

ITEM NO. 6

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: January 30, 2018

REGULAR X CONSENT EFFECTIVE DATE January 31, 2018

DATE: January 24, 2018

TO: Public Utility Commission

FROM: Caroline Moore

For CM

THROUGH: Jason Eisdorfer and JP Batmale

J

For JB

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. UM 1930) Request to open a Community Solar program implementation docket, and program implementation status update.

STAFF RECOMMENDATION:

Staff recommends the Commission open a docket (UM 1930) to house non-rulemaking matters related to the implementation of the Community Solar program.

DISCUSSION:

Issue

Whether the Commission should open a separate docket to consider matters related to Community Solar program implementation not related to rulemaking. The docket will address both consensus and non-consensus matters examined by the implementation sub-groups.

This memo also provides an update on Community Solar program implementation.

Applicable Law

The Commission adopted formal rules for Oregon's Community Solar program on June 29, 2017 through Order No. 17-232. That order adopted Division 88 of Chapter 860 of the Administrative Rules which provide for a series of extensive implementation actions

that must be accomplished before the formal launch of a Community Solar program. With Commission approval expressed in Orders No. 17372 and 17-458, Staff has commenced the implementation process with the support of Community Solar stakeholders.

Analysis

Background

The Commission's Order No. 17-232 adopted Community Solar Program rules and directed Staff to commence program implementation and identify a third-party administrator through a competitive bidding process. In a subsequent ruling, Order No. 17-372, the Commission adopted Staff's recommended next steps for implementation. These included commencement of a stakeholder process to identify and scope the Community Solar Program concurrently with the issuance of a Request for Proposals for a third-party Program Administrator, development of implementation items that could be resolved in the absence of the Program Administrator, and developing a recommended docket structure for implementation items. The Commission ordered Staff to report back with scoping and docket recommendations following the completion of any workshops.¹

Staff conducted a Community Solar workshop on October 19, 2017. Stakeholders and Staff agreed upon a series of implementation action items and priorities that could commence prior to selection of the Program Administrator.²

Additionally, stakeholder volunteers emerged to lead four sub-groups. These sub-groups would explore relevant and timely Community Solar implementation issues. The four sub-groups organized to investigate specific issues were:

1. Funding, Data and Financial Exchange, Billing Tariffs
2. Project details
3. RVOS and bill credit determination
4. Low income ³

¹ Order No. 17-372, Appendix A, P.6.

² See AR 603, Staff memo to Commissioners presented at the November 7, 2017 Public Meeting, subsequently approved as Order No. 17-458.

³ For more details on the specific issues each sub-group were intended to address, as envisioned by the stakeholders and Staff, please see Appendix A – F of this document and Order No. 17-458, Appendix A P.2-3.

Staff's memo also proposed a docket structure for the resolution of Community Solar implementation issues. Specifically, Staff would bring those recommendations to the Commission for approval as part of a separate Community Solar docket aimed at implementation issues not covered by or appropriate for a rulemaking docket, to the extent clear, and actionable recommendations would be produced through the sub-group process.⁴ Following, this memo the four sub-groups would meet several more times.

The Commission adopted these recommendations in Order No. 17-458. Per Commission order, Staff presented a brief update on implementation efforts at the January 17, 2018 Public Meeting.⁵ As part of this update Staff requested to provide an additional extended report on January 30, 2018, to accomplish the following:

- **RFP Update:** Share progress on the RFP to select of a third-party Program Administrator (PA).
- **Implementation Docket Request:** Request to open a docket to house non-rulemaking matters associated with program implementation, as well as, a review of items resulting from the sub-group's initial efforts that will be proposed for Commission consideration under the new docket.
- **Sub-Group Update & Recommendations:** Present a brief update of stakeholder sub-group activity and recommendations. More detailed summaries of each sub-group's activities can be found in Appendices A through F.
- **Categorization of Sub-Group Recommendations:** Staff has organized the findings and recommendations presented by the sub-groups into three categories: (1) matters of stakeholder consensus to be memorialized for use in the Implementation Manual (Manual) development; (2) non-controversial matters that would be considered for Commission approval in the near future under the new docket, UM 1930; and finally, (3) more substantive matters for Commission consideration over the course of the next six-months to a year as part of UM 1930.

This memo represents the extended report described above.

⁴ Order No. 17-458, Appendix A P.5. It should be noted that Staff did not immediately call for the opening of a new docket following the October 2017 stakeholder meeting. It was after several meetings by stakeholders in their respective sub-groups that it become clear a separate docket for implementation issues was necessary.

⁵ *Ibid*, Appendix A, P. 6, "Staff is directed to provide an update to the Commission on the Status of Community Solar implementation efforts no later than January 17, 2017."

RFP Update

Staff continues to make progress toward releasing the third-party administrator RFP. Staff drafted a Request for Proposals (RFP) for a third-party Program Administrator and is currently working with the Department of Administrative Service (DAS) and the Department of Justice (DOJ) on release of the RFP. The tentative schedule is as follows:

- Release RFP: Early- or mid-February
- Bidders conference, Q&A period ends: 1.5 weeks after RFP release
- Bidder responses due: 30 to 45 days after RFP release
- Complete evaluation and selection: Two weeks after responses due
- Protest Period: 7 days following selection
- Contracting begins: After protest period

Request to open new implementation docket

In light of the Community Solar rulemaking process concluding June 29, 2017, Staff recommends that the Commission open a new Community Solar docket focused on non-rulemaking program implementation matters. This docket will encompass current and future implementation steps. Staff imagines many future implementation issues will arise, but proposes the following initial scope and structure:

- Phase 1: Bring Stakeholder consensus issues, developed through the sub-group process, deemed by Staff as non-controversial to the Commission consideration in the near future.
- Phase 2: Initiate further discussion of sub-group implementation issues Staff has deemed in need of further consideration prior to Commission approval. This may be delegated to the PA once selected.
- Phase 3: Conduct implementation manual development with the PA and present to the Commission for adoption; address additional implementation matters as they arise.

