

**STATE OF MISSOURI
PUBLIC SERVICE COMMISSION**

In the Matter of the Consideration of Proposed)	
Amendments to the Missouri Public Service)	File No. EW-2019-0002
Commission’s Rules Regarding Solar)	
Rebates (4 CSR 240-20.100(4)))	

**COMMENTS OF THE MISSOURI SOLAR
ENERGY INDUSTRIES ASSOCIATION**

COMES NOW the Missouri Solar Energy Industries Association, by and through its undersigned counsel, and pursuant to the Commission’s July 5, 2018 Order in this case, and submits the following comments regarding the “Draft Concept” contained within Staff’s *Motion to Open Rulemaking Workshop* in this case.

I. Introduction

The Missouri Solar Energy Industries Association (“MOSEIA”), founded in 2009, has a mission to expand the solar industry and establish a sustainable energy future for all Missourians. MOSEIA acts as chamber of commerce for Missouri’s solar industry, and has over 50 members throughout the state, including solar installers, manufacturers, advocacy groups, and utilities. MOSEIA is the Missouri chapter of the Solar Energy Industries Association, and is a 501(c)(6) non-profit corporation with its principle place of business at 55 Shagbark Rd, Sunrise Beach, Missouri 65079.

MOSEIA appreciates the opportunity to submit these comments and offer its perspective on the Draft Concept submitted by the Staff for the Public Service Commission (“Staff”) as part of its *Motion to Open Rulemaking Workshop*. Along with Renew Missouri, MOSEIA and its members have been closely involved in Commission matters related to Missouri’s solar rebates throughout the past decade, including: the rulemaking and tariff creations resulting from the

passage of Proposition C in 2010-2011; the implementation of a statute in 2013 stepping down the solar rebate levels (HB 142, 2013); and negotiations in 2014 limiting utilities to an agreed-upon amount of solar rebates (ET-2014-0350, ET-2014-0071, ET-2014-0059). Some of these cases resulted in further legal conflicts in the courts. In context of this historical experience surrounding solar rebates, MOSEIA's primary goal is to ensure that the law is followed and implemented smoothly with minimal disagreements or further legal actions by the parties. In addition, MOSEIA believes the concerns raised in Staff's Draft Concept are of high significance and should be considered closely by the Commission. Solar energy is proving to be a powerful tool to make energy more affordable for low-income ratepayers and to strategically lower demand in over-stressed regions of the grid. However, for the reasons below, solar rebates are not a useful tool to accomplish those goals.

II. Support for the Aims in the Draft Concept

Staff's Motion requests that stakeholders provide comments on the following policy concepts:

... targeting a certain percentage of solar rebates to applicants in low-income communities, in high poverty level areas, multifamily dwellings, areas with over-utilized circuits or high congestion areas, customers whose household income is at a certain percentage of the federal poverty level or areas where additional distributed generation would benefit the electric utility system.

It's useful to reduce these policy concepts down to two primary concerns: 1) how to ensure equitable access to solar energy and use distributed generation to assist low-income individuals and multifamily households; and 2) how to strategically locate solar energy to reduce load and produce maximum system benefits. MOSEIA enthusiastically shares these concerns, and believes that solar energy can be the key for addressing them both.

Because of the competitive price of solar generation, the technology offers a way for all customers to reduce their electricity bills over long periods of time. This is particularly true for low-income customers, who have the largest energy burdens as a proportion of income. An additional concern is renters, who do not have the ability to install distributed solar on or near their homes. Solar is being used across the country to help renters and low-income customers stabilize and reduce their monthly bills, and Missouri is in a place to replicate these models. See Part III below for a discussion of how solar can be most effectively deployed to assist low-income and multifamily ratepayers by reducing their bills permanently.

In addition, solar is proving to be an effective way to strategically reduce demand at key parts in a utility's distribution grid to produce system savings. All across the country, solar is being used to lower demand near circuits or nodes that experience high stress and result in electricity losses and congestion. This is one of the many versatile advantages of distributed energy, and MOSEIA agrees with Staff and the Commission's focus on this potential. In Part III, these comments discuss how solar can best be used to strategically lower system demand and produce benefits system-wide.

III. Problems with Using Solar Rebates to Accomplish Aims

While MOSEIA agrees with the aims in Staff's Motion and Draft Concept, unfortunately solar rebates are not an effective way of addressing those concerns. The reasons for this are both legal and practical in nature.

a. Legal Issues with the Draft Concept.

The Draft Concept envisions a rule that would require or encourage utilities to "target" solar rebates to certain customers or to certain regions of the distribution grid. In effect, this

would mean that customers would not have equal footing when applying for solar rebates, and that certain applications may be restricted or rejected in favor of preferred applications. This type of rebate distribution presents several legal problems that are guaranteed to result in litigation.

