UM 1930 – Community Solar Program
Staff draft proposal and request for comments

July 16, 2021

This document describes the Oregon Public Utility Commission Staff's draft proposal to 1) release the 79 MW of capacity remaining in the Community Solar Program's Initial Capacity Tier and 2) modify some program elements in order to better achieve program goals. Staff seeks written comments on this draft proposal by July 30, 2021. There will be additional opportunities for the public to provide feedback to Staff and the Commission as described in the schedule below.

Please email comments on this draft proposal for the next phase of the Community Solar Program to puc.filingcenter@puc.oregon.gov by July 30, 2021.

Schedule

July 16, 2021 – Staff publish draft proposal for public comment
July 30, 2021 – Written public comment on draft proposal due
August 10, 2021 – Special Public Meeting for Commissioners to discuss draft proposal and hear oral comments from stakeholders
September 2021 (date TBD) – Staff publish final proposal for Commission decision

Background

The Community Solar Program (CSP or Program) was enabled by Oregon Senate Bill (SB) 1547 (2016). The Commission adopted administrative rules and a Program Implementation Manual (PIM) that jointly define the requirements for participation in the Program. The rules establish the Program's "Initial Capacity Tier" as 2.5 percent of each electric company's 2016 system peak load. The Program launched in 2020 with half of the Initial Capacity Tier for Portland General Electric (PGE) and Pacific Power (PAC) and all of the Initial Capacity Tier for Idaho Power Company (IPC), referred to in the PIM as the "Interim Offering" and in this proposal as "Tier 1 capacity." The capacity remaining in the Initial Capacity Tier is referred to in this proposal as "Tier 2 capacity."

Table 1. Tier 1 and Tier 2 capacity by utility

Utility	Initial Capacity Tier (MW-AC)	Tier 1 capacity (MW-AC)	Tier 2 capacity (MW-AC)
PGE	93.15	46.57	46.57
PAC	64.60	32.30	32.30
IPC	3.28	3.28	-
Total	161.03	82.15	78.87

Twenty-five percent of the Tier 1 capacity is carved out for exclusive use by projects sized at 360 kW-AC or smaller and projects developed by a nonprofit or public Project Manager ("carve-out capacity"). The remaining 75 percent of the Tier 1 capacity is available to any project up to 3 MW in size ("general capacity"). Capacity is reserved by a project at the time of pre-certification.

Program results to date

All of the general capacity in Tier 1 has been reserved by projects, and the Program Administrator (PA) is maintaining a waitlist of projects to be used if (i) Tier 1 capacity is freed up by a canceled project or (ii) Tier 2 capacity released by the Commission. Most of the Tier 1 carve-out capacity remains un-reserved, as shown in the table below.

Table 2. Tier 1 general and carve-out capacity utilization

Utility	General capacity in Tier 1 (MW-AC)	General capacity remaining (MW-AC)	Carve-out capacity in Tier 1 (MW-AC)	Carve-out capacity remaining (MW-AC)
PGE	34.9	0	11.6	11.6
PAC	24.2	0	8.1	6.1
IPC	3.3	0.3	-	-

The capacity that has been reserved comprises 34 projects, three of which are operating, the remainder of which are still in development. All projects are in the midst of or nearing participant recruitment. 19 projects have begun registering enrolled participants with the Program.

While it is encouraging that the Program's general capacity has been fully reserved by pre-certified projects, current trends in participant enrollment point to the need for programmatic adjustments to fulfill the direction set by SB 1547. To date, more than 22 MW of capacity across 18 projects have been subscribed by participants. Non-residential participants represent 80 percent of that subscribed capacity. Most of the non-residential subscriptions have been large commercial or public entities with multiple sites. The Program allows up to 90 percent of a project's capacity to be subscribed by as few as one non-residential entity with multiple sites. One Project Manager reported that maximizing non-residential capacity has been necessary to secure project financing. While Staff appreciates the reasons for high non-residential participation, it challenges a driving reason behind the CSP: to grant access to solar to all customers, not just commercial customers.

The Program requires that a minimum of 10 percent of a project's capacity be allocated to low-income residential customers. Recruitment of low-income individuals has been challenging for several reasons, as explained in Staff recommendation #3 below. Nineteen projects that are enrolling subscribers have successfully achieved the 10 percent low-income subscription threshold by subscribing providers of large, low-income multifamily residences to fill that capacity. Of the 3.2 MW of low-income capacity that has been subscribed to date, over 85

percent has been subscribed by providers of low-income multifamily housing rather than by low-income individuals. While residents of participating multifamily housing communities will receive direct financial benefit through their housing providers, their participation in the Program is indirect – through the property – and involuntary. Expanding access to solar involves expanding the ability for individuals to choose solar. Also, unlike low-income participants on individual meters, residents of multifamily housing will lose their CSP subscription if they move.

