



Q & A About Washington State's Net Metering Law

WHAT IS NET METERING?

Net metering measures the difference between the electricity you buy from your utility and the electricity you produce using your own generating equipment. Your electric meter keeps track of this "net" difference as you generate electricity and take electricity from the electric grid.

AM I ELIGIBLE FOR NET METERING?

In Washington, any residential or small commercial electricity customer who generates at least some of their electricity is potentially eligible for net metering. Your generating system must be powered by solar, hydro, wind, energy, or some combination of these resources, or it could also be a fuel cell. In any case, it must not exceed 25 kilowatts of peak power output. Your utility should be able to tell you if your electric account is the right type.

WHAT ARE THE TECHNICAL REQUIREMENTS FOR NET METERING?

A net metering system used by a home owner or business must include at the customer's own expense, all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by the national electrical code, national electrical safety code, the institute of electrical and electronics engineers, and underwriters laboratories.

WHAT ARE THE BENEFITS OF NET METERING TO ME?

First, net metering allows you to get full retail value for most, if not all, of the electricity you produce. It does this by permitting you to put any excess electricity you generate back into the electric grid and retrieve it later, free of charge, for your use. Your excess electricity now offsets electricity you would otherwise have to buy at full retail prices. Getting this high retail value for your excess electricity makes owning your own generating system more cost-effective.

Secondly, because net metering permits you to effectively "store" your excess electricity on the electric grid, you can also now size your system larger and offset more of your annual electricity needs. Without net metering to give value to this "excess" electricity, you might otherwise make your generating system smaller to minimize the amount of time your system produces electricity in excess of your immediate needs. Unfortunately, a smaller system also means that you would produce less electricity when you did need it. Without net metering, your only alternative would be to purchase some additional device to store this excess power for your later use, such as adding batteries to your system. While having your own electricity storage would mean that you could supply your own power even if there were a "black-out" on the electrical grid, such storage is expensive.

HOW DOES NET METERING "STORE" MY ELECTRICITY?

Net metering allows you to use the electric grid, and the company that otherwise supplies you with electricity, as if it were a **big, free battery**. There will be times when your electricity needs are less than the amount of electricity your generating system is providing at the moment. Your generating system puts the excess electricity you do not need back into the electric grid to be used by others and allows you to take this same amount of electricity back out of the electric grid. Net metering permits you to "bank" your excess electricity and then withdraw it from the grid free for your use later that day, or even months later. When you withdraw your "banked" electricity, you save not having to buy this amount of electricity from your electric service provider.

For example, on a sunny summer day when no one is home, a photovoltaic (solar) generating system might produce more electricity than needed at the time. Conversely, in the evening, when everyone is home, electricity needs would exceed the output of the system.

Most electric meters measure electricity moving both into and out of your home or business. Generally, we are taking electricity from the electric grid for our needs. The meter runs "forward" as it counts up the kilowatt hours we have consumed. But if you generate electricity with a photovoltaic or wind generating system and you make more electricity than you need, net metering legally allows

this excess electricity to run the other way through the meter and back into the electric grid. Just like running your car in reverse, the meter now turns backwards.

Net metering, thus, might result in your meter turning backwards at mid-day when the sun is the strongest and running forwards at night when a solar system stops operating. If you put 10 kilowatt-hours (kWh) of excess electricity into the electric grid during the day, net metering allows you to take 10 kWh of electricity out of the grid later and pay nothing for them. In effect, you are allowed to "bank" these 10 kWh and use them later to offset your need to buy 10 kWh. Thus, you can get full retail value for the electricity you generate.

HOW EXACTLY DOES NET METERING WORK?

Specifically, net metering is a special metering and billing arrangement between you and your utility or, as they are now called, your "electric service provider" (ESP). The electric meter on your home or business normally measures the amount of electricity that your ESP sends into your home or business. Each month the meter is read to determine how much electricity you used and for which you are billed.

