October 15, 2019

Gwen R. Pinson
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602-0615

RE: Public Comments from the Kentucky Office of Energy Policy on Implementation of the Net Metering Act
Case No. 2019-00256

Dear Ms. Pinson:

Enclosed is our initial public comment filing for Case No. 2019-00256 concerning implementation of the Net Metering Act.

If there are any questions, please feel free to contact us.

Thank you,

[Signature]

Joshua Bills
Commercial Energy Specialist
MACED
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC CONSIDERATION OF THE
IMPLEMENTATION OF THE NET METERING ACT

) ) CASE NO: 2019-00256

INITIAL COMMENTS FROM THE MOUNTAIN ASSOCIATION FOR COMMUNITY ECONOMIC DEVELOPMENT

The Mountain Association for Community Economic Development (MACED) provides the following initial public comments in response to the July 30, 2019 order of the Kentucky Public Service Commission ("Commission"). In the order, the Commission invites comments from interested utilities and stakeholders to develop a record which the Commission can draw upon as it considers broad issues of implementation of Senate Bill 100 (Net Metering Act), which takes effect on January 1, 2020.

The implementation of the Net Metering Act related to ratemaking changes in compensation rates, from those currently offered to existing net metered customers, can have great influence on the small but growing field of distributed generation installers and contractors, a growing and exciting field. Drastic changes in rates, or introduction of complex rate designs or complex netting periods, could all result in barriers to new investments in distributed generation, to system owner dissatisfaction (with utility and installer), and presents significant challenges to stakeholder organizations like MACED that offer business development assistance and financing to enterprises for investments in commercial solar installations in eastern Kentucky.

Alternatively, we see this new focus on net metering policy at the Commission level, brought about by The Net Metering Act, as an opportunity for the Commission to assure that non-rate related aspects in this growing field of work are similar, to the extent possible, across all utilities serving net metered customers. An opportunity for the Commission to review current application and interconnection processes and explore streamlining opportunities for customers to make investments in distributed generation. Additionally, an opportunity for the Commission to support incorporation of technical advancements in interconnection equipment to add additional ancillary benefits to the
distribution grid. MACED would like to see the Commission initiate a new administrative case, for review of current implementation, and for consideration of advancements, to the *Interconnection and Net Metering Guidelines for Kentucky*, which originally stemmed from Administrative Case 2008-00169 in 2009.

I. Introduction

The Mountain Association for Community Economic Development (MACED) is a 43-year-old nonprofit that works with businesses and communities in eastern Kentucky to advance a just transition to a new economy in Central Appalachia. MACED offers loans and business guidance to existing and startup enterprises, particularly those that may not qualify for traditional financing. The energy programs help homeowners, businesses, nonprofits, schools and local governments use less energy and save money through utility bill analysis, on-site walk-through energy audits, consulting and financing.

We at MACED have direct experience seeing firsthand the opportunity that electric utility customer investments in net metered infrastructure can have on reducing energy costs. We see the support offered to a sector of employment (renewable equipment installers) with growth potential that we have great optimism in, particularly when compared with other business sectors in our region showing clear signs of decline. We see investments in distributed generation, like solar—with long term savings in operating expenses and minimal maintenance—as low risk investments and have developed a long-term low-interest financing product based on an assessment of limited risk. The Net Metering Act, if results in drastic changes in net metered rate structures, could pose significant challenges for us. Adding challenge in evaluating long term savings to enterprises, wishing to make investments in solar and other renewables, and wishing to remain connected to the electric grid.

To date, MACED has financed over $600,000 commercial net metered solar systems and $40,000 off-grid (not connected to the electric grid) commercial solar net metered systems in eastern Kentucky. We are seeing enterprises achieving reduced operational expenditures and seasonal leveling of electric bills as a direct result of investments in solar. Some of these enterprises making these investments are nonprofits themselves providing low-income housing improvements and other
services in their communities. As of today, we are looking at a pipeline of financing $1,000,000 additional eastern Kentucky commercial enterprise investments in solar over the next six months.