Sub-Group Update & Recommendations

In a series of workshops, Staff and Stakeholders made implementation progress throughout November and December 2017. Each sub-group managed its own meeting schedule, format, and deliverables. Staff attended all meetings and led periodic full-group workshops during which sub-groups reported on their activities. Each sub-group culminated in a final report and recommendations submitted to Staff on December 31, 2017.

Staff greatly appreciates the time and energy that all of the sub-group participants devoted to thoughtful discussion and development of excellent work products. Staff would also like to warmly thank the sub-group leaders who volunteered to lead a time consuming process to a very successful conclusion: Erik Anderson of PacifiCorp, Oriana Magnera of the Northwest Energy Coalition, Jon Miller of the Oregon Solar Energy Industries Association, and Silvia Tanner and Michael O'Brien of Renewable Northwest.

Below is a summary of the recommendations from each sub-group. Appendices C - F contain direct work-product from each sub-group and summarize the activities and findings.

Funding, Data and Financial Exchange, Billing Tariffs Sub-group

The sub-group met two times to begin discussing the flow of data and funds between the many parties, as well as, the mechanics of on-bill subscriptions and required utility tariffs. With respect to matters covered by this sub-group, stakeholders agreed:

- To a schedule for tariff filings and other regulatory actions required for program implementation.
- That two primary subscription models are used in other states: variable-kWh fee and fixed-lease fee.
- On minimum requirements for the form and content of information displayed on participants' utility bill.
- That the Program Administrator should have a Customer Information Transfer Agreement (like ETO has) with utilities to protect and govern the exchange of customer data.

In addition, stakeholders indicated that they would like Commission guidance on:

- The circumstances under which alternatives to on-bill collection are appropriate.
- The type of information that can be shared between the participating entities.

Project Details Sub-group

The sub-group met two times to lay the ground work for important interconnection and certification process decisions. With respect to matters covered by this sub-group, stakeholders agreed:

- On general project development timelines and milestones to be considered during Manual development.
- The implementation manual should not establish an additional or parallel interconnection process.

- A completed impact study or an executed interconnection agreement should be sufficient to meet the pre-certification requirement.
- Existing projects in the interconnection queue should qualify for the Community Solar program.

RVOS and Bill Credit Determination Sub-group

The sub-group discussed the “drop dead” date by which the bill credit rate must be established. The group did not reach any points of consensus but provided the following set of findings:

- The drop dead date is either now, April 2018 or July 2018.
- The Federal Investment Tax Credit (ITC) step-down schedule and Federal Weatherization Assistance Project (“WAP”) application deadline affect the drop dead date.
- While outside of scope of their sub-group, Stakeholders discussed the potential need for an interim (i.e., RVOS will not be available in time) or alternate (i.e., RVOS will not be sufficient) bill credit rate, but did not reach consensus. This subject was also outside of the sub-group’s scope.

Low-income Sub-group

The sub-group’s primary task was to develop a recommendation for the low-income threshold definition. In addition, the group focused on considerations for low-income participant engagement and protection. With respect to matters covered by this sub-group, Stakeholders agreed:

- On a low-income threshold definition: The higher of 80% of State Median Income (SMI) or 80% of the Area Median Income (AMI).
- All low-income participation contracts should allow portability, transferability and early termination without penalty.
- Contract and disclosure requirements should utilize a low-income lens but did not reach an exact set of principles to execute that lens.
- Low-income housing providers should be able to tie their units or properties to a subscription (rather than a discrete low-income customer holding the subscription).
- The Low-Income Facilitator should maintain a queue of eligible low-income participants.

In addition, Stakeholders discussed, but did not reach consensus on:

- The need for additional low-income participation incentives.
- The value of program equity and potential mechanisms for monitoring or requiring program equity.

Categorization of Sub-Group Recommendations

The following sections categorize the initial sub-group findings and recommendations. Staff appreciates Stakeholders' efforts to begin tackling important implementation issues prior to Program Administrator engagement. Sub-group reports (See Appendix C – F) represent great progress but also a complicated blend of best practices to be used to develop future recommendations (e.g., through the Manual) points of consensus, as well as topics that are flagged, but not at a point of agreement. To be clear, this report does not propose immediate Commission action on any of the below items.

Along these lines, Staff divided the various findings and recommendations into three categories. The first category does not propose direct Commission consideration of issues, but rather provides suggestion for implementation to the future Program Administrator. The second category includes sub-group findings and recommendations where there was Stakeholder consensus and Staff plans to bring these findings and recommendations to the Commission for consideration at a future date in UM 1930.

The third category includes sub-group findings and recommendations identified as complex and substantive issues that require more intensive review before presentation to the Commission. These issues may not have Stakeholder consensus, may not be actionable without the PA in place, or Staff has determined that further consideration is required before a recommendation can be made to the Commission in UM 1930.

Staff has communicated to stakeholders that the review of any sub-group recommendations, regardless of categorization, will be considered using the following four factors:

- 1) Staff will only recommend adoption of sub-group recommendations that are consistent with law, rule, and order.
- 2) Staff will advance recommendations that are reasonable, meaning practical and likely to help support a successful Community Solar program.
- 3) Recommendations advanced by Staff will be timely, meaning that they are not premature, or subject to another proceeding that is concurrently advancing, etc.

- 4) Staff will advance recommendations that do not require the Program Administrator's input. Staff notes that all Community Solar implementation items would benefit from Program Administrator participation and review, but for some issues Program Administrator participation is essential and others can be addresses in the meantime.

Importantly, at this stage in the implementation effort, Staff is limiting its support of recommendations to those that have been advanced with general consensus.

Category 1 - Matters of Consensus for Memorialization

The following list summarizes sub-group findings considered important points of Stakeholder agreement that will aid in future implementation steps and help the PA in development of the Manual. The findings below are non-binding and not presented for Commission review. Staff anticipates that the findings will be put forth during creation of the Manual. The Manual will be subject to the Commission's review. Because these matters are not presented to the Commission for approval in this memorandum, Staff does not provide detailed review of these issues. Rather, Staff presents the items of agreement to be memorialized in this report and considered for incorporation in the Manual.

