

Calculate Your Savings

There are two things that can happen when your solar electric system is generating power:

- The power generated will first go to devices using electricity in your home. This offsets the electricity you would otherwise be purchasing, saving you 7.04¢ per kWh.
- When your system generates more power than your home uses, the excess power goes out onto the utility grid. This earns you net metering credits, which we purchase from you at our avoided cost of about 3¢ per kWh. This credit is applied to your account annually each March.

Most solar electric systems come with software that can calculate your energy savings. You simply input the cost per kWh that you pay for electricity. Our residential customers pay 7.04¢ per kWh.



Estimate Your Savings

You can estimate your savings by multiplying your total solar output by 7.04¢. This assumes you use all the energy your system generates. If most of the energy generated by your system goes onto our distribution system, your actual savings will be less.

Solar panel meter reading at the beginning of the month: _____

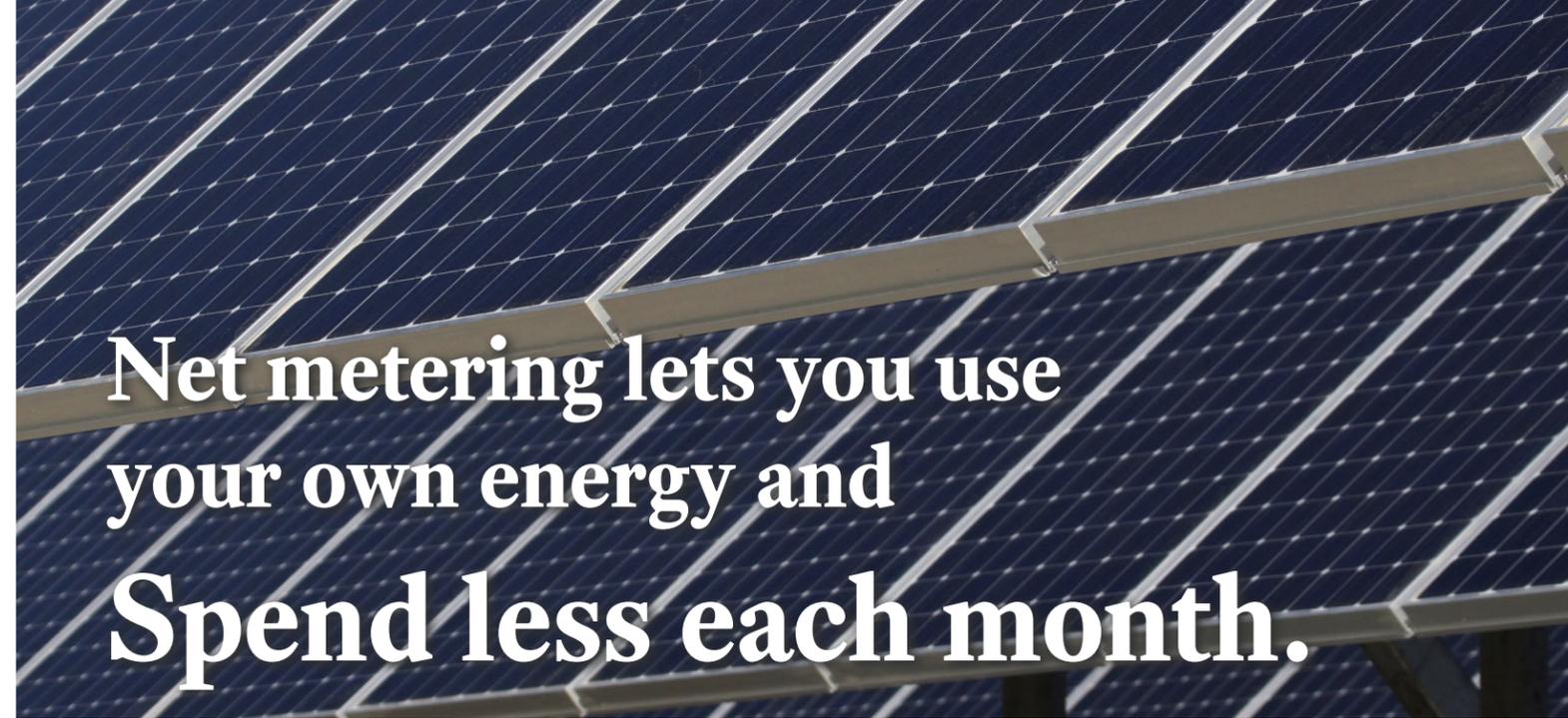
Subtract solar panel meter reading at the end of the month: _____

Equals total solar electricity generation: _____ kWh

Multiply by 7.04¢ for an estimated monthly savings of: \$ _____

Contact Us to Get Started

Contact our Energy Experts at **(503) 366-5470** or experts@crpud.org to start your project.



Net metering lets you use your own energy and Spend less each month.

Adding **solar panels** to your home generates your own electricity and creates a credit on your utility bill.

