Sulphur Springs Valley Electric Cooperative, Inc.

A Touchstone Energy® Cooperative

The 2016

SUN Watts

Program

What is ... SUN Watts ?

SunWatts, developed by SSVEC and Arizona's Touchstone Energy® Cooperatives, offers you a way to take part in the renewable and photovoltaic (solar) movement in Arizona.

Care of our environment is a growing concern among electric cooperative customers.

Many folks want a 'green' alternative for their energy needs. That's where the SunWatts ™ program comes in.

The SunWatts program has two parts:

- The SunWatts Contribution Program
- The SunWatts Incentive Program for Solar Water Heating

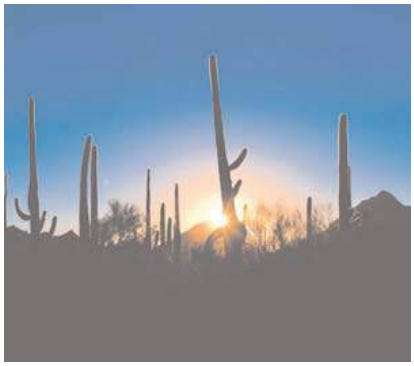
If you have any questions or need additional information, Please contact SSVEC at:

General Information:
Rebekah Knaub, 520-515-3471

Business:
David Bane, (520) 515-3472

Residential:
Tim Charley, (520) 515-3473

Each of these programs is discussed in more detail in this handbook.



Sulphur Springs Valley Electric Cooperative, Inc.
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SUN Watts

Contribution Program

Ensure a Bright Future for Planet Earth

Sunshine – it's one of Arizona's most abundant resources. And, with your help, SSVEC is harnessing the sun's enormous power and turning it into clean, green power.

Solar power generators take the sun's rays and turn them into electric energy that can be used for everything from cooling your home in the summertime to keeping you warm in the winter. And by using the sun's resources, we reduce our reliance on fossil fuel-fired electric generation, thus preserving our valuable resources.

With the SunWatts™ Contribution Program, you can help to foster this constantly evolving, exciting technology. You choose the amount you with to contribute, which will appear as a line item on your monthly bill. These extra dollars will go directly to the budget that supports the installation and maintenance of solar-powered and other renewable generation throughout Arizona. **Your contribution is voluntary and you can opt out at any time – just notify SSVEC.**

To take part in the SunWatts program, just fill out the form below and enclose it with your bill or drop it by SSVEC's office. Your enrollment will take effect in your next billing cycle.

YES! I want to enroll in SSVEC's SunWatts Contribution Program! By enrolling, I will make a monthly contribution to SSVEC's green energy programs.

Please print:

Name: _____

Address: _____

_____

Phone: (____)_____

Account Number: _____

Signature: _____

Date: _____

Amount I wish to contribute each month (please check ONE):

- ☐ $2.00
- ☐ $3.00
- ☐ $4.00
- ☐ $5.00
- ☐ $6.00
- ☐ $7.00
- ☐ $8.00
- ☐ $9.00
- ☐ $10.00

The amount you check will appear as a line item on your bill. Your enrollment will be reflected on your next bill. Contributions are voluntary and you may opt out of the SunWatts Contribution Program at any time. You must notify SSVEC in writing that you wish to opt out. It may take a full billing cycle for the change to appear on your bill.

Basic Interconnection Requirements

All customer solar electric generating systems must meet the following system and installation requirements to be connected to the electric distribution cooperative system:

1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.

2. The Customer System Components must be certified as meeting the requirements of UL-1741 - Power Conditioning Units for use in Residential Photovoltaic Power.

3. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code (NEC), including Article 690 and all grounding, conductor, raceway, overcurrent protection, disconnect and labeling requirements.

4. The Customer System and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. To do so, the installation must be completed in accordance with the requirements of the latest edition of the NEC in effect in the jurisdiction where the installation is being complete, including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superceded.

5. The Customer System must meet cooperative and Arizona Corporation Commission interconnection requirements for self-generation equipment.

6. The Customer System installation must meet the cooperative Service Requirements as follows:

   "An AC disconnect means shall be provided on all ungrounded AC conductors and shall consist of a lockable gang-operated disconnect clearly indicating open or closed. The switch shall be visually inspected to determine that the switch is open. The switch shall be clearly labeled stating "Photovoltaic System AC Disconnect." Switch to be located not less than 6" or more than 60" from meter.

