December 3, 2018

Ms. Steffany Powell Coker
Secretary to the Commission
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

Dear Ms. Powell Coker,

I respectfully submit my objections to the proposed We Energies solar tariff proposals in PSC docket 6630-TE-102. Please do not hesitate to contact me with additional questions on the concerns identified in this public comment.

Introduction

For the past 10 years I have worked as an energy efficiency consultant and professional engineer licensed in the state of Wisconsin. I have worked throughout the state and nation helping my clients improve building performance, maintain indoor air quality and comfort and install renewable energy technologies. As a consultant in the realm of building energy efficiency and renewable energy, I have worked with a wide variety of building owners, solar installers, solar developers and utilities as it relates to distributed energy generation, including those served by We Energies that will be impacted by the result of this docket decision.

In addition to my work as an energy engineer I am an avid follower of energy policy and PSC regulatory process. Once all the after-work responsibilities are complete, my children are asleep and my wife begins binge watching Netflix episodes, I catch up on the latest PSC dockets, review old decisions, and generally absorb myself in the latest current events related to the transformation of the electric utility industry.

My job experience as an energy engineer and my passion for energy policy provide me with a unique perspective to comment on this proposed pilot.

Part 1: Comments Regarding the Solar Now Proposal

Summary of Concerns

Regarding the Solar Now Pilot, also referred by the industry as the “Rent-a-Roof” program, I have the following concerns.

1) **The Solar Now Pilot attempts to create a regulated monopoly for distributed generation where none is required to protect the public interest.**

2) **The Solar Now Pilot is not the least cost option for developing and demonstrating electric generating technologies that utilize renewable sources of energy and will increase cost to both participating and non-participating ratepayers.**

3) **The Solar Now Pilot lease fees to hosts are volatile and unpredictable over time and will not create the price stability needed for widespread participation in this program.**

While I have numerous other concerns related to the Solar Now Pilot, I will focus this public comment on the 3 concerns noted above. There is existing literature that documents the litany of issues with utility owned distributed energy resources, the most insightful being the James Tong & Jon Wellinghoff article published on Utility Dive on May 11, 2015, which I urge the other public commenters, commissioners and PSC staff to read. (https://www.utilitydive.com/news/tong-wellinghoff-should-utilities-be-allowed-to-rate-base-solar/396283/)

Another useful background resource is the article written by the America’s Power Plan entitled, “Who Should Own and Operate Distributed Energy Resources.” https://energyinnovation.org/wp-content/uploads/2017/09/20150824_APPSEPA_utility-ownershipDERs.pdf

My comments will focus on my firsthand experience and research as it relates to the 3 primary concerns.

1) **The Solar Now Pilot attempts to create a regulated monopoly for distributed generation where none is required to protect the public interest.**

As described in “Electricity Regulation In the US: A Guide”, “the technological and economic features of the {electric utility} industry are also such that a single provider is often able to serve the overall demand at a lower total cost than any combination of smaller entities could. Competition cannot thrive under these conditions; eventually, all firms but one will exit the market or fail. The entities that survive are called natural monopolies, and, like other monopolies, they have the power to restrict output and set prices at levels higher than are economically justified. Given these two conditions, economic regulation is the explicit public or governmental intervention into a market that is necessary to achieve public benefits that the market fails to achieve on its own."

In the case of distributed solar generation, there is no risk of a natural monopoly and a **competitive market for distributed solar generation systems will provide all ratepayers with lower cost of energy and increased customer choice**. 3rd party behind the meter lease and power purchase arrangements provide the same function as the Solar Now Pilot but with greater benefits to both the participating and non-participating customers. Here's why…

In the Solar Now Pilot, We Energies states that the tariff will allow the company to "Gain valuable knowledge, insight and experience operating distributed solar generation and the Company's existing distribution system with these distribution generation assets deployed." The competitive solar market has already developed the skills and experience necessary to install and maintain extensive distributed energy resources. It is absurd to subsidize the investor owned utility "learning experience" with rate payer funds. **A market based DER policy will always bring the least cost service. This has been bore out in multiple states.**

Case in point is the Solar PV Program "SPVP" in California. This program was originally intended to be an investor owned DER program but after considerable pushback from 3rd party solar developers, included provisions for half the capacity to be installed and owned by third parties selling energy back to the IOU's. **After multiple years of the program, the utilities conceded that they could not beat independent power producers on DER pricing, and rate payers would be better off if distributed solar PV systems were owned and operated by 3rd parties procured through the reverse auction mechanism**. (https://energyinnovation.org/wp-content/uploads/2017/09/20150824_APPSEPA_utility-ownershipDERs.pdf, page 2 and 3)

Let's not reinvent the wheel here in Wisconsin at the expense of ratepayers.

Bringing it closer to home, the investor owned model for distributed energy generation in my service territory has been lackluster. The PSC approved an IOU (Investor Owned Utility) pilot for community solar in April of 2016. Since the tariff was approved, only 0.5MW of capacity has been installed on a total of 1 site. That site has been operational since December of 2016**. I have been on the waiting list since October 2017 for this community solar program, approximately 14 months.** In contrast, Minnesota's community solar program based on a third party competitive program utilizing a value of solar model has over 460MW of installed capacity since launching in December of 2014.

