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From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: RE: Written Comments on PSC Case Number 2019-00256
Date: Wednesday, October 16, 2019 4:01:00 PM

Dear Ms. Searson:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

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From: Emma Searson <[REDACTED]>
Sent: Friday, October 11, 2019 12:59 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

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Dear Public Information Officer,

I'd like to submit the following letter and attached supplemental report as written comments on PSC Case Number 2019-00256. I've included my address and phone number in my signature below - please let me know should you require any additional information on my

behalf.

Thank you for your consideration.

--

Dear Kentucky Public Service Commission:

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to all Kentuckians -- individuals, businesses, churches, farms and schools.

Evaluation of the value of distributed solar energy and cost of net metering should account for the full array of benefits that distributed solar generation delivers to the utility, ratepayers and society. A recent study from Environment America Research and Policy Center and Frontier Group, [*The True Value of Solar: Measuring The Benefits of Rooftop Solar Power*](#), defines each of these benefits and groups them into categories: benefits to the grid and all of the energy customers who depend on it, and benefits to society as a whole. I have included the full paper as an appendix to this letter. It is critical that the PSC considers all of the benefits discussed in the report in its cost assessment.

In Kentucky, a few benefits of distributed solar energy are worth noting in particular:

Solar adds value to the Kentucky grid, helping limit the need to generate power at centralized fossil fuel plants and reducing the need for costly investments in power distribution and transmission. Those avoided costs are especially valuable during hot summer months when electricity demand spikes along with air conditioning use -- and when solar panels are most productive. Since they generate electricity at the point of use, solar panels can also improve grid efficiency and save costs by reducing the amount of energy lost during distribution and transmission. Finally, solar resources diversity the state's energy supply and reduce financial risks posed by volatile fuel sources. These grid benefits are valuable to the utility and to every ratepayer, not just those with panels on their roofs, reducing costs and improving service across the board.

Distributed solar resources also deliver valuable benefits beyond the grid. The societal benefits from fewer global warming emissions are immense: The carbon emissions of our current energy system cost the U.S. billions of dollars in economic and social damages each year, so emission-free solar energy presents a huge savings opportunity. Solar energy also reduces emissions of dangerous air pollutants such as nitrogen oxides, mercury and particulate matter that harm public health, resulting in healthcare savings and reduced illness and mortality. And, solar energy reduces the need for fracking, coal extraction and other parts of the fossil-fuel life cycle that have adverse consequences and costs borne by all Kentuckians.

Including the full universe of benefits to solar energy, both to the grid and beyond, is critical to making an informed decision about the future of net metering that serves the interests of all Kentuckians.

Policies that support solar development such as net metering prove well worth the investment when the full value of solar energy is taken into account. [Numerous studies](#)

commissioned by state Public Utility Commissions that have included its full scope of benefits have found that distributed solar generation is worth more than its retail price, and that the benefits of distributed solar energy outweigh the costs of net metering.

Unfortunately, key benefits of solar energy are routinely left out of such studies. The narrow scope of those studies is misrepresentative and leads to undervaluations of solar energy and, in turn, justifies policies and electricity rate structures that make it harder to embrace this renewable resource and slow adoption. This is especially problematic in states like Kentucky with comparatively low market penetration of solar energy, where new barriers to solar development are likely to hinder much-needed growth.

Solar is working for all Kentuckians under the current net metering law. Non-profits, community centers, churches, and small businesses -- including the Post Medical Clinic in Mount Sterling, the Catholic Action Center in Lexington, People's Self-Help Housing in Lewis County, and the Campton Baptist Church in Wolfe County -- all benefit from rooftop solar energy in Kentucky. If the PSC is to continue to fairly compensate solar producers for the energy and wide array of benefits they provide to the grid and society, it must first recognize each of those benefits in its assessment of the value of distributed solar energy and cost of net metering.

Thank you for your consideration,

Emma Searson

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See attached: *The True Value of Solar*. Full paper also available online at <https://environmentamerica.org/feature/ame/true-value-solar>



The True Value of Solar

Measuring the Benefits of Rooftop Solar Power



FRONTIER GROUP

The True Value of Solar

Measuring the Benefits of Rooftop Solar Power



FRONTIER GROUP

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Environment America Research and Policy Center

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The authors bear responsibility for any factual errors. The recommendations are those of Environment America Research & Policy Center. The views expressed in this report are those of the authors and do not necessarily reflect the views those who provided review.

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Table of Contents

Executive Summary	1
Introduction	3
The Value of Solar Power Has Important Implications for Renewable Energy Adoption	4
Solar Power Delivers Important Environmental and Public Health Benefits	5
Grid Benefits	6
Societal Benefits	7
Value-of-Solar Studies Should Account for All of Solar Energy’s Societal Benefits	9
Conclusion and Recommendations	12
Notes	13

Executive Summary

Distributed solar energy is on the rise, generating enough electricity to power more than 6 million homes each year, and resulting in annual carbon dioxide emission reductions equivalent to taking 4.4 million passenger vehicles off the road.¹ Public policy has been a key factor in driving the growth of solar energy – recognizing the enormous benefits that solar power can provide both today and in the future.

To help develop smart public policy around solar energy, many public utilities commissions, utilities and other organizations have conducted or sponsored “value-of-solar” studies that attempt to quantify the monetary value of the benefits delivered, and costs imposed, by the addition of solar energy to the electric grid. Studies that include a full range of solar energy’s benefits – including benefits to the environment and society – reliably conclude that the value of

Figure ES-1. The Benefits of Rooftop Solar Energy²

Benefit Category		Benefit
Grid	Energy	Avoided electricity generation
		Reduced line losses
		Market price response
	Capacity and Grid Investments	Avoided capacity investment
		Avoided transmission and distribution investment
		Reduced need for grid support services
	Risk and Reliability Benefits	Reduced exposure to price volatility
		Improved grid resiliency and reliability
	Compliance	Reduced environmental compliance costs
	Societal	Environment
Avoided air pollution		
Health benefits		
Avoided fossil fuel lifecycle costs		
Economy		Local jobs and businesses

those benefits approximates or exceeds the compensation solar panel owners receive through policies such as net metering.

Many value-of-solar studies, however – especially those conducted by electric utilities – have left out key benefits of solar energy. Policymakers and members of the public who consult these studies may be left with a false impression of solar energy's value to the grid and society, with damaging results for public policy.

To make decisions that serve the public interest, policymakers should account for the full value of solar energy, including societal benefits to the environment and public health.

Rooftop solar energy brings a wide variety of benefits to the grid and to society.

- Rooftop solar power generally adds value to the electric grid. It not only reduces the need for generation from and investment in central power plants, but over the long lifetime of solar energy systems it also can increase price stability and grid reliability, and reduce environmental compliance costs.
- As a clean, emission-free energy source often located on private property and built with considerable private, non-ratepayer investment, rooftop solar brings valuable societal benefits. Solar energy reduces global warming pollution, and also reduces emissions of dangerous air pollutants such as nitrogen oxides, mercury and particulate matter.

Value-of-solar studies inconsistently account for solar energy's benefits, especially beyond the electric grid, resulting in dramatically different conclusions.

- Studies that include the benefits of solar energy beyond the grid generally find that its value

exceeds the retail rate of electricity. Recent studies from states including Maine, Pennsylvania and Arkansas have found that solar energy brings substantial environmental benefits, and that rooftop solar owners would provide a net benefit to society even with net metering compensation.³

- Studies commissioned by electric utilities generally fail to account for benefits beyond the grid, resulting in far lower values of solar. A 2016 report published by Environment America Research and Policy Center and Frontier Group reviewed value-of-solar studies and found that, of 16 studies reviewed, only eight accounted for avoided greenhouse gas emissions, and no studies commissioned by utilities accounted for the value of solar energy beyond the grid. The studies that left out societal benefits valued solar, on average, at 14.3 cents per kilowatt-hour, compared to 22.9 cents for those studies that at least accounted for greenhouse gas emissions.

Value-of-solar studies should account for all of solar energy's benefits to the grid and society.

- Policymakers must account for the societal value of reduced power plant emissions, in particular the value of avoided greenhouse gas emissions and pollutants that contribute to the formation of smog and soot.
- Policymakers should also seek to account for broader societal impacts of solar energy, including "upstream" impacts of fossil fuel production and use, such as methane emissions from fracking, and local economic development impacts.

Public policy that fails to account for the full range of benefits may deter the addition of solar power to the grid, with ramifications for the environment, public health, and the operation of the electric grid.

Introduction

The electricity system that powers our homes, businesses and factories imposes heavy costs on our environment and our health. These costs accrue in a variety of ways. Particulate matter from burning coal harms our bodies, increases mortality rates and strains the health care system.⁴ Fracking and coal mining degrade the environment, threaten water quality, and require expensive environmental rehabilitation.⁵ Each new ton of global warming pollution – whether carbon dioxide from power plants, or methane leaked from natural gas wells – adds to the burden we and future generations will face from extreme weather, rising seas, and economic and societal disruption.⁶

Most of these costs are quantifiable, and all are vast. For instance, one U.S. Environmental Protection Agency study found that the impact of fossil fuel electricity generation on premature mortality, lost work days, and health care costs add up to hundreds of billions of dollars each year.⁷ Per unit of energy, these health costs alone often exceed the price we pay on our electric bill.⁸

Policymakers have a variety of tools at their disposal to minimize the societal costs of electricity genera-

tion and minimize harm to our health and environment. But while many states aspire to least-cost utility planning, and some even incorporate the social cost of carbon into certain planning decisions, no state fully accounts for the external costs of electricity in pricing or investment decisions.⁹

In the 20th century, the vast majority of electricity was generated from fossil fuels at large, centralized power plants. Today, the availability of clean, affordable renewable energy, coupled with the potential to generate power close to where it is used, forces a rethinking of traditional ways of setting utility rates and comparing the value of various options for generating electricity. The ways in which we choose to assign value to various options for generating electricity will help to shape the electricity system of the future. It is critical that we get it right.

As the following pages show, one important step policymakers can take is to begin accurately assessing the costs and benefits of one of our most promising clean energy resources: rooftop solar energy. By doing so, they can adhere to sound policymaking principles, while putting the U.S. on a path to a cleaner, healthier and more prosperous future.

The Value of Solar Power Has Important Implications for Renewable Energy Adoption

What is the value of solar energy? In recent years, as distributed solar energy has grown into an important piece of the American electricity system – now generating enough electricity to power more than 6 million homes each year – policymakers, utilities, solar energy trade organizations and other energy policy experts have grappled with the question.¹⁰ Their attempts to calculate the cents per kilowatt-hour value of solar energy have had important ramifications – “value of solar” studies have been used as evidence for energy policymaking that affects the speed and quantity of solar energy adoption, which in turn affects the environment, public health, and the economy.

Authors of value-of-solar studies typically must contend with a variety of complex questions, but the most important question is really the simplest: What is the universe of benefits that will be included and quantified in the analysis? Their answer can determine whether policymakers ultimately view solar energy as bringing a net benefit to society, with consequences for energy rates and the compensation rooftop solar owners receive for excess energy they feed to the grid.

The difference can be dramatic. For example, a 2013 study by the Vermont Public Service Department found that the costs and benefits of solar energy were approximately equal when environmental benefits were ignored. When greenhouse gas emissions were accounted for, however, each kilowatt-hour of solar energy generated brought a societal benefit of 4.3 cents.¹¹

The value attributed to solar energy – and how that value is integrated into ratemaking and investment decisions – has important implications for renewable energy adoption. Any homeowner or business owner considering installing solar panels needs to compare the upfront cost of the investment with the likely utility bill savings over time – including both avoided electricity purchases and any compensation paid by the utility for the excess solar power supplied to the grid. Differences in the valuation of those extra kilowatt-hours supplied to the grid can make or break a distributed solar power project from a financial perspective. This is reflected by the success of net metering policies, which value solar energy at the retail rate of electricity, in driving adoption of rooftop solar power. Of the 10 states that generated the most small-scale solar energy per capita in 2017, all but two had a state net metering policy.¹²

Solar Power Delivers Important Environmental and Public Health Benefits

Not all energy is created equal. Some energy – like electricity generated by burning coal – imposes enormous costs on the public and the environment, including air pollution, environmental degradation and adverse health impacts. Energy sources such as wind and solar power impose fewer environmental costs than fossil fuel sources, and can even reduce the cost of operating the grid.

The benefits of distributed solar power can be divided into two categories: benefits to the grid (which benefit utility ratepayers in their capacity as consumers) and benefits to the environment and society (which benefit ratepayers and others in their capacity as residents and taxpayers). The following describes many of those benefits in detail.

