



April 17, 2018

To: Oregon Public Utility Commissioners: Lisa Hardie, Megan Decker, Stephen Bloom
From : Jaimes Valdez – Policy Manager, Spark Northwest;
Mike Riley - Executive Director, The Environmental Center;
Bridget Callahan - Energy Program Associate, Sustainable Northwest

RE: Joint Comment Response to Staff Proposal on UM 1930 Community Solar Alternate Bill Credit Rate

Thank you for the opportunity to provide joint comments and input to the staff recommendation regarding alternate bill credit rates in docket UM 1930.

Spark Northwest is a regional non-profit organization dedicated to creating communities powered by locally controlled, clean energy. Through our education, policy, and technical assistance programs, we help connect people with direct opportunities to participate and benefit from clean energy. In particular we have a focus on residential, and small business customers, with a goal of increasing access and benefit to low income customers.

The Environmental Center has deep roots in the Central Oregon community. We are engaging in this rulemaking process because bringing community solar to our community is essential to achieving our mission: to embed sustainability into daily life in Central Oregon. We want to see a successful community solar program that ensures access to Oregonians of all income levels across the state.

Sustainable Northwest is a conservation non-profit working at the intersection of economy, environment, and community. Since 1994, we have brought people together across the West to find natural resource solutions that work for people and nature. Through our Energy Program, we are leading a coalition of rural Oregon municipal and nonprofit entities (*Making Energy Work for Rural Oregon*) to accelerate the adoption of clean energy programs across our state.

The following joint comments reflect the perspective of our organizations. We have engaged in the various dockets and processes related to community solar over the past four years, along with a number of community stakeholders, and are excited for the opportunity to launch community solar. In order for the community solar program to be successful, the bill credit rate is a key element, and we appreciate the Commission's finding on March 5th that an alternate bill credit rate is necessary, and the staff work on developing these bill credit options. The following is our recommendation of the best course of action in selecting an alternate bill credit mechanism for the Community Solar Program (CSP), as well as comments and reflections on some of the staff principles and other rate approaches.



Summary Recommendation

In the early stages of the CSP, it is important that the program succeed in not just building projects, but also providing participation incentives for customers that have previously not had the opportunity to benefit from solar energy. We recommend that the Retail Rate approach be used as the starting point for the program, with an initial capacity allocation that is for the first 2.5% tier of allocation, representing approximately 160MW total. This is consistent with prior Commission docket AR 603 rules (Order Number 17-232 dated June 30th 2017) that the first tier of capacity provides an opportunity to “start out with a sufficient amount of projects to absorb the higher administrative costs in the initial years of the program—and to set a capacity limit that serves as a reasonable checkpoint where the program would be evaluated and adjusted before expanding.” In meeting the goal of sharing in the costs and benefits of solar, we suggest that the rate approach should mirror many of the same benefits that on-site customers receive from solar energy, and include a rate escalator mechanism if it is predicted that retail rates will rise in the future. We feel that this provides the most certainty in establishing a starting point for project development and customer acquisition.

However, we also note that even the retail rate is lower than the Levelized Cost of Energy (LCOE) calculated by Energy Trust of Oregon for many parts of Oregon.¹ Staff highlights the concern that one of the big unknowns at this point is the actual cost of development and marketing of community solar projects, and we can only assume that these transaction costs are higher than for a similarly-sized commercial system that is serving a single customer. At minimum, it would seem logical that a project would need to financially break even with the LCOE calculation in order to deliver any financial benefit to customers. This brings into question whether projects will indeed be viable west of the Cascades, impacting the opportunity for customers in Portland General Electric (PGE) service territory.

The staff proposals do envision potential for adders in order to reach specific program goals, and we agree with this overall concept. We suggest that it would be appropriate to include an adder for projects that have a high percentage (over 50%) of capacity allocated to low-income customers, and that the adder should be sufficient to ensure that projects occur. The low-income facilitator should also work with stakeholders to identify at minimum, a meaningful percentage of cost savings to be delivered by community solar to each low-income customer. We reject the idea (put forward by some utility stakeholders) that low income customers should not receive any subsidy or bill savings, and instead argue that enabling low income bill savings is one of the clear ways that the Commission can implement the legislative intent of providing an incentive for participation.

¹ Appendix A, Staff Report for the April 24, 2018 Public Meeting - Filed April 10, 2018



This approach will create a specific mechanism to ensure that the low-income goals of the program are met, while also providing a tool to support projects on the west side of the mountains. We also support adders that encourage smaller projects, or a carve-out that reserves capacity to smaller projects as a tool to ensure that there is a range of projects in the CSP. If for some regulatory reason it is not possible for a higher rate to be designated to projects that serve a high number of low-income customers, the Commission should identify other tools, incentives, or grants that will enable participation by low income customers in community solar.

