

Virtual Net Metering in Ashland

Conservation Corner - June 2019

What is it?

Virtual Net Metering (VNM) is a City of Ashland policy which enables energy produced at one electric meter, to be credited to another meter within the Ashland electric utility. The policy creates new options for construction of community solar systems and off-site solar generation. The Virtual Net Metering policy increases access to solar for all citizens, but it is especially enabling for community solar projects, those who have a poor solar resource, and for those who rent.

How does it work?

VNM systems are privately owned and are meant to be developed in much the same way as conventional solar. The primary difference is that City of Ashland facilitates the billing mechanism which transfers kWh credits from the generator to the recipient. Ashland does not define the relationship between the project developer/owner, project site owner, and energy recipient. This enables stakeholders to pursue a variety of ownership models, including direct ownership, group ownership, long term PPAs, and subscription models, to name a few possibilities.

What's the benefit of off-site solar?

Ashland has a quality solar resource, but rugged terrain and a mature urban tree canopy mean that only about 50% of buildings are well suited to solar energy systems. VNM allows solar systems to be installed anywhere within the City's electric grid, which enables systems to be sized and sited for optimal performance and improved investment. As an added benefit, off-site solar requires no changes to the building where the energy is used, which means no retrofit costs and no visual changes due to panels.

Where is Virtual Net Metering being used?

In one case, Southern Oregon University's Recreation Storage Building was designed for solar (with a south-facing roof and optimal tilt). It's 24 kW solar system is perfectly situated, but the building it is on consumes very little energy. The university is using virtual net metering to transfer the solar production from the storage building to the Facilities Administration building, which has a need for that energy.

Other uses of VNM include:

- An owner of several local businesses who used VNM to build a centralized solar system to serve all of their accounts.
- A family-owned VNM system with the ability of crediting energy to multiple family electric accounts.

Who can benefit from Virtual Net Metering?

The VNM policy creates new options to overcome some well known barriers to solar. For example, renters can invest in their own renewable energy system and reap the benefits without needing the building owner's permission and there's no need to make any physical changes to the building. Community solar (and other joint-ownership) projects are more feasible and less costly, now that there is an established mechanism to share the energy produced. Owners of older buildings with high retrofit costs or who want to maintain a certain look and feel can install solar without modifying their building. Lenders and project owners can develop solar in a protected, off-site environment, which helps to protect the asset and may facilitate transfer of ownership (for example, a share in a jointly owned system could be easily transferred to someone else).

Nuts and bolts

- Solar incentives are unchanged; the City of Ashland offers \$0.50/Watt up to \$7,500 for qualifying systems.
- Each "Generator-Account" must fill out an allocation table (updated once per year) describing how and where the energy will be distributed (on a percent basis).
- Each "Benefitting Account" receives a kWh credit for each kWh produced by the Generator-Account on their behalf .
- This program is available only within the Ashland Municipal Electric Utility.
- Ashland has 375 net metered systems in town of approximately 10,300 households (the 2017 population was 20,700).

The VNM policy is one of many identified actions in the Ashland Climate and Energy Action Plan, which aims to reduce Ashland's contribution to global carbon pollution and prepare the city for climate change impacts. Ashland's Climate Vision for 2050 is to be a resilient community that has zero net greenhouse gas emissions, embraces equity, protects healthy ecosystems, and creates opportunities for future generations. Read more about City of Ashland's Climate and Energy Action Plan at www.ashland.or.us/climateplan

For additional information please contact:

Stu Green, Climate and Energy Analyst, City of Ashland

stu.green@ashland.or.us

541-552-2085

or

Larry Giardina, Conservation Analyst, City of Ashland

larry.giardina@ashland.or.us

541-552-2065