BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1746

In the Matter of OREGON PUBLIC UTILITY COMMISSION Examining a range of community solar programs and attributes to allow individual customers to share in the costs and benefits of solar facilities.	Comments of Vote Solar and the Interstate Renewable Energy Council, Inc. (IREC)

I. Overview

On July 14, 2015, the Public Utility Commission of Oregon (Commission) opened a docket to comply with Section 3 of HB 2941 (2015). On August 14, 2015, Staff issued guidance for public comment. Please accept these comments on behalf of Vote Solar and the Interstate Renewable Energy Council, Inc. (IREC) in response to the guidance for public comment. Vote Solar and IREC appreciate the opportunity to provide the Commission with input on the future of community solar in Oregon.

Vote Solar submitted community solar program design comments on August 7, 2015. These comments are meant to supplement the initial comments and provide some additional details. In addition, these comments address some issues raised by other parties in comments or during the workshop.

Vote Solar and IREC are both national leaders in the field of community solar (*a.k.a.* shared solar). Community solar has been increasingly popular around the country as a way in which all consumers are able to benefit from solar. With this national trend has come some confusion about the meaning of community solar. Vote Solar and IREC hope that these comments help the Commission to develop a definition of and recommendations for community solar in Oregon.

Vote Solar is a non-profit grassroots organization working to foster economic opportunity, promote energy independence and address climate change by making solar a mainstream energy resource across the United States. Since 2002, Vote Solar has engaged at the state, local and federal levels to remove regulatory barriers and implement the key policies needed to bring solar to scale. Vote Solar is particularly focused on rate design issues related to solar. Vote Solar is actively participating in solar policy discussions and regulatory proceedings in states across the U.S, including: Arizona, California, Colorado, Georgia, Iowa, Kansas, Louisiana, Massachusetts, Minnesota, Nevada, New Mexico, New York, North Carolina, Utah, and Vermont, among others.

The Interstate Renewable Energy Council, Inc. (IREC) is a 501(c)(3) non-partisan, non-profit organization working nationally to expand and simplify consumer access to reliable and affordable distributed clean energy by: (1) developing and advancing regulatory policy innovations; (2) generating and promoting national model rules, standards, and best practices; and (3) providing workforce training, education, and credentialing. IREC works independently from renewable energy industries, trade associations, technologies, and advocacy organizations; and, though we promote the creation of robust, competitive clean energy markets, IREC does not have a financial stake in those markets. Grounded in the latest research and objective analysis, IREC's work helps inform and guide fact-based regulatory decision-making and workforce development efforts. Through collaborative partnerships with diverse stakeholders, IREC seeks to build consensus and achieve workable solutions to create a sustainable and economically strong clean energy future. The scope of IREC's work includes implementing shared, or community, renewable energy programs to expand options for consumers that cannot host a renewable energy system. As part of this work, IREC has participated in the development of

shared renewable energy programs in Colorado, California, Minnesota, Delaware, Maryland, and Washington, DC. We have also published *Model Rules for Shared Renewable Energy Programs* (*Model Rules*) and provide an up-to-date catalog of shared renewables programs around the United States.[1]

II. Reaction to Attribute Characteristics

The following address some, but not all, of the attribute characteristics raised by other parties. Any issue not addressed below should not be mistaken as support or opposition, and Vote Solar and IREC reserve the right to address other issues in the future.

A. Sale of Electricity

Northwest & Intermountain Power Producers Coalition (NIPPC) implies that community solar involves a sale of electricity.[2] Vote Solar and IREC clarify that community solar largely does not entail a sale of electricity to participants. Community solar involves a customer purchasing a subscription in a shared facility—for example, a capacity (kW or MW) or energy subscription (kWh block)—and then receiving from the utility a credit on the customer's electricity bill commensurate with that subscription. As discussed below regarding the definition of community solar, a community solar program necessitates that participants receive a credit on their electricity bill.

The only exception occurs when a community solar facility is not fully subscribed, as discussed below in the section on risk attributes. In this situation, the subscriber organization would sell the unsubscribed portion of the community solar facility's generation to the utility,

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1 Available at www.irecusa.org/regulatory-reform/shared-renewables.

2 "The program would enable individual customers or aggregations of customers to purchase power directly from specific solar facilities owned by non-utility third parties" (NIPPC comments at 1).

typically at the utility's avoided cost rate. However, the vast majority of generation would be credited to participating customers on their electricity bills.