Tier 2 planning activities

To develop this proposal for opening Tier 2 capacity, Staff has relied on a combination of limited project data, regular meetings with the PA and the Low-income Facilitator (LIF), informal conversations with Project Managers, and written and oral comments from stakeholders at a workshop conducted on June 4, 2021, to plan the next phase of the Program. On May 24, 2021, Staff and the PA published a dashboard of Program results and a list of questions to prepare stakeholders to participate the public workshop. The Program results were presented and discussed at the workshop.[1]

At the workshop, stakeholders shared priorities for the next phase of the Program. Stakeholder feedback converged on the following themes:

1. There has been success! Projects are being built and operating, and participants are excited about the Program.
2. The Program's purpose is to provide access to solar to individuals not served by net metering and other incentive programs.
3. Equity and energy burden is more important than ever.
4. Bill credit rate adders could help achieve participation goals.
5. Project Managers need certainty about the future of the program.
6. The Program is complex. Processes should be simplified where possible.
7. Community-led projects are an important element of the Program, but they face many barriers. Further efforts to support these projects should be made.

In developing this Tier 2 proposal, Staff and the PA used the same model that was used during the initial design of the program in 2019 to establish the Tier 1 bill credit rate. Staff ran scenarios through the model to estimate the financial impact of the proposed changes to 1) ratepayers, 2) Project Managers, and 3) participants.

Draft Staff proposal

Stakeholders are encouraged to comment on each of these draft recommendations. Note that these Tier 2 recommendations apply only to PGE and PAC, since IPC's capacity is entirely in Tier 1, not Tier 2.

[1] A workshop summary posted to Docket No. UM 1930 on July 15, 2021, includes links to the recorded workshop, the presentation, notes from the stakeholder breakout groups, and stakeholders' written comments.

1. Release the remaining 79 MW of the Initial Capacity Offering.
Staff proposes to release the remaining capacity in order to 1) allow more residential participation in the CSP and 2) support project viability that may be threatened by delay.

First, during the workshop and in comments stakeholders expressed broad agreement that the purpose of the CSP is to establish an equitable opportunity for consumers that have not been able to access customer generation opportunities and incentives. There was also agreement that residential participants have been underrepresented in Tier 1, which has been subscribed primarily by non-residential participants. Opening Tier 2 capacity provides the opportunity to expand residential participation in the CSP. To achieve this, Staff proposes to change the project participant requirements in Tier 2, as described in the following recommendations, to drive more residential participation.

Second, the Program has facilitated a pipeline of projects that can utilize Tier 2 capacity when it becomes available. Projects in the pipeline have deadlines. Project Managers have shared with the Program the interconnection costs that their pipeline projects have started to incur based on interconnection deadlines. The Oregon Solar + Storage Industries Association (OSSIA), in its comments, stated that delay in releasing Tier 2 capacity presents risk of expiring land use permits, subscriber attrition, and failing to secure financing. Table 3 shows that the pipeline of projects for PGE and PAC significantly exceeds the Tier 1 capacity.

Table 3. Capacity of projects assigned Tier 1 capacity or awaiting Tier 2 capacity

Utility	Tier 1 capacity (MW-AC)	Aggregate capacity of projects operating or with pending CSP interconnection applications (MW-AC)
PGE	46.57	62.0
PAC	32.30	74.1
Total	82.15	136.9

2. Require minimum 50 percent of project capacity be subscribed to residential customers.
Staff proposes that at least 50 percent of each Tier 2 project's capacity be reserved for residential subscriptions in order to drive significantly more residential participation in Tier 2 than we have seen in Tier 1. The recommended 50 percent residential capacity is inclusive of the minimum 10 percent project capacity reserved for low-income residential customers.

Under Tier 1, no more than 50 percent of project capacity can be subscribed by large commercial customers, at least 40 percent by residential or small commercial customers, and at least 10 percent by low-income residential customers. This split is intended to encourage a diversity of customers, while allowing projects to recruit large commercial customers as "anchor" customers to help ensure financial viability of the project. Within the minimum 40 percent of project capacity available to residential and small commercial subscribers, 13 percent has been subscribed by residential customers and 87 percent, over 6 MW, has been subscribed by small commercial customers. A third of the capacity subscribed by small commercial customers, over 2 MW, belongs to the same large commercial customers who also

serve as anchor customers. Staff argues that current project capacity requirements have resulted in less customer diversity than anticipated.