7. All installations must be completed in a professional, workman-like and safe manner.

8. A licensed contractor must certify the system. **THERE ARE NO EXCEPTIONS.**

2016 Solar Water Heater Incentive Request Form

After you have installed your Solar Water Heating systems complete this form and send it to Sulphur Springs Valley Electric Cooperative, Inc. (SSVEC). We will verify the OG-300 rating and issue an incentive. Incentives are typically processed within 30-60 days of receiving this form.

By signing this form I affirm that a Solar Water Heating system has been installed at this address replacing an electric, propane, or non-Southwest Gas* water heater.

Customer Name: _____ Date: _____
(Signature)

Customer Name:
_____
(Printed)

Customer Address:
_____

_____

Phone number: _____ Alternate Phone: _____

By signing, I am assigning my rights associated with environmental credits to SSVEC.

Solar Water Heater Unit Specifications:

Installer:	
Manufacturer/ Company	
System Name	
System Model	
System Number	

Please include a copy of the invoice for your purchase.

Completed Incentive form and invoice must be received within 60 days of installation.

Please return this form to your local SSVEC office or mail to:
SSVEC, Member Services Department, 311 E. Wilcox Drive, Sierra Vista, AZ 85635

* Southwest Gas has a program to provide incentives for solar water heating.

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Assignment of Environmental Credits

By signing below, I am assigning my rights associated with environmental credits to SSVEC.

I understand that as the owner or lease holder of the equipment, I am fully responsible for the unit's operation and safety. For Customer-owned systems, I will pay for normal system maintenance and repairs to the unit, including labor and if a leased system, hold the leasing company responsible for normal system maintenance and repair the system to keep it operational.

I also agree to submit signed inspection forms after installation to ensure it meets requirements set forth in the SunWatts Inter-Connection Systems Qualifications documentation. I agree that SSVEC is not in any way responsible for the unit, its safety, operation, insurance or repair.

By signing below I hereby certify that I have read and reviewed the above Program System Requirements. I understand that I am solely responsible for ensuring that these qualifications are met and maintained for the life of my electric generating system and I am responsible for any consequences if they are not met. I understand they are necessary for safe operation of my and SSVEC's electrical system. I also understand I am not eligible for any incentives from SSVEC for PV systems.

SIGNED _____

SPOUSE _____

Please print:

Name: _____ **Date:** _____

Address: _____

_____

Phone: (____)_____

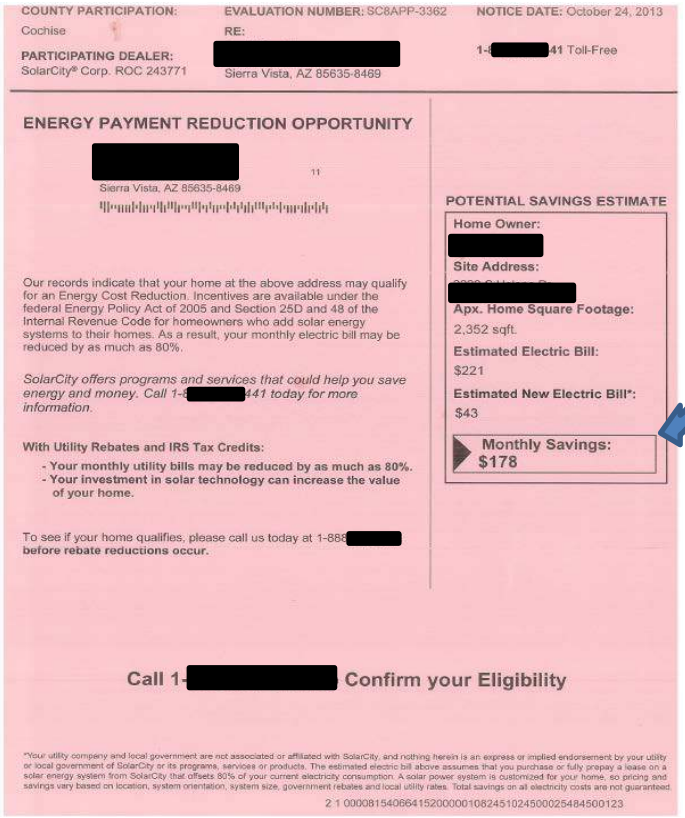
Account Number: _____

INFORMATION ON LEASING PV SYSTEMS

What they say in their Ads……..

"Solar Power Leases saves you money"

Then this flyer comes in the mail.



