WHAT IS NET METERING?

Traditionally, electricity purchases have been a one-way matter, going from generators through the grid and ending with the consumer. Recent years have seen a rapid increase in electricity generated by consumers themselves. So-called “behind-the-meter” generation can take many forms. The most well-known is rooftop solar photovoltaics (PV), but other sources of generation like combined-heat-and-power are also popular.

Most individuals and businesses that self-generate also rely on the broader electric grid to meet some of their electric demand. The amount of electricity generated from solar panels, for example, varies quite a bit throughout the day. Many residents with rooftop solar generate more electricity than they use during some times of the day, while at other times they need to rely on power from the grid.

“Net metering” or “net energy metering” is a program whereby self-generating consumers are able to sell their excess electricity back to the grid, often receiving credit against their other electricity use. More than 40 states operate some form of net metering program. The details of these programs (such as the rate of compensation for excess electricity) vary considerably between states and utilities.

Net metering can provide benefits to the grid, including cost savings from avoided power purchases, avoided capacity needs, avoided construction costs and all-around lowering of capital expenses. Behind-the-meter generation also provides a form of indirect competition, which can increase the efficiency of electric systems in regulated markets and lower prices overall.

Not all net metering programs are well designed. While net metering can provide system benefits to the grid—especially at low penetration levels—at higher penetration the ratio of costs to benefits may change. And even where net metering does provide net benefits, the program may not be the most efficient way to achieve these benefits. As customer-sited resources grow in popularity, states should explore market-based policies that reflect grid dynamics more accurately than net metering.

WHO DECIDES: STATES VS. THE FEDERAL GOVERNMENT

Net metering programs have traditionally been a matter of state jurisdiction. Recently, however, there has been an effort to get the Federal Energy Regulatory Commission (FERC) to usurp state jurisdiction over behind-the-meter electric sales. On April 14, 2020, the New England Ratepayers Association (NERA) submitted a Petition for Declaratory Order requesting that the Commission claim exclusive federal jurisdiction over wholesale energy sales from generation sources located on the customer side of the retail meter and order that the rates for such sales be priced in accordance with the Public Utility Regulatory Policies Act of 1978 (PURPA) or the Federal Power Act (FPA), as applicable.

If the petition is granted, it would represent a sweeping increase in federal oversight of matters traditionally left to the states. NERA is asking FERC to assert jurisdiction and provide a set rate, across the country, for every minute or hour a customer exports electricity back onto the distribution grid—even if, over the course of a customer’s billing period, they consume more electricity from the distribution utility.
New behind-the-meter technologies are developing rapidly. Recent years have seen the emergence of technologies like advanced inverters and non-wires alternatives, and state regulatory initiatives on distribution system planning. A federal takeover in this area would require FERC to approve investments in distribution system, set retail rates to recover those costs and manage the operation of the distribution system, all of which is inconsistent with the Federal Power Act.

States are better positioned to judge the relative costs and benefits of net metering and are doing so. State policy reflects the interests and needs of the given state, which varies across the country. Should FERC assert jurisdiction over NEM programs, it would greatly harm and limit the ability of states to develop and design innovative programs.

The NERA petition is really a means to protect utilities and utility-scale projects from competition. The growth of net metering programs across the country reflects the desire of retail customers for more choice than what is otherwise provided by their local monopoly. Especially in states without retail choice, net metering gives customers an opportunity to choose market-based innovation of products and services, including solar PV. Solar panel costs continue to decline, as traditional technology curves would suggest. Storage costs are following the same, if not a faster cost decline curve. This all means that customers will see even more opportunity for choice and options from the market.

Depending on how they are designed, a net metering program may involve some level of cross-subsidy between electric customers. But this is no reason for the federal government to exert exclusive jurisdiction over all behind-the-meter sales. Numerous causes of cross-subsidies exist across electric customer classes, which states address by adjusting rates to reflect costs and benefits according to dozens of variables, including customer generation. The degree of cross-subsidy, or whether one even exists, varies by local utility and is better handled by states than the federal government.

Should FERC agree with NERA’s position, it would have a significant impact on our system of federalism. A growing number of states are already concerned with what they view as FERC infringement in state decision-making and policy development. As a result, some states have begun to lose faith in wholesale markets. States such as Maryland, New Jersey and Connecticut have all announced their intentions to investigate leaving wholesale capacity markets due to FERC’s intrusion into state authority. Were the federal government to preempt state policies in this area, it may result in a greater number of states looking to exit wholesale organized markets entirely.

**CONTACT US**

For more information on this subject, contact the R Street Institute, 1212 New York Ave. NW, Washington, DC 20005, 202-525-5717.

Josiah Neeley  
Director, Texas  
Resident Senior Fellow, Energy  
jneeley@rstreet.org

Chris Villareal  
Associate Fellow  
cvillarreal@rstreet.org