At the workshop, several stakeholders noted the lack of residential customers in Tier 1 and argued that higher residential participation should be a goal of Tier 2. Joint comments filed by NW Energy Coalition, Bonneville Environmental Foundation, Solarize Rogue, and Wallowa Resources Community Solutions (joint parties) noted that residential tenants have been and should remain a target population for CSP since they don't own their roofs and can't access net metering.

To achieve higher residential subscriptions, Staff recommends converting the 40 percent project capacity requirement from residential/small commercial to residential-only. Combined with the existing requirement for 10 percent low-income capacity per project, which Staff proposes to retain in Tier 2, this would require Tier 2 projects to reserve at least 50 percent project capacity for residential customers. Staff proposes to continue to allow up to 50 percent of project capacity to be subscribed by non-residential customers of any size, to retain the anchor customer model for project viability.

During program design for Tier 1, Staff modeled $0.05/W-DC acquisition cost for all customers. However, increasing the residential capacity requirement for Tier 2 projects will increase Project Managers' customer acquisition costs. In their comments, OSSIA estimated the cost increase to be two to three-fold. Accordingly, Staff modeled customer acquisition costs at $0.15/W-DC for residential, and $0.05/W-DC for non-residential. To offset these increased Project Manager costs, Staff recommends adding a bill credit escalator, discussed in Recommendation #5.

3. Increase low-income subscription discount to 40 percent

Staff proposes to increase the low-income subscription discount from 20 percent to 40 percent in Tier 2 in order to facilitate recruitment of low-income participants and provide more meaningful benefit to those participants.

SB 1547 requires a minimum of 10 percent low-income participation in the CSP, so recruiting and retaining low-income participants is essential. To ensure no harm to low-income customers, the Program provides additional protections for low-income participants including no program fees, no late fees, no cancellation fees, and a guaranteed monthly savings by requiring the subscription fee to be at least 20 percent less than the bill credit rate. With the subscription discount of 20 percent required in Tier 1, low-income customers may save 10-14 percent on their utility bill. Even with existing protections, uptake in CSP by low-income individuals has been very slow. This is due in large part to 1) recruitment challenges presented by the COVID-19 pandemic and 2) an unforeseen risk to low-income participants caused by the utilities' payment hierarchy, in which bill credits are applied first to energy charges and last to CSP subscription fees. In the case the customer makes a partial payment, the unpaid balance will result in an amount owed to the Project Manager and may jeopardize the customer's

eligibility for energy assistance. Because of this risk, community-based organizations have declined to promote the Program to their low-income clients. The Program and the utilities are working to resolve the payment hierarchy challenge to ensure that low-income customers will see a savings from CSP every month regardless of arrearages.

However, even for customers who are not likely to fall into arrears, the LIF has noted that CSP participation is not an easy sell to low-income individuals without offering a significant financial benefit. The LIF anticipates that doubling the customer bill savings to 20-30 percent by doubling the subscription discount to 40 percent will greatly improve recruitment and have a long-lasting, meaningful impact on energy-burdened customers. OSSIA also suggested a 40 percent low-income subscription discount in their comments.

Increasing the required low-income subscription discount to 40 percent will make recruitment, retention, and replacement easier for Project Managers. It will also result in lower revenues for Project Managers from their low-income subscribers. Staff recommendation #5 adds a bill credit escalator to offset the reduction in Project Manager revenues.

Staff recognizes that having different low-income subscription discounts in Tier 1 and Tier 2 projects may disadvantage Tier 1 projects that are still recruiting low-income participants when Tier 2 projects enter the market. Staff proposes that customers be allowed to choose between accepting a smaller discount from a Tier 1 project that may begin operation sooner, or waiting for a Tier 2 project that offers a larger discount to become operational. Additionally, Project Managers with Tier 1 projects may optionally increase their low-income subscription discount in a Tier 1 project to compete with the Tier 2 discount. Staff welcomes stakeholder input on the impact of having different low-income subscription discounts in the market and how it should be addressed.

3. Set the Tier 2 first-year bill credit rate at: (i) the Tier 1 rate for residential participants, and (ii) 90 percent of the Tier 1 rate for non-residential participants.

Staff proposes to retain the Tier 1 bill credit rate for residential participants in Tier 2, but to reduce the bill credit rate for non-residential participants by 10 percent relative to Tier 1. This is intended to minimize ratepayer impact while providing sufficient revenues to support viable projects.