COUNTY PARTICIPATION: Cochise
EVALUATION NUMBER: SC8APP-3362
NOTICE DATE: October 24, 2013
RE: [redacted]
PARTICIPATING DEALER: SolarCity® Corp. ROC 243771
1-[redacted]41 Toll-Free
Sierra Vista, AZ 85635-8469

ENERGY PAYMENT REDUCTION OPPORTUNITY

[redacted]
Sierra Vista, AZ 85635-8469

Our records indicate that your home at the above address may qualify for an Energy Cost Reduction. Incentives are available under the federal Energy Policy Act of 2005 and Section 25D and 48 of the Internal Revenue Code for homeowners who add solar energy systems to their homes. As a result, your monthly electric bill may be reduced by as much as 80%.

SolarCity offers programs and services that could help you save energy and money. Call 1-[redacted]441 today for more information.

With Utility Rebates and IRS Tax Credits:
- Your monthly utility bills may be reduced by as much as 80%.
- Your investment in solar technology can increase the value of your home.

To see if your home qualifies, please call us today at 1-888[redacted] before rebate reductions occur.

POTENTIAL SAVINGS ESTIMATE
Home Owner: [redacted]
Site Address: [redacted]
Apx. Home Square Footage: 2,352 sqft.
Estimated Electric Bill: $221
Estimated New Electric Bill*: $43
Monthly Savings: $178

Call 1-[redacted] Confirm your Eligibility

*Your utility company and local government are not associated or affiliated with SolarCity, and nothing herein is an express or implied endorsement by your utility or local government of SolarCity or its programs, services or products. The estimated electric bill above assumes that you purchase or fully prepay a lease on a solar energy system from SolarCity that offsets 80% of your current electricity consumption. A solar power system is customized for your home, so pricing and savings vary based on location, system orientation, system size, government rebates and local utility rates. Total savings on all electricity costs are not guaranteed.

2 1 00008154066415200000108245102450002548450012 3

The real Savings is in the News

Here's a statement from Solar City in response to those company salesmen claiming higher monthly savings:

"We do a custom analysis for each customer based on their historical electricity usage, rates and expected output," **Vice President of Communications Jonathan Bass** said. "For heavy energy users, it would be possible to have larger bill savings, **but saving $5-$10 per month is still accurate for most customers."** (Emphasis added)

What they said to the Newspaper

azcentral.com
ARIZONA'S HOME PAGE

By Ryan Randazzo The Republic | azcentral.comMon Oct 28, 2013 6:55 PM

The term "net metering" sounds complex, but it's simply a system in which customers with solar panels on their houses get credit for the electricity they send to the power grid. They use those credits to offset the electricity they buy from the utility at night or when their panels are not making enough electricity to meet their needs.

Here are some common questions and answers about the system:

Question: Why is net metering important?

Answer: Electricity must be used when it is generated unless it has battery storage. Batteries are expensive, so most urban houses tied to the power grid don't use them. Without net metering, solar customers only would be able to power their own appliances during daylight hours when their panels generate electricity. They wouldn't have a way to capitalize on the power they make but don't use immediately.

Q: How does net metering affect solar customers' bills?

A: Solar customers accrue credits for each kilowatt-hour of electricity they generate during daylight hours that gets sent to the grid. At night, those customers rely on the utility grid to supply them with power. At the end of the month, they are billed on the amount of kilowatt-hours they took from the utility minus the kilowatt-hours they sent to the grid.

Customers with a large enough solar array can offset all of their electricity use and see bills as low as $22 a month, reflecting just a few basic fees. **However, this does not include the money they pay to either lease or buy their solar panels. Officials from SolarCity Corp. have said that their average customer saves $5 to $10 a month on their combined utility bill and lease.** (Emphasis added)

Questions to ask before you sign a lease for Solar

1. How much money will I be saving each month when you subtract the lease payment from the savings on the electric bill?
2. Will the lease payment stay the same over the life of the lease or will it increase by a fixed percentage each year over the life of the lease? If so, how much does it increase? (SSVEC rates historically have risen an average of less than one percent per year)
3. What happens to the lease if I decide to sell my home? Is it transferrable? What if the buyer doesn't meet your credit requirements to assume the lease? What if the buyer doesn't want to assume the lease?
4. Since the system is attached to my home do I have to cover it under my homeowners insurance?