A net metering arrangement allows you to first use any electricity your own generating system produces to offset the amount of electricity you would have to buy from your ESP, and, secondly, to put any excess electricity you produce, but cannot use, back into the electrical grid. When this excess electricity flows out of your home or business into the grid, it turns your meter backwards. Under net metering, this extra electricity is "netted" or subtracted from the times when you draw electricity from the electrical grid and your meter runs forwards

WHO OFFERS NET METERING?

Under Washington law, all public and private utilities, including cooperatives, that operated must offer net metering.

HOW WILL I BE BILLED UNDER NET METERING?

Just as they do presently, your utility will continue to read your meter monthly. However, with net metering, they will not send you a monthly bill. Instead, they will send you a monthly statement showing the net amount of electricity you consumed that month or the net amount generated and put into the electric grid. If you ran the meter backwards more than forwards, you would be a net generator for that month. If you took more electricity from the electric grid than you fed back, you would be a net consumer.

your utility will bill you for only the amount of **net** electricity consumed over the last twelve months. If instead you were a net generator over the past year, the utility is not required to buy any net generation. However, some utilities might buy your net generation, or even arrange a more favorable contract that pays you a premium above the retail rate for your "green" environmentally friendly power.

HOW DO I SIGN UP FOR NET METERING?

It's simple. Just contact your utility and ask about their net metering agreement. If you have a large utility company, they may be a bit slow. Some large utilities in Washington still do not have their policies in place. You may be able to help them develop one by installing even a small solar electric system

CAN I USE MY CURRENT ELECTRIC METER FOR NET METERING?

Generally, yes. Most residential and small commercial customers have simple meters that are already capable of turning in both directions (bi-directional). Some utilities may want two meters for net metering, one meter to measure all electricity flowing into your home or business and one measuring the excess you are putting into the electric grid. If a utility wants two, one-way (uni-directional) meters, by law they, not you, must pay for them. You are only responsible for having a single, bi-directional meter, the type most residential and small commercial customers already have.

Common Misconceptions About Net Metering

1. If my generating system produces more electricity than I need, my electric service provider must buy it from me.

Wrong: Utilities may, but are not required to, purchase any excess electricity you produce at the end of each year of your net metering agreement. State law assures that your utility does not have to buy your net generation. However, some utilities in Washington, especially those specializing in selling "green" electricity, may be willing to buy your excess solar or wind electricity for resale to their other customers.

2. My electric service provider will pay me full retail rates for my excess electricity.

Wrong: If they are willing to buy this "net" annual generation, they do not have to pay you full retail prices for it. While the actual rate paid would be up to the ESP, it would likely be less than retail and closer to "wholesale" rates, which are much lower.

3. I will have to spend hundreds of dollars on special meters, inspections or fees to get my system hooked up to the electric grid.

Wrong: You are only responsible for having a simple, bi-directional meter, the type you probably already have. If your generating system meets national safety and performance standards, you cannot be charged for additional tests, certification or fees.

4. The kilowatt-hours of electricity I might still need to buy from an ESP will cost me more than before I became a net metered customer.

Wrong: Your ESP cannot charge you anything extra for being a net metered customer and no charges can be imposed on the electricity you generate.

Adapted to Washington by Mike Nelson, WSU Energy Program, from a California Energy Commission factsheet

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For you masochists, here is the law.

80.60.005 Findings.

80.60.010 Definitions.

80.60.020 Available on first-come, first-served basis -- Interconnected metering systems allowed -- Charges to customer-generator.

80.60.030 Net energy measurement -- Required calculation -- Unused credit.

1. Safety, power quality, and interconnection requirements -- Customer-generator's expense -- Commission may adopt additional requirements.

RCW 80.60.005

Findings.

The legislature finds that it is in the public interest to:

- (1) Encourage private investment in renewable energy resources;
- (2) Stimulate the economic growth of this state; and
- (3) Enhance the continued diversification of the energy resources used in this state.