Funding, Data and Financial Exchange, Billing Tariffs Sub-group

- *Review of potential subscription models.* Two primary subscriptions models are for Oregon's Community Solar program: a variable per-kWh fee and a fixed-lease fee.
- *Guidelines for on bill display.* The Community Solar portion of participants' utility bills should be limited to 30 characters per line. Adding too many lines may cause bills to run over to additional pages. The number of variable fields should be limited to five per line. The following items should be displayed on participants' bills:
 - Facility name
 - Energy production for that term (kWh)
 - Bill credit calculation: banked differential credit (\$) + [eligible generation (kWh) x bill credit rate (\$/kWh)]
 - Participation fee calculation – only for participants with a variable fee: total generation (kWh) X participation fee rate (\$/kWh).
 - Administrative fee amount(s)

- kWh bank
- Differential credit bank

Project Details Sub-group

- *Interconnection Process.* The sub-group agrees that the existing interconnection process is fair and nondiscriminatory. The program implementation manual does not need to establish an additional or parallel interconnection process.
- *Interconnection documentation.* A receipt of a completed impact study or an executed interconnection agreement are sufficient to meet the pre-certification requirement to provide all documentation relevant to the interconnection process.
- *Project development timing.* Stakeholders agree on the following project development milestones to be considered in Implementation Manual development:
 - Land control takes roughly 1 – 6 months
 - Interconnection takes roughly 6 – 18 months
 - Participant contract execution takes roughly 2 – 6 months
 - Project financing varies but can take 2 – 6 months for smaller projects

Low-income Sub-group

- *Low-income Facilitator Role.* The Low-income Facilitator should “maintain a queue of potential low-income subscribers in each utility service territory so as to replace transferred or terminated subscriptions ...”

Category 2 – Consensus Issues for Future Commission Consideration

The following points of Stakeholder consensus will be presented for Commission consideration under Docket No. UM 1930 in the near future. These are items that can be resolved prior to PA engagement about which Stakeholders reached a point of consensus with minimal.

Funding, Data and Financial Exchange, Billing Tariffs Sub-group

Sub-group Recommendation: Tariffs and regulatory actions

The Utility-Data Transfer Sub-group identified a series of essential actions and possible initiation dates for the regulatory filings necessary for program launch. There was wide consensus in the group that these actions need to be addressed as part of future implementation efforts.

Staff agrees that some filings, like the proposed Community Solar RVOS Tariffs for each utility, could involve extensive review and will likely need time for complete resolution. The PA is not essential to initiate these filings, however, PA engagement will benefit certain issues, particularly with regard to the proposed Data Privacy Docket and the Program Implementation Manual filings.

The sub-group recommended timeline to file individual Community Solar RVOS Tariffs has been modified below by Staff. Staff modified the timeline to ensure that they are properly timed to allow resolution of the current individual RVOS filings under review by the Commission and Stakeholders. The RVOS establishment process and Community Solar program develop efforts are inherently linked.

The sub-group suggested the following actions be filed under the new implementation docket once opened.

Action	Actor	Timing
File for approval of a standardized Community Solar PPA agreement between the electric company and project managers for unsubscribed energy	Each Utility	No later than March 31, 2018
Initiate Utility Administrative Cost Recovery discussion under UM 1930	Commission Staff	No later than March, 31 2018
File for approval of a Community Solar RVOS tariff	Each Utility	After conferring with Staff, and the Program Administrator regarding the timing of the filing.
File Community Solar Participant Tariff (for on-bill collection)	Each Utility	No later than June 30, 2018
File Company Project Tariffs (For utility project participation)	Each Utility	Upon decision to initiate projects

Initiate Customer Data Privacy discussion under UM 1930	Commission Staff	No later than June 30, 2018
Initiate Program Implementation Manual development under UM 1930	Program Administrator and Commission Staff	Upon selection and contract execution of the Program Administrator
File Program Implementation Manual for Commission approval	Program Administrator and Commission Staff	Upon completion of the manual

Project Details Sub-group

Sub-group Recommendation: Converting existing projects

The sub-group's initial report presents Stakeholder agreement that projects with a place in the interconnection queue should have the opportunity to qualify for the Community Solar program. The sub-group noted that it would be incumbent on the Project Manager to work within the utility interconnection rules to preserve the project's queue position during any transition of assets to the Community Solar program.

This recommendation has been vetted by both developer representatives and utility representatives, and presents a reasonable consensus. Due to the length of the time associated with interconnection, from start to finish, Stakeholders believe allowing projects in the midst of the interconnection process to be designated as Community Solar projects will help to ensure the program can be effectively launched in the near term. There is no barrier in law, rule or order that would prevent the Commission from adopting this recommendation.

Staff plans to bring this sub-group recommendation before the Commission for its consideration under UM 1930 in the near future.

Low-income

Sub-group Recommendation: Contract Issues

The low-income sub-group agrees to recommend several contract requirements for low-income participants based on the increased mobility and other vulnerabilities of low-income customers. Stakeholders agreed that certain protections are necessary for low-income program success. These include the need for all low-income participation contracts to allow portability, transferability, and early termination without penalty.

Staff believes that there is no prohibition of these contract provisions in the program rules. Staff notes that these provisions may increase long-term subscription risk for

Project Managers, but believe these risks can be mitigated by the presence of the Low-income Facilitator.

Staff plans to bring this sub-group recommendation before the Commission for its consideration under UM 1930 in the near future.

Category 3 – Substantive Matters for Commission Consideration

The implementation matters discussed in this section are high priority issues, identified through the sub-group process, that will require additional discussion and time to resolve in UM 1930. These issues may be controversial and require input from the PA or Low-income Facilitator. Staff concludes that these sub-group findings and recommendations require continued discussion under UM 1930.

