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COMMISSION

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Kentucky Public Service Commission  
P.O. Box 615  
211 Sower Boulevard  
Frankfort, Kentucky 40602-0615

Subject: Comments on the determination of net metering rates for electric utilities, and the rate at which Kentucky electric utility customers receive credit for electricity they generate from solar panels and other renewable sources.

Dear Kentucky Public Service Commission,

A new law governing net-metered customers was recently announced, where net-metered customers will receive dollar credits (at each billing period) at a compensation rate set by the PSC in rate proceedings for each utility. The new law states that an electric utility is "entitled to implement rates to recover from its eligible (net metering customers) all costs necessary to serve" those customers, independent of the rate structure for all other customers.

The original net metering statute provided credits at the full retail rate, using a bi-directional meter that reflected whether a customer was producing more or less electricity than was being used. The customer bill reflected the net usage.

My comments below are being submitted based on the announcement that comments on this new law are being accepted by the Commission until September 20, 2019.

Obviously, there are fixed service charges, essentially overhead, the electric utility needs to recoup.

If an electric utility is "entitled to implement rates to recover from its eligible (net metering customers) all costs necessary to serve" those customers, then is the reciprocal true? Is the customer/solar home owner also entitled to implement rates to recover their costs incurred to send their excess solar power back to the utility? If so, then the customer should file a rate for their cost of putting electricity on the grid. Of course, with thousands of individual solar homes each filing a cost of service, it would become unwieldy to manage so many rates. A simple solution is for the solar homeowner's cost of service to mirror the utilities service charge, resulting in the original net metering statute that provided credits at the full retail rate, using a bi-directional meter that reflected whether a customer was producing more or less electricity than was being used.

If the solar homeowner is not going to be considered ineligible to recover their costs, then the solar homeowner should be considered a generator during the periods they are overproducing and sending power to the grid. In such a case, the grid becomes a virtual "pool" similar to what happens on a major interstate natural gas pipeline. Electric power producers and consumers, which for a solar homeowner may be the same entity, could all trade in this pool. The pool price per kWh could be negotiated between parties or determined by a spot market price. The electric utility becomes a facilitator and transporter.

Of the two scenarios outlined above, I am not sure either would work in a manner that fairly balances the costs between parties. A hybrid system is needed.

On one hand it seems logical that whether a home or business uses a little or a lot of electricity, they pay for electricity, and the service charge to supply it. The price to the consumer should be the same for consumed kWh hours whether the consumer uses less kWh through conservation, or self-generated power, or by net reduction through periodic excess solar generation.

But with the current regulation, the unused kWh from conservation is more valuable to the consumer because every kWh saved is saved at the full residential rate, whereas the unused self-generated kWh has a reduced commodity value because it was returned to the grid net of utility costs. It's a *disincentive* to consumers to become solar generators, at least to the extent they are generating more than they can consume themselves.

On the other hand, on extreme demand days, the electric utility may not be able to satisfy 100% of demand. Does the electric utility incur the cost to build more generation capacity, and large cross-country utility towers and lines to meet full demand? And then pass along those higher utility costs (via rate case) that further disincentivize the solar homeowner? No, the excess electricity generated by solar homeowners can supplement the grid and reduce the need for a huge capital upgrade by the electric utility. It seems counter-productive that this peak period life-saving home solar electricity be discounted in value.

I believe the Utility and PSC need to define and set two distinct charges; 1) a service charge for the cost of infrastructure to transmit, distribute, deliver and connect the utility to a consumer, and 2) an energy charge, for the cost of the commodity including the cost to generate the kWh.

All variation in rate between solar homeowner and electric utility should be captured in the service charge component of the rate. And the solar homeowner should pay this service charge, because the home is also a consumption point at time, and the utility has to deliver to that home.

The value of the commodity itself, the kilowatt, should be viewed as equitable and exchanged equally between solar homeowner and Utility. If utilities can recover its costs to serve the customer, then the customer should be able to also recoup their invested cost of infrastructure to supply electricity back to the grid.

Even though the solar homeowner and the utility may have varying cost to generate, that becomes moot once the kWh is put on the grid for consumption by others, just as the cost of an Mcf of natural gas on the spot market is uniformly available to all, regardless of each natural gas company's cost to produce the gas. The electric grid should act as a natural gas pipeline hub.

If all variation in cost to distribute the kWh is in the service charge, it will allow the value of each kWh to be the same once it is on the grid, regardless of who generated it. However, that value aka the energy charge (\$/kWh) should vary based on time-of-day and Demand Side Management, and this DSM \$/kWh should apply uniformly to both the Utility and solar homeowner at the time the kWh is supplied or received, no matter which party is the supplier or receiver.

Sincerely,



Tim Maddox