Comments on Staff Principles

We appreciate that the staff built the recommendations on a set of five principles, including that the bill credit rate be: Simple, Accessible, Minimize Cost Shifting, Locational, and Transitional. However, we are disappointed that project diversity is discounted as a goal (in either geographic location or customer participation), as we have consistently stated that these are elements that have value to stakeholders and potential participants. We will briefly address a couple of the principles.

Accessible : In defining the criteria for this principle, staff focuses on whether the bill credit rate leads to project development. However, we suggest taking a customer-focused lens to this principles, and ask: which customers would have access to the program based on the bill credit structure? In particular, nowhere in the staff report is the 10% inclusionary target for low income customers mentioned, or evaluated as to the impact of different bill credit approaches. It is unclear if the provision of 5% of each project to low-income customers is built into the assumed project economics of each project, and how the program would seek to address the 10% goal. In the LCOE modelling provided by ETO, it is not clear that these elements are included in the calculations, or part of the model assumptions. The definition of accessibility should include evaluation of who has access to the program, and the benefits that they would receive.

Minimize Cost Shift:

We note that staff provide the context with which they are evaluating rate structures as to whether they are “designed to provide the lowest cost possible in order to minimize cost shifting”. However, staff does not appear to identify or acknowledge another key other element of legislative direction, which is to “at minimum, Incentivize consumers of electricity to be owners or subscribers.”²

In simple terms, it appears PUC staff are currently defining cost shift as the rate impact associated with the differential between the bill credit rate and the real levelized standard Qualifying Facilities (QF) rate. Staff notes that this is an incomplete basis for rate impact

² Oregon SB 1547, Sec 22 , (2)b,A



evaluation. We agree that a thoroughly developed RVOS would be a better starting point for establishing any calculation of cost shift, and note that the cost shift could be either positive or negative depending on the value. For reference of past programs for solar and their rate impact, in the 2015 Report to the Legislature on the Volumetric Incentive Rate (VIR) Program the Commission identified a rate impact of 0.25% of the revenue requirement, related to that 27.5 MW program.³ We would note that even the high side of the PGE and Pacific Power estimate rate impacts that staff calculated (0.12% and 0.13% respectively), these are about half of the VIR program, for a significantly greater amount of capacity.

As the program rollout progresses and more cost elements are known It would be useful for the Commission to identify an acceptable level of rate impact in order to measure and plan for program deployment. Defining an acceptable threshold or rate impact will be helpful for stakeholders and program administrators in evaluating the balance between rates paid and the total capacity allotted as the program continues beyond the initial capacity tier. The appropriate time to make that determination is after the program has successfully launched, as subsequent tiers of capacity can be allocated to meet program goals.

Comments on Different Bill Credit Rate Approaches

Retail Rate:

Staff state in their comments that the Retail Rate approach is deemed “most likely to spur active project development”. We agree with this statement, and the inherent simplicity and value of a retail rate approach. The retail rate approach allows enough transparency and predictability for projects to plan for deployment and marketing in the near term. As stated above, we support this approach as the starting point for the program rollout, with modifiers to support projects that serve a high percentage of low income customers , and a carve out or adder for smaller projects.

Recommended modifications: Incorporate a simple adder for projects that commit to +50% low income participation as a portion of total project capacity. This adder should be at a rate sufficient in a LCOE evaluation to provide net benefit to participants. To be clear, we still support the Commission proposed structure that every project be required to have 5% low income participation - our recommended adder would be for projects that seek to go significantly beyond that minimum.

Also, Staff or the Program Administrator should develop a process to determine how a meaningful percentage of low-income customers bills would be reduced by participation in community solar. As a core principle, low income customers should receive a net-benefit from participation in community solar, in a way that meaningfully reduces their energy burden. We

³ 2015, Oregon Public Utility Commission - Solar Photovoltaic Volumetric Incentive Program - Report to the Legislative Assembly



also generally support other mechanisms that ensure that small projects are offered an incentive to participate, through either an adder or a carve out mechanism. These are all consistent with principles that are articulated by the Interstate Renewable Energy Council in their handbook “Shared Renewable Energy for Low and Moderate Income Customers: Policy Guidelines and Model Provisions”⁴

We suggest that the retail rate approach in Oregon, even with moderate adders, will provide a starting point that is lower than most any of the retail rates in other states that have deployed community solar using this method. It also conveys benefits that are similar to the opportunity that customers have previously been able to access for on-site solar, and creates some parity. The table below compares some of the other approaches of community solar and virtual net metering (VNM) programs in other states, and some of the estimated rates associated with those programs. Note this does not capture the full value or benefit to customers, as there are some states that have additional grants and incentives for community solar. Also, the retail rates in some cases are underestimated, as they use average state rates, whereas in some jurisdictions only investor owned utilities (IOUs) have obligations to offer community solar. Typically IOUs have higher rates than the state average, as is the case in Oregon.