Funding, Data and Financial Exchange, Billing Tariffs Sub-group

Customer Data Exchange and Privacy

Customer data exchange and privacy issues were a significant topic of discussion for the Utility Data Transfer Sub-group. While Stakeholders agreed that the Program Administrator should have a Customer Information Transfer Agreement with utilities to protect and govern the exchange of customer data, no further consensus was reached. Subsequently, the sub-group requested that the Commission provide direction on the necessary consent requirements for the Program Administrator to release customer data to a Project Manager. The sub-group also requested guidance on the nature and substance of information that may be shared in this manner.

Staff finds that for the Commission to provide the requested direction, a broader discussion needs to take place under UM 1930. The exchange and use of utility customer data is a wide-ranging, sensitive, and high priority matter that warrants additional discussion and analysis before the Commission can weigh in on this matter. Staff also notes that effective guidance on this point may not be possible in the absence of the Program Administrator. Staff appreciates the sub-group's work to begin scoping the issues associated with customer data. Staff will engage Stakeholders to further evaluate Customer Data and Privacy issues through UM 1930. Staff plans to initiate workshops on this matter no later than June 30, 2018.

Alternative models to on-bill collection

Sub-group members expressed an interest in Commission direction regarding the ability of Project Managers to collect subscriptions outside of the utility billing system. The sub-group notes that OAR 860-088-0130 indicates the possibility of this type of arrangement, and potential Project Managers in the process of scoping product offerings argue that they would benefit from a clearer understanding of the

circumstances under which the Commission would approve an alternate collection model.

Staff observes that the Commission addressed this question in both rule and order. Specifically, OAR 860-088-0130 (3)(a) and (b) states that "The Project Manager may use a modified on-bill payment method if agreed by the PA and the electric company. The Project Manager may request approval of an alternative fee collection method for ownership or subscription configurations incompatible with the available on-bill methods."

Staff asserts that Order 17-232 and the adopted Community Solar rules make clear the following:

- 1) The Program Administrator should play a part in this discussion as it related to their administrative costs and function as the conduit for calculation and collection of on-bill fees.
- 2) Alternate fee collection models should only be proposed when the subscription model doesn't fit into the standard on-bill methods.
- 3) The rules allow Project Managers to directly request Commission approval for an alternative fee collection method.

Recognizing these facts, Staff's believes it is premature to request that the Commission to provide additional guidance on this topic until the Program Administrator is in place per Order 17-232.

RVOS and Bill Credit Determination Sub-group

Drop dead date to establish the bill credit rate

The RVOS Bill-Credit Sub-group did not produce a consensus recommendation but provided input into the timing of the establishment of the bill credit rate. Stakeholders' input gravitated toward one of three options for the bill credit drop dead date: "now", April 2018, or July 2018. In addition to their interest in launching the program by the end of 2018 (i.e., launch the pre-certification process), Stakeholders widely referenced the expiring ITC as a major external driver for a prompt establishment of the final bill credit rate.

Staff is sensitive to the fact that the bill credit rate may ultimately determine the overall level of participation in the Community Solar program. Staff understands the process for ultimately establishing the bill credit rate consists of two-steps:

- 1) Completion of each utility RVOS docket, which will establish the RVOS for each respective utility.
- 2) Identification of a utility-specific bill credit rate based on the RVOS rate applicable to each project at the time-of precertification. OAR 860-088-0170 (1) (a) states that "Bill credit rate' is an amount used to calculate a participant's monthly bill credit. Unless otherwise determined by Commission order, the bill credit rate for a project will be based on the resource value of solar applicable to that project at the time of pre-certification and will apply for a term no less than the term of any power purchase agreement entered into pursuant to OAR 860-088-0140(1)(a)."

Staff considers it important to have a common understanding of the manner in which the RVOS will be applied in the Community Solar context to determine the bill credit rate. Among other issues, a discussion on this point is planned for the Stakeholder Workshop scheduled January 31, 2018.

Though sub-group reports express some divergence as to exactly when, prior to program launch, they believe it is necessary to establish a bill credit rate. There appears to be universal agreement that the bill credit rate needs to be established before program launch, i.e., accepting applications for project pre-certification. Parties largely felt that an April, or at latest, a July date for a bill credit rate is appropriate. Staff notes that the ongoing RVOS process is the essential process for determining the bill credit rate. Staff is also sensitive to the concerns that the bill credit rate process should be completed in time for certified Community Solar projects to meet ITC related construction requirement deadlines.

Some stakeholders have made clear the desire for an interim or alternative bill credit, as opposed to an RVOS-based bill credit. These stakeholders believe that the RVOS for each utility will prove too low for an effective and functioning community solar program, and advocate for the establishment of an alternative bill credit rate now.

Staff believes this position is premature as the initial testimony reviewing RVOS values has not been completed. Further, Staff believes it is beyond the scope of the Commission's direction to Staff and the sub-groups. In adopting Community Solar rules, the Commission noted that:

"As to an interim rate, we agree with Staff that it is premature to adopt an interim rate. As discussed in this order, many steps remain in implementing this program. During the implementation process to follow, we direct Staff to work with the Program Administrator to monitor the progress of docket UM 1716 and to recommend

appropriate action if it becomes apparent that delay in establishing a bill credit rate is delaying program launch.”⁶

As referenced above, the bill credit cannot be known, and subsequently deemed adequate, until the individual utility RVOS determinations are made.

Staff finds that further evaluation of the RVOS drop dead date under UM 1930 would be beneficial. To address Stakeholder concerns, Staff proposes to issue a report to the Commission no later than April 17, 2018 describing the current status of the establishment of each electric company bill credit rate under RVOS. This report will be presented to the Commission and evaluate whether the electric company bill credit rates under RVOS are likely to be finalized by July 1, 2018 and assess the impact of the RVOS bill credit rate on Community Solar program participation and viability.