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Section 1 Forms

Small Residential/Small Business/Commercial
Photovoltaic System Interconnection Requirements
Effective November 1, 2014

1.0 GENERAL REQUIREMENTS

1.1 The following photovoltaic (PV) system or other renewable system interconnection requirements by Sulphur Springs Valley Electric Cooperative, Inc. (SSVEC) are the minimum requirements by SSVEC to ensure proper interface with the utility. These minimum requirements are based on the **IEEE Recommended Practice for Utility Interface of Residential and Intermediate Photovoltaic Systems (ANSI/IEEE Std 929)**. In addition to the following minimum requirements, the customer is responsible for complying with all other applicable technical standards, safety codes, **Article 690 of the National Electric Code**, and equipment manufacturers' specifications related to the design, installation, operation, and maintenance of the customer's entire electrical installation, including the PV system, not specifically mentioned in this document. **The PV System Components must be Listed and Tested by a Nationally Recognized Testing Laboratory (NRTL) to UL Standard 1741.**

1.2 It is the Solar Contractor's Responsibility to verify that the PV systems capacity will not exceed the capacity of the service transformer. Without the written permission of the SSVEC Engineering Manager the capacity of the PV system may not exceed 100% of the Service Transformer.

2.0 AGREEMENT PROCESS REQUIREMENTS

2.1 The customer reviews the interconnection requirements and returns the signed and completed agreement form (included in the handbook) to SSVEC, which verifies that the customer is in agreement with the interconnection requirements. SSVEC will not install the Net Meter authorizing parallel operation with the utility until forms are complete.

2.3 The customer must obtain all permits and inspections required by city or county inspectors regarding the installation of the PV system. The PV system must be installed or certified by a licensed electrical or PV contractor. The disconnect switch must be verified by a licensed electrician.

2.4 After the PV system has been installed, inspected, and approved by the city or county inspector, the customer should provide SSVEC with copies of the final inspection. SSVEC will inspect the PV system installation to confirm that it complies with the interconnection requirements. SSVEC recommends the licensed electrical or PV contractor be on site when SSVEC inspects the PV system installation to answer any questions that SSVEC may have.

2.5 After SSVEC has inspected the PV system installation, and confirmed that it meets the interconnection requirements, SSVEC will then sign the agreement form, which authorizes the customer to operate the PV system in parallel with the utility.

3.0 POWER QUALITY REQUIREMENTS

3.1 The power quality at the customer's meter must be within **published national voltage (ANSI/IEEE Std C84.1) and harmonic (ANSI/IEEE Std 519) standards**. The PV system must not exceed SSVEC flicker standards, and must operate in synchronism with the utility at 60 Hz. The PV system must not inject direct current (DC) into the alternating current (AC) system. In addition to these standards, the customer's PV system must not cause noticeable interference with telephone, radio, computer or other communication systems. If the customer's power quality does not meet these standards or if the PV system interferes with the power quality of other SSVEC customers, SSVEC reserves the right to disconnect the PV system from the utility.

4.0 PROTECTION REQUIREMENTS

4.1 The customer must ensure that the PV system automatically disconnects from the utility if SSVEC, or other personnel, open an upstream breaker, fuse, or switch to de-energize the utility power source to safely work on local area power lines or equipment. Without proper protection, the PV system could potentially backfeed the local area loads, and energize the local area power lines. This condition is called "islanding" and is extremely dangerous because SSVEC, or other personnel, will have assumed that they have isolated the utility power source, and could potentially be electrocuted by the customer's PV system backfeeding the utility. This situation is absolutely intolerable and it is the customer's responsibility to ensure that the PV system will automatically disconnect from the utility under these conditions.

4.2 Upstream SSVEC distribution breakers will trip open due to temporary faults (lightning strikes, etc.) and will automatically reclose 1-2 seconds later. Upstream SSVEC transmission breakers will also trip open due to temporary faults and will automatically reclose instantaneously. It is the customer's responsibility to ensure that the PV system has automatically disconnected from the utility before an upstream utility distribution or transmission breaker automatically recloses onto the PV system out of synchronism. SSVEC will not be responsible for any damage caused by an upstream utility breaker automatically reclosing onto the customer's PV system out of synchronism.

4.3 The following minimum protection is required by SSVEC to prevent the PV system from islanding the utility. The PV system must automatically disconnect from the utility 2 seconds (120 cycles) after the voltage deviates outside the voltage range 88-110% of nominal. The PV system must automatically disconnect from the utility 0.1 second (6 cycles) after the frequency deviates outside the frequency range of 59.3-60.5 Hz. After the PV system has disconnected from the utility, it should remain disconnected until voltage and frequency is within the above voltage and frequency ranges for 60 seconds.