Figure 1. The Benefits of Rooftop Solar Energy¹³

Benefit Category		Benefit
Grid	Energy	Avoided electricity generation
		Reduced line losses
		Market price response
	Capacity and Grid Investments	Avoided capacity investment
		Avoided transmission and distribution investment
		Reduced need for grid support services
	Risk and Reliability Benefits	Reduced exposure to price volatility
		Improved grid resiliency and reliability
	Compliance	Reduced environmental compliance costs
	Societal	Environment
Avoided air pollution		
Health benefits		
Avoided fossil fuel lifecycle costs		
Economy		Local jobs and businesses

Grid Benefits

Energy generated using solar panels on rooftops of homes and businesses benefits the electric grid. Not only do solar panels reduce the need for electricity from central power plants, but the integration of distributed clean energy resources can also help create a more modern, resilient and efficient grid.

Energy

Avoided electricity costs: Solar energy sent to the grid reduces the amount of electricity that utilities must generate or purchase from power plants. The value of this avoided electricity consumption is often greatest in the summer months, when demand for electricity rises due to increased air conditioning demand and solar energy production is near its peak. Adding solar energy to the system reduces the need to power up expensive, often inefficient generators that run only a few times a year, or to purchase expensive peak power on wholesale markets, reducing the cost of electricity for all ratepayers.

Reduced line losses: Distributed solar energy also reduces the amount of electricity lost as heat as it travels from large, centralized power plants to our sockets. The U.S. Energy Information Administration estimated that the United States lost about \$21 billion worth of electricity in 2017, or 5 percent of the total amount of electricity generated that year.¹⁴ These losses cause us to generate more electricity than we need, increasing costs for ratepayers.

Rooftop solar PV systems drastically reduce the amount of system losses by producing electricity on-site, thereby reducing the amount of electricity transmitted and distributed through the grid. Solar power is particularly effective in reducing line losses because it reduces demand on grid infrastructure at times when line losses are highest. Line losses increase with the square of the load on the distribution system, with losses as high as 30 percent during the high-load hours when most solar output is delivered.¹⁵

Market price response: Distributed solar energy also reduces the price of electricity by reducing overall demand on the grid, which can suppress wholesale electricity prices.¹⁶ In other words, ratepayers not only benefit when utilities must purchase less electricity to satisfy demand, but they also gain because each unit of electricity purchased becomes cheaper.¹⁷ These demand reduction-induced price effects can represent an important value to ratepayers.

Capacity and grid investments

Avoided capacity, transmission and distribution investment: Expanding the amount of electricity we generate from the sun can defer or eliminate the need for new grid capacity investments, particularly because demand for energy from the grid is often highest during the day when the sun is shining. By reducing overall and peak demand, expanding solar energy production helps ratepayers and utilities avoid the cost of investing in new power plants, transmission and distribution lines, and other forms of electricity infrastructure.

Reduced need for ancillary services: Solar energy may also reduce certain costs of keeping the grid running smoothly, including regulating voltage and reducing the need to keep backup power plants running (“spinning reserves”). Solar energy systems installed with “smart inverters” and other technologies that increase two-way communication with the grid, for example, have the potential to improve grid operation and reduce the need for centralized grid support services.¹⁸ Without such equipment, solar energy may increase certain grid support costs.

Risk and Reliability Benefits

Reduced exposure to price volatility: Fossil fuel price volatility has long been a concern for utilities and ratepayers alike, but the risk has become greater as power companies have shifted from coal to natural

gas – a fuel with a history of price volatility.¹⁹ Because solar panels, once installed, do not incur fuel costs, integrating more solar energy capacity onto the electric grid can reduce exposure to sudden swings in the price of fossil fuels or wholesale electricity. Research has shown that the risk of fuel price volatility is primarily borne by ratepayers, rather than utility shareholders.²⁰ Some utilities also engage in fuel price hedging strategies to ensure that a portion of electricity costs are stable. Solar energy can help ensure price stability, a contribution with financial value for utilities and grid users.²¹

Improved grid resiliency and reliability: Solar panels create a more diverse and geographically dispersed energy portfolio, and generate energy close to the point of consumption. These attributes may help reduce congestion in transmission and distribution systems, and create a more reliable grid less prone to central disruptions, power outages or rolling blackouts.²²

Compliance

Avoided environmental compliance costs: Adding solar energy to the grid allows local utilities and municipalities to avoid some of the growing costs of compliance with environmental regulations. Increasing distributed solar energy capacity helps utilities avoid or reduce the costs of installing new technologies to curb air and water pollution or installing renewable energy. Solar energy also reduces the costs of compliance with regulations on criteria pollutants like sulfur dioxide and nitrogen oxides, as well as greenhouse gas reduction programs such as the Regional Greenhouse Gas Initiative in the northeastern U.S., California’s cap-and-trade program for greenhouse gas emissions, and any future programs that may be adopted at the state or federal levels.

Societal Benefits

Solar panels provide valuable benefits to society beyond what is addressed by current electricity rates. Namely, solar energy reduces the need for the extraction, transportation and combustion of fossil fuels, which impose heavy costs on the environment and public health.

Environment

Avoided greenhouse gas emissions: In 2017, the electricity sector was responsible for 28 percent of all U.S. greenhouse gas pollution.²³ The generation of electricity with both coal and natural gas has a substantial climate impact. Although natural gas is less carbon intensive than coal at the point of combustion, the process of natural gas extraction and transportation results in vast emissions of methane, a gas that traps approximately 86 times more heat in the atmosphere than the same amount of carbon dioxide over a 20-year time frame.²⁴

Research suggests that every metric ton of carbon dioxide released into the air causes \$37 of economic and social damage.²⁵ In 2017, the United States electric power sector emitted more than 1.7 billion metric tons of carbon dioxide emissions, equivalent to more than \$64 billion in economic and social damages.²⁶ Solar energy, on the other hand, is renewable and emission-free, and avoids the costs of both future damage and future environmental compliance.

Rooftop solar in particular is also fast and flexible to implement, making it an important tool for taking on climate change. Residential rooftop projects typically take just a few months from initial deposit to power generation.²⁷ Distributed solar energy can also be installed in a wide variety of urban settings, including on rooftops and parking lot canopies, making it well-suited for densely populated and energy-intensive regions.

Health benefits and avoided air pollution: Solar energy reduces emissions of dangerous air pollutants such as nitrogen oxides, mercury and particulate matter that harm public health.²⁸ Solar energy production can reduce emissions beyond the level required by environmental regulations, or address environmental and public health threats that are inadequately regulated, providing value such as reduced illness and mortality.

According to a 2018 report by the American Lung Association, 41 percent of Americans live in a county where air pollution often reaches dangerous levels.²⁹ Air pollution is linked to increased incidence of asthma and chronic bronchitis, and has also been shown to cause hundreds of thousands of premature deaths per year.³⁰ A typical coal-fired power plant without technology to limit emissions sends 170 pounds of mercury – an extremely harmful neurological toxin – into the air each year.³¹

Expanding the nation’s ability to source clean electricity from the sun reduces our dependence on fossil fuels, and lessens the amount of harmful emissions that flow into the air we breathe.

Avoided fossil fuel lifecycle costs: Use of solar energy reduces the need for fossil fuels, which impose a steep cost on society not just at the point of combustion, but also during extraction and transportation.³² Natural gas drilling uses vast water resources,

and risks chemical contamination of drinking water. Coal mining puts coal-worker health at risk, and has caused environmental devastation including the loss of thousands of miles of streams.³³ Burning coal generates millions of tons of coal ash that are often stored on site at power plants, threatening groundwater and occasionally resulting in catastrophic spills. And thermoelectric power plants – coal, natural gas and nuclear – require water for cooling, and can have adverse effects on water resources and ecosystems.³⁴

Economy

Local jobs and businesses: The solar energy industry has created thousands of new jobs and businesses across the nation. As of November 2017, the solar energy industry employed more than 250,000 people, a 168 percent increase from 2010.³⁵ The Bureau of Labor Statistics projects that solar installation jobs will be the nation’s fastest growing occupation in terms of total employment through 2026.³⁶ There are more than 10,000 solar companies in the U.S., and in 2017 the solar industry generated \$17 billion of investment in the U.S. economy.³⁷ Because rooftop solar installations take place in our communities, they generate local spending and opportunities for local businesses, and serve as visible reminders of the local economic benefits of clean energy.

Value-of-Solar Studies Should Account for All of Solar Energy's Societal Benefits

Good policymaking requires accurate information, and accurately valuing energy resources is a critical part of setting good energy policy. In Karl R. Rábago and Radina Valova's 2018 *Electricity Journal* article attempting to determine new principles for modern rate design, the authors contend that policymakers must work to "fully comprehend and reflect resource value in rates" through "conscious engagement with objective, data-driven valuation processes."³⁸ For policymakers to fully comprehend the value of solar, they must understand solar energy's full range of costs and benefits, including environmental, public health, and other societal impacts – and incorporate them appropriately into rate-setting and investment decisions.

Many states already incorporate solar energy's societal and environmental benefits in value-of-solar studies. In Maine, for example, the state Legislature required the public utilities commission to "determine the value of distributed solar energy generation" and in doing so to account for "the societal value of the reduced environmental impacts of the energy."³⁹

The Interstate Renewable Energy Council, which works to provide energy regulators with best practices and other policy resources, has written that the "societal benefits of [distributed solar generation] policies, such as job growth, health benefits and envi-

ronmental benefits, should be included in valuations, as these were typically among the reasons for policy enactment in the first place."⁴⁰

Often, however, utilities present assessments of the value of solar that exclude key benefits to society, the environment, or the grid. In 2016, Environment America and Frontier Group published *Shining Rewards*, which assessed recent value-of-solar studies, mostly either commissioned by public utility commissions or submitted as evidence in ratemaking cases. Of 16 studies published, only eight accounted for avoided greenhouse gas emissions, and only three accounted for economic development benefits. No studies commissioned by utilities accounted for the value of solar energy beyond the grid.

The societal benefits of [distributed solar generation] policies, such as job growth, health benefits and environmental benefits, should be included in valuations, as these were typically among the reasons for policy enactment in the first place."

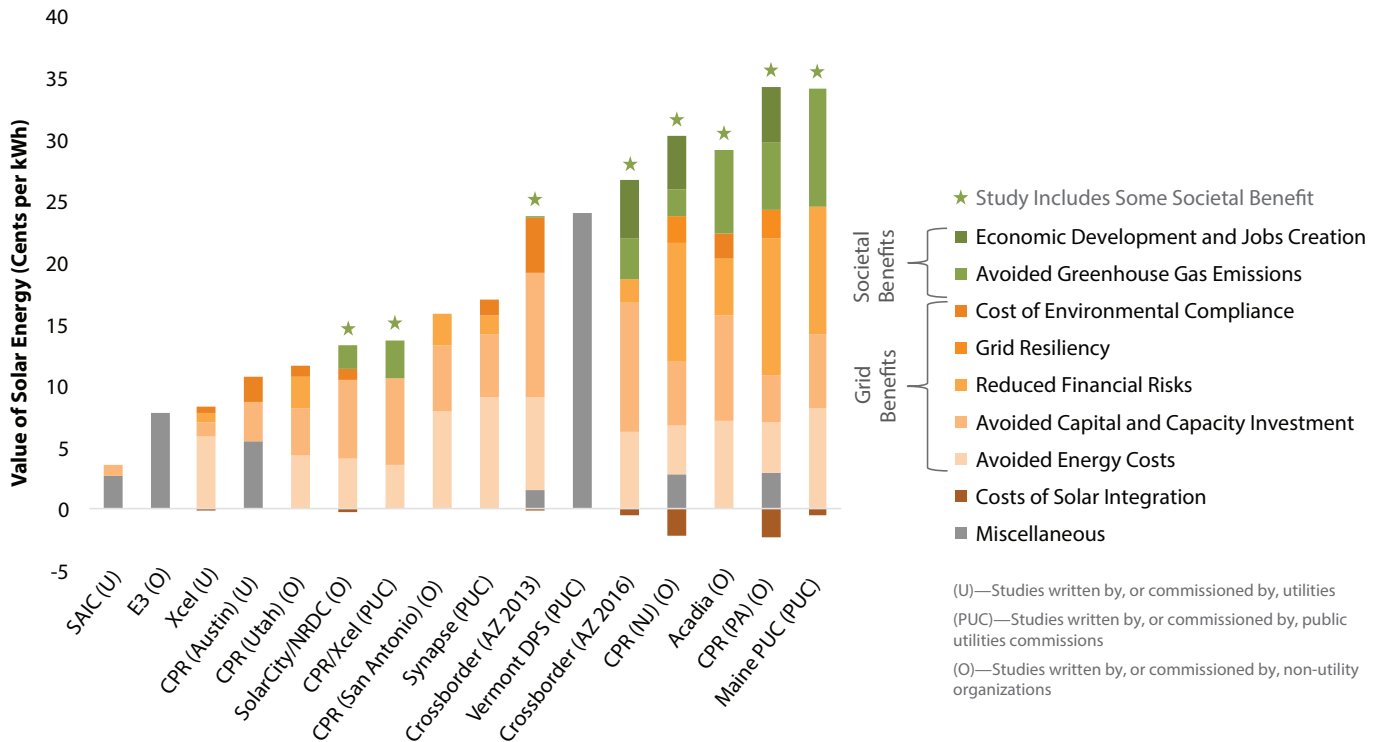
- Interstate Renewable Energy Council

Those studies that left out societal benefits valued solar power, on average, at 14.3 cents per kilowatt-hour, compared to 22.9 cents for those studies that at least included greenhouse gas emissions.⁴¹ The difference is even starker when studies include public health, economic or other societal values.

