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COMMONWEALTH OF KENTUCKY

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BEFORE THE PUBLIC SERVICE COMMISSION

PUBLIC SERVICE  
COMMISSION

In the Matter of:

ELECTRONIC CONSIDERATION OF THE ) CASE NO.  
IMPLEMENTATION OF THE NET METERING ACT ) 2019-00256

**SUPPLEMENTAL COMMENTS OF THE KENTUCKY SOLAR INDUSTRIES  
ASSOCIATION**

The Kentucky Solar Industries Association (“KYSEIA”) provides these supplemental written comments to Kentucky Public Service Commission (“Commission”) at its Public Hearing on November 13, 2019, regarding the implementation of Senate Bill 100, An Act Related to Net Metering (“Net Metering Act”). KSYEIA appreciates the opportunity to provide supplemental written comments and would like to use this opportunity to provide a preliminary response to several general arguments made by Duke Energy Kentucky, Louisville Gas & Electric (“LG&E”) and Kentucky Utilities (“KU”), and Kentucky Power, among other stakeholders filing initial comments.

**The PURPA Avoided Cost Model Is Inappropriate for Small Distributed Generation**

The Commission should reject arguments made by some stakeholders that suggest that the provisions of the Public Utility Regulatory Policies Act of 1978 (“PURPA”) be used to undermine the continued growth of beneficial rooftop solar in Kentucky. Specifically, some stakeholders suggest that retail rate net metering be eliminated and that the Commission should instead use a compensation rate based on the avoided cost rate provisions of PURPA for generation exported to the grid by net-metered facilities sized 45 kW or less. However, under the Net Metering Act, the General Assembly specifically continued the use of a net metering program for small facilities up to the utility’s 1% net metering cap. Kentucky’s net metering

policy under the Net Metering Act is separate and in addition to the application of PURPA avoided cost rates under a utility's must-purchase obligation, which generally applies to qualifying facilities up to 80 MW, or 20 MW for certain utilities. Nearly every state in America has effectively rejected using the avoided cost rate under PURPA as the main compensation mechanism for small-scale solar facilities under very low deployment levels of distributed solar, and have instead largely adopted retail rate net metering programs. Even states with very high adoption rates of distributed solar that subsequently adopted successor programs to retail rate net metering (*e.g.*, after utilities reached their preliminary net metering caps) have rejected the PURPA avoided cost rate methodology for small distributed solar facilities and instead credited grid exports at values significantly above the utility's calculated avoided cost rate (*e.g.*, Arizona).

The Commission should also note that one of the express purposes of PURPA was to *encourage* the deployment of small-scale renewable energy facilities. Under PURPA section 111, states are even required to decide whether to implement net metering for eligible customers.<sup>1</sup> The current PURPA statute thereby requires states to consider adopting net metering for small facilities used primarily for on-site generation in lieu of using an avoided cost methodology under other PURPA provisions that is more appropriate for large-scale generation that primarily or exclusively exports its generation to the grid.

Furthermore, utilities in Kentucky currently are getting compensated at rates significantly above their own avoided cost rates for solar facilities that they own and operate. It would be unfair for the Commission to approve utility cost recovery of a solar facility that resulted in an effective rate above the avoided cost rate, while on-site net-metered solar is compensated at the lower avoided cost rate despite providing substantially greater value on a per-kWh basis.

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<sup>1</sup> See Section 1251 of EPAAct 2005.

Finally, the utility's avoided cost rate currently in place for large-scale centralized renewable resources is a wholly inadequate and inappropriate compensation rate for net-metered facilities that provide numerous additional, measurable benefits that make its generation more valuable and offset additional utility costs.<sup>2</sup> Net-metered facilities generate power primarily for on-site consumption; utility-scale facilities typically export all generation to the grid for delivery to the end-use customer via the transmission and distribution system. In contrast to centralized energy generation facilities, net-metered facilities do not rely on the transmission system to deliver power, and only minimally use the distribution system in instances when a net-metered facility provides excess generation to the grid. Net-metered facilities can therefore defer transmission and distribution system investments, while avoiding line losses associated with delivering energy over these systems. Net metering compensation should also account for avoided environmental compliance costs, mitigating risk of federal carbon emissions regulation, fuel hedging value, reduced criteria pollution that negatively impacts human health, among other benefits categories. Adoption of a generally applicable PURPA avoided cost rate would violate the Commission's directive to establish rates that are fair, just and reasonable, and could conflict with current state law.