Low-income

Income threshold definition

The Low-income Sub-group recommends that under Oregon’s Community Solar program, to be eligible as “low-income,” a subscriber must be at or below 80% of State Median Income (SMI) or 80% of the Area Median Income (AMI). A subscriber may qualify as “low-income” based on the higher of the two thresholds for the area in which the subscriber resides. Stakeholders also agreed that subscribers enrolled in state or federal assistance programs should qualify automatically as low-income.

OAR 860-088-0010 (4) states that: “‘Low-income residential customer’ means a retail residential customer of an electric company whose annual income is at or below the threshold set by Commission order for the Community Solar Program.” While the sub-group did not chose to adopt a definition currently approved or utilized by other state and federal programs, the sub-group has reached consensus and provided several reasonable arguments for establishment of a new definition. First, the sub-group noted that low-income access is important and will benefit from a definition that better captures the vulnerable population with income right above the threshold for existing low-income assistance programs. In addition, Stakeholders note that selecting a single geographic granularity creates unfair inconsistencies across the state.

At the same time, Staff notes that this is a significant element of the program that can benefit from more comprehensive review by Stakeholders and the Commission. In addition, the Program Administrator and Low-income Facilitator may benefit from the opportunity to review the recommendation prior to formal adoption.

⁶ Order 17-232, p.8.

Equity considerations

Staff would like to highlight this issue as important to many Stakeholders. Stakeholders discussed the merits of monitoring program equity and/or setting real equity targets. The sub-group did not reach consensus on these points and asked Staff for its perspective. Staff agreed that equity is an important issue, but one that is not currently in the scope of the rulemaking or program. Staff notes that the implementation process as proposed by Staff is designed to be responsive to stakeholders, and there is significant stakeholder interest in the important concept of equity.

Staff supports a continuation of this discussion, but notes that this important issue is not directly or indirectly addressed in law or rule. Accordingly, Staff is not prepared to support a future, specific recommendation for an equity requirement without specific guidance from the Commission. Staff additionally notes the benefit of establishing the Low-Income Facilitator to support these discussions.

Low-income participation incentives

Some Stakeholders argue that incentives to facilitate low-income participation will be necessary, regardless of the ultimate bill credit rate. These Stakeholders advocated that the Commission should initiate the process to establish low-income participation. These stakeholders cited the experience of other states, such as Colorado. They point out that our rules contemplate the provision of low-income incentives, and that low-income incentives could have additional benefits such as reduced arrearages for electric and other energy bills.

Staff considers this issue to be important. However, Staff understands the Commission directive to balance the requirements for a successful program with protections against unnecessary cost-shifting between participating and non-participating customers.

Without a known bill credit rate or concrete evidence that low-income participation is at risk under Oregon's program model, Staff does not find that incentives are necessary at this time. Additionally, Staff feels it is essential to review viable non-ratepayer incentives before evaluating the possibility of rate-payer funded incentives. For instance, Stakeholders have discussed priority queue placement for designated low-income projects. Or, the potential to allow housing providers to hold low-income subscriptions for units or properties. Staff believes these issues should be discussed further under UM 1930, once the bill credit rate is finalized.

Housing Provider Participation

Noting the experience of Community Solar programs in other states, Stakeholders propose that low-income participation in community solar programming will dramatically benefit if low-income housing providers are permitted to hold subscriptions and tie them to their units or properties.

Staff appreciates the program benefits of this recommendation, but believes this recommendation requires additional legal analysis.

Staff does agree with Stakeholders that this approach is reasonable and notes that Stakeholders have provided examples of success with this approach in other states. Sub-group members reached consensus. Further legal analysis is required to determine whether the subgroup recommendation is consistent with two elements of the program rules.

1. The definition of subscriber in OAR 860-088-0010 (15): “Subscriber” means a retail customer of an electric company who enters into a contractual agreement of 10 or more years for part of a project that results in bill credits being applied to that customer’s electricity bill. Subscriber is defined at the site address level.”
2. The requirements surrounding low-income participation measures in OAR 860-088-0080 (2): “At least 10 percent of the total generating capacity of the Community Solar Program must be allocated exclusively for use by low-income residential customers. The respective bill credits associated with this allocation must be linked to discrete low-income residential customers.”⁷

Staff will initiate this legal analysis under UM 1930.

Conclusion

Staff appreciates Stakeholders support of the Commission’s effort to implement the program. If the current collaborative effort on the part of these entities continues, Staff expects consistent progress as we move deliberately towards a program launch. Progress toward Program Administrator selection continues and Stakeholders have made notable headway toward implementation in the interim. This headway includes several matters of consensus and many matters for continued examination as summarized below.

Sub-Group	Category of Activities	Sub-group Findings or Recommendation	Staff’s Analysis
Utility Data Exchange	Tariff Regulatory Structure and Timing	Stakeholders agree to a schedule for tariff filings and other regulatory actions required for program implementation.	<i>File tariffs and other regulatory actions per the proposed schedule.</i>
	Primary Subscription Model	Stakeholders have identified two primary subscription models:	<i>Memorialize need to evaluate for implementation manual development</i>

⁷ OAR 860-088-0080 (2).

		variable-kWh fee and fixed-lease fee.	
	On-Bill Subscription Collection	Request Commission guidance on the circumstances under which alternatives to on-bill collection are appropriate.	<i>Requires more review under UM 1930</i>
	On-Bill Display	Stakeholders agree on minimum requirements for the form and content of information displayed on the bill.	<i>Memorialize for implementation manual development</i>
	Customer Information & Privacy Requirements	<ul style="list-style-type: none"> Stakeholders agree that the Program Administrator needs to have a Customer Information Transfer Agreement (like ETO has) with utilities to protect and govern the exchange of customer data. Stakeholders request Commission guidance on the type of information that can be shared between the participating entities. 	<i>Further evaluate customer data privacy agreements and issues under UM 1930..</i>
Project Details	Interconnection	<ul style="list-style-type: none"> Stakeholders agree that the implementation manual does not need to establish an additional or parallel interconnection process. Stakeholders agree that a completed impact study or an executed interconnection agreement are sufficient to meet the pre-certification requirement. 	<i>Memorialize for implementation manual development</i>
	Role of existing projects, any carve-outs for smaller projects	Stakeholders agree that existing projects in the interconnection queue qualify for the Community Solar program.	<i>Bring Stakeholder position to the Commission under UM 1930.</i>
	Flow of needed pre-certification items from projects	Stakeholders agree on general project development timelines and milestones.	<i>Memorialize for implementation manual development</i>
	Deposits and associated process	None	<i>None</i>
	PPA requirements	None	<i>None</i>
	Qualifying Facility (QF) project requirements	None	<i>None</i>
	Project Queue	None	<i>None</i>