II. Rate Impacts and Netting

One service MACED provides to clients in eastern Kentucky is energy billing review and analyses. Having provided this service for over ten (10) years, we have seen a lot of electric bills. One thing that still surprises us is the frequency of no-cost saving opportunities found through billing review. These include the not-infrequent discovery of a nonprofit electric customers having paid sales taxes on electricity bills for years; opportunities to renegotiate demand contracts to lower bills; and identifying more cost effective rate classes that a customer is eligible for, but was never directly offered by their electric service provider, to be moved into. Also, educating customers on what demand charges are, and on no-cost to low-cost measures they can make to reduce their demand costs, occupies a good portion of our energy related technical assistance.

Another surprise, is the allocation of costs for economic development that we find shared across all rate class members, and included in billings for a number of electric service providers that serve the region we work in. It isn’t a concern of ours that these costs are born to all customers within their particular rate classes and we aren’t questioning the validity of those programs. We’ve seen positive impacts from them, albeit arguably not felt by all ratepayers paying into them. However, it is a concern of ours, if argued utility costs for net metering (if any) are identified as not being fully compensated by current net metering customer-generators and is found to be minimal cost impact on non-customer-generators in comparison to existing costs of Economic Development Surcharges or Residential Energy Assistance programs. We see current one-for-one kWh net metering netting as an easy to understand rate system and economic development opportunity for customer-generator investment with benefit to both system owner and system installer, and arguably growing grid distribution resiliency benefits.

The Kentucky Office of Energy Policy conducts an annual survey of utilities across Kentucky to assess Kentucky’s renewable generator interconnections. This has been a useful resource in assessing current standing and growth direction of distributed generation in the state. For
2018 this survey showed that about 30 percent of renewable generation capacity in the state was net metered while 70 percent renewable generation capacity was interconnected via non-net metering arrangement. One metrics we would like to see in future reports for net metering interconnections is an aggregate quantity of net metered generation, in kWh, that show up as a net credit carried forward from one month to another tallied up for each rate class annually, for each electric service provider. Currently, the argument and impetus for The Net Metering Act appears to be around retail credit for customer-generator generation that exceeds use and flows to the distribution grid. However, there is currently no clear assessment of the actual quantity that this represents for each utility. Without this assessment, we have no way to evaluate extent of impact to customers not participating in net metering, and no way to compare to other shared economic development costs like Economic Development Surcharges and Residential Energy Assistance programs.

Currently, net metering customers are able to reduce their costs attributed as surcharges that are based on their kWhs consumed each billing period, or factored as a percentage of overall bill amount, through net reduction of their bill via one-for-one kWh netting. For example, a customer receiving 2,000 kWh over a billing period, while delivering 1,000 kWh, or 50 percent, over the same billing period would see surcharges like fuel adjustment, demand-side-management and capacity reduced by 50 percent due to the net kWh being reduced from 2,000 kWh to 1,000 kWh. Regardless of export value changes, we urge the Commission to retain kWh netting values for assignment of kWh based surcharges. Changing the customer delivery kWh price rate different than kWh receiving rate should have no impact on associated kWh based surcharges, and those should remain based on the net kWh received by the customer-generator.

Unfortunately, even now, under current one-for-one kWh netting, in reviewing bills for customer-generators, we have seen situations, albeit uncommon, where fuel surcharges have been assigned to the total monthly receiving kWhs, instead of the net. This is an unfair allocation, as the closest neighbor receiving that customer-generator’s delivered kWhs is also paying that fuel surcharge on those kWhs. Additionally, we have witnessed billing where the Environmental Surcharge has been applied to the total gross bill value amount before inclusion of the net metering kWh credit value deduction. We highlight these to underscore two things: 1) importance to keep the kWh monthly netting for appropriately allocating related surcharge amounts and 2) emphasizes our
interest in seeing the Commission initiate a new administrative case, for *review of current interconnection implementation*, and for consideration of advancements, to the *Interconnection and Net Metering Guidelines for Kentucky*, originally stemming from Administrative Case 2008-00169 in 2019.

We urge the Commission to strive for simplicity of netting period. Current net metering policy can be thought of as applying netting over the life of the account. Any billing cycles with net excess generation, that excess kWh amount is carried forward to offset future billing cycles where customer-generator receives more kWhs then they deliver. A typical net metered customer will not have net excess carried forward beyond 12 billing cycles. If a customer-generator, annually is delivering more than they are receiving, they may have invested in a system larger than necessary to attain a similar benefit. Any excess generation beyond a year can be seen as primary benefit to the electric service provider, as being no-cost generation from that customer-generator. When the account is closed there is no obligation to compensate the customer-generator with any net excess kWh they may still hold.