More recent value-of-solar studies from 2017 and 2018 have also left out the societal value of solar energy. South Carolina utilities, using a state-determined methodology, reported that solar generation had zero value for avoided CO₂ emissions, since they only assessed avoided compliance costs.⁴³ Oregon utilities, also using a state-determined methodology, based avoided emission values on “anticipated environmental standards” – the estimated avoided cost of compliance with future greenhouse gas standards – and therefore did not include the full societal benefits of avoided emissions.⁴⁴

Meanwhile, at least two recent utility value-of-solar studies have accounted for the societal value of solar energy. A value-of-solar study conducted by Austin Energy, a publicly owned utility that compensates rooftop solar owners based on its calculated value of solar, accounts for the avoided carbon dioxide emissions using the social cost of carbon (as estimated by the U.S. EPA).⁴⁵ And in Minnesota, Xcel Energy’s 2019 value-of-solar tariff calculation includes avoided environmental costs that are based on the social cost of carbon, and externality costs for non-CO₂ emissions developed by the Minnesota Public Utility Commission.⁴⁶ Xcel Energy’s calculation was made using a required, state-commissioned methodology.⁴⁷

In both studies, despite only including a subset of societal benefits, those benefits were found to be significant: Environmental benefits accounted for more than 17 percent of the value of solar energy in Austin



Among 16 value-of-solar studies included in Environment America Research & Policy Center and Frontier Group’s 2016 report *Shining Rewards*, only eight accounted for any societal benefits, none conducted by or for utilities.⁴²

Energy's analysis, and more than 33 percent in Xcel Energy's.⁴⁸ Yet these substantial benefits are typically left out of utility analyses.

Failing to account for the full value of solar energy may have costly ramifications. Utility regulators, legislators and the public are keenly focused on ensuring that utility rate-setting and investment decisions do not impose undue burdens on ratepayers. Value-of-solar studies that fail to include key societal, environmental and grid benefits of solar power have been used to undermine support for policies such as net metering that compensate owners of distributed

solar energy for the excess electricity they supply to the grid. For example, a solar cost-benefit analysis conducted for the Louisiana Public Service Commission that did not include social benefits informed legislation that severely restricted Louisiana's solar tax credit.⁴⁹

Understanding the full value of solar installations can help policymakers develop and implement appropriate tools to compensate owners of distributed solar projects for the value they provide. The full range of benefits to society needs to be reflected in those policies.

Conclusion and Recommendations

As policymakers consider the future of America's energy system, they should seek to make decisions that serve the public interest. In his seminal and oft-cited work on utility ratemaking, *Principles of Public Utility Rates*, James Bonbright defined "the theory of rates" as "the systematic development of principles of rate-making policy, the complete or qualified observance of which would subserve the public interest or the social welfare."⁵⁰

In 2019, serving the public interest means considering the broad impacts of electricity generation, which is closely tied to many of America's most pressing environmental and public health challenges. In 2017, electricity generation accounted for 28 percent of U.S. global warming emissions, and as America moves toward the electrification of transportation and heating, the importance of clean electricity will only increase.⁵¹

When it comes to solar energy, that means basing policy decisions on studies that accurately and fully assess the impact of solar energy on the grid and society. Failing to account for solar energy's full range of benefits is not only unsound policymaking, but also risks putting America on a path to a less healthy, less sustainable, and less prosperous future.

To craft energy policy that accurately reflects the value of solar energy resources, policymakers should account for the societal as well as the grid benefits of solar energy, specifically including:

- The societal value of avoided greenhouse gas emissions.

- The societal value of other avoided pollutants, including criteria pollutants such as particulate matter, lead, and sulfur dioxide.

Policymakers should also seek to quantify and account for a broader set of societal impacts of solar energy, including:

- The local economic benefits of solar energy, including the creation of local jobs and businesses.
- The societal value of avoided costs imposed by fossil fuels throughout their life cycle, including:
 - Impacts from resource extraction, such as methane emissions associated with fracking.⁵²
 - Health care and mortality costs associated with pollution from the entire fossil fuel lifecycle.
 - Potential impacts of accidents and spills associated with fossil fuels, including coal ash, fracking and pipeline spills.

After accounting for the full value of solar, policymakers should seek to ensure that electricity rates, investment decisions, and other energy policies fully reflect their findings. There is precedent for ensuring that electricity rates incorporate societal costs and benefits beyond energy costs, and doing so is both justifiable and necessary.⁵³ In some cases, legislators may need to ensure that state utility commissions have the authority to account for external costs and benefits in ratemaking decisions.

The decisions we make about our use of power not only impact the grid, but also our health, our quality of life, and our future. Energy policy should reflect that – after all, ratepayers are taxpayers and citizens too.

Notes

1 Based on 2018 “small-scale solar photovoltaic” generation and 2017 household electricity use, and EPA emissions calculator <https://www.eia.gov/electricity/data/browser/>; <https://www.eia.gov/tools/faqs/faq.php?id=97&t=3>; <https://www.epa.gov/energy/green-house-gas-equivalencies-calculator>.

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From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 4:03:00 PM

Dear Mr. Bowman:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
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Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Friday, October 4, 2019 2:48 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more.

The church where I am a member (and elder), Bardstown Road Presbyterian in Louisville, added solar panels to its roof two years ago. We are trying to do our part in protecting God's good creation by reducing the need for electricity from coal-fired power plants. Other churches, businesses, and individuals need to have the opportunity to do the same thing.

We members of the church, and members of the public, want to have a world for our children and grandchildren where the climate does not warm excessively because of human-caused greenhouse gas emissions. One way to do this is to add more solar-generated electricity to the power grid.

Please act to protect the lives of future generations by encouraging the use of solar power in the future.

Thank you for your consideration.

Sincerely,
Bill Bowman
2623 Valletta Rd Louisville, KY 40205-2311 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [Samuel Parker](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 4:02:00 PM

Dear Mr. Parker:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
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-----Original Message-----

From: Samuel Parker <[\[REDACTED\]](#)>
Sent: Friday, October 4, 2019 3:57 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Cc: [\[REDACTED\]](#)
Subject: Kentucky Solar net metering case #2019-00256

Case #2019-00256

Letter written by The Kentucky Solar Industries Association has opened up an unbelievable opportunity not only for residents of this great State but for all small businesses.

The monopoly has gauged so many business for too many years.

Because of LG&E's unfair formulas determining how they calculate their rates and charges have caused my company to close a business laying off more than 25 Plus employees.

My name is Sammy Parker having my business located at 2900 South 7th Street Road Shively Kentucky 40216. Parker Commercial Storage & Distribution inc.

This property was developed in a industrial area where 3 phase electric was normal for this Tobacco warehouse operation.

This property location has been reclassified from C-2 to EZ-1.

Due to being categorized as being located with in a distressed area, this new zoning allowed me to think on the challenge too redirect this typical commercial usage to reorganize and try developing this 58 acre, 1,000,000 square foot facility.

LG&E is and should be recognized as a true blessing for all they do. I can understand why they do not want to loose business, but it's like the future demands change and every change provides success while others feel the pain. This is normal.

I have been trying to develop a relationship with LG&E for many years.

Because of the 3 Phase electric, LG&E's formula is regulated by having the term " DEMAND LOAD " which is determined by the highest 15 minute electrical used with in a one month period. This formula cost me double even when I use less electric.

I would very much like to sell excess electric that would benefit my business and help recoup my cost. I have enough roof top that could light up Shively.

Thank you

Sammy Parker

From: [PSC - Public Information Officer](#)
To: [Sue Strong](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 4:02:00 PM

Dear Ms. Strong and Ms. Scherrer:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
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From: Sue Strong <[REDACTED]>
Sent: Saturday, October 5, 2019 8:25 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Re Case 2019-00256: Solar energy is critical to future

Dear Public Service Commission,

As your constituent, I am writing to tell you how important solar energy is to Kentucky's future, and how critical our state's retail net metering program is to that future.

Retail net metering enables people to become more energy independent with solar and fight back against monopoly utilities that have had a stranglehold on electricity for the past century. People should have the right to produce, use, and share their own energy and not be reliant on others.

More solar energy means more good jobs for Kentucky. More solar energy also means more good jobs for Kentucky. Neighboring states like Illinois and Tennessee have 3x the number of solar jobs compared to Kentucky. Let's grow the economy, create jobs, and make our state more energy independent.

I urge you to protect solar energy in Kentucky! It's the future & it's time to be forward thinking about our energy future.

Sincerely,
Sue Strong &
Barbara Scherrer
374 Hutchison Rd
Paris, Ky 40361



From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:59:00 PM

Dear Mr. Morris:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
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Direct line 502-782-2564
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From: Jack Morris <[REDACTED]>
Sent: Saturday, October 12, 2019 8:38 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Case 2019-00256 comment

Please include the following as part of the Public Comment file associated with case 2019-00256.

Case 2019-00256

To Whom It May Concern:

I am a net metering customer of KU since 2016 and therefore consider myself an interested person/stakeholder of matters that relate to net metering.

This is a difficult task you have been assigned, but I can think of no better public organization to handle it. Good luck.

Here is my understanding of issues relevant to your task.

- Net metering power is used by nearest neighbors to the net metering customer until any excess power is consumed. Net metering power is naturally distributed and uses very few grid resources.
- A kilowatt generated by a net metering customer is a kilowatt that the generating station does not need to produce since generation and consumption must be balanced.
- Wholesale priced power is only available to a utility at the edges of its service area. As such, it is neither transmitted nor distributed. Since this power is neither distributed nor transmitted, its cost includes none of the very thing the utilities accuse net metering customers of not paying for.

A less rigorous alternative method to 'value' approaches for determining a fair compensation for net-metering customers would be to work backwards from standard power tariffs on an added cost basis. All that remains to be determined from set tariffs is what investments and costs need to be included because of the presence of net-metering customers and what investments and costs do not need to be included. My understanding is that operational costs are passed through to customers and a 'fair' rate of return is guaranteed to the utility for its capital investments. Applying the same logic to SB100, utilities could argue that billing costs are inflated because of net metering customers. We have already discussed my opinion of grid costs, and a very small fraction of that should be included. However, all acquisition and consumption of net-metered fuel costs go to zero. Capital costs for net-metered generation go to zero because the net-metering customer paid for their own panels. Because of the 1:1 reduction in demand, some extension of distribution and transmission equipment life should result. These and others are all avoided costs the utility does not need to pay. I would think that splitting into customer and variable costs should be similar to recent PSC decisions. Both additions and subtractions from set tariffs are probably insignificant though since SB100 puts a hard cap at 1% net-metering.

I would argue that as long as the costs the utilities bear associated with standard retail power is greater than the costs associated with net-metering power, net-metering customers should be compensated *at least* at the retail power rate. Following this alternative methodology will never give you a true Value of Solar estimate. Societal benefits and furthering policy goals, among others, are not considered. But by using the alternative method, you have avoided quantitative difficulties associated with renewable and traditional power.

--

Sincerely,
Jack W. Morris
827 White Oak Road
Stamping Ground, KY 40379



From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:59:00 PM

Dear Mr. Stancil:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
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-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 12:27 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more.