RCW 80.60.010

Definitions.

The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.

- (1) "Commission" means the utilities and transportation commission.
- (2) "Customer-generator" means a user of a **net metering** system.
- (3) "Electrical company" means a company owned by investors that meets the definition of [RCW 80.04.010](#).
- (4) "Electric cooperative" means a cooperative or association organized under chapter 23.86 or 24.06 RCW.
- (5) "Electric utility" means any electrical company, public utility district, irrigation district, port district, electric cooperative, or municipal electric utility that is engaged in the business of distributing electricity to retail electric customers in the state.
- (6) "Irrigation district" means an irrigation district under [chapter 87.03 RCW](#).
- (7) "Municipal electric utility" means a city or town that owns or operates an electric utility authorized by [chapter 35.92 RCW](#).
- (8) "**Net metering**" means measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer-generator that is fed back to the electric utility over the applicable billing period.
- (9) "**Net metering** system" means a fuel cell or a facility for the production of electrical energy that:
 - (a) Uses as its fuel either solar, wind, or hydropower;
 - (b) Has a generating capacity of not more than twenty-five kilowatts;
 - (c) Is located on the customer-generator's premises;
 - (d) Operates in parallel with the electric utility's transmission and distribution facilities; and
 - (e) Is intended primarily to offset part or all of the customer-generator's requirements for electricity.
- (10) "Port district" means a port district within which an industrial development district has been established as authorized by Title 53 RCW.

(11) "Public utility district" means a district authorized by chapter 54.04 RCW.

RCW 80.60.020

Available on first-come, first-served basis -- Interconnected metering systems allowed -- Charges to customer-generator.

An electric utility:

(1) Shall offer to make **net metering** available to eligible customers-generators on a first-come, first-served basis until the cumulative generating capacity of **net metering** systems equals 0.1 percent of the utility's peak demand during 1996, of which not less than 0.05 percent shall be attributable to **net metering** systems that use as its fuel either solar, wind, or hydropower;

(2) Shall allow **net metering** systems to be interconnected using a standard kilowatt-hour meter capable of registering the flow of electricity in two directions, unless the commission, in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, determines, after appropriate notice and opportunity for comment:

(a) That the use of additional metering equipment to monitor the flow of electricity in each direction is necessary and appropriate for the interconnection of **net metering** systems, after taking into account the benefits and costs of purchasing and installing additional metering equipment; and

(b) How the cost of purchasing and installing an additional meter is to be allocated between the customer-generator and the utility;

(3) Shall charge the customer-generator a minimum monthly fee that is the same as other customers of the electric utility in the same rate class, but shall not charge the customer-generator any additional standby, capacity, interconnection, or other fee or charge unless the commission, in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, determines, after appropriate notice and opportunity for comment that:

(a) The electric utility will incur direct costs associated with interconnecting or administering **net metering** systems that exceed any offsetting benefits associated with these systems; and

(b) Public policy is best served by imposing these costs on the customer-generator rather than allocating these costs among the utility's entire customer base.

RCW 80.60.040

Safety, power quality, and interconnection requirements -- Customer-generator's expense -- Commission may adopt additional requirements.

(1) A **net metering** system used by a customer-generator shall include, at the customer-generator's own expense, all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by the national electrical code, national electrical safety code, the institute of electrical and electronics engineers, and underwriters laboratories.

(2) The commission, in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, after appropriate notice and opportunity for comment, may adopt by regulation additional safety, power quality, and interconnection requirements for customer-generators that the commission or governing body determines are necessary to protect public safety and system reliability.

(3) An electric utility may not require a customer-generator whose **net metering** system meets the standards in subsections (1) and (2) of this section to comply with additional safety or performance standards, perform or pay for additional tests, or purchase additional liability insurance. However, an electric utility shall not be liable directly or indirectly for permitting or continuing to allow an attachment of a **net metering** system, or for the acts or omissions of the customer-generator that cause loss or injury, including death, to any third party.