RVOS & Bill Credit	Drop Dead Date	No consensus. The drop dead date is either now, April 2018 or July 2018.	<i>Further evaluation of the RVOS drop dead date under UM 1930. Staff proposes to issue a report to the Commission no later than April 17, 2018 recommending whether and how, an interim or alternate bill credit would be established.</i>
	External factors impacting timing of bill credit	ITC and WAP deadlines affect the drop dead date.	
Low-Income	Definition of LI Customer	Consensus recommendation: At or below 80% of State Median Income (SMI) or 80% of the Area Median Income (AMI). A subscriber may qualify as "low-income" based on the higher of the two [thresholds] for the area in which the subscriber resides.	<i>Further consideration of the definition of low-income customer under UM 1930.</i>
	Contract issues	<ul style="list-style-type: none"> • Consensus recommendation: All low-income participation contracts allow portability, transferability and early termination without penalty. • Stakeholder also agree that contract and disclosure requirements should utilize a low-income lens. 	<ul style="list-style-type: none"> • <i>Bring Stakeholder position for low-income contract requirements to the Commission under UM 1930.</i> • <i>Memorialize low-income lens for implementation manual development</i>
	Housing Provider Participation	Consensus recommendation: Low-income housing providers should be able to tie their units or properties to a subscription,	<i>Legal analysis of Stakeholder position under UM 1930.</i>
	Role of Low-Income Facilitator	Stakeholders agree that the Low-Income Facilitator will maintain a queue of eligible low-income participants.	<i>Memorialize for implementation manual development</i>
	Incentives for Low-Income participation	No consensus	<i>Further consideration of the definition of low-income incentives under UM 1930.</i>
	Equity issues	No consensus	<i>Further consideration of equity issues under UM 1930.</i>

PROPOSED COMMISSION MOTION:

That the Commission adopts Staff's recommendation to open Docket No. UM 1930 to house non-rulemaking matters associated with Community Solar program implementation, including:

- Consideration of Category 2 issues addressed in the near future;
- Investigation and consideration of Category 3 matters addressed in this report;
- Program Implementation Manual development and adoption with the selected Program Administration; and
- Consideration of additional implementation matters as they arise.

Initial Scope of Activities for Each Sub-Group

1. Funding, Data and Financial Exchange, Billing Tariffs
 - a. Pre-recovery of PA and utility costs
 - b. Data and financial exchange
 - c. Billing Models
2. Project details
 - a. Interconnection
 - b. Role of existing projects, any carve-outs for smaller projects
 - c. Flow of needed pre-certification items from projects
 - d. Deposits and associated process
 - e. PPA requirements
 - f. Qualifying Facility (QF) project requirements
 - g. Project Queue
3. RVOS and bill credit determination
 - a. Sub-group identification of what RVOS elements need to be known to implement Community Solar
 - b. Discussion of granularity, what factors will differentiate community solar projects; i.e. urban vs. rural, locational values, etc.
 - c. Identification of timing for alternative credit development if necessary (i.e. "drop dead date" if RVOS is not ready.)
 - d. If an interim rate if not ready, what is the alternative path (procedural and timing)
4. Low income
 - a. Providing clarity to interested community groups on implementation ideas for community engagement
 - b. Income threshold definition review
 - c. Consideration of how low-income projects will be placed in the queue
 - d. Definition of principles for low-income engagement, benefits flowing to individual customers, etc.
 - e. Portability or locational attributes
 - f. Incentive adders discussion within low income sub-group"¹

¹ Order No. 17-458, Appendix A P.2-3.

Sub-group Findings

Utility Data Exchange Subgroup

The Funding, Data and Financial Exchange, and Billing Tariff sub-group ("Utility-Data Exchange" sub-group) met two times, and produced several consensus items. This sub-group organized its activities into five categories, within the define scope:

1) Tariff Regulatory Structure and Timing

The sub-group productively discussed the essential tariffs and regulatory filings associated with Community Solar program implementation. The sub-group developed the following table describing key filings to support a timely program launch, in the context of an anticipated program launch late in 2018:

Issue	Who	Initiated?
Standardized QF/PPA Agreement between the utility and Project Managers for Unsubscribed Energy	Each Utility	1 st Quarter
Utility Administrative Cost Recovery Methodology discussions/filing	Each Utility	1 st Quarter
Community Solar RVOS Tariff	Each Utility	2 nd Quarter
Community Solar Program Tariff for Customers	Each Utility	Late 2 nd Quarter
Company Project Tariff	Each Utility	Upon decision to initiate project
Data Privacy Docket	Program Administrator	2 nd Quarter
Program Handbook Approval	Program Administrator	When Complete

2) Primary Subscription Models

Program rules require each electric company work with the Program Administrator to develop and obtain Commission approval of an on-bill payment model that allows for multiple ownership and subscription configurations to assess and remit fees owed by participants. Accordingly,

the Utility-Data Exchange sub-group explored the various models that Project Managers are likely to offer. A review of other state programs and industry trends indicated two primary fee collection models likely to be offered in Oregon; a variable per-kWh fee and a fixed-lease fee.

The variable fee model would tie a customer's monthly subscription fee to the generation from their "subscribed" portion of the facility during the corresponding period e.g., the customer fee is calculated as X cents per kWh generated that month.