B. Community Solar versus Green Power Purchase Programs

At the workshop on August 11, the Commission and staff received a wide range of recommendations for and interpretations of community solar program design. Vote Solar and IREC want to clarify that community solar is fundamentally different from green power purchase programs. Historically, green power purchase programs are premium programs for customers to purchase renewable energy certificates (*a.k.a.* renewable energy credits or RECs). The participating customers in a green power purchase program pay an additional rate for the RECs in addition to the other applicable rates for their customer class.

Community solar, in contrast, is a program whereby participants have a vested interest in the performance of the community solar facility via their subscriptions. Whereas a green power purchase program participant buys RECs, typically generated remotely and not tied to a particular facility, community solar participants' credits are tied to the real-life production of the community solar facility in which they are subscribers. The Citizens Utility Board (CUB) described community solar well: "[t]he idea is to grant individual customers the option to buy solar energy via a more public means opposed to privately installing solar capacity."[3] In short, community solar is a means by which customers can avail themselves of the benefits of solar without installing solar on their premise, and the benefits of solar are far greater than just RECs.

C. Utility-owned Projects

Vote Solar and IREC do not support or oppose utility-ownership of community solar projects. However, if the Commission does recommend to the Oregon Legislature that the

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[3] CUB comments at 2.

utilities be allowed to own community solar projects, Vote Solar and IREC strongly encourage the Commission to ensure that there are no competitive advantages for the utilities over other market participants. This is best achieved by requiring an unregulated affiliate of the utility to be the subscriber organization, where the affiliate should have all of the same risks and access to information as other market participants. Other arrangements may be considered, but this is by far the most common arrangement set forth in other states.

D. Credit Value

As the Commission is well aware, solar has many benefits. Since the Commission is currently discussing this issue in docket UM 1716, the current docket is not the appropriate venue to discuss the benefits. Nonetheless, Vote Solar and IREC note that the benefits of community solar are similar – if not identical – to the benefits of on-site distributed solar generation.

As we discuss below, the Commission may want to consider several additional factors when setting the credit rate. However, Vote Solar and IREC oppose PacifiCorp's proposal for the credit rate. In PacifiCorp's proposal, the credit value would be the "solar resource cost + program administration costs – supply charges."[4] This proposal woefully underestimates the value of solar in the credit rate. PacifiCorp actually calls this formula the "solar premium calculation."[5] For all intents and purposes, this proposal pegs the credit calculation as the energy rate plus program administrative costs.

Vote Solar and IREC propose that the credit rate, whether based on the retail rate or the Resource Value of Solar rate, more closely approximates the sum of the benefits of solar. If this

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4 PacifiCorp Comments at 5.

5 *Id.*

approach is taken, then participating customers will realize the true value of solar on their utility bills.

E. Customer Eligibility

Vote Solar and IREC see no reason to limit eligibility for community solar to certain customer classes. For instance, PacifiCorp proposed to limit eligibility to residential and small non-residential customers at first, and then expand eligibility to other customer classes.[6] Around the country, many successful community solar programs have capped participation by certain classes of customers in a given community solar project in order to ensure diverse participation and maximum opportunity to broaden access (e.g., large customers cannot subscribe to more than 50 percent of a project). While we understand the justification of placing parameters on the composition of participation, we are not compelled by the rationale to exclude an entire sector from participation in community solar programs.

One of the primary goals of community solar is to expand access to solar, as discussed further below. This goal is defeated if entire sectors of customers are prohibited or arbitrarily excluded from participation. Community solar can be incredibly appealing for those customers that cannot otherwise install solar, and Vote Solar and IREC encourage the Commission to provide for access for all customers.

F. Customer Motivations

At the workshop on August 11, most parties portrayed customers as wanting community solar in order to "green" their electricity. While this is certainly a motivation for some customers, Vote Solar and IREC encourage the Commission to consider the appeal of community solar more broadly. For instance, many customers will participate in community solar in order to

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6 *Id.* at 4.

minimize their exposure to electricity bills. The financial motivation may be particularly important to customers on fixed and/or low to moderate incomes. Electricity bills typically make up a larger portion of such customers' overall expenses as compared to higher-income customers, and thus these customers are especially sensitive to any increases in their bills. For the same reason, these customers are also especially interested in ways to reduce their bills or at least mitigate their exposure to rate increase over time. As mentioned above, the Commission should consider program options that will provide access for all customers. In doing so, appropriate consideration of the various customer motivations is warranted. If the Commission proposes a community solar program designed solely for customers that want to reduce their environmental impact, we posit that customer participation could be undermined, especially if such a program did not involve bill savings but instead entailed a bill premium.

