

- Arizona will compensate small-scale photovoltaic systems at the five-year-average utility-scale power purchase agreement (PPA) price, and only for 10 years;
- Indiana will only offer net metering to systems connected before 2022; and
- Maine will phase down the value of a net metering credit by 10% each year starting in 2018

However, many states with policy objectives to increase solar penetration have no plans to transition away from retail net metering.



RETAIL VS. SUB-RETAIL OR WHOLESALE RATE

There is fervent and ongoing debate between clean energy companies and utilities about the rate that distributed generation customers should be compensated at for their net power. The critique on the **retail rate** is that it is a bundled cost of energy generation, transmission and distribution. The argument is that the retail rate allows residents with solar energy to pay less for grid infrastructure operation and maintenance. Customers who have not equipped their homes with solar are therefore indirectly subsidizing customers who financially benefit from net metering. There is also data to suggest that **solar customers are more affluent than the average ratepayer**, making this subsidy a regressive policy outcome and therefore inherently anti-free market. However, to stimulate growth in the solar sector, especially when solar penetration is limited, the retail rate is often the necessary starting point to make the programs work for households.

As a policy solution to this contentious and lingering issue, CRES believes that in the long run a rate closer to the **wholesale rate** is desirable. Such a rate would treat homeowners and communities generating power more like other distributed generators, but also compensate for the use of private capital and the benefits of distributed energy generation.

To combat lost revenues from retail rate net metering, utilities have sought to increase the **fixed charge** portion of customer bills. These fees hit customers who use the least energy the hardest—primarily lower-income households and seniors on fixed incomes.

A recent trend in several states has been the **transition to a net billing** or “value of solar” tariff structure. **Net billing** allows customers to generate electricity for on-site or personal use and sell any excess energy to the utility company at wholesale or “avoided cost” prices, while purchasing power at the retail rate. As a result, the economics of projects change and the payback period is longer than under traditional net metering. For example, the credited rate is, estimated between **40-60 percent lower** than the retail rate.

EFFICIENCY AND RELIABILITY VS. PERSONAL INDEPENDENCE

Distributed generation offers ratepayers greater control over their electricity costs. This principle should be encouraged, under the idea that **“customers have a right to reduce their consumption of grid-supplied electricity with energy efficiency”**. However, concerns for efficiency and reliability should not be ignored in state policy. For example, while rooftop solar projects take advantage of “idle” private property for distributed power generation they are usually more expensive per kW hour compared to utility scale systems, because there are economies of scale. While there are benefits to a decentralized energy grid funded by private investment it is **not the most cost-effective way** to transition to a and ever-expanding renewable energy grid. Some states subsidize more than 100 percent of costs, which raises concerns for fiscal responsibility and longevity for the policies.

Recommendation

There is no single best approach to net metering. CRES Forum supports the rights of all customers to make energy choices in their best interest and supports states’ rights to establish policy to assure resiliency, reliability, and affordability in the energy system. As policy-makers revisit state net metering policies, CRES Forum recommends the following.

- **Put people first.** Policymakers should oppose any legislation or regulations that limit customers who want to generate their own energy, such as barriers to deployment or renewable energy caps/net metering capacity limits. Customers should be fairly compensated for energy they generate and supply to the grid. Furthermore, policies must protect private property rights and limit financial risks.
- **Avoid barriers to new technology.** The structure of a net metering policy should be technology neutral and should therefore avoid barriers to future technologies.
- **Evaluate the cases for retail reimbursement vs. net billing.** In many cases, traditional net metering with customer reimbursement at the full retail rate is appropriate. However, CRES Forum supports net billing (or VOST rates) that credit the customer at the value of the energy they have generated, separate from distribution and transmission charges. This approach addresses the economic concerns of crediting customers at the retail rate. Shifting to a net billing structure may help limit the need for increased fixed charges.

Ultimately, CRES Forum supports a state-by-state policy discussion as solar and other renewable energy technologies mature and get dispatched to the grid.

