Solar, Avoided Cost, and Electricity Rates— How Power Purchased by Utilities Can Impact Consumers

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It can be difficult for consumers to navigate the many aspects of rate making in South Carolina— especially when it comes to setting rates for renewable energy production from sources such as solar. On May 16, 2019, the South Carolina Energy Freedom Act (Act 62) was signed into law. Act 62 requires the state to look at many different aspects of renewable energy production and determine the associated costs. One cost that the Public Service Commission of South Carolina (PSC) is required to determine is "avoided cost."

What is avoided cost?

Avoided cost is the minimum amount an electric utility is required to pay for the energy it buys from an independent power producer that is designated as a qualifying facility (QF). Avoided cost is equal to the cost the utility avoids in not having to produce that power on its own. Avoided costs include, but are not limited to, the avoided fuel, operations, and maintenance cost of a power plant.

Why does the PSC evaluate avoided cost for electric

utilities?

The Public Utility Regulatory Policies Act of 1978 (PURPA) was enacted in response to the mid-1970s energy crisis. PURPA encourages electric utilities to purchase alternative power (solar, wind, biomass, etc.) from independent power producers to help conserve oil and natural gas and lessen the dependence on foreign oil.

Under PURPA's "mandatory purchase obligation," electric utilities must purchase the power from QFs. QFs are a special type of electric-generating facility that use renewable resources like wind, solar, and biomass to produce energy and are less than or equal to 80MW. PURPA requires electric utilities to purchase power from these QFs at or below the utility's avoided cost. Act 62 requires the PSC to establish the methodology used by each electric utility in determining avoided cost rates paid to QFs.

Although QFs can use many different renewable sources to generate energy, solar is most prominent in South Carolina. Since the amount of energy produced from solar installations can change based on the weather, electric utilities have to make sure they have enough energy available for all consumers whether the sun is shining or not. When solar energy is available, such as midday, the resulting costs the utility avoided to produce this energy itself (avoided cost) is what the electric utility pays the QF for the energy.

How are consumers impacted?

Avoided cost payments made to QFs are directly passed along to all consumers through the utility's Annual Fuel Adjustment Clause proceedings as purchased power expenses. The higher or lower these expenses are, the greater the impact to consumers' rates and monthly bills.

How are residential consumers with solar panels impacted?

In addition to the avoided cost rates paid to QFs, Act 62 requires the PSC to determine the payment a residential solar consumer receives in return for selling energy back to the utility. Although the PSC has already approved Solar Choice Rates for utilities, every two years these rates will be re-evaluated. The higher the avoided cost, the more a residential consumer with solar panels will receive in payment for excess energy sold back to the utility.

For more on Act 62, visit the South Carolina Energy Freedom Act page. For consumers interested in learning more about solar energy, visit SOLAR.SC.GOV.

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