4.4 In addition to the minimum protection required by SSVEC, it is the customer's responsibility to ensure that all additional personnel safety and equipment protection devices required by all other applicable technical standards, safety codes, and equipment manufacturers' specifications are properly installed. SSVEC is not responsible for the protection of the customer's PV system.

5.0 DISCONNECT SWITCH REQUIREMENTS

5.1 The customer shall install a SSVEC accessible, outdoor mounted, load break disconnect switch with a visible open that is capable of being padlocked in the open position by SSVEC personnel. The disconnect switch shall be mounted at the service entrance next to the meter, properly grounded, and clearly labeled "**PHOTOVOLTAIC SYSTEM AC DISCONNECT**". The disconnect switch shall be installed on the alternating current (AC) circuit between the utility and AC input to the PV inverter. The purpose of the disconnect switch is for SSVEC, or other personnel, to disconnect the PV system from the utility to eliminate all potential sources of backfeed when it is necessary to safely work on local area power lines or equipment. The customer understands that SSVEC has the right to padlock the disconnect switch in the open position at any time, without notice to the customer. The customer also understands not to tamper with, or remove the padlock if the disconnect switch is padlocked in the open position by SSVEC. The disconnect switch must be installed by a licensed electrician.

5.2 Requirements for Net Metering and PV interconnections for Primary Metered Accounts.

Background:
Primary Metered accounts represent a much different physical design than the typical Metered Service Entrance which create the need for some additional latitude when it comes to the location of the PV disconnect switch as the meter may be a significant distance from the PV interconnection point.

PV Disconnect Switch Requirement:
For primary metered accounts the PV disconnect switch must be visibly located within 6" to 60" of the Service Panel interconnection point. In addition to the normal PV interconnection warning signs, the Contractor must list, number (e.g. PV switch 1 of 3, 2 of 3, etc…) and map the location(s) of all PV systems served by the Primary Meter at all Distribution Service panel(s) including the distribution panels that do not have a PV system connected. This list must also be posted at the Primary Meter location.

Additionally it is the Solar Contractors Responsibility to verify that the PV systems capacity will not exceed the capacity of the service transformer regardless of who owns the service transformer. Without the written permission of the SSVEC Engineering Manager the capacity of the PV system may not exceed 100% of the Service Transformer.

6.0 ANNUAL INSPECTION

6.1 SSVEC may conduct one inspection annually, at no cost to the custumer. The customer shall provide SSVEC personnel with reasonable access to the PV system to conduct the annual inspection. This inspection will consist, at a minimum, of a visual inspection of required equipment and a test to verify that the equipment will still disconnect properly from the utility when the utility power is disconnected.

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Section 2 Forms to be filled out by your Contractor

Please print the following information.

Interconnect Customer Information

Customer Name: _____ Account Number: _____

Customer Service Address (Street, City, State, ZIP Code): _____

_____

GPS Coordinates (optional): _____

Customer Mailing Address: _____

Customer Telephone Number: _____

Customer Cell Number: _____ Customer E-Mail: _____

Designated Agent (Engineer, Contractor, Electrician) other than Customer: _____

Photovoltaic Inverter/Panel Information

Inverter Manufacturer: _____Model Number: _____

Is the equipment UL 1741 listed? YES ___ NO ___ Attach manufacturer's cut-sheet showing UL 1741 listing or certified sheet stating tested to UL 1741

Number of PV Panels _____Model Nos. _____

Are the PV panels UL 1703 listed? YES ___ NO ___ Attach manufacturer's cut-sheet showing UL 1703 listing or certified sheet stating tested to UL 1703

AC Output Voltage (☐120 V or ☐120/240 V AC)

Total Power Output (☐ kVA or ☐ kW)_____

Estimated Installation Completion Date with AHJ Approval: _____

Protection Information

Please list the available range of protection settings, which should include pickup values and time delays.

Under/Over Voltage Protection_____

Under/Over Frequency Protection_____

Under/Over Current Protection _____

Other Protection_____

System Performance and Solar Array Data

Max. Power Output (Watts): _____ Max. Power Voltage(Volts): _____

Max. Power Current (Amps): _____ Does Inverter Disconnect Properly?: _____

Miscellaneous System Design Information

Is a gate code(s) necessary for access to the property and/or community? If yes, please provide_____

Will the system utilize a supply (line) side tap per NEC 690.64(A)? _____(See SSVEC Requirements)

Will the system consist of two or more power sources (PV, Wind, Emergency generator, etc.)? _____

Is this a system expansion that only adds panels?_____

Other information contractor or engineer believe will be important, i.e., proposed exceptions _____

_____

_____

_____

_____

_____

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Installation Certification

The system has been installed in compliance with IEEE 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems" and the latest edition of the National Electric Code. The Photovoltaic System components are listed and tested by a NRTL to UL Standard 1741.