G. General Comments

Vote Solar and IREC are impressed with the depth of thinking that went into the comments (written and oral) by Northwest Sustainable Energy for Economic Development *et al* (Northwest SEED). Vote Solar and IREC applaud their work on this subject and think that their comments are an excellent starting point for the Commission.

III. Narrowing the Field

In further deliberating program design, Vote Solar and IREC propose a process of elimination. The Commission could evaluate different program designs and/or program attributes through the spectrum of the legislative directive in combination with the *Model Rules*. If a program or program attributes do not meet the aforementioned criteria, the Commission could remove the option from consideration. We believe this will help to ensure an effective and expedient process as program design deliberations continue.

We submit that the concept of community solar as envisioned by the Legislature is well established and that while tuning program design aspects necessitates incorporation of flexibility, deliberating fundamental program options is not consistent with the scope of the current proceeding. For instance, one subscriber organization may want to offer subscriptions that include the retirement of RECs on behalf of the participants whereas another may want to offer subscriptions that involve the organization selling the RECs on behalf of the participants. This is an example of flexibility within a program design; that is, the design allows for multiple subscriber organization business models. Similarly, subscriber organizations may offer different subscription and payment options (*e.g.* upfront ownership, lease, and payment for production). However, this is fundamentally different from the Commission recommending all of the following under the guise of community solar: (1) a green power purchase program; (2) an ownership stake in a solar facility, and (3) an investment opportunity to help a local food cooperative install solar on their roof. As discussed above, a green power purchase program is a distinct opportunity from community solar. Likewise, an investment opportunity does not involve bill credits for participants and therefore is also distinct from community solar. Vote Solar and IREC discourage the Commission from recommending fundamentally different programs all under the moniker of community solar; the end result will be customer confusion and skepticism for anything associated with community solar, not to mention being in contradiction to the Legislature's intent for this program.

Vote Solar and IREC do, however, encourage the Commission to develop a program design that allows for project and subscriber organization flexibility, and from our experience such flexibility will allow different business models to flourish, which will ultimately benefit customers.

In addition, although the goal should be a successful program from the perspective of customers, the Commission should also consider the program design from the perspective of the Legislature. The program design that the Commission proposes to the Legislature should be comprehensible and straightforward to promote a common understanding among lawmakers and their constituents as they consider the Commission's recommendations.

With all of this in mind, Vote Solar and IREC discuss in more depth below what community solar means in the context of Oregon. Although we do not propose a specific framework, we hope the following helps narrow the field on what is appropriate in Oregon.

IV. Attribute and Characteristic Framework

A. Legislative Intent

Consistent with community solar programs around the United States as well as the first guiding principle in our *Model Rules*, Vote Solar and IREC understand the Oregon Legislature's intent to be to expand access to solar energy to more consumers. Indeed the Legislature specifies that the program design should "allow individual customers to share in the costs and benefits of solar facilities."[7] Staff includes several statements to this effect in its initial outline. In addition, the Legislature's express reference to "bill credits" indicates its intent to focus on programs that result in the benefits of community solar being provided on participants' utility bills, in line with the second guiding principle in our *Model Rules*.[8]

Related to these two points, we note that in our experience nationally, most community solar customers' primary motivations for participating in community solar are the same for those

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[7] HB 2941 §3(1) (Holvey 2015).

[8] *See* HB 2941 §3(1) ("For purposes of this subsection, attributes of different community solar program designs include ownership structure, eligibility criteria, length and terms of contracts, subscription pricing and how bill credits are calculated.").

installing solar on-site: (1) to improve energy cost certainty and to save money on their utility bills; and (2) to green their energy supply and promote the environmental and societal benefits of solar energy.

B. Definition of Community Solar in Oregon

As discussed above, while the legislation requires the Commission to examine "a range of community solar programs and the attributes of different community solar program designs,"[9] Vote Solar and IREC suggest that a definition of community solar that is as refined as possible would be of most help to the Legislature as it assesses the future direction of community solar in Oregon. As indicated in Vote Solar's August 7 comments, we believe that a community solar program should comport with the four guiding principles in the *Model Rules*:

1. **Expand renewable energy access to a broader group of energy consumers**, including those who cannot install renewable energy on their own properties. Based on this guiding principle, we suggest that any community solar program should be open to all ratepayers, including residential, commercial, industrial, and any other classes of ratepayers, as discussed further below.
2. **Produce tangible economic benefits on customer's utility bills**. In other words, a community solar program should involve on-bill crediting. We discuss the valuation of bill credits further below.
3. **Remain flexible enough to account for energy consumers' preferences.** Consumers have a wide variety of motivations for participation in community