One concern related to drastically changing the customer delivery kWh rate, if reduced substantially compared to customer receiving rate, is the possibility of setting up price signals that promote customer investment in systems larger than what is necessary to simply offset their own consumption annually, which is avoided today under current one-for-one netting and no obligation to compensate for overproduction. With reduced customer delivery rate, a rate structure is established that in some situations could bring financial benefit to customer oversizing system beyond generating just enough to avoid current annual consumption.

For simplicity, we urge the Commission to implement changes to delivery kWh rates (if warranted) due to The Net Metering Act, to apply solely to those kWhs delivered over a billing cycle beyond the consumption during that billing cycle. In essence this is *billing cycle netting* of those kWhs. For example, a customer receiving 2,000 kWh over a billing period, while delivering 2,500 kWh, over the same billing period would see the new delivery kWh rate applied to the net excess 500 kWhs delivered that billing period. It simplifies the concerns around allocation of surcharges (particularly those surcharges like environmental surcharges which are based on summation of line
item monetary values on bills), by continuing to assess kWh related surcharges on the net consumed kWhs for the billing cycle and having that net show up on the bill. It is an understandable rate structure to potential solar system owners and makes a simpler job out of evaluation of solar savings impacts on customers. It avoids potential large differences in savings for similar sized facilities that may use electricity at differing times of day that could occur if hourly, 15-minute, or instantaneous netting was the basis for quantifying kWhs to apply delivery rate on. Keeping it simple should be an ideal to strive for.

III. Deviations from Interconnection Guidelines

We are seeing troubling trends of utility implementation that seem to deviate from Interconnection and Net Metering Guidelines for Kentucky, originally stemming from Administrative Case 2008-00169. We are seeing interconnection applications requiring $300,000 liability coverage, whereas the Level 1 Application and Level 2 Application section of the Interconnection and Net Metering Guidelines for Kentucky for Kentucky, says the following:

“The Customer shall maintain general liability insurance coverage (through a standard homeowner’s, commercial, or other policy) for both Level 1 and Level 2 generating facilities. Customer shall, upon request, provide Utility with proof of such insurance at the time that application is made for net metering.”

We have also heard an electric utility pursuing changing their requirement of external disconnect switch (EDS) to be required and be adjacent to Utility’s meters, whereas Interconnection and Net Metering Guidelines for Kentucky allow for other location with proper placard identifying accessible location:

“For Level 1 and 2 generating facilities, where required by the Utility, an eligible Customer shall furnish and install on Customer’s side of the point of common coupling a safety disconnect switch which shall be capable of fully disconnecting the Customer’s energy

\[1\] https://www.psc.ky.gov/agencies/psc/Industry/Electric/Final%20Net%20MeteringInterconnection%20Guidelines%201-8-09.pdf
generating equipment from Utility's electric service under the full rated conditions of the Customer's generating facility. The external disconnect switch (EDS) shall be located adjacent to Utility's meters or the location of the EDS shall be noted by placing a sticker on the meter, and shall be of the visible break type in a metal enclosure which can be secured by a padlock. If the EDS is not located directly adjacent to the meter, the Customer shall be responsible for ensuring that the location of the EDS is properly and legibly identified for so long as the generating facility is operational. The disconnect switch shall be accessible to Utility personnel at all times. The Utility may waive the requirement for an EDS for a generating facility at its sole discretion, and on a case-by-case basis, upon review of the generating facility operating parameters and if permitted under the Utility's safety and operating protocols.”

This change to require EDS and to require being adjacent to meter presents significant challenges to many commercial facilities where interconnection point can happen at a subpanel on the opposite end of the facility as the Utility’s meter is located.

These troubling trends, along with the opposing array of grid support functionality available with newer interconnection equipment warrants, in our opinion, a review of current implementation, and for consideration of advancements, to the Interconnection and Net Metering Guidelines for Kentucky, which originally stemmed from Administrative Case 2008-00169 in 2009. We urge the Commission to initiate a new administrative case, for review of current implementation, and for consideration of advancements, to the Interconnection and Net Metering Guidelines for Kentucky. Additionally, we urge the Commission to grant intervening status in the Administrative Case to all interveners, that participated in the original Administrative Case 2008-00169.

Joshua Bills, CEM
Commercial Energy Specialist
MACED