State	Valuation Approach	Value (cents/ kWh) (for retail rates, residential state average)
California	Full Retail Rate	15.23
Colorado	Aggregate Retail + REC	~13.8 + RECs
Delaware	Full Retail Rate	11.09
Illinois	Retail volumetric charges + SREC adder	~7.0 + 18.0 SREC
Maine	Full Retail Rate	12.8
Maryland	Full Retail Rate + LI Set Aside	12.2
Massachusetts	"SMART" Rates - based on project location, size and low income qualifications	15.0 initial base rate, plus adjustments. Low Income Community Solar = 21.0 to 36.0
Minnesota	Initially Retail, now moving to VOS	VOS 10.3 + escalator up to 17.9
New Hampshire	Full Retail usage rate	15.7
New York	Generally Full Retail Rate approach	14.5
North Carolina	Avoided Cost	TBD
Vermont	Full Retail Rate + adder	~ 20.0 (14.46 retail + adder)
Washington	Production Incentive	16.0 to 21.0 (PV module dependent)

Developed by Spark Northwest - Sources :

⁴ 2018 Interstate Renewable Energy Council : “Shared Renewable Energy for Low and Moderate Income Customers: Policy Guidelines and Model Provisions : <https://irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/>



Shared Solar HQ map database : <http://www.sharedrenewables.org/community-energy-projects/>
EIA State Energy Profiles (for average retail rates) : <https://www.eia.gov/electricity/state/>

Adjusted Retail Rate:

The proposal for adjusted retail rate attempts to balance a number of programmatic goals, however, it does not appear to be structured in a way that sets it up for success. In evaluating the reduced retail rate for “small and medium” projects under 360 kW, the rate does not seem to align with the LCOE rates needed to make a project financially viable, especially in Portland or Salem. Additionally, it suggests a 12 month window for increments in program deployment and evaluation, which is far too long a period to make adjustments to the program and learn from market activity. If a time-based, iterative mechanism is to be used, a quarterly review (at maximum) would be needed to adequately adjust, and more than 5% of project capacity would need to be allocated to determine market response. In general, we feel that the increments of capacity allocated in this model are too small.

A reverse auction mechanism (RAM) as envisioned for larger projects will also likely lead to a number of speculative projects, or alternately, only projects developed by utilities or the most sophisticated developers. Creating an arbitrary cap on the maximum point for the auction price also does not seem to fit with true market response discovery, and we have concerns that the proposed approach would wait too long before making any adjustments in the case that projects did successfully bid into the capacity queue but were not built. We do not support a reverse auction mechanism.

Modified RVOS Approach

We do not think that the RVOS is sufficiently developed to serve as a starting point for Community Solar deployment, for many of the same reasons that the Commission decided to establish an alternate rate approach. In addition, the transition mechanism envisions appears to be designed to punish project models that take longer to deploy, since the rate decreases as capacity is brought online. This creates a structure where only the most sophisticated projects would be able to meaningfully participate in the program, as the Market Transition Mechanism adjusts automatically. Our same concerns about the time window of evaluation hold true in this model, and we do not believe that a 12 month window is appropriate for evaluating program success and making adjustments soon enough to be meaningful. We also note that the other states that use a RVOS methodology have only done so after initially launching their programs, and that states like Minnesota that are moving to a Value of Solar methodology appear to account for a greater range of factors in their VOS than we are considering in the RVOS UM 1910, 1911, and 1912 dockets.⁵

⁵ February 2018, Institute For Local Self Reliance - <https://ilsr.org/community-solar-and-value-of-solar-under-review-in-minnesota/>



In summary, we suggest that a retail approach, coupled with mechanisms to clearly incentivize projects that include high percentages of low income customers, is the best path forward in the first phase of deploying community solar in Oregon. This provides a measure of fairness in the program and helps ensure that program goals are met. Consideration should also be given to smaller projects to provide mechanisms for project diversity, which we argue is indeed an important element of the CSP development, and is a key factor for many stakeholders who want to see projects physically located in their communities.

Thank you for your consideration of these comments, and we look forward to further engagement on this docket as it progresses.

Sincerely,

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