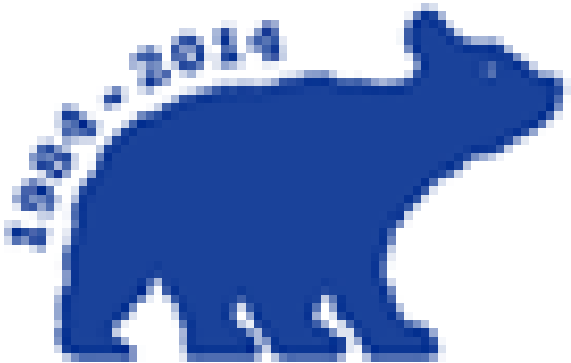


Citizens' Utility Board of Oregon

30 Years and Counting

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1746

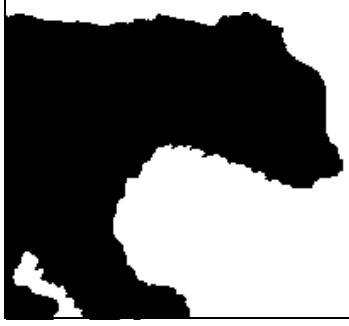
In the Matter of	)
	)
PUBLIC UTILITY COMMISSION OF OREGON	)
	)
Report to the Legislature on Recommendations for Community Solar Program Designs and Attributes	)

COMMENTS

OF THE

CITIZENS' UTILITY BOARD OF OREGON

August 7, 2015



BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1746

In the Matter of	)	
PUBLIC UTILITY COMMISSION OF OREGON	)	COMMENTS OF THE CITIZENS' UTILITY BOARD OF OREGON
Report to the Legislature on Recommendations for Community Solar Program Designs and Attributes	)	

Submitter: Citizens' Utility Board of Oregon

Brief Definition for Community Solar in Oregon: CUB believes that the purpose of a community solar program is to allow individual customers the opportunity to procure solar energy, or as stated by HB 2941, "to share in the costs and benefits of solar facilities." Ideally, a community solar program would consist of a central location with a certain level of solar capacity from which individual consumers can purchase solar kWh of power every month. The idea is to grant individual customers *the option* to buy solar energy via a more public means as opposed to privately installing solar capacity.

Visual Depiction of Your Community Solar Program Design Proposal: While CUB does not have a visual description of a community solar program design, we did study PacifiCorp/Rocky Mountain Power's proposed Subscriber Solar Program. We believe this proposal, while still having many questions to consider, is a good starting point for the community solar discussion in Oregon.

Questions Related to Community Solar Attributes and Statutory Considerations:

1. **Ownership structure:** *Who will develop, own, and maintain the solar facility? Who will own the RECs and power? What is the utility's role in this ownership design?*

CUB is fine with a utility-built and owned resource but also believes that an independently-owned resource should be given equal weight, including whether or not the utility initiates the project. Individual consumers are able to install a net-metered rooftop system without consulting the utility, and participants in a community solar project should have the same ability. Consider the Rocky Mountain Power proposal, which is based on a utility-built resource but also leaves room for a contracted resource.

2. **System characteristics:** *Does your proposal include constraints to system characteristics, such as size, location, interconnection level, etc., on the solar facility?*

This question is a bit vague as it does not specify what "constraints" might be. At this point, CUB does not have a strong opinion about *system size* limits, which would affect interconnection levels. CUB would support limits to how much an *individual consumer* can buy in to the system (for example, a customer should not be able to produce more than they consume, as is the standard practice in Oregon with net metering). As noted above, CUB points to Rocky Mountain Power's pilot program in Utah[1] – in that docket, Rocky Mountain Power proposed a community solar program that allows individuals to purchase "slots" of a community solar project in 1 kW "blocks." The program participants also purchase kWh of power generated from their blocks at a certain rate per month that varies depending on whether they are residential or commercial customers. In this example, individual participation is limited, and CUB agrees with this approach, but CUB does not have a strong opinion on the capacity size of a total project. If it is the wish of individual residents to come together to invest in a relatively large solar system (e.g., 75 MW), CUB is open to considering such an option. However, CUB also notes that there may be regulatory barriers beyond a certain point. The design of the program would need to address any potential regulatory issues.

As far as location is concerned, CUB is ambivalent about participation extending across a state. For example, CUB is open to a Pacific Power customer living in North Portland buying into a community solar program located in Pacific Power's Medford service territory. For example, customers may prefer to invest in a Medford system as it might generate more power because of sunnier weather in that part of the state. However, CUB also believes that customers should only be able to participate in community solar programs within their respective utility service territory (e.g., the customer in Pacific Power North Portland territory should not be able to buy into the PGE solar program across the street). This is mainly due to regulatory complications associated with mixing service territories. This does not mean that only the utility can own the solar—just that each individual project be allocated to the customers of a single utility.

[1] See Utah Docket Number 15-035-61: http://www.psc.utah.gov/utilities/electric/elecindx/2015/1503561indx.html.

3. **Eligibility criteria**: *What criteria to determine customer eligibility (e.g., customer class, location, size) are included, and are there carve-outs for specific groups (e.g., low-income, multi-family, renters)?*

   One of the purposes of a community solar program is to provide people with the option to install solar if they otherwise cannot—hence, you would expect to see populations that don't traditionally install solar participating. However, this should not exclude homeowners who have solar potential on their roofs from participating. There may also be room for "affinity groups" – for example, could a church add solar and allow members of its congregation to subscribe to it, or could Costco add solar to its stores and allow its customers/members subscribe to it? This would seem to fit with the idea of a "community" coming together to add solar. While CUB realizes there might be logistical difficulties associated with tracking different types of customers (e.g., renters vs. multi-family groups), CUB is open to a community solar program that includes a diversity of customers and is also open to ways that community groups can participate.

