of solar users would recommend your program to a friend.

Large commercial solar vs. small solar units: their initial reaction

50% small

32% large

But what if you knew large scale is less expensive and everyone benefited?

56% large

27% small

Why did you put in a solar unit? (asked of solar only)

62% financial reasons

30% help the environment

Pay retail or wholesale for solar power? (all members)

37% pay wholesale

48% pay retail

Among solar users:

61% say pay us retail

25% say pay us wholesale

Only 28% of solar users are opposed
a modest charge
for using the poles and wires.

Followup calls (150 solars)

41% OK with $10, 38% oppose

49% OK with $5, 25% no,
with 25% undecided

55% OK with $2.50 fee, 20% oppose

Times are changing.
Beware of stereotypes.

Climate change

7% man made

6% a hoax

29% natural cycle

57% both man made & natural

What should be the top priority: rates or climate change?

38% climate

54% rates

Is REST a good idea?

1 penny/ to $3.49 max.

39% good

27% bad

Is the half-penny surcharge to fund EE zero-interest loans a good idea?

48% yes

16% no

29% don't particularly care

REST + retail net metering will cost 8% more in next 10 years

22% extremely serious problem

44% somewhat of a problem

29% no problem

How much more would you pay over 10 years for energy independence?

22% say they'd pay 25% more for renewables and conservation

2% say 20% more

21% say 10% more

26% say 5% more

= 71% would pay at least 5% more

How much more would you pay over 10 years to protect the environment?

26% say they'd pay 25% more for renewables and conservation

2% say 20% more

24% say 10% more

25% say 5% more

= 77% would pay at least 5% more

SSVEC's EE loans

64% are not aware of them

24% are real interested

Media notes

40% have used your website

50% use Facebook

59% unaware of Smart Hub

TV is the weapon of choice

40% of members have visited SSVEC's website

In 2010 it was 27%.

Younger members are using SSVEC's website more.

2010 (<45)

42% - Yes

2014 (<50)

63% - Yes

Demographic tidbits

67% are 1 or 2 person households

22% have children at home

Attachment F

Q&A

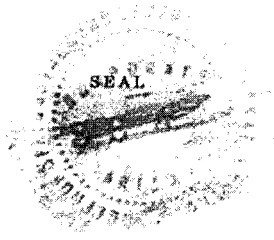
Attachment G

RESOLUTION **2014-05**

The following resolution was adopted at a regular meeting of the Sulphur Springs Valley Electric Cooperative, Inc., Board of Directors held June 18, 2014, in Benson, Arizona:

> WHEREAS, Sulphur Springs Valley Electric Cooperative (SSVEC), an electric cooperative company in Arizona, is required by ACC decision 70567 for NET Metering to submit a NET Metering Tariff for their approval,
>
> BE IT RESOLVED that the Board of Directors of SSVEC authorizes the management and staff of SSVEC to develop and submit to the ACC a NET Metering Tariff based on Docket No. RE-00000A-07-0608 Decision 70567.

I, Harold L. Hinkley, do hereby certify that I am the Secretary of Sulphur Springs Valley Electric Cooperative, Inc., and the foregoing is a true and correct copy of a resolution adopted by the SSVEC Board of Directors at a regular meeting held on June 18, 2014.



Harold L. Hinkley

Secretary