Specifically, evaluation of the cost of net metering should include the full range of benefits that net metering and distributed generation provide to the utility, ratepayers, and society. The benefits of solar offer to the energy grid, and to Kentucky, include:

- 1) avoided energy costs - Because solar panels are most productive on sunny summer days, the times when energy costs are high and demand peaks, rooftop solar lowers costs by allowing utilities to avoid purchasing peaking power on the market or using expensive backup power sources;
- 2) reduced line losses - Energy distributed from homes has a shorter distance to travel, which is more efficient since less energy is lost in the distribution process. Rooftop solar reduces wear and tear on the grid because the electricity travels a shorter distance;

- 3) avoided investment in new capacity - Rooftop solar can eliminate the need for new capacity investments, saving money for ratepayers and utility companies. Solar can also help reduce the need for costly pollution controls like scrubbers for smokestacks;
- 4) reduced financial risks from volatile fuel sources - Increasing solar on the grid helps reduce the financial risks associated with fuels that often have a volatile price, like natural gas. Solar also allows individuals to reduce their monthly bills;
- 5) increased grid resiliency- Rooftop solar helps reduce peak energy needs, which can overload a system and cause outages. Due to its distributed nature, it decentralizes energy production helping to provide local resilience in times of centralized outages;
- 6) environmental and social benefits - Solar helps improve local air and water quality and reduce pollution like coal ash and greenhouse gas emissions;
- 7) reduced public health threats - Kentucky has one of the highest asthma rates, which is directly connected to air pollution. By reducing air pollution, solar improves public health; and
- 8) job creation and economic development - Solar energy is one of the fastest growing industries in the United States, now employing more than 260,000 workers nationwide. As solar still makes up less than 0.1% of Kentucky's energy mix, it has enormous growth potential in every region of the Commonwealth.

The PSC should consider these benefits when determining the value of solar.

In states like Minnesota (Farrell, Institute For Local Self-Reliance, 2014) and Maine (Norris, Gruenhagen, Grace, Yuen, Perez, and Rábago 2015), studies commissioned by state Public Utility Commissions have found that distributed solar generation is worth more than its retail price and that the benefits of distributed solar energy consistently outweigh the costs.

The utility argument that rooftop solar customers are not paying their fair share for upkeep to the energy grid is flawed. An analysis of Kentucky utility data reveals that, at most, net metering costs the average ratepayer less than one penny per month (Kentucky Resources Council 2018). A study by the US Department of Energy concluded in 2017 that distributed solar would have a negligible impact on rates until solar reaches 10% or more of a utility's peak demand (Galen, Department of Energy, 2017). In Kentucky, we are far from that 10% mark—much less than 1% of Kentucky's energy mix currently comes from distributed solar.

Solar is working for all Kentuckians under the current net metering law. Non-profits, community centers, churches, and small businesses all benefit from rooftop solar energy in Kentucky.

Thank you for your consideration.

Sincerely,
Kenny Stancil
444 Marquis Ave Apt B Lexington, KY 40502-2110 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:58:00 PM

Dear Mr. Perkins:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 2:01 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

I have an existing rooftop solar installation, subject to the grandfather provision of SB100, and therefore am not writing for personal economic reasons. I firmly believe that the PSC and Kentucky as a whole should be doing everything possible to encourage the transition to renewable energy in the face of the climate crisis and the market-driven decline of the coal industry. I believe that solar power users should pay their fair share of the cost of maintaining the grid and I encourage you to require utilities to provide detailed and accurate analysis of those costs on a per-user basis and to determine to what extent they are already being covered by the fixed charges which we are billed and which have recently been increased. Studies have shown that additional costs to other ratepayers are not significant below 10% solar penetration, or are at most a few cents per month. In addition, please consider the benefits of distributed solar, both monetary and other. Distributed solar lowers peak demand and thereby allows the utility to lessen the need for peak generating capacity or the purchase of expensive peak power. We can hope or presume that such savings are reflected in electric rates, not simply shareholder profits.

Thank you for your consideration.

Sincerely,
George Perkins
3411 Goose Creek Rd Louisville, KY 40241-2543 [REDACTED]

From: [PSC - Public Information Officer](#)
To: sdunham76@hotmail.com
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:58:00 PM

Dear Ms. Dunham:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 11:10 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

With regard to the 2019 Net Metering Act, I want to say that I believe the current net metering law is working well for Kentuckians.

It seems clear that we are going to have to move increasingly to renewable energy like solar as we deal with a warming climate and a decline in coal production. Net metering in its current form is a factor people consider when they decide whether or not to install solar systems. I have been saving up with the hope of installing solar sometime in the next few years. I was disheartened to hear about the proposed changes to net metering. Changing this system will discourage people from investing in solar which will impact the small but growing solar industry in the state and put Kentucky at a disadvantage when it comes to developing the skills and talent needed to support the green economy.

Please leave the current net metering laws in place.

Sincerely,
Shauna Dunham
10 Adele Pl Frankfort, KY 40601-2714

From: [PSC - Public Information Officer](#)
To: [Scott McReynolds](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:58:00 PM
Attachments: [image001.png](#)

Dear Mr. McReynolds:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Scott McReynolds <[REDACTED]>
Sent: Monday, October 14, 2019 10:17 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Comments on Case Number 2019-00256

Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

Dear Public Service Commission,

Thank you for the opportunity to comment on Case Number 20019-00256 regarding the net metering changes resulting from the Kentucky State legislature's passage of SB100 earlier this year. As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more.

As the Executive Director of Housing Development Alliance, Inc. I know firsthand how high electric bills negatively impact low-income residents of Kentucky. We see low-income families struggling with \$300, \$400, \$500 and even \$600 a month electric bills in winter! This is one reason that the Housing Development Alliance installed solar panels on a new home we constructed in 2018. This test home has been incredibly successful and HDA is exploring completing more new homes with solar power and retrofitting solar panels on existing homes. With the right financing, roof top solar can be an affordable option for Kentuckians of all income levels.

However, any reductions in the full retail credit rates will significantly reduce the return of investment on the installation of rooftop solar arrays, negating the incentive to invest in solar energy and eliminating an important tool we can use to keep homes affordable for low income households. Without the full retail credit rates for net metering customers, roof top solar will not be economically viable for low income households. One of the utility industry's arguments against net metering is that it forces low income households to subsidize the solar panels of the wealthy. This is a false argument and the reality is that without full retail credit for net metering, the only people who will be able to afford solar are well-off homeowners who are motivated by environmental concerns not saving money!

The utility industry's argument that rooftop solar customers are not paying their fair share for upkeep to the energy grid is flawed. An analysis of Kentucky utility data reveals that, at most, net metering costs the average ratepayer less than one penny per month (Kentucky Resources Council 2018). A study by the US Department of Energy concluded in 2017 that distributed solar would have a negligible impact on rates until solar reaches 10% or more of a utility's peak demand (Galen, Department of Energy, 2017). In Kentucky, we are far from that 10% mark—much less than 1% of Kentucky's energy mix currently comes from distributed solar.

The Public Service Commission also needs to clarify whether grandfathering will apply to future installation of rooftop solar. I would urge to the commission to include grandfathering for future installations. Without grandfathering it would be impossible for a homeowner or business to calculate their future savings when evaluating the cost/benefits of adding rooftop solar.

Finally, net metering with full retail credit is the critical policy enabling ratepayers to generate their own power and control their energy costs with on-site generation. The Commission should

protect customers' right and ability to produce their own power and make investments to control their energy costs.

SCOTT MCREYNOLDS | 606•436•0497 | www.HDAHome.org

Housing Development Alliance

Executive Director, NMLS #165507

Cell: 606-438-0530

Building Homes, Building Communities.



From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:57:00 PM

Dear Ms. Parker:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Monday, October 14, 2019 11:55 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more. Specifically....

Residents of the Commonwealth should have a say in how their energy dollars are used in their own households. The premise of our country has allowed each person to do what is necessary to eliminate waste in their households. Solar energy will allow our fellow Kentuckians to budget their households to put their wages to better use, such as rising health cost for everyone. Please let each of us make the decision to put our dollars where they are needed and not in the pockets of big power conglomerates.

Thank you for your consideration.

Sincerely,
Nancy Parker
990 Hanly Ln Frankfort, KY 40601-9286
[REDACTED]

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:56:00 PM

Dear Mr. Viles:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 3:54 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you move forward to implement the 2019 Net Metering Act, you must consider the numerous and significant benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more.

I personally lobbied the General Assembly as SB 100 was considered and I was shocked by how little understanding proponents of the bill had of the current functioning of net metering and rooftop solar.

The utility argument that rooftop solar customers are not paying their fair share for upkeep to the energy grid was shared frequently and is fundamentally flawed. An analysis of Kentucky utility data reveals that, at most, net metering costs the average ratepayer less than one penny per month (Kentucky Resources Council 2018). A study by the US Department of Energy concluded in 2017 that distributed solar would have a negligible impact on rates until solar reaches 10% or more of a utility's peak demand (Galen, Department of Energy, 2017). In Kentucky, far less than 1% of Kentucky's energy mix currently comes from distributed solar.

A study commissioned by the Maine Public Utility Commission in 2015 put a value of \$0.33 per kWh on energy


generated by distributed solar, compared to the average retail price of \$0.13 per kWh — the rate at which electricity is sold to residential customers as well as the rate at which distributed solar is compensated. The study concludes that solar power provides a substantial public benefit because it reduces electricity prices due to the displacement of more expensive power sources, reduces air and climate pollution, reduces costs for the electric grid system, reduces the need to build more power plants to meet peak demand, stabilizes prices, and promotes energy security. These avoided costs represent a net benefit for non-solar ratepayers.

Your valuation of the cost of net metering should include the full range of benefits that net metering and distributed generation provide to the utility, ratepayers, and society. The benefits of solar offer to the energy grid, and to Kentucky, include avoided energy costs, reduced line losses, avoided investment in new capacity, reduced financial risks from volatile fuel sources, increased grid resiliency, environmental and social benefits, reduced public health threats, and job creation and economic development.

Given these benefits, and your charged duty to serve the public, I encourage you to prioritize the support and development of distributed solar power production by developing fair net metering rules and rates moving forward.

Sincerely,

Mr. Aaron Viles

4789 Willman Way Lexington, KY 40509-2537 

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:56:00 PM

Dear Ms. Rogers:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 1:28 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more.

I am a rural Kentuckian who switched to net-metered home solar in 2017. Since the installation of our system, we have generated the amount of electricity we use annually for our home. Prior to becoming a net-meter member of our local rural electric co-op (Fleming/Mason), I was member purchasing electricity from multiple rural electric co-ops in the different places I have lived in Kentucky since first having my own home beginning in the late 1980s. As a grid-tied member, my household continues to pay the \$15/month minimum bill, plus the environmental surcharge based on monthly kWh usage each month. The misinformation that net-meter customers utilize the grid without paying for it is often included in public comments of those in opposition to a one-for-one net-meter agreement for customers. This is simply false, as net-meter customers continue to pay a monthly bill to remain connected to the grid, even if they generate enough electricity to meet their needs.

Secondly, we live in a state with a history and a present of extensive reliance on coal-fired electricity generation. As

the coal industry declines and utilities are required to meet safer environmental standards, home and small business net-meter solar production is one easy way to reach these standards at no cost to the utilities. Power that a utility company does not have to generate that is generated carbon-free at the site of usage and credited at a one-to-one rate is a cost avoidance for the utilities, and therefore, should be embraced as one way to meet energy needs, with no environmental challenge to the utility.

Developing diversified sources of electricity while compensating individual customers and producers fairly will build a future of a grid that is more resilient. Compensating individual and small business customer producers at a one-to-one rate will continue to motivate people to make this substantial investment in their home or business. Not everyone will pursue this option, but fairly compensating those that do will lead to decreased need for capacity investment and a reduced financial risk for utilities. Individuals and small businesses will not be as quick to make this substantial investment if the return on their investment cannot be predicted. Even with the current one-to-one rate for home solar customers, It will take 15 years for the system at my home to pay for itself. Under the current agreement, individuals and small business owners willing to install solar are assuming the capacity investment and financial risk that would otherwise fall to the utility in order to produce the power for those same customer needs.

Aside from the benefits to utilities, the overall benefit to communities, including job creation and economic development, should not be overlooked. The solar installation industry is thriving in Kentucky and will be severely curtailed by unpredictability in the rate agreement going forward. As the coal industry goes through a major decline, job creation in a new and sustainable industry is crucial.

As the PSC contemplates rate changes, the process should be transparent and all inclusive. Everyone from individual customers, small business owners, community agencies, non-profits, schools, etc. should have an opportunity to provide input and be invited to participate in the process. A process that includes big businesses, industrial investors, and utility companies without giving equal consideration to others, as happened at the end of 2018 with the KU/LG&E proposed rate hike, will serve only those who are represented.