To begin with, neither the existing Renewable Energy Standard statute (Section 393.1030, RSMo.) nor the newly enacted Senate Bill 564 (Section 393.1670, RSMo.) grant utilities the authority to deny or favor certain customers or areas over others. The statutes simply require utilities to offer all customers solar rebates at specified levels for systems of a certain size. These statutory requirements effectively confer a right on utility customers to apply for and receive solar rebates until the utility reaches a specified amount. One could imagine a prospective solar customer with a ready project, a contract with a solar installer, and an otherwise valid application who receives a rejection or delayed application due to rule provisions similar to those in the draft concept. It is easy to imagine both the solar company and the customer bringing causes of action against the utility, the Commission, or both, citing the statutory language that makes no mention of priority or qualitative merit for rebate applications. These hypothetical complainants will also be able to point to clear economic damages resulting from the denial of their applications.

This is not to say that the concern of equitable access to solar is invalid. As stated above, MOSEIA is committed to working with all parties to ensure that low-income and multifamily customers can benefit from solar. Nevertheless, these kinds of legal challenges are easily foreseeable, and could cause needless expense and wasted time. MOSEIA respectfully recommends that the Commission avoid them, particularly when there are far more effective ways of addressing the Draft Concept concerns using solar.

b. Practical and Technological Issues with the Draft Concept.

Aside from the legal issues, relying on customer-owned distributed solar does not offer a reliable way to address the concerns in the Draft Concept.

Solar rebates are, by their nature, tied to solar systems that the customer pays to construct and install on their own property associated with their own single meter. Low-income and multifamily customers are the least likely to be in the position to invest tens of thousands of dollars to install solar panels on their own properties. Installing solar is most certainly not an option for renters of any kind.

Even in the case of an owner or property manager of a multifamily property, solar rebates are of almost no use whatsoever. First, there is often a situation with multiple owners, which presents practical issues with getting solar systems approved, installed and paid for properly. But even in the case where the landlord owns the building, a rooftop solar system can only be used to benefit the landlord and his common-area metered locations; tenants can receive no benefit.¹ This is because landlords cannot sell electricity to their individually-metered tenants under Missouri law. The sale of electricity triggers the definition of “electrical corporation” under Section 386.020, subjecting the seller to the Commission’s jurisdiction and all the attendant regulations characteristic of a monopoly utility state. Until Missouri law changes to allow individual customers to contract directly with owners or developers of renewable generation, customers may only purchase power from regulated utilities. Effectively, this means that renters and most low-income and multifamily ratepayers have no way to take advantage of solar rebates, even if they possess the financial means.

¹ A slight exception to this statement is in the case of master-metered multifamily properties, where the owner/manager pays utilities for all the units. MOSEIA is willing to work with Staff, the Commission, and utilities to figure out ways to target solar marketing directly to these master-metered properties.

The scale is also relevant here. Section 393.1670 requires utilities to pay \$51 million total in solar rebates, across Ameren Missouri, KCP&L, GMO, and Empire service territories. While it may seem like a large number, MOSEIA expects this rebate money to be committed before the end of 2019, and likely prior to June 30, 2019 when the rebate amount reduces from \$0.50/watt to \$0.25/watt. Assuming the \$51 million is paid out or committed before June 30, 2019, the total amount of solar installed from rebates statewide is approximately 100 MW. To put that amount in context, Ameren Missouri alone expects to construct more than 100 MW in utility-scale solar within the next few years.

The Draft Concept and rule also present a timing issue. By January 1, 2019, utilities have a legal obligation to offer solar rebates to their customers. It is unlikely that Staff and the Commission could conduct a rulemaking process and enact a rule prior to the requirements of Section 393.1670 kicking in. It is also unlikely that this rulemaking could be completed in time for any remaining uncommitted rebate dollars to be distributed according to the rule.

Furthermore, the construction of solar systems of 150 kW or smaller is not an effective way to reduce load at key regions of the grid. The limitations in system size means that solar can't be used in a meaningful way to reduce demand at a particularly congested site, unless the rebated systems were somehow aggregated together or installed in extremely close proximity. Below in Section 3, we propose a more effective way of using solar to strategically reduce load.

IV. Alternative Methods to Accomplish the Aims of the Draft Concept

While solar rebates may not be the best way to address the concerns in the Draft Concept, Missouri does have the potential to utilize large-scale solar to provide more equitable access to

solar and to create greater system benefits. Like solar rebates, recent legislative changes from SB 564 make this an ideal time to consider this potential.

a. *Utility-Sponsored Community Solar Programs.*

The cost of solar generation has plummeted in recent years, down to under \$2.00/watt for utility-scale generation. In addition the solar market and utilities have matured and gained experience that has reduced risk, streamlined installation, and improved grid integration. These two facts have conspired to make it possible for customers to save money by investing in solar. Giving low-income customers the ability to pay a lower rate for solar each month is more cost effective and long-lasting than simply providing energy assistance dollars, however this benefit only exists if the customer does not have to pay an up-front capital investment.