Project Managers report that overall project costs have not decreased since program launch, are not forecasted to decrease in the near term, and that project finances for Tier 1 projects are tight. Therefore, Staff does not expect a lower bill credit rate to work for Tier 2. Staff recommends that the current Tier 1 rate be used as the first-year rate for Tier 2 residential subscribers.

Staff recommends lowering the bill credit rate for non-residential customers for two reasons. First, a lower bill credit rate reduces the cost of the CSP to ratepayers. Second, non-residential customers may need less incentive to participate. To date, many non-residential CSP

subscribers are commercial and public entities with sustainability goals that may indicate a willingness to pay more for clean energy.

In reality, Staff assumes that Project Managers will offer non-residential customers similar bill savings in Tier 2 as they do in Tier 1, even with a lower bill credit rate. This is because Project Managers have indicated that they must offer a subscription fee that is lower than the bill credit rate to assure project financers that their product offering is favorable enough to attract and retain customers, ensuring revenues over the life of the project. Thus, Staff's modeling of Tier 2 impacts assumes that Project Managers will lower their subscription fee for non-residential participants to about 5 percent below the bill credit rate – the same discount offered in Tier 1.

Staff's modeling showed that the non-residential bill credit rate could be as low as 80 percent of the Tier 1 rate, when combined with all other elements of this proposal, and still provide a project IRR similar to the IRR in Tier 1. Lowering the non-residential rate to 90 percent of the Tier 1 rate provides a slightly higher IRR. Staff proposes to set the rate at 90 percent of Tier 1 because Project Managers have indicated that requiring a higher percentage of residential subscribers will increase the project risk for financers, which would increase project costs. Those increased project costs are not included in the model. Staff asks for stakeholder feedback on whether projects can support non-residential bill credit rates of 80 percent of Tier 1 rates in order to reduce ratepayer impact of the Program.

Staff recognizes that lowering the non-residential subscription fee will reduce project revenues. Allowing the bill credit rate to escalate, as proposed below, helps offset that lost revenue.

Table 4. Proposed first-year Tier 2 bill credit rates

Utility	Tier 1 residential and non-residential	Tier 2 residential (including low-income)	Tier 2 non-residential
PGE	$0.11234	$0.11234	$0.101106
PAC	$0.0977	$0.0977	$0.08793
IPC	$0.0848	n/a	n/a

5. Add a 2 percent escalator to the bill credit rate for all projects.
Staff proposes to add a 2 percent escalator to the bill credit rate for Tier 2 projects to 1) ensure that projects are financially viable by offsetting the higher costs and lower revenues that Project Managers will experience as a result of the Tier 2 requirements, 2) bolster residential customer recruitment, 3) and provide more support for carveout capacity projects.

First, under this Tier 2 proposal, Project Managers will need to recruit more residential customers, which have higher acquisition costs than non-residential, and offer a higher subscription discount to low-income customers, which will decrease project revenues. The Tier 2 proposal also lowers the bill credit rate to non-residential participants, likely resulting in the Project Manager lowering their non-residential subscription fee, further reducing project

revenues. An escalating bill credit rate will allow Project Managers to charge escalating subscription fees. These increased revenues should offset the higher costs and lower revenues caused by the Tier 2 changes. Project Managers report that escalating revenues will also improve cash flow, since many project costs escalate over time.

Second, Project Managers and the LIF report difficulty with residential recruitment and suggest that the value proposition of receiving a flat bill credit rate over a 10 to 20-year contract period is not compelling. Marginally increasing the bill credit rate annually at a rate similar to the Consumer Price Index (CPI) would offer a more compelling long-term economic case.

Third, community-driven projects face many financial barriers. An escalating bill credit rate would improve the project financials, even it if doesn't fill the financial gap for most community projects.

Staff proposes a roughly 2 percent escalation rate which is based on the forecasted CPI, as originally proposed by Staff during Program design. The model indicates that a 2 percent escalation rate, combined with all the proposed Tier 2 changes, provides a slight improvement to the project IRR (less than one percentage point) compared to the IRR for Tier 1 projects. As mentioned earlier, that slightly better IRR allows for additional costs associated with these program changes that are not included in the model, and are not experienced in Tier 1.

The incremental cost to ratepayers of adding an escalator to the bill credit rate, in combination with the other changes proposed for Tier 2 projects, is described in the "Ratepayer impact" section near the end of this proposal.

6. Retain the 25 percent capacity carve-out for community-driven projects. Move remaining carve-out capacity from Tier 1 into Tier 2.