Lower Your Bill

Installing solar panels can reduce your electric bill in two ways:

- You use the energy generated by your solar system. This offsets your need to buy energy from us, saving you 7.04¢ per kilowatt hour (kWh).
- When your solar system makes more energy than you use, the excess goes into our system for other customers to use. We track the energy you send us and give you a net metering credit on your utility bill every March. The credit is calculated using our wholesale electric rate, which is about 3.5¢ per kWh.

Net Metering Credits

In 2016, the average solar customer's annual net metering credit was \$61.58. The size of your solar system, the amount of sun it receives, your home energy usage, and other factors all affect the amount of net metering credit you will receive. Our net metering system tracks energy supplied to your home from us, and the energy you send to us. This information is recorded on a bi-directional meter that we install.

What Happens During an Outage

If your home has a battery backing up your solar power, you will still have power during an outage.

Homes without battery backups for their solar systems will lose power during an outage.

updated 09/12/2017

Calculating Your Energy Usage

When you generate some of the electricity you use, your electric meter readings won't match your total home energy usage. Our meter can't measure how much electricity is generated by your solar system. It can only measure the amount of electricity sent onto our distribution system, and how much electricity our distribution system sends into your home.

Your solar photovoltaic system may come with software to measure total energy consumption. You can also use this formula to calculate it:

Solar Panel Meter Reading -
Beginning of Month

Solar Panel Meter Reading -
End of Month

(subtract from above)

Total Solar Electricity Generation

Energy Consumption
Shown on PUD Bill

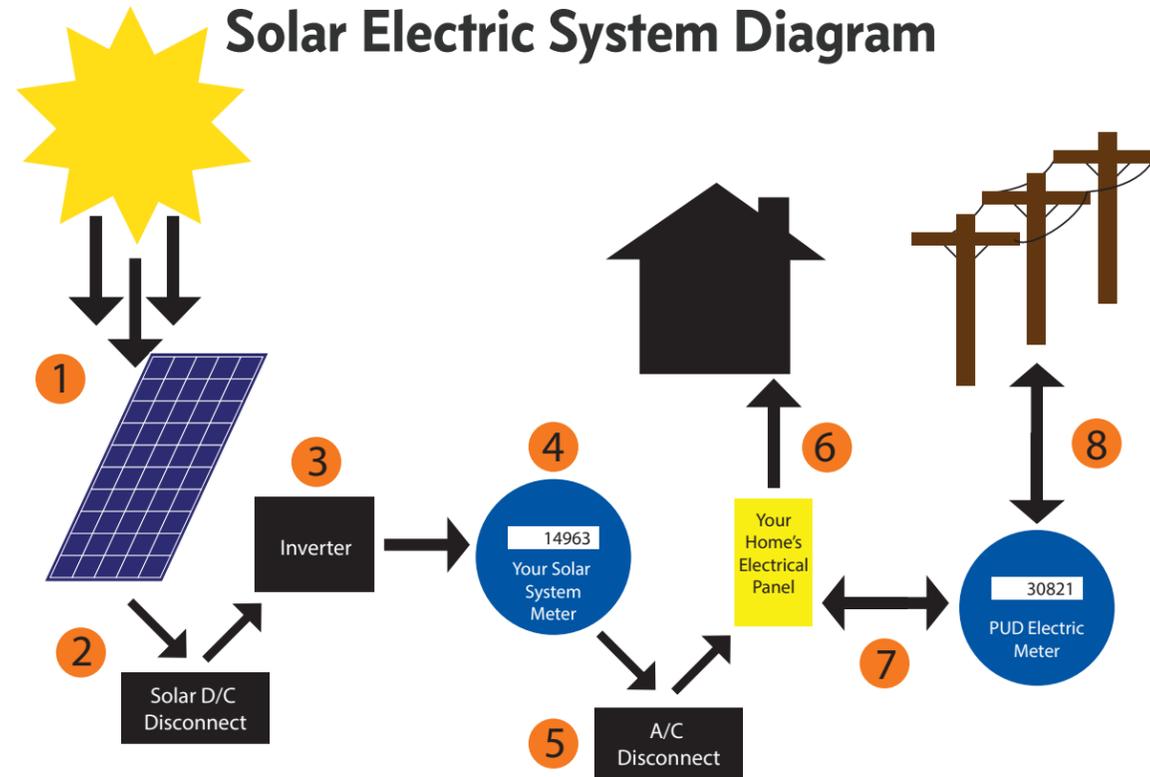
(add to total from above)

Net Metering Credit
Shown on PUD Bill

(subtract from above)

Total Monthly Energy Usage

Solar Electric System Diagram



1. Your solar panels generate electricity from the sun.

2. The electricity passes through a solar disconnect switch. The switch is used by your solar contractor's maintenance technicians so they can safely work on the solar system.

3. The electricity passes through an inverter. It is converted from direct current (DC) power (what the panels generate) to alternating current (AC) power (what is used in your home).