Thank you for your consideration.

Carmen Rogers
Owingsville, KY

Sincerely,
Carmen Rogers
780 Flat Bottom Rd Owingsville, KY 40360-8096 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:56:00 PM

Dear Mr. McGee:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 12:41 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

I understand that the Kentucky Public Service Commission is interested in input about how to implement the 2019 Net Metering Act. As a life-long Kentuckian I recommend that you look at this from all perspectives. Distributed solar energy provides benefits to all Kentuckians--individual Kentuckians who make up small and large businesses, teachers/educators, the un- and under employed, miners, healthcare consumers and providers, etc, etc.

Knowing that Kentuckians had a net metering option for rooftop solar customers, I was pleased that Kentucky was moving in a positive direction as we of necessity move from reliance on fossil fuels to sustainable energy sources. So I was discouraged by the actions of our legislature. Now you, the KY PSC, have an important role in keeping us moving in the right direction, knowing that the current net metering law was working well. Individuals, non-profit groups, community centers, and small businesses were all benefiting from rooftop solar.


To maintain that benefit, the PSC should keep the administrative process simple and low cost as it has been to date. Think about the cost of a new administrative process compared to the overall impact net metering has proven to have on customers.

In addition, solar needs to be supported as part of a group of sustainable sources of energy that we need to implement to help stave off the ever more obvious hazards of climate change. Although coal has been mined in Kentucky for a long time, we need to recognize the negative impact that has had. Coal mine owners made huge profits while the miners suffered health effects that shorten their lifespan and decreases their quality of life in a major way. Changing our energy source can increase the health of Kentuckians while decreasing the cost of healthcare related to threats to public health.

While the utilities claim that rooftop solar customers do not pay their fair share, this has been debunked by several studies. In addition to the cost for individuals to install rooftop solar, the utilities benefit from the use of excess energy during peak hours. And the more rooftop solar we have, the smaller the grid that the utilities need to build and maintain. So think about why the utilities are pulling back from support of net metering. It is not because it is good for Kentucky at large.

Thank you for your consideration.

Sincerely,
Kevin McGee

Sincerely,
Kevin McGee
6769 Mount Pleasant Rd Ewing, KY 41039-7840 

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:55:00 PM

Dear Ms. McGee:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Sunday, October 13, 2019 11:25 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, to our energy grid and to public health, economic development, and climate protection. Solar energy is one of the new types of energy we need to promote as we strive to shift to sustainable sources of energy. Kentucky has relied on coal for a long time and coal has provided economic benefits to the mine owners. However, the coal industry has benefited at the expense of miners, who are still damaging their health, decreasing their life expectancy and suffering devastating effects on their quality of life.


The utilities indicate that the rooftop solar customers are not carrying their weight of the cost of maintaining the energy grid. But evidence shows that net metering costs are negligible, costing the average ratepayer less than \$0.01 per month (KY Resources Council 2018). Other studies report similar findings. Two other states (Maine and Minnesota), in fact, found that distributed solar generation is worth more than its retail price and that the benefits of distributed solar energy consistently outweigh the costs. Individuals who install rooftop solar do so at a significant cost to themselves, while providing the utilities with additional energy they can use at peak use times.

The Kentucky Public Service Commission must live up to its name and provide a service to the public at large and

not just to the utility companies. All Kentuckians, including low-income residents, environmental advocates and small businesses that are attempting to have an impact on our battle with climate change, should be involved in the how the PSC handles rate changes and concerns. All Kentuckians---the Public for whom the PSC is providing Service---are impacted by PSC 's decisions and deserve a voice.

Thank you for your consideration.

Sincerely,
Susan McGee
Ewing, KY

Sincerely,
Susan McGee
6769 Mount Pleasant Rd Ewing, KY 41039-7840 

From: [PSC - Public Information Officer](#)
To: [Cathy Hinko](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:55:00 PM
Attachments: [image001.png](#)
[image002.png](#)

Dear Ms. Hinko:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Cathy Hinko <[REDACTED]>
Sent: Monday, October 14, 2019 1:34 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Case 2019-00256 Comment



Metropolitan Housing Coalition
P.O. Box 4533
Louisville, Kentucky 40204
Phone: (502) 584-6858
Fax: (502) 452-6718
www.metropolitanhousing.org

Facebook.com/mhclouisville

Twitter: @mhclouisville
Cathy Hinko, Executive Director
cathy@metropolitanhousing.org

14 October 2019

Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

Re: Kentucky Public Service Commission Case No. 2019-00256

Dear Commissioners:

The Kentucky Public Service Commission (PSC) is engaging in determining the costs and benefits associated with net metering of individuals generating solar power and enhancing the energy available on the grid. The Metropolitan Housing Coalition submits these comments to aid the PSC in its determinations.

Metropolitan Housing Coalition

MHC is a nonprofit, nonpartisan membership organization incorporated under the laws of the Commonwealth of Kentucky in 1989 and comprised of over 300 organizational and individual members. MHC members include representatives of low-income households, private and non-profit housing developers, service providers, financial institutions, faith-based and neighborhood groups, as well as other advocacy groups, advocating in a united voice for fair, safe, and affordable housing in the Metro Louisville area. For three decades, MHC has utilized the public and private resources of the Metro Louisville community to provide equitable, accessible housing choices for all persons through advocacy, public education, and through support for affordable housing providers.

MHC is an education and advocacy organization on issues of fair and affordable housing which also operates a lending pool for use by non-profit developers creating or rehabilitating affordable housing. In 2008, MHC published a paper that focused on utility costs as part of affordable housing. In 2013, MHC published *How to Lower Utility Costs: A Guide to Louisville Programs for Energy Efficient Improvements and Resources to Help Pay a Utility Bill*. This guide to resources also included a comparison of utility costs in Louisville of the years 1998, 2008, and 2013.

MHC worked with LG&E staff to update that resource. MHC's work includes analyzing the policies of state and local agencies providing service or financial support for utility costs and serving on committees convened by LG&E on both community input and on energy efficiency.

MHC operates a lending pool of about \$800,000 that is for use by non-profit developers in creating and rehabilitating units that are affordable to low-income households, with an emphasis on those below 60% of median income. Some of those non-profits try to include solar power to lower costs, although current government policies often make that impractical.

Transparency and Inclusion

MHC will first address the process of the Kentucky Public Service Commission (PSC). The PSC has recently fiercely advocated to exclude the voices of those who represent low-income people and those who are advocates on environmental issues. However, the PSC's role is to govern a monopoly. Listening only to those representing the monopoly in setting rates and fees skates perilously close to anti-trust activity and collusion in setting the rates and fees. The PSC also straddles an indefensible line that says Attorney General's office represents all other interests, except then arbitrarily allowing those voices the PSC deems rich. MHC would argue that the percent of income spent by low-income people on utilities is greater than the percent of income spent by Wal-mart. Therefore, the PSC must demonstrate with transparency, the weight given to the comments and testimony (should that occur) given to all parts of our community.

The PSC should support the right of solar industry, consumers, low-income, and environmental advocates to intervene in future PSC rate cases, including rate cases regarding solar net metering. In late 2018, the Public Service Commission blocked the right of low-income advocates and environmental groups to intervene in a rate case to decide on a proposed rate hike for KU/LG&E customers—while allowing industrial intervenors like Kroger and Walmart. This is an issue of special interest to many stakeholders, each of which bring important perspectives to the issue and will be significantly affected by the PSC's decisions. With a new Attorney General taking office in 2020, there is no way to know what position they will take on these issues; it would be unreasonable to assume the AG will represent these diverse interests; and these parties will have relevant expertise which the new AG may not have.

What benefits should be considered

Include a full range of benefits

Evaluation of the cost of net metering should include the full range of benefits that net metering and distributed generation provide to the utility, ratepayers, and society. The benefits of solar offer to the energy grid, and to Kentucky, include avoided energy costs, reduced line losses, avoided investment in new capacity, reduced financial risks from volatile fuel sources, increased grid resiliency, environmental and social benefits, reduced public health threats, and job creation and

economic development.

Summer Peak

MHC has been an advocate for including non-energy benefits (NEBs) in evaluations. As Louisville's heat index rises and deaths associated with the heat index rise, it is imperative that we look at health and environmental benefits when considering the costs and benefits of energy production. In fact if more individuals have the ability to produce power in the summer when sunshine hours are at their peak, it could offset the need for other, more expensive, ways to generate power to cover peak demand hours. Summer cooling is now as important to life as winter heating. The PSC should be aggressively looking at ways to avoid more power plants or to, even worse, cancel the planned obsolescence of generators now scheduled to be taken off line.

National Security

It is in the national interest to encourage solar production particularly at the granular level of individual production and it is in our national interests to make the connection to our traditional power supplies lucrative. In the event of a disaster or attack, having a growing percentage of individual energy producers could mean the ability to save lives.

Government Support

In states like Minnesota (Farrell, Institute For Local Self-Reliance, 2014) and Maine (Norris, Gruenhagen, Grace, Yuen, Perez, and Rábago 2015), studies commissioned by state Public Utility Commissions have found that distributed solar generation is worth more than its retail price and that the benefits of distributed solar energy consistently outweigh the costs.

The city of Louisville has given tax incentives for solar installations. The PSC cannot ignore the will of Kentucky's major city in promoting the installation of individual solar generation. And the PSC would actually be undercutting the tax benefits promised and return on investment by the city.

Costs and the Grid

The utility argument that rooftop solar customers are not paying their fair share for upkeep to the energy grid is flawed. An analysis of Kentucky utility data reveals that, *at most*, net metering costs the average ratepayer less than one penny per month (Kentucky Resources Council 2018). A study by the US Department of Energy concluded in 2017 that distributed solar would have a negligible impact on rates until solar reaches 10% or more of a utility's peak demand (Galen, Department of Energy, 2017).

In Kentucky, we are far from that 10% mark—much less than 1% of Kentucky's energy mix currently comes from distributed solar. In light of the raises of 12% or more by LG&E, the cost of solar is negligible and the benefits are clear.

The PSC should be capable of establishing a tiered system that revisits this if penetration does reach 10% by individual generation.

Many Communities Benefit from Solar

Solar is working for all Kentuckians under the current net metering law. Non-profits, community centers, churches, and small businesses all benefit from rooftop solar energy in Kentucky. Some examples include: the Post Medical Clinic in Mount Sterling, the Catholic Action Center in Lexington, People's Self-Help Housing in Lewis County, and the Campton Baptist Church in Wolfe County.

The Utility Business Monopoly Model Discourages Wise Choices

Utilities' business model is outdated, and the rate structure should not enable this outdated, shareholder focused model. Utilities build too much, and they want to sell as much power as they possibly can because this model allows them to keep asking for rate increases that fund new, often redundant infrastructure and funnel profits to shareholders.

In Kentucky, utilities have financial incentives for capital investments that encourage unwise choices. Although already guaranteed a profit, the utilities can experience a windfall of, in my experience, 10% extra money of all capital investments AND another windfall of getting an interest rate from lending themselves the money to do the investments. Not a great model for planning our energy future.

This model creates disincentives for the monopoly to welcome and embrace individual energy producers. They are rivals. Surely, it is not the role of the PSC to eviscerate additional and innovative producers. Since the PSC does not set a 20 year plan for the energy future, the PSC should not erase the citizens who will, nor leave that plan to a self-serving monopoly.

MHC recommends policies that encourage individual solar rooftop power. There can be an automatic review of policies when individual solar power production reaches 10% of all power.

Sincerely,



Cathy Hinko
Executive Director

Cathy Hinko
Executive Director
Metropolitan Housing Coalition
P.O. Box 4533
Louisville, KY 40204



From: [PSC - Public Information Officer](#)
To: [Kate Shanks](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:54:00 PM
Attachments: [image001.png](#)

Dear Ms. Shanks:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Kate Shanks <[REDACTED]>
Sent: Monday, October 14, 2019 2:31 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: RE: 2019-00256

****CAUTION** PDF attachments may contain links to malicious sites. Please contact the COT Service Desk [REDACTED] for any assistance.**

Attached is a joint comment letter of the Kentucky Chamber, Northern Kentucky Chamber, Greater Louisville Inc., and Commerce Lexington Inc. A hard copied will be delivered.

Thank you.