Contractor (signed): _____

Contractor License No.:_____ Class: _____ Expiration Date: _____
(You must include a copy of your ROC license.)

Name (print): _____

Mailing Address: _____

Telephone Number: _____Cell Number: _____

E-Mail Address: _____

Disconnect Switch Verification

Electrician's Name (print): _____

Electrician (signed): _____

Electrician License No.: _____ Expiration Date: _____

Telephone Number: _____ Cell Number: _____

E-Mail Address: _____

State of Arizona Registered Engineer (where required, see Note 1)

Engineer Name: _____ Business Name: _____
AZ Registration No.: _____
Business Address (Street, City, State, ZIP Code):_____
_____
Telephone Number_____Cell Number _____
E-Mail Address _____

Government Authority Having Jurisdiction (AHJ)

Check one:

___ City of Benson
___ City of Sierra Vista
___ City of Willcox
___ Cochise County
___ Graham County
___ Pima County
___ Santa Cruz County
___ Exemption (see Note 2)
___ Other, explain: _____

MISC. NOTES

1) PV/Wind Generation designs shall be prepared by and/or under the direct supervision of an AZ registrant where prescribed by the Arizona Board of Technical Registration in their Rules and Statutes. The complete Rules and Statutes may be found at the Arizona State Board of Technical Registration website: http://www.btr.state.az.us . Objections to interpretations of these Rules and Statutes will be submitted to the AZ Board of Technical Registration for resolution. SSVEC will support the following but not limited to Rules and Statutes:
(a) the Arizona Administrative Code Title 4, Chapter 30, Article 3, Section R4-30-302 Electrical Plans, A. states:

> "A registrant shall prepare and submit drawings and specifications for a new electrical system or an addition or modification to an existing electrical system provided the service and associated electrical feeders exceeds 600 amperes 120/240 volts, single phase or 225 amperes 120/208 volts, three phase and the fault current exceeds 10,000 amperes. "

(b) Arizona Revised Statutes, Title 32, Chapter 1, Article 3. Regulatory Provisions, 32-142 Public Works A., states:

> "Drawings, plans, specifications, estimates for public works of the state or a political subdivision thereof involving architecture, engineering, shall be prepared by or under the direct supervision of a registrant within the category involved."

2) The SunWatts program requires the customer/contractor obtain a construction permit and pass AHJ plans review and an AHJ installation inspection. If the customer submits an exemption from the AHJ installation inspection, the owner may at their option and expense, provide to SSVEC a certification from a State of Arizona registered professional engineer. The certification shall be stamped by the engineer and state the installation adheres to all applicable local, national and industry codes and standards. In addition, the engineer shall certify that all equipment and material are in agreement with SunWatts application and design information submitted to SSVEC, and the equipment and material are installed according to manufacturer's recommendations, SSVEC SunWatts requirements and SSVEC Service Entrance Requirements.

Additional Information

The customer must include an electrical one-line and three-line diagram of the PV installation with this agreement form. The electrical one-line diagram must show connections, bus size, circuit breakers (size & back feed rated?), fuses, etc. between main electrical components such as meter(s), main panel, main disconnect switch/breaker, PV breaker, ac utility disconnect switch, PV inverter(s), sub-panel, loads, etc. The customer must also include a detailed map that shows major cross roads and plant locations. A Site Plan must be submitted showing the arrangement of major equipment, including the electric service entrance section and utility meter, locations of PV inverter, interface equipment, and Disconnect Switch. The licensed electrical or PV contractor should be able to provide the electrical one-line diagram, three-line diagram, detailed map, and site plan, and invoice. Incomplete submittals may result in project delays.

Customer and Customer contractor/electrician agree not to tamper and/or disable any SSVEC Hold Tag or SSVEC padlock on the AC utility disconnect switch. The purpose of this switch is to protect SSVEC personnel and emergency agency personnel from dangerous back feeds on circuits they are working on. The Customer is aware that SSVEC personnel will not energize the solar system when they remove the SSVEC hold tag and padlock.

Customer agrees not to encroach on or reduce the safe work space area required by SSVEC Service Entrance Specifications around the SSVEC service meter and the ac utility disconnect switch.

Customer agrees that SSVEC equipment, in particular the ac utility disconnect switch shall remain readily accessible on a 24 hour/7 days a week basis.