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[9] HB 2941 §3(1).

solar programs and wide variety of definitions for "community," as well.[10] The flexibility emphasized in this guiding principle is intended to allow multiple project offerings to flourish within the community solar program framework, such that customers can choose a project that meets their locational, financial, and other needs and preferences.

a. Location: While Vote Solar and IREC agree that subscribers should be located in the same utility service territory as a community solar facility, we do not necessarily believe that further restrictions are required. In this way, project developers and subscribers are free to offer and seek out, respectively, arrangements that meet their needs and preferences. In addition, Vote Solar and IREC suggest that utilities could identify optimal grid locations for facilities and potentially offer associated financial incentives (e.g., bill credit adders) to encourage projects to locate within those areas.

b. Administration: Utilities are necessarily involved in the customer bill crediting process. Beyond that, we suggest that the Commission ensure fair competition within the community solar program, such that third parties and groups of customers can serve as subscriber organizations and administer a variety of community solar projects that meet the diverse interests of Oregonians. Utilities would be able to participate as administrators as well through their affiliates.

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[10] *See* Laurel Passera, IREC, *Location, Location, Location: How much does it matter for shared solar participants?* (Jan 8, 2014), www.irecusa.org/2014/01/location-location-location-how-much-does-it-matter-for-shared-solar-participants.

c. Ownership: Similarly, Vote Solar and IREC suggest that the Commission ensure the full spectrum of ownership options is available within its recommended community solar program, including third-party ownership, customer ownership, and utility ownership (as aforementioned, through an affiliate).

4. **Be additive to, and supportive of, existing renewable energy programs, and not undermine them**. A community solar program should complement other program offerings. In a way, this program feature flows from the first guiding principle—community solar should be available to expand access to customers that cannot or do not want to participate in other programs more specifically geared for on-site solar.

C. Eligibility/Limitations Attribute – Potential Characteristics

Customer type: As discussed above, Vote Solar and IREC suggest that any community solar program should be open to all ratepayers and customer classes. We recognize, however, that the Commission or Legislature may want to endorse limitations on the number of certain types of subscribers involved in a particular facility (e.g., requiring 50 percent be set aside for residential customers or requiring a low-income customer carve-out), based on other parties' comments. Even so, Vote Solar and IREC suggest that as many customers as possible have the opportunity to participate in a community solar program in order to expand access as broadly as possible.

Subscription sizing: Vote Solar and IREC note that the best practice nationally is to allow participants to offset up to at least 100 percent of their annual electricity load. The *Model Rules* specify that customers may offset up to 120 percent of their load, in part to account for future

customer energy-consuming investments, such as electric vehicles, or to accommodate other behavior or lifestyle changes that impact electricity consumption.

Low-income customer access: In its August 7 comments, Vote Solar provided detailed information regarding promoting low-income customer access.[11] We reiterate the importance of low-income customer inclusion and refer the Commission to these prior comments for more detail. In addition, we note that, while the low-income carve-out in Colorado's Community Solar Gardens program is often cited as a successful policy, we understand from low-income customer advocates that additional incentives are typically critical to providing meaningful and direct access to community facilities for low-income subscribers.

D. Contract Terms Attribute – Potential Characteristics

In a competitive community solar program, such as the one we suggest here, the subscriber contract terms, including both length and termination provisions, are not typically subject to Commission jurisdiction. Rather, they are determined between the subscriber organization and its subscribers. Therefore, Vote Solar and IREC do not believe that the Commission should dictate contract length options or termination provisions. In order to ensure consumers are adequately protected, the Commission could exert oversight and influence over subscriber contracts in at least two ways.

First, the Commission may set certain minimum contractual requirements. For example, it might require subscriber contracts to provide clearly for subscriber treatment when a subscriber moves within the utility's service territory and when the subscriber exits the territory, without necessarily stating *how* the subscriber organization must do so. Similarly, the

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[11] Correction: Please note that the current version of IREC's CleanCARE proposal, referred to by Vote Solar in its August 7 comments, is available in CPUC docket R.14-07-002, and available at: http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M154/K225/154225576.PDF.

Commission might set a maximum contractual term, such as the typical life of a solar facility (20-25 years), without specifying that a subscriber organization must use a particular term length.