4. The electricity passes through the solar system's meter, which records all electricity generated by the system.

5. The electricity passes through a second disconnect switch. This one protects our linemen. It prevents

electricity from backfeeding onto our electric system during outages, when linemen are working on the lines.

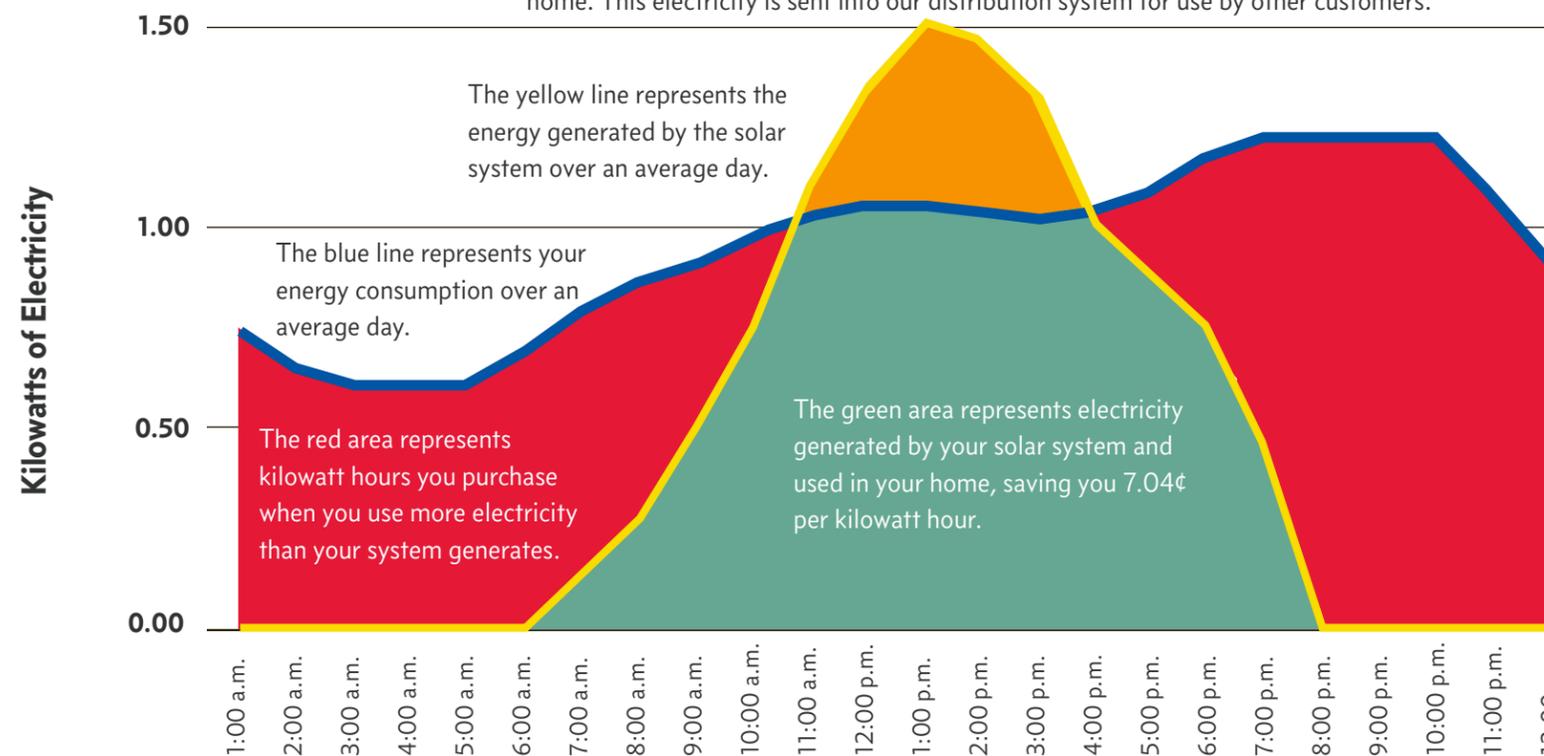
6. The electricity is sent through your home's electrical panel into your home for use. Every kWh you generate and use reduces your utility bill because you don't have to buy that power from us. For residential customers, the savings is 7.04¢ per kWh.

7. If you use more electricity than your solar system generates, you buy some electricity from us.

8. If your system generates more electricity than you use, you sell some electricity to us. The excess goes through our electric meter onto our distribution system for other customers to use. You receive a Net Metering Credit for this power every March.

2kW Solar Panel Output vs. Avg. Residential Load, Summer Months

The orange area represents energy generated by your solar system in excess of what you use at home. This electricity is sent into our distribution system for use by other customers.



Information Shown on Your Bi-Directional PUD Meter

The display on the bi-directional meter cycles through three different data readings. Much like the odometer on your car, these values accumulate from the time of the meter's installation.

PD = Peak demand, in kW

DE = kWh we have delivered to your home

RE = kWh we have received from your system