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DISCLAIMER

FUTURE ACC RULES and/or RATE CHANGES MAY AFFECT 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, the customer understands, and is in agreement with, Sulphur Springs Valley Electric Cooperative, Inc. Photovoltaic System Interconnection Requirements. The customer should not operate the PV system in parallel with the utility until the governmental authority having jurisdiction or an AZ registered engineer has approved the installation and SSVEC has performed the compliance inspection and install the proper metering for the photovoltaic installation.

SSVEC WILL NOT ASSUME ANY RESPONSIBILITY FOR THE PROTECTION OF THE CUSTOMER'S PHOTOVOLTAIC SYSTEM, OR OF ANY OTHER PORTION OF THE CUSTOMER'S ELECTRICAL EQUIPMENT. THE CUSTOMER IS FULLY AND SOLELY RESPONSIBLE FOR PROTECTING THEIR EQUIPMENT IN A MANNER TO PREVENT ANY FAULTS OR OTHER DISTURBANCES FROM DAMAGING THE CUSTOMER'S EQUIPMENT.

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

Signature:_____ Date: _____

Name: (printed)_____

Sulphur Springs Valley Electric Cooperative, Inc.
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2016 Net Metering Application

☐ New Application ☐ Transfer of Existing Net Meter Account

I request to be placed on Net Metering. By signing this application I certify that my renewable system has been inspected by the local building authority, is connected to the SSVEC grid, and meets the ACC definition of a Net Metering Facility or is a current Net Metered Account.

I understand and agree to the following:

- I will receive kWh credit for any excess kWh generated by my system to be used in current and future months up to the amount of delivered kWh in each billing period. (Subject to modification by the ACC)
- Once per year in September the account will be "trued up" and I will receive only the avoided cost as approved by the ACC for excess kWh remaining "in the bank" in the true up month.
  - If my true up amount exceeds $100.00 I will receive a check, if less than $100.00 it will be a credit on the bill during the above month.
- I will have an additional meter charge for the NET meter of $2.70 per month (fee subject to adjustment by the ACC).
- If I am using a Time of Use rate and wish to remain on the Time of Use rate, I will provide at my expense a second meter socket for the Net Meter. (Contact SSVEC for requirements and options.)
- I have read the Disclaimer on Page 15 of the SunWatts Handbook.

Signature: _____

Name (printed): _____

Street Address: _____

City: _____ Zip: _____

SSVEC use only

Account Number: _____

Received by SSVEC on _____ By: _____

Sulphur Springs Valley Electric Cooperative, Inc.
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2016 Solar FAQ's

These are the most common questions asked by our member-owners about Photovoltaic systems for their homes and the SunWatts Program.

Q: What is the 2016 Renewable Incentive?
A: Under the 2016 REST plan we only have incentives for Solar Water Heating.

Q: How long will it take to get my Incentive?
A: We pay incentives once per month so it might take up to 30-60 days to get your check, depending on when we receive your request.

Q: How does SSVEC get the Incentive funds?
A: There is an ACC Environmental Surcharge (REST) collected from each bill each month and those funds are used to fund the Incentives and cover other program costs.

Q: Will my rates ever change if I put in PV? I heard something about the rates changing.
A: Contrary to what you may have been told,

- 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.

Q: How large a system can I install?
A: The ACC rules allow you to install a system that meets 125% of your load and still receive an Incentive. Contact our office to get help in determining the best and largest size system based on your consumption history.

Q: What do the systems cost?
A: The costs change too fast for SSVEC to keep up with the changes. We recommend you get multiple bids.

Q: Does SSVEC sell and install systems?
A: No, we pay just incentives for Solar Water Heating and record installations for the ACC reports.

Q: With NET Metering should I put in a system larger than I need? Then I make money!
A: Under the NET metering regulations, you get full retail credit for the kWh you produce and use yourself. Excess kWh (those that you can't consume over a years' time) is purchased by the Cooperative at our avoided cost once per year (currently $0.0258 per kWh). Also if you size your system larger than the 125% allowed, you can't participate in NET Metering, and have to negotiate a special contract with SSVEC.

Q: Can I install the PV system myself?
A: For safety considerations we require that the system be installed or certified by a licensed electrical contractor.

Q. Why can't I use batteries on the system?
A: Beginning with the 2016 program there is no longer a restriction on installing batteries.

Q: How do I determine what my Incentive will be for a solar water heater?