Kate Shanks | Vice President of Policy Development

Kentucky Chamber of Commerce

464 Chenault Road

Frankfort KY 40601



October 14, 2019

Kentucky Public Service Commission
211 Sower Blvd.
Frankfort, KY 40601

RE: 2019-00256

Dear Commissioners:

The Kentucky Chamber of Commerce, Greater Louisville Inc., Commerce Lexington Inc., and the Northern Kentucky Chamber of Commerce (collectively, the “Chambers”), appreciate the opportunity to submit comments in response to net metering statute changes adopted by the Kentucky General Assembly in 2019. The Chambers supported the legislation (SB 100) that brought about the statute changes and called on the Ky. Public Service Commission (PSC) to set the compensation rates for net metering credit through specific utility rate making proceedings. The Chambers represent all types and sizes of businesses across the state. The Chambers are the business voice of the Commonwealth.

About the Chambers

The Kentucky Chamber of Commerce is the major catalyst, consensus builder, and advocate for a thriving economic climate in the Commonwealth of Kentucky. The Kentucky Chamber of Commerce supports a prosperous business climate in the state and works to advance Kentucky through advocacy, information, program management, and customer service to promote business retention and recruitment. Representing the interests more than 68,000 employers across the commonwealth and a membership base with more than 470,000 employees, the Kentucky Chamber advocates for growth-oriented policies, infrastructure investment, workforce solutions, and sensible regulations to spur economic growth and opportunity in Kentucky.

As the Greater Louisville region’s largest convener of business leadership, representing nearly 1,700 employers across the region with more than 270,000 employees, GLI leads economic and global outreach strategies focused on business attraction; nurtures the entrepreneurial ecosystem; and champions the development of the community’s talent base. As the voice of Greater Louisville’s business community, GLI advocates for a pro-business environment and facilitates businesses engagement on issues that impact regional competitiveness, such as sensible regulatory standards and compliance.

The NKY Chamber represents nearly 1,500 employers in northern Kentucky and the surrounding region. We enjoy a diverse economy, with broad representation of employment in all sectors of the economy, including manufacturing, distribution, agriculture, finance, and services. Our region is situated centrally to the majority of the population in the eastern United States, and is traversed by major interstates, rail lines and navigable rivers. While the region has enjoyed and is positioned for future growth, we are committed to protecting human health and the environment and at the same time preserving an economic climate for business.

Commerce Lexington Inc., the greater Lexington area chamber of commerce, represents more than 1,800 employers. This organization seeks to promote economic development, job creation, and overall business growth in Lexington and its neighboring communities, while strengthening its existing businesses through its many programs and services. Commerce Lexington Inc.'s economic focus centers on promoting entrepreneurial start-ups, business expansion and retention, and new job creation; workforce development; connecting people and businesses; advocacy; community, minority, and small business development; and the cultivation of local and regional leadership. Commerce Lexington Inc. serves as a regional voice for public policy advocacy, championing issues that promote economic growth and improve Kentucky's competitiveness for jobs, including protecting the region's low-cost energy rates.

The Chambers believe now is the appropriate time to reevaluate how utilities should value excess power generated by net metering customers. Nearly two decades ago, the net metering statute was adopted to help the emerging solar industry in Kentucky. Solar was an expensive option, and customers would generate excess power they couldn't use, which created a need to export electricity to the utility's grid. The net metering law in Kentucky was established to provide a mechanism for dealing with excess power, while also subsidizing the expensive investment.

Today, solar is a more affordable option that is quickly growing in popularity. According to the Solar Energy Industries Association, the industry saw record growth during the first quarter of 2019, and the association expects solar photovoltaic capacity to double over the next five years. However, a policy adopted to spur investment has now created a cost shift that increases each day with new solar installations. Without new tariffs, utilities must credit the exported power at the retail rate, which equates to a 300% premium relative to other sources of power. Utilities collect this premium from customers such as businesses. However, according to the Solar Energy Industry Association, the price of solar in Kentucky has fallen 34 percent just in the past five years.

Every dollar a business spends on utility bills is a dollar not spent on payroll, business expansion, or philanthropic activities. While energy costs are a part of doing business in any state, outdated energy policy should not force companies to pay more than they have to.

Further, Kentucky's economy is very much dependent on low-cost electricity which is predominately generated by coal. Kentucky is a manufacturing state with more than 250,000 people working in a Kentucky manufacturing facility, some of which operate energy-intensive processes. Kentucky is the top-producing state per capita for automobiles and attributes billions

in state GDP to aluminum, steel, and iron production. Not surprisingly Kentucky has set records for exports with aerospace and automotive sectors supercharging the growth. While other states that are more reliant on service-based economies can withstand policies that cause higher electricity prices, Kentucky cannot. Additionally, Kentucky has seen significant coal production declines over the past several years resulting in the loss of more than 12,000 jobs. While there are complex reasons for the change in demand for coal, one reason has been policies adopted in some states and at the federal level that have shifted demand to other sources of electricity disadvantaging coal. Therefore, Kentucky's economy, heavily dependent on manufacturing and coal, is greatly impacted by energy policy.

The Chambers are not opposed to the use of solar power or net metering to account for excess power generated. The legislation adopted was never drafted or considered in such a way to do away with net metering, which is especially important for residential customers. The Chambers want to ensure that net metering customers pay their fair share of using the grid. The PSC is best suited to determine the costs associated with serving customers so that such costs can be factored into the credit value for net-metered systems.

The Chambers believe any effort to increase the credit and exacerbate the subsidization of net metering customers is misguided. The PSC should carefully evaluate any suggested benefits from net-metered systems to determine not only if benefits accrue and what their value is, but also if the indicated value can be monetized by the utility in a way that prevents a cost shift to non-net metered customers. Should the PSC determine benefits accrue that can be monetized, the Chambers would expect the PSC to question the cost-effectiveness of generating those benefits as it does for any program administered by a regulated utility.

According to the Energy Information Administration, Kentucky's average industrial electric power costs ranked sixth lowest in the nation in 2018 while the average retail price for all sectors was eight lowest. Kentucky cannot afford to lose its low-cost power advantage, and the role of the PSC in protecting Kentucky's low rates has never been more crucial. Kentucky has seen record economic growth based on new and expanding investment, jobs, and exports due to pro-growth policies adopted by the General Assembly and Governor Matt Bevin and supported by the Chambers over the past few years. The Commonwealth has never been better suited to take advantage of the economic growth and to continue to achieve the Governor's goal of Kentucky being the center for manufacturing excellence and engineering. This can happen in concert with sustainable growth in net-metered systems by setting a tariff that is fair and appropriately recovers the cost of serving net-metered customers without awarding value for benefits that cannot be monetized or are not cost-effective.

Sincerely,

Kentucky Chamber of Commerce
464 Chenault Rd., Frankfort, KY 40601

Commerce Lexington Inc.
300 E. Main 100, Lexington, KY 40507

Greater Louisville Inc.
614 W. Main #6000, Louisville, KY 40202

Northern Kentucky Chamber
300 Buttermilk Pike #300
Fort Mitchell, KY 41017

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:54:00 PM

Dear Dr. Arnold:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Monday, October 14, 2019 3:56 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

The proposed legislation and implementation is neither pro-business or pro-growth. It may be pro-established utilities, but that is not the same as being effective utility or economic development strategy.

Sincerely,

Dr. David L. Arnold
Versailles, KY

Sincerely,
Dr. David Arnold
423 Marsailles Rd Versailles, KY 40383-1673 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [Chuck Burke](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:53:00 PM

Dear Mr. Burke:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Chuck Burke <[REDACTED]>
Sent: Monday, October 14, 2019 5:17 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: 2019-00256

I would encourage you to SUPPORT fair and full retail rates for solar energy providers that supply energy back to our grid. There is a clear delineation between the fees that consumers must pay to participate in the electric grid and the rates that they pay for the electricity. For this reason, there is no justification to not provide the same retail rate to those organizations and residents in Kentucky that are doing their part to make Kentucky a more modern and clean environment.

Please do the right thing and do NOT cave to industry pressure on this issue.

Thank you!

Chuck Burke (KY Resident)
216 Stilz Ave, Louisville, KY 40206



--

Chuck Burke
// [502.552.3918](tel:502.552.3918)

From: [PSC - Public Information Officer](#)
To: [James Bush](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:53:00 PM

Dear Mr. Bush:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: James Bush <[REDACTED]>
Sent: Monday, October 14, 2019 9:20 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Case 2019-00256

****CAUTION** PDF attachments may contain links to malicious sites. Please contact the COT Service Desk [REDACTED] for any assistance.**

Please find and accept as public comment the attached PDF file for Case No. 2019-00256 regarding implementation of the Net Metering Act.

- james bush

Attachment <James Bush Public Comment.pdf>

October 14, 2019

Public Service Commission
PO Box 615
Frankfort, KY 40602-0615

RE: Case No. 2019-00256

I want to thank the Commission for soliciting public comment on the implementation of Senate Bill 100. Given the volume of content to review, I'll be brief.

The new compensation rate for customer-generated electricity entering the grid will be an important decision for the future of solar in the Commonwealth. The financial signal it sends will have a significant impact on the growth of the solar industry in Kentucky, and more importantly, the businesses, jobs and technology that support it. Companies are seeking lower carbon options throughout their supply chains and in their siting plans. The utilities, and the state by association, will be less competitive in this area of economic development if the benefits of distributed generation resources are not fully recognized.

I believe that equating the compensation rate to the Variable Charge per kWh would undervalue solar's contributions during times of peak electrical demand as well as the environmental savings associated with displacing power generated from fossil fuels. Solar is criticized as not being reliable, but its aggregation can be modeled and it will offer a hedge against peak summer load, a key metric in utility resource planning and a component of the Infrastructure Charge per kWh. This asset will only grow as renewable energy is coupled with battery storage devices and electric vehicles to provide demand side management. In order to participate in and benefit from this emerging market, at least some portion of the Infrastructure Charge should be included in the compensation rate to generating customers.

Lastly, while I prefer the simplicity of true net metering, a positive outcome of monetizing the transaction is that customers who voluntarily produce more than they consume will be able to apply their compensation toward the entire bill rather than just the cost of energy. In this regard, and to prevent additional confusion of net metering rules across the state, I would encourage the Commission to request of the utilities standard terminology and methodology for how energy flows are to be tracked and monetized.

Thank you again for the opportunity to provide input on this topic.

Sincerely,

James Bush
1146 Athenia Dr
Lexington, KY 40504

From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:52:00 PM

Dear Ms. Beecher:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: [REDACTED] <[REDACTED]>
Sent: Tuesday, October 15, 2019 9:36 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: SB100 Comment

Commissioner,

I object to reducing the rate (\$) solar customers receive for sending power to the grid.

This rate should increase automatically along with any rate hike utility companies charge for energy.

I look forward to taking my home solar. The payback at current rates is +10 years! Lowering the rate will make the decision even less desirable. This is not in the best interest of KY.

Say "NO" to SB100.

Thank you,

Audrean Beecher

616 Millpond Rd.
Lexington, KY 40514

From: [PSC - Public Information Officer](#)
To: [Matt Stone](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:52:00 PM

Dear Mr. Stone:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Matt Stone <[REDACTED]>
Sent: Tuesday, October 15, 2019 11:18 AM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: SB100 Comments

From:
Matthew Stone
2621 Valletta Rd, Louisville, KY 40205

Regarding SB100 "net metering"

I understand that there are additional costs related to generation and transportation of energy by LG&E that rooftop solar customers may not have to handle, but the looming dangers of climate change are too severe to significantly discourage individuals from reducing their carbon footprint. This is especially true in a state that relies so heavily on coal-fired power

plants.

With the goal of greenhouse gas reduction in mind, I would recommend marrying the rate set for rooftop solar pricing (or other residential renewable generation) to the percentage of the utility's renewable generation, with a "floor" rate of the wholesale price.

For example, if the retail rate of energy is \$0.10/kWh and the utility generates 15% of their electricity from renewable sources, then the price paid for rooftop generation should be at \$0.085/kWh. As the utility adds more renewable generation, that "rooftop rate" would continue to drop until it reaches the wholesale price.

This approach would encourage utilities to invest in renewable generation of their own, while keeping the "rooftop rate" proportional to the environmental benefit created by the customer installing their own renewable generation.

At a time when climate change's effects are already starting to be felt in the Commonwealth, I believe we should be actively encouraging clean renewable power generation. Setting the rooftop solar rate significantly lower than the retail rate at a time when there is so little renewable generation from the utilities would be a step in the wrong direction.

From: [PSC - Public Information Officer](#)
To: [Anne Lubbers](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:51:00 PM

Dear Ms. Lubbers:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Anne Lubbers <[REDACTED]>
Sent: Tuesday, October 15, 2019 12:42 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Re Case 2019-00256: Protect solar energy!