From the inception of the Program, community-driven projects have been seen as an important vehicle to provide equitable access to solar projects. While the Tier 1 capacity carve-out for community-driven projects remains largely unused, Staff proposes to retain the 25 percent carveout in Tier 2. This will allow more time to test the ability for the escalating bill credit rate to drive participation, for other program improvements to take root, and for some of these projects to secure outside sources of funds to facilitate their development. If these efforts ultimately fail, the Commission always has the option to repurpose any unused carve-out capacity in the future.

Staff also proposes to move any remaining carve-out capacity from Tier 1 into Tier 2. This would increase the amount of carve-out capacity available to community-based projects in Tier 2, and make all future carve-out projects eligible for the Tier 2 bill credit rate and subject to Tier 2 requirements. Staff also proposes to clarify eligibility requirements (to be developed with stakeholders and included in a future proposal) for the carve-out capacity to ensure the capacity is used by community-driven projects. Any specific eligibility requirements will be proposed in the near future for stakeholder input.

Table 3. Summary of proposed changes to bill credit rates and participant requirements

	Tier 1 requirements	Tier 2 recommendations
Bill credit rates	• Fixed rates, no escalator • Same rates for residential and non-residential	• Add 2% annual escalator • First year residential rates = 100% of Tier 1 rates • First year non-residential rates = 90% of Tier 1 rates
Program capacity carve-out	• 25% for community-driven projects	• 25% for community-driven projects
Project capacity splits by participant type	• Minimum 10% low-income residential • Minimum 50% residential or small commercial (including 10% low-income residential) • Maximum 50% large commercial	• Minimum 10% low-income residential • Minimum 50% residential (including 10% low-income residential) • Maximum 50% non-residential
Low-income subscription fee	• At least 20% lower than bill credit rate	• At least 40% lower than bill credit rate

Ratepayer impact

If Tier 2 were released with the same fixed bill credit rates and project requirements as Tier 1, the expected ratepayer cost of Tier 1 and Tier 2 combined over 20 years is estimated to be $142.1M ("business as usual"). By releasing Tier 2 capacity with the recommended bill credit rate escalator and new project requirements, while retaining the current Tier 1 requirement for Tier 1 projects, the expected ratepayer cost of Tier 1 and Tier 2 combined is estimated to be $168.5M, an increase of 19% over business as usual.

If the Commission does not release Tier 2 capacity, the ratepayer impact of Tier 1 alone, once fully subscribed, is expected to be approximately $84M over 20 years. Note that utility and PA administration fees were set at rates that will fully recover expected ongoing utility and PA costs after *both* Tier 1 and Tier 2 are fully operational and subscribed.

Staff and the PA are currently working to estimate the ratepayer impact of extending the bill credit rate escalator to the remaining carve-out capacity from Tier 1. We are also working to estimate the ratepayer impact of each of the recommendations in isolation from the others. Staff will share new modeling results when available and for discussion at the August 10 Special Public Meeting with Commissioners.

Project Manager impact

Staff and the PA estimate that the combination of all the proposed Tier 2 changes will slightly increase the Project Manager's IRR for general market projects, by less than one percentage

point compared to Tier 1. This slight increase results from the combination of 1) the expected increase in customer acquisition costs to meet the proposed Tier 2 residential participation requirement, 2) the decrease in project revenues due to lower subscription fees for low-income and non-residential customers in Tier 2, and 3) the increase in project revenue from subscription fees that escalate over time, allowed by the escalating Tier 2 bill credit rates. The increased IRR does not, however, account for any impact to the availability of financing available to projects with higher residential capacity requirements in Tier 2. We seek feedback from the Project Managers on how the proposed Tier 2 changes will affect their project IRR, particularly in comparison to their project IRR under Tier 1.

Future Program changes to be considered for Tier 2

Stakeholder feedback at the June 4 workshop emphasized the opportunity to support residential and community-driven participation with certain Program efforts. Examples included:

- Simplifying the participant agreement and enrollment process
- Increasing utility marketing of the Program
- Exploring a interconnection costs for small projects
- Clarifying carve-out capacity eligibility
- Reviewing pre-certification requirements for community-driven projects
- Delegating certain authority to the PA

These changes are important to consider and will be addressed at a future date. This draft proposal is focused on the major policy questions related to releasing the Tier 2 capacity. Staff will provide specific recommendations addressing this additional June 4 stakeholder feedback in the coming weeks in a separate communication.

How to submit comments

Please email comments on this draft proposal for Tier 2 of the Community Solar Program to puc.filingcenter@puc.oregon.gov by July 30, 2021.

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