Under the variable fee model, the dollar amount of the subscription fee would change as the output of the solar facility fluctuates. This means that the monthly fee amount will vary in the same way that the per-kWh credit for the generation of the "subscribed" portion of the facility varies. Developers have noted that the actual cents-per-kWh rate customer pay can also change over the length of the subscription, depending on the contract terms.

Alternatively, developers may offer a fixed fee model where subscriptions fees are static per month according to the unit of capacity subscribed by the customer e.g., the customer pays a pre-determined X dollars per kW or per panel per each month. Under this model, the pre-determined fixed monthly fee may change over the course of the subscription, depending on the contract terms e.g., a fixed fee with a pre-set escalator.

Because the rules require that these models be developed with the Program Administrator, the Utility-Data Exchange sub-group has not requested approval from the Commission on this issue. Instead, the group presents these findings as a point of consensus to aid in the development of the implementation manual and essential for the understanding of a number of billing and data exchange issues.

3) On-Bill Subscription Collection

OAR 860-088-0130 (3)(a) and (b) states that "The Project Manager may use a modified on-bill payment method if agreed by the Program Administrator and the electric company. The Project Manager may request approval of an alternative fee collection method for ownership or subscription configurations incompatible with the available on-bill methods." As conversation in this sub-group progressed, it became clear that some prospective project managers anticipate the opportunity to collect subscriptions without utilizing the utility on-bill system.

In light of the formal rules and the Commission's discussion of this issue in Order No. 17-232 (described below), the sub-group agreed to request Commission guidance on the circumstances under which alternatives to on-bill collection are appropriate. Specifically, the sub-group has noted that:

“It would be helpful if the Commission could provide their concerns related to direct subscription collection. This would allow Project Managers to have a better understanding of when direct subscription collection might be permitted.

If a concern is that administrative costs should be equitably shared between all participants. A solution could be to require all participants to share equally in the administrative costs whether or not they use the on bill subscription collection process. In this way an individual projects decision to directly collect subscriptions will not negatively harm participants of other projects.

Again, the sub-group did not reach a consensus recommendation, but understanding the Commission position will allow a more concrete proposal to be developed.”¹

4) *On-Bill Display*

The Utility-Data Exchange sub-group explored on-bill display requirements in an effort to lay the ground work for data exchange guidelines and elements to be determined in the implementation manual. First, the sub-group identified the capabilities of each utility billing system to display information on the bill. Then, Stakeholders developed a consensus recommendation for the elements that are and are not appropriate for display, given the relatively limited amount of room to display content on bills. Like the #2) Primary Subscription Model discussion above, there is no specific recommendation to the Commission at this time, but points of Stakeholder consensus for the future tariff and Manual issues.

The sub-group determined that the display should be limited to 30 characters per line and adding too many lines may cause bills to run over to additional pages. In addition, the sub-group determined that the number of variable fields is limited to five per line.

The following table, developed by the sub-group, describes agreed upon elements for inclusion on participant utility bills:²

¹ See Appendix C.

² This table is presented exactly as provided in the sub-group report in Appendix C.

Characteristic	Included, Where	Discussion
Facility Name	Yes: Description Somewhere	Probably needs to be something descriptive rather than to short
Admin Costs	Yes: Separate Line	There seemed to be consensus that this should be displayed separately. May be some concern that this adds an extra line. fixed fee, or a kWh rate x eligible generation
kWh Produced	Yes: Credit Line: PPA Subscription Fee Line	Included in Credit line with Credit Rate to show total credit. Also shown in PPA Model for computation of subscription fee
RVOS/Credit Rate	Yes: Credit Line	Included in credit line to show total credit the differential credit (\$) + (eligible generation (kWh) x bill credit rate (\$))
PPA Rate	For PPA Customers: Subscription fee line	Included in subscription fee line to explain amount
Lease rate and shares purchased	No	Not important to include breakdown of how Subscription fee is calculated if it does not vary throughout the year, and conforms with contracts provided to customers.
Banked kWh	Yes : Somewhere	Group thought this value is important to include on bills
Differential Credit Bank	Yes: Somewhere	Group thought this value is important to include on bills

5) Customer Information and Privacy Requirements

Because several exchanges of customer and project data, between multiple parties, will be necessary to implement and operate the Community Solar program, the Utility-Data Exchange sub-group explored this issue extensively.

The group did not reach consensus on what or how customer data and privacy should be handled. The group was able to reach agreement that the Program Administrator will have access to customer usage information through a Consumer Information Transfer Agreement similar to the agreement currently in place between the Energy Trust of Oregon (ETO) and the utilities.³

Because Stakeholders were not aligned, the sub-group has also requested Commission input on the type of information that can be shared between the participating entities.

Project Details Sub-Group

The Project Details sub-group met twice to explore a number of issues, but focused extensive conversation on interconnection issues, the “flow of needs” for projects i.e., which milestones projects must reach on what timetable, and project certification requirements.

First, the group arrived at the following understanding of the “flow of needs” which is valuable in providing context to implementation manual development:

- “Land control timing: 1-6months
 - Costs: \$500 - \$10k
- Interconnection timing: 6 months – 1.5years
 - Costs: see interconnection discussion
- PPA timing: 2 – 6 months
 - Can vary greatly depending on number of customers and their type (residential vs commercial)
- Project finance timing: depends on project type and credit committee review processes. Final decisions can take 2-6 months for smaller utility solar projects – assumes all information required to make the decision is in hand.”

Using the established “flow of needs, the sub-group produced three clear points of agreement and identified a number of other issues to serve as the subject of future discussion. One specific item the sub-group attempted to address is the Commission request for, “Staff and stakeholders to consider during development of the program implementation manual the potential role of the program administrator ensuring nondiscriminatory access and evaluating whether the interconnection process is fair and functional for projects seeking to enter the community solar program.”⁴

Below are the points of agreement the sub-group reached:

1. “The sub-group generally agreed that interconnection process is an established process in Oregon that is separate from the Community Solar program.