4. **Length and terms of contracts:** *Describe each agreement between parties in your proposal, including the parties' commitments, term lengths, penalties (e.g. early termination), and agreement formation (e.g., RFP).*

   CUB believes that a range of timeframes are appropriate depending on the preferences of the customer. Pointing to Rocky Mountain Power's proposal, that program included anywhere from 2, 5, 7, and 10 years of participation for residential and small non-residential customers. CUB likes the diversity of this approach and is open to similar time frames in an Oregon program.[2]

5. **Subscription price calculation**: *Is the subscription price based on a capacity product (kW) or an energy product (kWh) and how is the price determined? Provide a simplified example showing cost assumptions (e.g. capital, operational, and maintenance costs, program administration costs, costs related to data collection and modification to utility billing systems).*

   CUB believes that a community solar program can take a wide range of approaches. The program might function like a PPA, where residents only purchase the power per kWh.[3] Or the program might function like a lease, where residents purchase a service and receive a credit to their bills. If a solar pilot is jointly owned by a group of individuals,

[2] Ibid.
[3] Note that some PPAs also charge up-front costs.

then presumably there would be no leasing or rates associated as each resident would be financing the system. The Rocky Mountain Power program was a combination of leasing and PPA – residents contracted blocks and purchased power per kWh.[4] CUB is not comfortable speculating as to what an appropriate "subscription price" would be for such a system in Oregon but is open to a variety of different approaches as outlined in this section.

6. **Bill credits calculation:** *How are bill credits determined and applied (e.g. retail rate, avoided resource cost rate, avoided power cost rate, future resource value of solar rate, etc.)? Provide a simplified example.*

   CUB believes that bill credits would apply at the retail rate, in the same way it was proposed in the Rocky Mountain Power project.[5] However, this might change depending on who owns the system. In addition, it should be noted that Oregon solar resource value is currently being designed in docket UM 1716, and there are a number of avoided costs included in that—transmission and distribution, line losses, carbon, among others. Presumably, once the solar resource value is determined, the methodology would apply to a community solar project. CUB still believes that solar power should be credited at the retail rate, especially if residents are being charged per kWh for purchasing the power.

7. **Minimizing cost-shifting:** *Break out the cost components that will be charged to subscribers. How does this allocation of cost components minimize costs to non-subscribers?*

   Ideally, the entire solar program would be financed only by participating customers. Rocky Mountain Power's proposal addressed this issue in its report, and although CUB is not in complete agreement with their analysis, Rocky Mountain Power mentioned that non-cross subsidization only occurs under the assumption of 100% participation in solar program. In other words, if *all* of the capacity of a community solar system is not contracted out, non-subscribers are assumed to be affected (cost-shifting occurs). However, the pilot program in Utah is only 15 MW. Due to the relatively low penetration levels of solar energy in Oregon, and especially considering expiring tax credits for these programs, CUB does not expect a significant market increase in the coming years. CUB is not convinced that cost-shifting concerns are particularly significant at this point in time. Rocky Mountain Power itself asserts in its report that it filed its proposal "as quickly as possible in order to meet an in-service date before the end of 2016 in order to

[4] See Utah Docket Number 15-035-61: http://www.psc.utah.gov/utilities/electric/elecindx/2015/1503561indx.html.
[5] Ibid.

realize the 30% federal investment tax credit."[6] However, this does not mean that the community solar program should not account for cost-shifting at all. At the moment, CUB is not comfortable speculating as to how such a mechanism should be designed and would prefer to have more time discussing the issue with other parties before reaching any conclusions about that.

8. **Risk assessment:** *Who bears the burden of risk in the following categories and how is this risk mitigated: (1) solar facility system performance, (2) subscription rate and fluctuations in under or over subscription, (3) Other risk categories?*

   Again, ideally, this risk would be borne by participating customers, but if the entirety of the capacity is not contracted out, then inevitably the builder of the solar system incurs losses. If the utility builds the system, then it is likely that the system is taking some of the risk. Even if a contract says the participating customers take the risk, because customers move and customers default, there are likely to be some uncollectibles associated with solar programs. At the moment, CUB is not comfortable speculating as to how such a mechanism should be designed.

Summary:

CUB generally supports the idea of a community solar program, provided it is well-designed. CUB points to Rocky Mountain Power's proposal in Utah as an example of one method Oregon stakeholders can explore and possibly build upon. This does not mean CUB feels that the utility should be the only entity that provides community solar facilities. CUB feels that the existing filing may be too utility-based and that community solar should include the possibility of an independent contractor—not just the utility—to participate.

It is not unreasonable to assume that there is a subset of Oregon's population who wants to install solar but are limited in their ability to do so, either because they are renters, they live in condos, their roofs do not face an optimal direction, etc. To the extent that Oregon can help diversify energy options, and options that produce local, low-carbon power, CUB believes that community solar is a worthwhile program. This might also address some of the green tariff complications associated with UM 1690 as it could allow consumers to band together to assume the costs and reap the benefits of a renewable energy system. But that's another conversation.

//

//

[6] Ibid.

Sincerely,

Nadine Hanhan
Utility Analyst
Citizens' Utility Board of Oregon
610 SW Broadway, Suite 400
Portland, OR 97205
(503) 227-1984, x11
nadine@oregoncub.org