Dear Public Service Commission,

I am one of your constituents who has installed solar panels on my small home. I firmly believe that the current net metering program must be protected.

My solar panels generate enough electricity to fulfill all of my electrical needs, but because I remain connected to the grid Inter-County Energy gets to keep and sell what I don't use, which is much more than I do use. While I am very willing to pay for my use of the grid I think it is only fair and ethical that the value of the kilowatts I donate to ICE be able to offset in equivalent value the electricity I use for myself, including the wear and tear on the grid

itself.

Solar energy is one of the most efficient ways that Kentucky can modernize its electricity system to reduce our state's impact on CO2 generation. We need to encourage more individuals to independently reduce their CO2 generation, not discourage them. People should have the right to produce, use, and share their own energy and not be reliant on others. Retail net metering also enables people to counter the stranglehold on electricity that monopoly utilities have had for the past century.

More solar energy also means more good jobs for Kentucky. Neighboring states like Illinois and Tennessee have 3x the number of solar jobs compared to Kentucky. Let's grow the economy, create jobs, and make our state more energy independent.

I strongly urge you to protect solar energy in Kentucky!

Sincerely,
Anne Lubbers
665 Upper Salt River Road
Danville, KY 40422
United States

[REDACTED]

From: [PSC - Public Information Officer](#)
To: [Robert Murray](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:51:00 PM

Dear Mr. Murray:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Robert Murray <[REDACTED]>
Sent: Monday, October 14, 2019 1:36 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Re Case 2019-00256: Grow solar energy in Kentucky!

Dear Public Service Commission,

As your constituent, I am writing to tell you how important solar energy is to Kentucky's future, and how critical our state's retail net metering program is to that future.

Our planet is at stake here and we haven't much time left. Now is the time to act, show your kids our future means more to us than a fake currency exchange. Please.

Retail net metering enables people to become more energy independent with solar and fight back against monopoly utilities that have had a stranglehold on electricity for the past century.

People should have the right to produce, use, and share their own energy and not be reliant on others.

More solar energy means more good jobs for Kentucky. More solar energy also means more good jobs for Kentucky. Neighboring states like Illinois and Tennessee have 3x the number of solar jobs compared to Kentucky. Let's grow the economy, create jobs, and make our state more energy independent.

I urge you to protect solar energy in Kentucky!

Sincerely,
Robert Murray
4591 Mayes Creek Road
Springfield, KY 40069
United States



From: [PSC - Public Information Officer](#)
To: [Mark Swanson](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:50:00 PM

Dear Mr. Swanson:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Thank you again for your interest in this matter.

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Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Mark Swanson <[REDACTED]>
Sent: Monday, October 14, 2019 1:46 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Re Case 2019-00256: Grow solar energy in Kentucky!

Dear Public Service Commission,

As your constituent, I am writing to urge you to support the continued development of solar energy in Kentucky by supporting a continuation of the current retail net metering program that supports solar.

Retail net metering enables people, and our state, to become more energy independent with solar. I have heard the argument that paying the retail price of energy shifts costs from solar-installing homeowners to the general energy customer. However, this ignores the huge savings independent solar offers to all ratepayers by reducing the need for additional power

generation.

The solar industry is still in its infancy, but I can't imagine a better investment in Kentucky's future than expanding and strengthening renewable energy. Neighboring states like Illinois and Tennessee have 3x the number of solar jobs compared to Kentucky. Installation and maintenance of solar panels are jobs which can't be outsourced in the way so many coal jobs have been in our state.

I realize that the energy utility monopolies in our state are extremely powerful and want to remain dominant in the energy markets. But while higher and higher rates along with continued use of fossil fuels helps energy utilities make money, they do nothing but hurt the wallets and the health of the average Kentuckian.

The title of your agency is the PUBLIC Service Commission. Please put the needs of the PUBLIC above the demands of the energy monopolies in Kentucky, and support a policy that continues full payment of solar producers who feed power back into the grid.

Sincerely,
Mark Swanson
328 Arcadia Park
Lexington, KY 40503



From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:42:00 PM

Dear Dr. Phillips:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
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Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Monday, October 14, 2019 1:44 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

I am very disappointed in the legislature's decision. I hope you will protect the growing solar industry in KY. I had planned to add solar panels to my house because I have the land to do so. I was even considering adding Tesla Power packs to power my house when the utility grid goes down. All of that is now been put on hold until the PSC makes final decisions on this process. I beg you to support Kentuckians and give them the right to choose solar without being penalized by added fees from utility companies.

Thank you for your consideration.

Sincerely,
Dr. John Phillips
4785 Ridge Creek Rd Owensboro, KY 42303-7816 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [Barry Tinning](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:41:00 PM

Dear Mr. Tinning:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Barry Tinning <[REDACTED]>
Sent: Tuesday, October 15, 2019 12:58 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Case Number:2019-00256 Public Comments

Greetings

I am submitting these comments regarding KY PSC Case Number 2019-00256 (Net Metering) on behalf of myself, as a citizen of Kentucky and a current subscriber to electric service. I am Barry Tinning, and I reside at 343 North Maysville Street in Mount Sterling KY.

As a general comment, I do not favor any PSC action that would economically disadvantage the production and distribution of electricity via solar energy generated

From: [PSC - Public Information Officer](#)
To: [Don Waters](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:41:00 PM

Dear Mr. Waters:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

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Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Don Waters <[REDACTED]>
Sent: Tuesday, October 15, 2019 2:33 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Cc: Dan Hofmann <[REDACTED]> Amy Waters <[REDACTED]>
Subject: Case Related Question: Case Number 2019-00256: NET METERING

I'm Donald Edward Waters. I live at 406 Cannons Ln., Louisville KY 40206-3016.

I'm charged \$14.62 EVERY MONTH by LG&E for basic service plus whatever else is not an energy charge! EVERY MONTH! Tell LG&E to let me at least provide the meter reading whenever they want it rather than send a reader out monthly. Surely that would save them money. They could check the meter at 6 mos. or yearly. Also advise them to stop taking exorbitant bonuses, taking expensive trips and buying expensive meals to further save money.

Rather than undermining solar initiatives which are meant to ameliorate the climate mess that

LG&E and its ilk have caused, tell them to tighten their own purses and STOP TAXING EFFORTS TO REDUCE CARBON FOOTPRINTS!

I have 16 solar cells on my roof installed in mid 2013. Since 2016 at least one or two cells have not worked. I should be gaining about 4300 kWhs a year on average:
2014=4422 kWh 2015=4301 2016=4133 2017=3764 2018=3158 and through June this year, a whopping 1445 kWhs! IT'S 2:27 pm and I only have 11 panels out of 16 reporting! So to advise that maintenance reduces the owner's return can be a massive understatement! And LG&E wants to tax me further?

I'll let a quote from Andy McDonald's (Solar Society member) article in the Northern Kentucky Tribune complete my plea to stop LG&E from killing this movement:

“Traditional net metering provides a simple set of rules that empowers people to make investments to control their energy costs. It gives people the freedom to produce their own energy and benefit from their investments. The new law uses regulations and bureaucracy to undermine customer ownership of solar power. It replaces a simple, consistent system with a complicated bureaucratic process that will cost solar businesses, taxpayers, and ratepayers hundreds of thousands of dollars to litigate before the PSC. It replaces a transparent, predictable system with uncertainty and instability.

The new law allows monopoly electric utilities to smother competition from small solar businesses, while the utilities build their own large solar facilities and take control of the solar market.

Net metering could have been the seed for a new economic sector in Kentucky. The U.S. solar industry has grown exponentially in recent years, with states like North Carolina adding tens of thousands of jobs to serve the demand for solar power. U.S. employment in solar now exceeds 250,000. Kentucky's solar industry is still very small, with net metering accounting for less than 0.1 percent of total electricity production in Kentucky.

A few smart policy changes to our previous net metering law could have triggered rapid growth in Kentucky's solar industry and brought its benefits to counties throughout the state. Instead, the Legislature chose to end net metering and stifle the growth of rooftop solar.

Utilities have argued that net metering customers aren't paying their fair share for use of the electric grid and shift costs onto other ratepayers. However, they have provided no evidence of this and the facts do not support this claim. The Kentucky Resources Council has analyzed utility data provided to the U.S. Department of Energy.

|

Their analysis found that the potential cost-shift onto other ratepayers by net metering is less than 1 cent per month, and that's if you disregard all the benefits net metering provides to utilities and other ratepayers. These benefits have been well-documented in numerous studies across the U.S."

Andy McDonald, Solar Society Member

Article in Northern Kentucky Tribune, October 15, 2019

Sent from my iPad

From: [PSC - Public Information Officer](#)
To: [Joe Pence](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:40:00 PM

Dear Mr. Pence:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Joe Pence <[REDACTED]>
Sent: Tuesday, October 15, 2019 8:45 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Case number: 2019-00256

To Whom It May Concern,

I am writing in support of maintaining the net-metering rate for new Kentucky renewable generation at the retail rate of electricity, in that I believe it is a prudent investment in helping to distribute electricity generation, rather than a top-down stratification of power production.

We need to be building a system that maintains assurances going forward that people who are putting down their own capitol in renewable power that they will not be punished for a large scale investment by a power rate that is more beneficial to a for-profit utility company's bottom line. Thank you for your time and consideration.

Respectfully,

Joseph M. Pence
745 N. Barbee Way
Louisville, KY 40217

From: [PSC - Public Information Officer](#)
To: [Josh Bills](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:40:00 PM
Attachments: [image001.png](#)

Dear Mr. Bills:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Josh Bills <[REDACTED]>
Sent: Tuesday, October 15, 2019 9:06 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: FW: MACED comments Case 2019-00256

****CAUTION** PDF attachments may contain links to malicious sites. Please contact the COT Service Desk ServiceCorrespondence@ky.gov for any assistance.**

Oops. In an abundance of caution, resending as last send was 2019-000256 in subject line instead of 2019-00256.

From: Josh Bills
Sent: Tuesday, October 15, 2019 9:04 PM
To: 'psc.info@ky.gov' <psc.info@ky.gov>
Subject: MACED comments Case 2019-000256

Resending as original email subject line referenced "2009-00256"

Whereas correct reference is Case "2019-00256"

Thank you,

Joshua Bills, CEM
Commercial Energy Specialist
433 Chestnut Street
Berea, Kentucky 40403
Office: (859) [REDACTED]
Mobile: (859) [REDACTED]
Fax: (859) [REDACTED]
Email: [REDACTED]
www.maced.org



From: Josh Bills
Sent: Tuesday, October 15, 2019 8:43 PM
To: psc.info@ky.gov
Subject: MACED comments Case 2009-00256

Please find attached MACED cover letter and MACED comments to include in official case record for Case 2019-00256.

Thank you,

Joshua Bills, CEM
Commercial Energy Specialist
433 Chestnut Street
Berea, Kentucky 40403
Office: (859) [REDACTED]
Mobile: (859) [REDACTED]
Fax: (859) [REDACTED]

Email: [REDACTED]

www.maced.org





Mountain Association for Community Economic Development
433 Chestnut Street • Berea, Kentucky 40403
voice/tdd 859-986-2373 • facsimile 859-986-1299
www.maced.org • info@maced.org



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,

A handwritten signature in black ink, appearing to read "Joshua Bills", written in a cursive style.

Joshua Bills
Commercial Energy Specialist
MACED

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC CONSIDERATION OF THE)
IMPLEMENTATION OF THE NET) CASE NO:
METERING ACT) 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 kWhs, 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 than 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.”¹

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/Finai%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.”²

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

² <https://www.psc.ky.gov/agencies/psc/Industry/Electric/Finai%20Net%20MeteringInterconnection%20Guidelines%201-8-09.pdf>

From: [PSC - Public Information Officer](#)
To: [John Wright Rios](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:38:00 PM

Dear Mr. Wright :

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: John Wright Rios <[REDACTED]>
Sent: Tuesday, October 15, 2019 11:37 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: "Case No. 2019-00256" Net Metering - Attn: Public Information Officer

Attn: Public Information Officer
Dear Public Service Commission,

I ask you to please consider first and foremost the desperate need Kentucky has to diversify its Energy Portfolio and to protect our soil, water and air. When you make your Net Metering decisions I ask you to consider these 4 points below that I wholeheartedly support which I've quoted from the website of Kentuckians for the Commonwealth, a group of which I am a member.

