



May 6, 2026

To: The Honorable Ken King, Chair, House Committee on State Affairs; The Honorable Ana Hernandez, Vice-Chair, House Committee on State Affairs; Members, House Committee on State Affairs

From: Kaiba White, Public Citizen's Texas office, kwhite@citizen.org

Microgrids and Distributed Energy Resources

Public Citizen appreciated the opportunity to provide information and policy recommendations relevant to the deployment of distributed energy resources

Distributed energy resources offer unique opportunity to provide kilowatt-hours to the electric grid, alleviate transmission needs, and improve grid and community resilience. Distributed energy resources can be deployed more quickly than utility scale resources or transmission infrastructure and thus offer an opportunity to avoid more costly transmission projects. Yet, even as Texas has excelled at deploying utility-scale resources, distributed energy resource deployment lags far behind. Key policy changes could unlock distributed energy potential in Texas.

Fair Compensation for Distributed Energy Resources

Utilities across Texas systematically discourage the use of distributed energy resources by establishing rate policies that dramatically undervalue energy provided to the grid. Texas has never had a statewide net metering or other distributed energy resource compensation policy beyond an ill-defined requirement to pay avoided cost. Thus, utilities have had broad latitude to assign avoided cost values with little or no analysis to support the validity of those values.

In 2024, Public Citizen released a study of rates and fees specific to residential customers with customer-sited distributed energy generation at all non-competitive Texas electric utilities to inform policymakers.¹ This scope included all 141 municipal and cooperative electric utilities in Texas, and monopoly investor-owned electric utilities that serve Texas

¹ <https://www.citizen.org/article/eclipsing-progress/>

customers outside of ERCOT. This research complemented an assessment by Solar United Neighbors (SUN) of distributed energy compensation policies offered by retail electric providers that serve customers in ERCOT's competitive markets. We found that only 28 of the utilities offered net metering or a distributed generation rate that was comparable. The average avoided cost rate paid for energy sent to the grid from distributed energy systems was 43% of the retail rate charged for consumption from the grid. The avoided cost rates ranged down to just 17% of the retail rate. In the two years since we released this study, we have continued to track distributed generation compensation policies and have seen additional degradation of the value provided to customers through rates. Some utilities that offered net metering when we first did this research have now replaced those policies with lower avoided cost rates.

These low distributed energy compensation rates play a significant role in slowing the deployment of these resources by lengthening the pay-back time for these resources. A customer's energy usage patterns determine how sensitive they are to low compensation rates. Customers who are able to self-consume the energy they produce when it is produced are insulated from low compensation rates. They are, however, impacted by additional monthly fees and other discriminatory charges that at least 35 of the utilities levy on customers with distributed energy resources. Customers who self-consume less of the energy they produce at the moment it is produced – which is often the case for those who work outside of the home during the day – are significantly impacted by low compensation rates. Rate policies at some utilities are so unfavorable that a customer who exports 50 percent of the energy produced from their distributed solar energy system wouldn't pay back their investment for longer than 25 years (which is the typical warranty for solar panels). This is a clear discouragement to investing in distributed energy resources.

Not only are the distributed energy tariffs low, but the values assigned are often based on faulty assumptions and little or no expert analysis. Electric cooperatives and municipally owned electric utilities are often able to get rate changes approved by their boards of directors without substantial analysis or customer engagement. Avoided cost is frequently defined as the average cost of wholesale electricity for the utility. The monopoly vertically integrated utilities that must get rates approved by the Public Utility Commission of Texas (PUCT) aren't held to a higher standard either.

For example, the PUCT recently overturned a recommendation from an administrative law judge (ALJ) in the El Paso Electric rate case and approved a discriminatory demand charge for residential customers with distributed energy resources. The ALJ recommended against this demand charge because El Paso Electric provided little evidence to support inaccurate assumptions about the costs and benefits of distributed energy generation to the utility.

Also, demand charges are common for commercial customers, but are generally viewed as inappropriate for residential customers, who are less sophisticated and may have less ability to adjust demand patterns – especially for those who are at home during the day, including many retirees and parents with small children.

The situation in the competitive markets isn't any better. There used to be several retail electric providers (REPs) that provided rate packages that included full net metering. That changed several years ago and there are now no full net metering options available in the competitive market. It is our understanding that this is in large part because of the REPs are charged by the transmission and distribution utilities (TDUs) in a way that doesn't accurately value the avoided costs provided by distributed generation. This is a problem that could be remedied by the PUCT, but hasn't been.

Instead of haphazardly guessing at the value of distributed energy resources, utilities should be required to conduct a thorough analysis of the costs and benefits, based on real data. The National Standard Practice Manual (NSPM) for Benefit-Cost Analysis of Distributed Energy Resources² provides a framework to do just that. The NSPM was developed by leading experts on distributed energy resource valuation and has been utilized in assessing the value of distributed energy resources in over a dozen jurisdictions. Factors that the NSPM framework identifies that apply to utilities and the grid include:

- Generation benefits: avoided costs of energy generation, capacity, environmental compliance, and ancillary services and reduced market prices
- Transmission benefits: conserving transmission capacity and avoiding transmission system losses.
- Distribution system benefits: conserving distribution system capacity, avoiding distribution system losses, reducing distribution system operations and maintenance costs, and maintaining distribution system voltage.
- Other benefits, including improved reliability and resilience, reduced risks, and reduced bad debt and disconnections.

In 2024, the Texas Solar Energy Society commissioned a study of the value of distributed solar energy to the ERCOT grid.³ The study was conducted utilizing the NSPM and included an analysis of values to the ERCOT grid and some additional societal benefits. The study revealed that the generation, transmission, and distribution values provided by distributed solar energy resources total 15¢ per kilowatt-hour. Even though this calculation doesn't

² <https://naseo.org/nesp/nspm>

³ <https://txses.org/new-value-of-solar-study-rooftop-solar-cuts-costs-for-the-texas-grid/>

account for the full avoided transmission costs that a utility can realize with distributed energy resources, it is more than triple what many Texas utilities are offering their customers for energy provided to the grid from distributed energy resources.

The Texas Legislature should pass legislation to establish a clear and comprehensive minimum standard for all Texas utilities to use when calculating compensation or avoided cost rates for energy exported to the grid from distributed energy resources, while allowing utilities to go beyond the minimum standard if they wish. A version of the methodology should be established for the TDUs as well. We recommend that the NSPM framework be the reference for these minimum standards.

Plug-In Solar

Plug-in solar systems typically range from 200 to 1,600 watts. They can plug into a wall outlet and don't require professional installation. They are in widespread use in Germany and other parts of Europe, where there are several million systems in use.

Pug-in solar offers significant opportunity to expand access to distributed solar for residents who live in multifamily properties, are renters, or simply cannot afford to purchase a larger permanent solar installation for their homes. These small systems can yield several hundred dollars in annual savings on an electric bill and can also be paired with batteries to provide resilient back-up power for select appliances.

The states of Utah and Maine have passed laws setting standards for plug-in solar systems and establishing residents' right to use compliant systems. Another 32 states, including Oklahoma, Wyoming and Idaho are considering legislation to enable the use of plug-in solar. The Texas Legislature should pass legislation to allow Texans to access these affordable and effective distributed energy systems.

Public Citizen welcomes the opportunity to work with members of the committee to advance these policy recommendations.