Second, the Commission may require the utility to ensure that its internal administration of the community solar, in particular the bill crediting component, comports with subscriber contracts. For example, the Commission could require the utility to commit to providing bill credits up to the term of the subscriber contract (e.g., 20-25 years) or the life of the community solar project (e.g., 25 years).

E. Subscription Pricing Attribute – Potential Characteristics

As above, the subscription price should be determined between the subscriber organization and the subscriber, and set forth in the subscriber contract, which is typically not subject to Commission review. Thus subscriber organizations should be able to offer customers energy (kWh) or capacity (kW) subscriptions, at viable market prices.

F. Bill Credits Attribute – Potential Characteristics

How calculated: An individual subscriber's bill credit is calculated by multiplying the actual energy generated by the bill credit rate by the subscriber's percentage share of the community system.

Energy: Across the country, bill credits are typically based on the actual energy produced by the community solar array, not on estimated generation.

Rate: The appropriate bill credit rate can be the most debated and most critical component of a community solar program. In assessing the appropriate rate for Oregon's community solar program, Vote Solar and IREC urge the Commission to ensure (1) that the rate reflects the fair value of the benefits of the solar generation and (2) that it results in financeable

community solar systems, potentially up to a particular program capacity target(s) identified by the Commission. To achieve the second goal, Vote Solar and IREC suggest that the program may require incentives above and beyond the retail rate or the Resource Value of Solar rate, whichever is used, at least in the early years of the program. The Commission could consider recommending a declining incentive block structure tied to megawatts installed—such that incentives decline as capacity goals are achieved—to ensure that any ratepayer impact is kept to a minimum. The California Solar Initiative is often cited as a prime example of how successful such a program framework can be at encouraging solar development and driving down costs.[12] In addition, Vote Solar and IREC urge the Commission not to suggest waiting on resolution regarding the Resource Value of Solar to move forward with community solar. For example, Minnesota's community solar gardens statute allows for the use of the retail rate until the Commission approves a value-of-solar tariff, which has not yet occurred in that state.[13]

G. Minimize Cost-Shift Attribute

Vote Solar and IREC suggest reframing this as a question of minimizing any impacts on non-participating ratepayers, for example through recovery of incentives associated with a community solar program via the utilities' entire rate base. We agree that these impacts should be a consideration in designing a community solar program, and that the Legislature and the Commission should balance the goals and benefits associated with community solar (broad consumer access, environmental benefits, societal and economic benefits, grid benefits, etc.), against any costs associated with the program. In this way, the Commission can divorce the design of this community solar program from the national, contentious battle about "cost

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12 For more information, see www.gosolarcalifornia.ca.gov/about/csi.php.

13 Minn. Stat. 216B.1641(d).

shifting," which ultimately comes down to differing opinions about the benefits and costs of solar, as well as broader questions about rate design across the board.

H. Risk Attribute – Potential Characteristics

Overall, Vote Solar and IREC believe that the majority of the risks associated with the program should be borne by the project developer, subscriber organization (if different), and subscribers, and not by the utility and its ratepayers. Subscriber organizations should make subscriber risks clear in their subscriber contracts and the Commission may wish to ensure that important risks are effectively communicated to subscribers by specifying customer disclosure requirements. Vote Solar and IREC could provide examples of disclosures required in other states to the extent there is interest. In addition, Vote Solar and IREC suggest that subscribers are protected by existing, general consumer protection laws and remedies, which protect consumers more broadly when they enter into contractual relationships.

We see only one real risk for utilities and their ratepayers: the purchase of any unsubscribed energy generated by a community solar facility. This could occur in a situation where a community solar facility lost a large portion or all of its subscribers in a short time frame, and could also occur on a regular basis to the extent the facility maintains a "buffer" amount of unsubscribed generation to ensure that subscribers are fully credited even when energy production fluctuates from month to month or year to year. Vote Solar and IREC suggest that the Commission adhere to the best practice nationally and set the price for such unsubscribed energy at an appropriate avoided-cost rate, such that non-participants are indifferent to the utility purchasing it. Setting a lower rate for unsubscribed energy also serves to encourage community solar facilities to ensure they are as fully subscribed as possible in order to receive the higher rate.

V. Conclusion

Vote Solar and IREC appreciate the opportunity to provide these comments. We look forward to continuing our participation in this docket.

Respectfully submitted,

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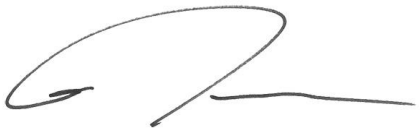

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