My local IOU utility also has a sleeved green tariff referred to as the Renewable Energy Rider which was approved in July of 2017. Despite extensive interest from the IOU customers and a cost of renewable energy on par with existing energy costs, **0 projects have been submitted by the utility to the PSC since the program was approved over 15 months ago!**

Rapid development of distributed energy resource is not a priority for investor own utilities, especially considering the large rate based renewable energy installations they are able to develop. **Why put company resources to administratively costly small scale DERs when IOU's can build single site 300MW solar farms?**

There is extensive appetite from solar developers, contractors and independent power producers to develop new distributed energy resources. Dane County put out an RFP for an 8MW solar PV system at the Dane County Airport. In May of 2018, bids were received back from a total of 14 solar contractors and developers.

There are tremendous economic development opportunities for the state once a competitive marketplace is established for DER. These IOU owned pilots are a barrier, not enablers of a transformative DER future. The wind-down of the federal investment tax credit further increases the sense of urgency with which the PSC should act to develop competitive market based DER both behind and in front of the meter.

2) **The Solar Now Pilot is not the least cost option for developing and demonstrating electric generating technologies that utilize renewable sources of energy and will increase cost to both participating and non-participating ratepayers.**

The commission and utility have numerous policy and regulatory capabilities to develop and demonstrate renewable energy technologies at considerably less cost and greater impact than the Solar Now Pilot. This includes:

- Providing capacity credits to customer sited generation
- Increasing net metering limits without shifting costs to non-participating customers
- Clarifying the legality of 3rd party behind the meter solar systems to create a stable environment for installers and investors
- Implementing 3rd party community solar programs utilizing a "Value of Solar" framework

3) **The Solar Now Pilot lease fees to hosts are volatile and unpredictable over time and will not create the price stability needed for widespread participation in the program.**

Benefits of a 3rd party behind the meter program are significantly greater for the host sites than the existing Solar Now proposal lease payment. Behind the meter installations enable the energy produced from the Solar PV system to offset the retail price of electricity. It is not clear how We Energies will evaluate the value of energy produced from the in-front of the meter installations.

Participation in this program will exclude these host sites from participating in a future program that has more equitable benefits to hosts.

Recommendations and Alternatives

Based on the facts presented in this comment, I urge the commissioners to emphatically reject the current We Energies Solar Now Pilot. There will likely be solar advocates that support the Solar Now proposal because, on the surface, it enables additional renewable energy to be installed. **However, take off the rose-colored glasses, and one can see this proposal for what it is; at best case, it is a We Energies money grab for ratepayer money, and at worst case, it is another utility scheme to further delay the regulatory adoption of third party solar in Wisconsin.** A wolf in sheep's clothing is still a wolf.

The following are potential alternatives to the existing proposal:

Alternative 1: Reject Solar Now Pilot and open exploratory docket for a comprehensive stakeholder developed DER program adopted on a state-wide wasis

It appears that the state's distributed energy resource policy planning is currently being developed ad hoc through pilot tariff submissions by the state's IOUs. Each IOU has their own set of ideas and tariffs on how to best capitalize on their customers demand for renewable energy. This is creating a jumbled mess of new tariffs and policies that discourage innovation and economic development opportunities that are being realized by neighboring states with market based DER programs. Additionally, benefits to non-participating rate payers are not maximized.

I recommend that the PSC open a new docket to explore how to best integrate distributed energy resources to maximize benefit to ratepayers as it relates to cost, choice and reliability, and maximize the potential economic benefits to the state.

Alternative 2: Reject the existing Solar Now Pilot and require modifications to be made that require at least 50% of the total proposed capacity to be owned by competitive third parties and sold to We Energies through a DER PPA program.

Alternative 3: Reject the existing Solar Now pilot.

Part 2: Comments Regarding the Dedicated Renewable Energy Resource Pilot (DRER)

The DRER is a contract between individual customers and the utility to procure renewable energy resources, as opposed to the Solar Now proposal which is a ratebased program.

Summary of Concerns

1. A competitive market-based solicitation of the renewable resources through PPA format would provide lower costs to the participating customers.

2. The program lacks the price stability needed for widespread participation. A PPA based format would provide a known cost per energy over the life of the contract. The risk of the project would be taken on by private independent power producers, not We Energies customers.

3. When DRER systems are located near system loads, the value of the power is significantly greater than the MISO wholesale rates. This proposal does not capture those cost savings in the customer's cost of renewable energy.

Recommendations and Alternatives

Based on the facts presented in this comment, I suggest the commissioners require modification to the proposal as follows:

Alternative 1: Require the DRER to include 50% of the capped capacity to be contracted through a competitive market-based format where the IOU passes through the cost of a PPA contract to the customer. This alternative procurement path would allow all parties to better understand the pros and cons of various procurement options as it relates to cost, customer choice and the ability to scale small renewable energy projects. Being a pilot, the whole point of this exercise is to better understand program options. **If only 1 format is included in the pilot, the value of the pilot is extremely limited; what other options are the proposed pilot being compared to?**

Alternative 2: Reject the DRER proposal and open an exploratory docket for a comprehensive stakeholder developed DER program that can be adopted on a state-wide basis.

Alternative 3: Approve the DRER but maintain the ability of the PSC to modify the tariff prior to the program cap being reached, such that future policy development can enable revisions to the DRER program language.

Sincerely,
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