

# 2017 Solar FAQ's

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

**Q: What is the 2017 Renewable Incentive?**

A: Under the 2017 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 by sales agents 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 year's time) is purchased by the Cooperative at our avoided cost once per year (currently \$0.0249 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. Keep in mind that under the current Net Metering rules SSVEC acts as a very cost effective battery.

**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 under the Net Metering rules.

**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. Wind generators work best in sustained winds. Wind gusts common to our area tend to damage equipment. If you want to put in a wind system we no longer pay incentives.

**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: 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: 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 “recorded” 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.