A: Our solar water heater Incentive is based on the efficiency of the system you purchase. The system must be tested and certified by the Solar Rating and Certification Corporation in the OG-300 guide. This will provide SSVEC with the estimated kWh savings for the first year which we will pay $0.50 per kWh saved.

Q: How much will a 2kW system lower my monthly electric bill?

A: You are billed for kWh used, not kW, so you have to do a little math to determine the value of a 2 kW system. A 2 kW fixed array (one that does not move to track the path of the sun) will, on average, produce the equivalent of 6 hours of full capacity per day. This takes into consideration that the early morning and late afternoon sun does not strike the panel as efficiently as it does at noon. A 2 kW system produces an average of 12 kWh per day. If the cost per kWh is $0.13 your bill can be lowered up to $1.56 per day or $46.80 per month. Due to internal losses in the inverter, dirt collecting on the panels, and cloudy days, most systems only produce 85% of the rated capacity (so a 2 kW system = 1.7 kW delivered). Efficiency varies by technology.

Q: Can you tell me what size system to buy?

A: The sizing and design of the system is left to the solar contractors because they are the ones who have to determine what size system will fit on your home and in your budget. SSVEC will provide a Net Zero Sizing report to determine the maximum size system that will qualify for an incentive.

Q: When the grid power goes out will my PV system keep my house operating?

A: No, the inverter, which converts the DC electricity from the panels to AC that your home can use, needs to have a "reference voltage" to operate and without utility power it turns itself off. This is also a safety feature to prevent the PV system from feeding current back into the grid and putting our line workers in danger.

Q: What about Wind?

A; Preliminary studies don't show any viable commercial grade wind in our area. If you want to put in a wind system we no longer pay incentives.

Q: I thought that 2kW (2,000 watts) of energy was a lot. What does it mean in real terms?

A: Let's look at the wattage used by a few common household items.

- Hair Dryer 1,800 watts
- Coffee Maker 900 watts
- Vacuum 630 watts
- Water Heater 4,500 watts
- 4 tons of A/C 3,690 watts

Let's keep in mind that you purchase kWh, not kW, and see what some common usages for various appliances are (per month):

- Refrigerator 75-175 kWh
- Freezer (frost free) 85-175 kWh
- Freezer (manual) 70-150 kWh
- Plasma TV 79 kWh
- LCD TV 46 kWh
- CRT TV 35 kWh
- Personal PC 45 kWh
- Coffee Maker 45 kWh

(A 2kW PV system will produce about 10-12 kWh per day)

Q: Do I have to use a contractor to install a solar water heater system?

A: No, all that we require is for you to take out a permit and have the system inspected (and approved) by the local or county building inspector.

Q: Why does green power cost more than other power?

A: Renewable energy is still not widely used and is more expensive to produce than traditional sources. As technology improves, use will increase and development costs will be driven down. Thus, access to renewable fuels should become more economically attractive.

Q: Does SSVEC Monitor my PV system?

A: No, SSVEC only sees your "excess kWh" which is the energy your system produces but you can't use the moment it is made. This goes back through the billing meter to the grid and is "captured" for net metering.

Q: So, if there is no backflow does that mean my PV system is not working?

A: Not necessarily. If you are consuming all your production (by running the A/C etc.) there is nothing left to go to the grid. You should monitor your system output from your inverter or customer owned production meter.

Sulphur Springs Valley Electric Cooperative, Inc.
A Touchstone Energy® Cooperative

SunWatts Paperwork Checklist

Please submit each one of these forms to SSVEC to have a complete packet on file before a final inspection can be scheduled (All forms are available on the SSVEC website):

Please submit all these forms in a complete packet:

- ☐ Section 2 Forms (Pages 11-13 of Customer Handbook)
- ☐ Environmental credits (Page 6 of Customer Handbook) Optional for Leased systems
- ☐ Final Invoice from contractor *(required by ACC for tracking costs)*
- ☐ W-9 (if applying for Solar Water Heater Incentive)

  W-9 form available at https://www.irs.gov/pub/irs-pdf/fw9.pdf)
- ☐ Net Metering Application (page 10 of Customer Handbook)
- ☐ Disclaimer (page 15 of Customer Handbook)
- ☐ Copy of the ROC license *(from contractor/electrician)*
- ☐ Copy of the county/city inspection final approval *(from contractor)*
- ☐ One and Three-Line Drawings *(from contractor)*

LEASED SYSTEMS:

We will need all paperwork listed above in addition to:

- ☐ Copy of the Final Lease Agreement *(from contractor)*
- ☐ REC Form (optional)

Inspections will not be scheduled until all required forms are submitted.