### **Monthly Netting Is Required by the Net Metering Act and Avoids Undue Complexity**

As explained in KYSEIA's initial comments, the Net Metering Act requires the Commission to adopt a policy that maintains the monthly netting of grid imports and exports. In addition to being the most reasonable interpretation of the Net Metering Act, monthly netting can

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<sup>2</sup> KYSEIA believes the implementation of PURPA in Kentucky for larger-scale (>45 kW) solar facilities also warrants additional review by the Commission to ensure current rates and tariffs are fair, just, and reasonable. The Commission should ensure that a utility's PURPA standard offer contracts and tariffs provide terms sufficient for Qualifying Facilities to be financeable and that avoided cost rates accurately reflect a utility's full avoided costs of energy and capacity, for example.

be easily implemented by utilities under all types of metering equipment and avoids undue complexity that would confuse consumers. Monthly netting is a simple billing solution that utilities throughout the country have been using for more than 40 years. Customers accept and intuitively understand it.

Alternatives to monthly netting inject unnecessary complexity that both create customer confusion and potentially involve implementation challenges. Netting over shorter time periods, such as over 15-minute or one-hour intervals, could result in net metering customers having to install expensive new metering equipment. Utilities would also have to do significantly more complicated calculations, potentially including making expensive billing system upgrades to automate this process. It would also add additional complexity for customers considering buying a rooftop solar system by requiring them to make significantly more complicated calculations with greater uncertainty when trying to decipher the potential payback period of their investment. There is simply no need for the Commission to add new burdensome metering and billing system requirements and involve the use of complicated calculations for consumers who want to look to the free market for alternative energy generation resources.

### **Utilities Provide Misleading Arguments on Basic Rate Design Principles**

Several commenters imply that utility “fixed costs” should be recovered through fixed charges and demand-related costs through demand charges. Neither approach is consistent with generally accepted principles of rate design. Fixed charges, or customer charges, are generally designed to recover customer-related costs, not any cost that a utility might characterize as “fixed”. The commenters do not generally define what constitutes a “fixed cost”. Furthermore, this line of logic overlooks the fact that while most costs for any business are “fixed” over the short term, over the long-term all costs are variable. For example, a grocery store does not charge

their patrons a fixed-fee “cover charge” of, say, \$5 to enter their store, even though they incur numerous “fixed” charges in the short run (e.g., monthly building lease expenses) that might average \$5 per person per visit to a store. Instead, customers pay for what they purchase.

Demand charges are likewise an inappropriate rate design for small customers, which is why they are typically only used for larger commercial and industrial customers, and are almost never required for residential customers. Utility infrastructure costs are caused by peak demands at different levels of the system. A demand rate only captures the relationship between customer demand and those costs if a customer’s peak demand is coincident with those system peaks. Such alignment is far less likely to exist for small, low load factor customers (e.g., residential customers) than it is for larger customers that tend to have consistent demands and higher load factors (e.g., commercial and industrial customers).

In fact, utility commissions across the country have repeatedly found demand charges are inappropriate for the generally applicable residential customer rates. Researchers have also found that the general public do not have accurate perceptions at how much demand various energy-using compliances consume, with people significantly underestimating the load of high-demand appliances (e.g., clothes dryers, hair dyers). Both experience and research show that residential customers generally do not have the knowledge or capacity to effectively respond to demand charges, making it an ineffective price signal. For a typical residential customer, a demand charge is effectively a fixed charge. In contrast, sophisticated non-residential energy users can hire energy experts to find solutions to reducing and managing their demand charges. In several recent examples where utilities and their regulators implemented demand charges, it has resulted in customer frustration. A key principle for rate design is for customers to be able to understand and respond to their energy charges. Residential demand charges violate this principle.

