Customer-Generation FAQ's

What Is Net Energy Metering?

"Net energy metering" refers to an interconnected customer generation facilities with a meter that reads the "net" difference between the customer's electricity generation and consumption. Utility bi-directional meters are able to spin or produce meter reads in both directions according to whether power is being consumed or generated.

Are there incentives available?

Yes, there are or have historically been incentives available. These can include:

Federal Tax Incentives – 30% federal income tax credit for the cost of solar technology installations prior to December 31, 2019 with the percentage declining until the ending time of December 31, 2021. Contact the U.S. Internal Revenue Service for further information.

Washington State Sales Tax Exemption - Solar electric systems may qualify for tax exemptions. Contact the WA Department of Revenue to find out program expiration dates and complete an Application for Sales Tax Refund on Purchases & Installation of Qualified Renewable Energy Equipment.

Renewable Energy Production Incentives (Washington State) – In July 2017, a new Washington State Renewable Energy System Incentive Program was adopted. Projects with executed Net Energy Metering Agreements with Klickitat PUD maybe eligible to be certified by the Washington State University's Energy Office maybe eligible for incentives for eight fiscal years, or until the cumulative incentive reaches 50 percent of the total system price, whichever occurs first. Program limitations per Washington law will apply. The State programs are not a Klickitat PUD developed program and Klickitat PUD participates as a pass-through and participation is voluntary.

***Program updates 10/09/2018: New deadlines for program participation are as follows:**
Final electrical inspection date must be no later than January 31, 2019 *and* applications to WSU must be submitted by 5:00 p.m. February 14, 2019. Anything after those dates will be placed on a wait list and will be processed only if funds are available.

To inquire about the Renewable Energy System Cost Recovery Certification contact:

Washington State University Energy Program at:

Website: http://www.energy.wsu.edu/RenewableEnergySystemIncentiveProgram.aspx

Email: solarprogram@energy.wsu.edu
Phone: 360-956-2200 or 888-363-7289

What happens when my solar panels generate more electricity than I use during daylight hours?

Most grid-tied photovoltaic (PV) solar systems today have no way of storing the electricity generated by their rooftop solar energy systems to use later. That means when your solar panels produce electricity, it goes first to powering the lights, appliances and electronics in your home.

If your generating facility produces less electricity than you need or if you need energy when the sun isn't shining at all, that power is automatically supplied from the utility grid.

If your generating facility produces more electricity than you need, the extra electricity gets delivered back to the utility grid.

How do I power my home when the sun isn't shining?

As a KPUD customer you will use electricity supplied by KPUD from the grid when the generating facility is not generating enough to power the home's needs.

What is solar electricity?

Solar electricity is produced when sunlight reacts directly with semiconductor materials in solar electric cells, a process that frees electrons and creates an electrical current. Electricity is produced whenever the sun is shining, but more is produced when sunlight is intense (like on a clear sunny day) and direct (when the sun's rays are perpendicular to the solar cells).

What equipment is needed for solar?

A solar electric system consists of basic components for generating and delivering electricity to the home or business. There are two fundamental types of solar electric systems: independent, or "off grid" systems, and interconnected, or "grid-tied" systems. Only grid-tied systems are covered here since most customers will choose to generate electricity in parallel with Klickitat PUD's distribution system. These grid-tied systems are referred to as "net energy metered" systems

How much does a solar electric system cost?

Cost depends on a number of factors, but for conventional systems mounted on a sloped roof, cost is fairly proportional to size ranging from $2 – 5 per watt of capacity installed. Thus, a typical 7,000 watt or 7 kilowatt (kW) system would cost $14,000 – $35,000 installed. Other cost factors relate to design complexity, system configuration, equipment options, and contractor expertise. Systems that integrate solar cells into roofing or glazing materials or require special equipment to install cost more. Local solar electric providers can provide you with estimates or bids.

Do I have a good site for solar?

To get the most benefit from a system, a well-designed solar electric system has clear and unobstructed access to the sun for most of the day, throughout the year. You can make an initial assessment yourself, and if the site looks promising, your solar electric provider has the tools to trace the sun's path at your site and offer a more complete assessment.

Is your site free from shade by trees, roof lines, nearby buildings, or other obstructions in the surrounding landscape? Remember that an area that is unshaded during one part of the day may be shaded during another. Even small objects, e.g. a utility or flagpole, can result in significant shade losses. As little as 10 percent of shade on a module can reduce output by as much as 80 percent.

Other factors aside, the best orientation (direction) for a solar electric system is south, where the sun spends most of its time, with the solar modules tilted between 20 and 60 degrees. Roofs that face east or west may be acceptable but generate about 20% less electricity.

If a rooftop can't be used, solar modules can also be mounted on a separate structure, pole or the ground, either on a fixed or "tracking" mount that follows the sun to orient the modules for maximum performance.

Who sells and installs solar electric systems?

In some locations, finding a solar electric provider can be as simple as picking up the telephone directory and looking under "Solar Energy Equipment and Systems - Dealers." Be aware, however, that many of those listings are for solar water-heating companies. They may not be experienced in solar electric system design or installation. Similarly, many electrical contractors, although proficient in most electrical work, may not have expertise in solar electricity or residential roof-mounting techniques. Unless you are skilled in solar electric installation, you should consider hiring a reputable professional contractor with experience in installing solar electric systems.

What permits are required?

Klickitat PUD customers will need an electrical permit from the Washington State Labor & Industries to meet Klickitat PUD's requirements for net energy metering. An electrical permit is required to qualify for Washington State's production incentive program. You may also need a building or land use permit depending on the size and complexity of the installation.

If you live in a community in which a homeowners association requires approval for solar installations, you or your solar electric provider may need to submit additional plans.

Typically, your solar electric provider will take care of all required permits and include the cost into the overall system price. However, in some cases, your solar electric provider may not know how much time or money will be involved in obtaining required permits. If so, this task may be priced on a time-and-materials basis, particularly if additional drawings or calculations must be provided to the permitting agency. In any case, make sure the permitting costs and responsibilities are addressed at the start with your solar electric provider.