1. *Evaluation of the cost of net metering should include the full range of benefits that net metering and distributed generation provide to the utility, ratepayers, and society. The benefits of solar offer to the energy grid, and to Kentucky, include avoided energy costs, reduced line losses, avoided investment in new capacity, reduced financial risks from volatile fuel sources, increased grid resiliency, environmental and social benefits, reduced public health threats, and job creation and economic development. The PSC should consider these benefits when determining the value of solar.*
2. *In states like Minnesota (Farrell, Institute For Local Self-Reliance, 2014) and Maine (Norris, Gruenhagen, Grace, Yuen, Perez, and Rábago 2015), studies commissioned by state Public Utility Commissions have found that distributed solar generation is worth more than its retail price and that the benefits of distributed solar energy consistently outweigh the costs.*
3. *The utility argument that rooftop solar customers are not paying their fair share for upkeep to the energy grid is flawed. An analysis of Kentucky utility data reveals that, at most, net metering costs the average ratepayer less than one penny per month (Kentucky Resources Council 2018). A study by the US Department of Energy concluded in 2017 that distributed solar would have a negligible impact on rates until solar reaches 10% or more of a utility's peak demand (Galen, Department of Energy, 2017). In Kentucky, we are far from that 10% mark—much less than 1% of Kentucky's energy mix currently comes from distributed solar.*
4. *Solar is working for all Kentuckians under the current net metering law. Non-profits, community centers, churches, and small businesses all benefit from rooftop solar energy in Kentucky. Some examples include: the Post Medical Clinic in Mount Sterling, the Catholic Action Center in Lexington, People's Self-Help Housing in Lewis County, and the Campton Baptist Church in Wolfe County.*

Our children, grandchildren and all subsequent generations are deeply affected by your choices. Sincerely,

John Wright
300 Prospect St
Berea, KY 40403

From: [Melnykovych, Andrew \(PSC\)](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:36:00 PM

Dear Mr. & Ms. Arnold:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: PSC - Consumer Web Inquiry <PSC.Consumer.Inquiry@ky.gov>
Sent: Wednesday, October 16, 2019 8:09 AM
To: Melnykovych, Andrew (PSC) <Andrew.Melnykovych@ky.gov>
Subject: FW: Net Metering in KY - consumer comment

-----Original Message-----

From: Andy <[REDACTED]>
Sent: Tuesday, October 15, 2019 5:32 PM
To: PSC - Consumer Web Inquiry <PSC.Consumer.Inquiry@ky.gov>
Subject: Net Metering in KY - consumer comment

Hello,

I tried to leave a comment in public comments on your website for over an hour and could not figure out how to create a comment there. I hope you will be able to use my email to address my concerns.

I would like for the PSC to allow consumers the most benefit in installing rooftop solar. I feel it is in our local and national best interest to make solar installations as affordable as possible. I would be happy to pay an extra "carbon tax" to my utility for the necessary use of carbon fuels (at night, etc), but solar should be allowed to flourish in our state by all means necessary. I am very concerned for the future health of our planet and am very interested in an economical installation of rooftop solar.

Thank you for listening to my concerns

Andy & Michelle Arnold
12311 Owl Ct
Anchorage, KY 40223

From: [Melnykovych, Andrew \(PSC\)](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:36:00 PM

Dear Mr. Knoll:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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Please cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: PSC - Consumer Web Inquiry <PSC.Consumer.Inquiry@ky.gov>
Sent: Wednesday, October 16, 2019 8:08 AM
To: Melnykovych, Andrew (PSC) <Andrew.Melnykovych@ky.gov>
Subject: FW: Net metering input

From: Benjamin Knoll <[REDACTED]>
Sent: Tuesday, October 15, 2019 4:19 PM
To: PSC - Consumer Web Inquiry <PSC.Consumer.Inquiry@ky.gov>
Subject: Net metering input

Hello! I'm writing to express a quick message OPPOSING the net metering bill that was passed by the KY state legislature last year.

I SUPPORT solar customers being guaranteed to "receive a credit equal to the retail value of the energy they put back on the grid."

Thanks very much for your consideration.

Benjamin Knoll
Danville, KY

Benjamin Knoll



From: [PSC - Public Information Officer](#)
To: [Joshua Brown](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:33:00 PM

Dear Mr. Brown:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

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The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Joshua Brown <[REDACTED]>
Sent: Tuesday, October 15, 2019 2:28 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Re Case 2019-00256: Protect solar energy!

Dear Public Service Commission,

As your constituent, I am writing to tell you how important solar energy is to Kentucky's future, and how critical our state's retail net metering program is to that future.

Retail net metering enables people to become more energy independent with solar and fight back against monopoly utilities that have had a stranglehold on electricity for the past century. People should have the right to produce, use, and share their own energy and not be reliant on others.

More solar energy means more good jobs for Kentucky. More solar energy also means more good jobs for Kentucky. Neighboring states like Illinois and Tennessee have 3x the number of solar jobs compared to Kentucky. Let's grow the economy, create jobs, and make our state more energy independent.

I urge you to protect solar energy in Kentucky!

Sincerely,
Joshua Brown
Lawrenceburg, KY



From: [PSC - Public Information Officer](#)
To: [REDACTED]
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 3:33:00 PM

Dear Mr. Williams:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

The hearing in this matter will be held on Wednesday, November 13, 2019, at 9 AM Eastern Standard Time at the PSC offices, 211 Sower Boulevard in Frankfort. It is open to the public and those in attendance will have an opportunity to address the Commission. The hearing also will be streamed live via the PSC website, psc.ky.gov.

Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovych
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovych@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Tuesday, October 15, 2019 1:47 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Written Comments on PSC Case Number 2019-00256

Dear Kentucky Public Service Commission,

As you consider how to best implement the 2019 Net Metering Act, I urge you to consider the many benefits that distributed solar energy provides to individual Kentuckians, businesses, churches, farms, and schools; to our energy grid; and to public health, economic development, climate protection, and more. Specifically....

Homeowners who invest their own money to put solar panels on their homes also provide a service to the utility companies. When homeowners with solar panels produce electricity they provide energy for their neighbors in addition to their own homes during peak usage hours and then draw some energy back in the evening during non-peak hours. This saves the utilities money in that they don't have to build excess utility plants for the peak hours. Homeowners with solar serve as feeder suppliers of electricity which allows utilities to meet demand during peak hours in an efficient way. Homeowners with solar and utility companies should be seen as partners benefiting from each other.

In light of this partnership I would encourage a 1 to 1 rate similar to that offered through net metering so that more homeowners will be attracted to placing solar on their homes. This will help diversify our energy sources, help support good paying sustainable jobs and help make our living environment healthier.

Thank you for your consideration.

Jim Williams

Sincerely,
Jim Williams
4536 S 6th St Louisville, KY 40214-1404 [REDACTED]

From: [PSC - Public Information Officer](#)
To: [Brydon D. Ross](#)
Subject: your comments in case 2019-00256 - Implementation of the Net Metering Act
Date: Wednesday, October 16, 2019 4:03:00 PM

Dear Mr. Ross:

Thank you for the comments you have submitted to the Kentucky Public Service Commission in case 2019-00256. They will be placed into the case record for the Commission to consider as it prepares its final report in the matter.

Comments received and all other records in this case are available on the PSC website at https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2019-00256.

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Please continue to cite the case number in any future correspondence in this matter.

Thank you again for your interest in this matter.

Andrew Melnykovich
Director of Communications/Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, Frankfort KY 40601
Andrew.melnykovich@ky.gov
Direct line 502-782-2564
Cell 502-330-5981
Main 502-564-3940

From: Brydon D. Ross <[REDACTED]>
Sent: Wednesday, October 2, 2019 12:15 PM
To: PSC - Public Information Officer <PSC.Info@ky.gov>
Subject: Comments on Case Number 2019-00256

****CAUTION** PDF attachments may contain links to malicious sites. Please contact the COT Service Desk [REDACTED] for any assistance.**

To whom it may concern,

On behalf of Consumer Energy Alliance, attached are comments to the Public Service Commission on Case Number 2019-00256. Thank you for your assistance with this submission.

Sincerely,

Brydon Ross
Consumer Energy Alliance
9900 Corporate Campus Drive, #3000
Louisville, KY 40223

October 2, 2019

Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

RE: Case number 2019-00256

Dear Commissioners:

On behalf of Consumer Energy Alliance, we appreciate the opportunity to offer these comments on the new incentive structure and proposed changes for Kentucky's net metering program that were directed by the passage of SB 100 last session.

Consumer Energy Alliance (CEA) is a national non-partisan, non-profit association which has long advocated for national and state energy and environmental policies which focus on creating a diverse portfolio of energy supplies, from wind and solar, to biofuels, petroleum, nuclear, coal and clean natural gas for America's families, households, and small businesses. As a representative of energy consumers, families, small businesses and end-users across the nation, CEA strongly supports the increased use of solar and is proud to advocate for the utilization of solar energy resources that help meet energy demands, temper volatile energy prices, and ensure fair access to energy for all. In Kentucky, we have over 5,500 individual members and affiliate members across the Commonwealth.

As part of its national [Solar Energy Future](#) campaign, CEA advocates on behalf of policies that are pro-solar, pro-grid, and pro-consumer. We believe solar can and will provide long-term health, environmental, and cost-saving benefits for our communities and our economy. Solar continues to deploy across Kentucky (and the nation) at a significant rate, and with that growth it is imperative that the Commonwealth's incentive policies ensure this growth is responsible, equitable and that costs are fairly allocated to avoid an unfair price stigma being attached to solar. Residential rooftop solar has greatly expanded across the state in recent years due to falling costs of installation (down nearly 70 percent nationwide since 2009) as well as from programs like net metering and federal tax incentives.

CEA supported the passage of SB 100 as it provided common-sense steps to reexamine Kentucky's existing 15-year solar incentive structure, while grandfathering-in existing rooftop solar customers for 25 years and expanding the size of eligible systems that could participate in the program by 50 percent. The Public Service Commission was tasked with developing a new compensation rate for future private solar customers and under the new law that compensation will be subtracted from a customer's total bill.

It is important for the public to know that Kentucky's solar incentive program, like many across the country, were designed for a very different era with high costs of installation and low customer acceptance or usage. Kentucky's previous 15-year old statute remained largely unchanged while the state's solar program grew significantly, and the compensation credits for those participating in the private solar program were awarded at the full retail rate of electricity, which is roughly three times or 300 percent more than the competitive market-rate for wholesale electricity. Over time, as solar use increased, the structure used to incentivize private solar deployment at very generous levels leads to sustained losses to cover the costs of providing electricity 24 hours a day, seven days a week. Compensation at the full retail rate of electricity for private solar customers does not reflect the true

fixed costs for maintaining the public electric grid infrastructure – the poles, wires, and meters- that all customers use. These fixed costs are typically factored into a family or small business' monthly power bill. Avoiding these costs creates gaps in proper grid maintenance funding and consequently those funds must be collected elsewhere. Further, without maintaining the public grid, private solar customers would not have the ability to net meter.

A key concern of CEA is that as more private solar is utilized, cost increases associated with current above-market incentive programs will raise rates, which is not only unfair for participating customers but could create a backlash and slow the growth in solar deployment. Developing a new compensation structure that continues to value the benefits that private solar can bring must also importantly ensure that proper grid management is maintained and that costs are fairly allocated to keep pace with the tremendous changes occurring in this dynamic industry.

In 2018, CEA released a [study](#) that describes and quantifies the amount of incentives that consumers have access to in various states across the country. The analysis covered 25 states and had a broad geographic sample to ensure a balance of different policy perspectives and priorities found in other regions of the country.

Among the report's key findings were that the existing national incentives for residential solar systems are significant, and on average provide 104 percent of the total cost of installation. The report also found that utility-scale solar installations are less expensive to install but are incentivized at lower rates per watt than rooftop solar systems, at roughly 45 percent of the total cost of installation. Perhaps the most significant finding was related to third-party owned solar systems (which are not allowed in Kentucky) are incentivized at an average of about 140 percent of the total cost of installation.

The major concerns with these findings is the sustainability of current net metering incentives which create a scenario where program recipients are receiving thousands of dollars in benefits while putting non-solar customers at risk of bearing increased costs.

CEA strongly supports the increased development of renewable energy projects, wants to ensure robust solar growth and distributed solar generation as well as the continued ability for customers to offset their energy use to lower power bills. However, as the market matures, we urge the Commission to set an incentive policy that ensures this expansion places a reliable, resilient electricity grid at the forefront and keeps overall electricity rates as low as possible for all households, families, small businesses and those on fixed incomes.

Sincerely,



Brydon Ross
VP of State Affairs
Consumer Energy Alliance