If it had been the intent of the General Assembly for the Commission to implement demand charges, higher fixed charges, or punitive extra fees on solar customers, it would have provided as much through the provisions of the Net Metering Act. The Net Metering Act only provides that a utility may recover its demand and fixed costs (terms which are undefined in the statute), but is not prescriptive in *how* those costs are to be recovered. The Commission could be frustrating the intent of the General Assembly if it implemented a radically different rate design that created a chilling impact on the adoption of rooftop solar.

Finally, the Commission should remember that existing utility rates *are already designed* to recover a utility's fixed-, demand-, and energy-based costs. There is no reason to believe that Kentucky utilities are not currently collecting sufficient revenues to recover all of their net costs to serve their customers, and none of the utilities even attempted to demonstrate otherwise in their comments through empirical evidence. It is a utility's obligation to demonstrably prove rates are insufficient to cover their costs of service by using valid methods and transparent data. No such evidence has been provided to date.

### **Interconnection Should be Streamlined to Reduce Costs**

Some stakeholders raised issues of net metering customers not paying their interconnection costs. For example, Kentucky Power states the costs required to interconnect an eligible electrical generating facility averages between \$600 and \$7,500. These cost estimates are concerning because they are substantially higher than the costs of interconnection used in other states. Often, customers that seek to interconnect small systems that use certified equipment pay only a modest application fee (*e.g.*, \$50-\$100), which is reflective of the fact that such small systems only rarely trigger a need for a detailed interconnection review or study. Given the very small amount of solar deployed and the small size of net-metering facilities, the primary utility

interconnection-related costs should be the costs to administrate the program, *i.e.*, administratively process an application. Detailed engineering reviews should not be necessary for most facilities sized 45 kW or less at utility deployment levels below the 1% net metering cap. To the extent that a utility's actual administrative costs under Kentucky's current Interconnection and Net Metering Guidelines are as Kentucky Power claims, it suggests that interconnection procedures should be promptly updated to allow for efficient, fast-track processing of most applications.

### **Net Metering Customers Have the Right to Self-Generate**

It should be noted that the Net Metering Act does not permit utilities to implement a "buy-all, sell-all" compensation framework in which a net metering customer would be required to export all of their generation and purchase all consumption from the utility. Consumers have a fundamental right to determine the amount of electricity they buy from a utility, including the right to reduce their consumption through adopting more efficient energy-using appliances, making behavior changes, and using self-generation technologies.<sup>3</sup> The implementation of the Net Metering Act concerns *net metering*, and not the adoption of a completely different type of distributed generation compensation policy, such as a buy-all, sell-all tariff. The Commission should reject the invitation to go beyond its authority by implementing an unpopular policy that would undermine Kentuckians' property rights and right to be energy self-reliant by using the energy that they produce for beneficial use on their property. The focus of the Commission, as the regulators of utilities that are granted monopoly franchises over the electric grid, should be on setting a fair compensation rate for the net electricity consumers export to the grid over a billing period, in conjunction with establishing fair electricity rates for these customers.

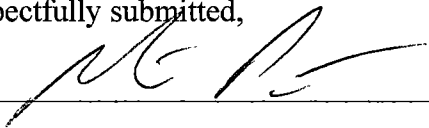
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<sup>3</sup> See generally Jon Wellinghoff and Steven Weissman, "The Right to Self-Generate As a Grid-Connected Customer," November 16, 2015, *Energy Law Journal*, Vol. 36:305.

## **The Commission Should Increase Solar Access to More Kentuckians**

Some commenters imply that the Commission should cut compensation to net metering customers and impose other harmful policies on the basis of unsupported assertions that net metering customers are financially better off than non-net-metering customers. Even if this is true—and the commenters have failed to provide any data that would support this assertion for Kentucky net metering customers—it would imply that the Commission should *increase* compensation under net metering in order to make it more financially viable to less financially secure customers. KYSEIA supports policies that increase solar access to all customers and remove customer barriers and red tape in going solar. Making cost-effective solar appear artificially expensive to the consumer by adding unsupported extra charges, unpopular rate design, and unfair compensation rates for exported electricity is the antithesis of sound energy policy. Such a practice would harm ratepayers of all incomes, and especially low-income families, by making solar even less accessible.

Respectfully submitted,



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