

May 31, 2017

RE: AR 603 – Community Solar Draft Rules

Dear PUC Commissioners and Staff:

This letter is to provide comments on the draft rules, particularly as relates off-system community solar projects (i.e. not in a utilities service territory).

First, I'd like to commend Staff on the superb job it has done in running this process. The professionalism, transparency, investment in developing knowledge about community solar approaches, and your balancing of numerous concerns related to stakeholders, the effects to the regulatory utility system, and the objectives of the program have been impressive and are appreciated.

Moving on to specific comments: *Mine are focused primarily on the effects to the ratepayer of the contiguous system/service territory requirement proposed.* While I appreciate the careful explanation provided by Staff in its May 30th memo as to the its reasoning regarding the proximity requirements of a community solar, I respectfully disagree, and believe this approach clearly undermines the ratepayers' interests (including Community Solar).

Community Solar is a means of ownership (and access to economies of scale), not geographic:

Community Solar is first and foremost a means of assets ownership which allows a community of people/ratepayers/customers to access the benefits of project scale for solar in order to diminish 1) lack of access issues (due to customer limitations for siting PV at their load site) and 2) cost disadvantages inherent in smaller scale installations, particularly at the single home and small commercial PV system scales. There are *material* difference in the installation cost at these scales versus larger scale projects. Indeed, PV systems don't really start to reach asymptotic convergence on maximum economies of scale until somewhere in the 10 to 30 MW range. You could see 100% differences in cost per unit of system generating capacity (or realizable cost per KWH) between a rooftop project and a 10 MW project. The architects of initial (and ongoing) community solar program efforts seek to bring access to PV systems to those seeking green, renewable generation and/or asset ownership (or equivalent dedication of a resource) in such larger, more cost effective projects than is realizable through smaller D.G. systems.

In essence, a central point of Community Solar is cost improvements – particularly through scale. Community Solar is *communally owned* (and/or subscribed) solar to facilitate access to scale – and lower costs to ratepayers for green generation. As with power and electricity in general, its proximity isn't material.

And, as with many community owned assets and institutions, geography can be local, but not necessary. A consumer is not required to live in the neighborhood of a banking coop (credit union) to bank there; certainly larger banks like USAA (member owned) demonstrate this. I can join a food coop without living in the same town, just as it can open a location elsewhere, or as REI can have members that may or may not live near its retail locations. These community owned institutions (and their assets) are community through membership, ownership, and/or subscription. Community Solar is analogous.

More importantly, a decision/rule requiring interconnection of a Community Solar project to subscriber's utility system inherently damns the majority of Oregon ratepayers to inferior viability and achievable economics. The bulk of the Oregon ratepayers' geographic presence on the rainy side of the Cascades, and prevention of their access to the *materially* superior solar resource of the desert side (~50%), directly undermines not only the viability of the program but ratepayer's intrinsic interest in access to lower cost resources.

Comparison to other off-system projects erroneous: Regarding Staff comments that east side / off-system projects are somehow too similar to PURPA projects or other utility scale generation: Respectfully, this is completely beside the point. Community Solar is about *retail* customers *access* to superior market offerings through scale and asset superiority. The ratepayer interests are in leveraging whatever scale and synergies can be realized through larger scale project development. The comparison to wholesale power contracting options' similarities is erroneous; the comparison to Direct Access competitive options for superior retail options, if achievable in the market, is correct.

In summary: *The Commission can't block access to off-system Community Solar options without directly harming the ratepayers realizable potential from the program.* Solar resource input directly correlates with economic outcome potential. The solar resource is horrible in Portland (worse than almost anywhere in the country). Solar resource on the east side (and cool temperatures) is favorable, and materially superior for solar generation. Bigger projects and better sun align with ratepayer interests. Artificially restricting these does not serve them.

Bill Credits should be KWH, not \$/KWH nor RVOS: Finally, on a different matter, Bill Credit Rates: While recognizing that perhaps I don't fully understand the Bill Credit structure proposed, the program should allow – as other Direct Access programs do – developers and consumers to set the price of their own relationship. Bills should offset KWH with adjustors on a fixed basis for unbourn/unshared system costs. If a competitive energy provider can provide solar KWH at a rate lower than the retail rate, so be it! The Commission and the Community Solar program rules shouldn't artificially diminish values of KWH received versus the retail value of such a KWH. This undermines the program. It undermines ratepayer interests. It undermines a unique opportunity to provide competitive market options – that are *renewable* to ratepayers directly – and keep the utilities competitive, which pressures only serve the greater ratepayers interests (if unbourn costs are allocated reasonably), by compelling those utilities to be able to compete with cheaper power sources, if so achievable. RVOS should only apply to overgeneration, beyond the applicable net metering caps, not be the basic increment of credit. The consumer's goal is to offset the KWH fully.

Single Bill Credit per Utility (even service territory) is problematic: Further, the material variations within a utilities service territor(ies) is likely to result in some wonkiness if trying to set a standard value per utility. For example, the DNI (direct normal incident) radiation in downtown Portland (PGE) is 3.9 but in Salem is 4.1, a 5% variation. Of course, the options for "local" generation in downtown Portland are limited; and materially better in the less urban areas south (including solar resource) despite the lack of geographic proximity (re: further issues with proximity). In Pacific Power's Roseburg service area, DNI is 4.46, but it 6.04 in Klamath Falls (also [contiguous](#)), a difference of 35%. The difference from Cottage Grove

(4.32) to Klamath is 39%. The difference from North Portland (3.80) to Klamath is 39%. The difference from North Portland (3.8) to Bend (5.75) to Klamath is 39%.

Thank you: Thanks again for your superb efforts on the implementations, and apologies for the belated nature of these comments. I thought that others might be covering these points, but upon reading your memo dated yesterday realized I should comment directly. We hope these changes and this program allow our company to help bring compelling market options to the ratepayers of Oregon and appreciate your extensive efforts. We also apologize for inability to fully participate throughout this process, given limitations of resources of a small organization. We appreciate the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jake Stephens', with a long horizontal line extending to the right.

Jake Stephens
Principal
NewSun Energy