Utilities are now developing and offering community solar (or “subscriber solar”) programs throughout the country and in Missouri as well. These programs have the advantage of allowing ratepayers to invest in solar without paying any up-front capital investment, and the price of utility-scale solar is now low enough to allow for solar subscription rates at or below retail rates almost anywhere in the country. Residential customers, renters, and small commercial ratepayers can all benefit from participation in community solar in ways that are not possible through customer-owned distributed generation. However, the customers that most stand to benefit from these programs are low-income and multifamily tenants.

The best way to ensure that low-income and affordable multifamily tenants can benefit from solar is to offer them a special low-income community solar rate that is below their retail rate. This allows the customers to simply elect to participate, and then begin experiencing immediate savings without any cost or lengthy process. This savings can be long-term (15-20 years), and programs can be structured so that the customer maintains their savings when moving

properties. There are two ways to subsidize a low-income rate to ensure that low-income customers experience savings. One is to use dollars from another existing program to buy down the low-income to the desired level. Programs that could be drawn from include the Low-Income Housing Energy Assistance Program (LIHEAP), weatherization (WAP), and various utility-offered economic relief programs such as KCP&L's Economic Relief Pilot Program. The other way is to simply shift resources from the non-low-income participants' rat to subsidize the low-income solar rate. Both of these models have been implemented throughout the country.²

In addition, utility-owned community solar systems are far more flexible than customer-owned distributed generation if the aim is to strategically lower demand in areas of high congestion. The Commission may determine where utilities should site their larger systems in ways that will relief grid congestion and provide maximum system benefits. This avoids the task of establishing a complicated system of rules to determine which customers' solar rebate applications should be granted or denied based on location, income level, or other criteria.

b. Other SB 564 Changes: Utility-Scale Solar Generation and Pilot/Innovative Technology Projects.

Under SB 564, utilities are required to invest approximately \$25.5 million in utility-scale solar by the end of 2023. Section 393.1665, RSMo. This is a minimum amount of utility-scale solar investment that is guaranteed to be installed in the next few years, regardless of utility IRPs, consumer appetites, or changes in the market. Missouri's utilities will almost certainly be constructing many times this amount of utility-scale solar in the coming years. Unlike solar rebates, these solar investments do not require any customer investment; the investment comes solely from ratepayer funds.

² See "Direct Testimony of Philip A. Fracica" on behalf of Renew Missouri, File Nos. ER-2018-0145/0146 for further information about the various available program designs for low-income community solar.

MOSEIA believes this is a sensible area to consider strategic siting. For example, the Commission could strongly recommend that utilities site these solar systems in locations that strategically lower demand in key regions of the distribution grid. Utilities could also construct these systems for use in a community or subscriber solar program, so that general ratepayers are held harmless. For a variety of reasons, utility-scale solar generation presents a more flexible way of addressing the concerns in Staff's Draft Concept.

In addition, SB 564 authorizes the Commission to approve utility investments in programs or pilots designed to advance utilities' knowledge of efficiencies and innovative technologies. See Section 393.1610, RSMo.:

The commission may approve investments by an electrical corporation in small scale or pilot innovative technology projects, including but not limited to renewable generation, micro grids, or energy storage, if the small scale or pilot project is designed to advance the electrical corporation's operational knowledge of deploying such technologies, including to gain operating efficiencies that result in customer savings and benefits as the technology is scaled across the grid or network.

This new statutory authority provides a broad array of possibilities that the Commission and utilities may pursue to accomplish both goals of equitable access the renewables and strategic load reduction.

MOSEIA is very interested in working with parties to examine how utility-scale solar and new technologies like battery storage and microgrids may bring more equity and customer benefits to Missouri's power grid. MOSEIA's members have broad experience, both topically and geographically, that could prove valuable to these discussions.

V. Conclusion

MOSEIA would like to restate that it enthusiastically supports the concerns raised in Staff's Motion and Draft Concept. Solar technologies present us with ways to ensure that renters, low-income, and affordable multifamily tenants have equitable access to renewables, the best way being through utility-sponsored community solar programs. In addition, recent statutory changes from Senate Bill 564 give us an opportunity to address these same concerns through utility-scale solar investments and new pilot projects involving battery storage, microgrids, and other technologies. In the case of solar rebates, there are both legal and practical reasons why customer-owned distributed generation does not lend itself to addressing the concerns in the Draft Concept. MOSEIA appreciates the opportunity to submit comments on these topics, and looks forward to working with parties to find ways of utilizing solar energy to benefit all ratepayers.

Respectfully Submitted,

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