Watt, Watt Hours, Kilowatt, Kilowatt Hours

Watt - A watt is an instantaneous measure of power use or power production. If it were a 100 watt light bulb using the power - it would be measured 100 watts right now.

Watt Hours - Power measured over time is measured in Watt Hours. A 100 watt light bulb on for one hour would use 100 watt hours of electricity.

Kilowatt - One kilowatt equals 1,000 watts. We size solar electrical systems in kilowatts or kW. A 4000 watt solar array would be called a 4 kilowatt system.

Kilowatt Hours - One kilowatt hour would = 1,000 watts over a one hour period or 1,000 watt hours. We are charged for electricity use in kilowatt hours.

Rates for Electricity Use - Rates are charged by the electrical utility provider These rates can vary widely from one jurisdiction to the next. Also certain times of day when demand is high, electricity may cost more than during periods when demand is low. For instance late afternoon in the summer demand is high because of air conditioning, while late at night when demand is low electricity is usually much less expensive.

Electric Meter - Your electrical meter keeps track of your electrical use in kilowatt hours. Usually for residential this is a low rate of 9 to 12 cents a kWh. 1,000 watt hours or one kWh would cost you 9 to 12 cents.

Time of Use (TOU) - Your bill may charge you more for high demand times, and less for low demand times. If this is the case your electrical provider has a meter and metering system.

Net Metering - If you produce more electricity than you use with a solar electricity system, you can spin your meter backwards. To do so you need a special meter that will spin forward when you use power from the grid and that spins backward when you put power back into the grid.

Net Metering Laws - Utility companies would rather sell you power than to buy your excess power from your solar system when you "spin the meter backwards". Net Metering Laws were passed to insure you that your utility must accept your excess power and give you a credit toward your utility bill.