³ OAR 860-086-0030 (6)

⁴ Commission Order No. 17-232, P. 10.

- a. The Community Solar program will not set up additional or parallel interconnection processes as they are already approved and being used in Oregon.
2. The sub-group generally agreed that developers can apply to the Community Solar program with projects that have previous interconnection queue status, regardless of previous development intent.
 - a. It is incumbent on the developer to work within the utility interconnection rules to ensure they do not lose their queue position during any transition of assets to the community solar program.
3. It was generally agreed that either a receipt of a completed impact study or an actual interconnection agreement would suffice to meet the item 2(d) interconnection deliverable as a precondition to obtaining pre-certification.
 - a. It should be noted that if several projects are ahead of the developer in the interconnection queue at this point, it could bring the 18 month requirement to reach final certification into play.”⁵

The group also discussed a number of other discrete implementation issues and identified important subjects for future discussion. The Project Details sub-group added another subject for discussion: “Project Characteristics (Size, location, residential & commercial requirements, max % / project / customer, etc).”⁶

The sub-group has agreed to a proposed list of issues that have not reached agreement or require a Program Administrator to be in place. These issues are proposed to be. Specifically, the sub-group proposes to examine the following in future sub-group meetings:

- The definition of “small commercial customer” as referenced in OAR 860-088-0080 Section (1).
- Clarification of the alternating current vs. direct current interpretations of the definition of nameplate capacity definition in OAR 860-088-0010 Section (5).
- Whether Project Managers are permitted to carve out a portion of a larger project to create a Community Solar eligible project. The group noted some agreement that this should be permitted.
- At which point in the certification process a Community Solar project’s queue space is established.
- The treatment of applications once initial queue space is filled.
- The nature, size, or existence of an application fee.

⁵ See Appendix D.

⁶ *Ibid.*

- When and how the subscriber credit rate will be set for a given project.
- Discussion of the start of the project application (which could affect the queue discussion described above).
- Criteria and/or requirements for solar project performance.

Some issues were the subject of extensive discussion that was not resolved with a recommendation or specific question, but that should be recounted for the benefit of the Commission. For instance, the group discussed permitting requirements as part of the pre-certification phase of project submission and qualification. Stakeholders discussed the distinction between ministerial and discretionary permits i.e., permits that are clearly granted following the completion of specific objective milestones as opposed to permits that are granted on a subjective basis. Participants discussed possible standards of ministerial permit achievement that must be obtained prior to pre-certification.

Another area of significant discussion was Program Administrator and Commission oversight of third-party Project Manager materials. OAR 860-088-0040 (2) requires Project Managers to submit the participant acquisition approach, proposed marketing materials, and proposed forms and standard contract language as components of the application for pre-certification. Further, OAR 860-088-0100 requires contracts and marketing materials to include certain customer protection disclosures.

Some stakeholders expressed concerns over the rules, as they could be read to imply that the Commission “approves” third-party Project Managers’ marketing materials, contracts, forms and other participant materials. These stakeholders argue that there are sufficient other channels for customer to raise complaints regarding deceptive advertising or bad actors and existing safeguards do not need to be reinvented. In addition, some stakeholders noted that these contracts can be highly proprietary, that considerable expense has been spent to create them, and that public disclosure of model contracts would affect competition. Stakeholders also indicated that larger, more sophisticated customers had the capability of working to negotiate individualized contract terms and should not be subject to any disclosure provision.

RVOS and Bill Credit Determination Sub-group

Facing the most challenging topic from a consensus-building perspective, the RVOS and Bill-Credit Rate sub-group held two meetings that produced important insights, but no agreement or recommendations. Staff notes that this was not due to the management or leadership of the group; graciously and professionally provided by Renewable Northwest's Silvia Tanner and Michael O'Brien, but due to the challenging nature of the subject matter and the divergent Stakeholder views on some fundamental issues, and the timing utility RVOS values filed in late November.

The sub-group was asked to explore two important issues; the first being the "drop-dead date," commonly understood as the date by which a bill-credit rate is absolutely needed for program launch, either a specific date or a number of months before the queue for pre-certification is established. Second, the sub-group was asked to consider any major external factors that could impact the timing requirements for a bill credit rate, such as the availability of tax incentives.

After the two sub-group discussions, Stakeholders provided a range of responses to each question. Renewable Northwest compiled these responses anonymously in a report to Staff which is attached to this report as Appendix E.

1) Drop-dead date for a finalized bill credit rate

Responses to this question ranged from "now" to three months prior to the completion of the program implementation manual. Stakeholders generally diverged into two groups in the context of a formal program launch in late 2018: those focused on an April date for the finalization of a bill credit rate, and those focused on a July date.

Stakeholders focused on the April date noted that projects will need to know the bill credit rate six months prior to pre-certification in order to provide a complete pre-certification application. If Staff expects a program launch in late 2018 i.e., program is ready to accept pre-certification applications, Project Managers must know the bill credit rate in April to ensure a chance at securing a competitive queue position.

For those arguing for a July date the rationale was similar, citing a three-month timeframe to prepare for pre-certification.

2) Major external factors that could impact the timing of the determination of a bill-credit rate.

Discussion of external factors that may influence the timing requirements focused on the availability of the Federal Investment Tax Credit. Stakeholders noted that, in order to ensure the ITC is preserved and utilized, projects need to begin construction by the end of 2019. The ITC steps down

after that; moving from 30 percent in 2019, to 26 percent in 2020, 22 percent in 2021, and then 10 percent in 2022.

Stakeholders noted that the bill credit rate needs to be established no later than the second quarter of 2018 to achieve the project development milestones required to begin construction in 2019.

Stakeholders also noted that the Federal Weatherization Assistance Project ("WAP") program year begins on July 1. Low-income projects seeking to leverage this assistance need to know the bill credit rate by that date in 2018 to prepare a project for pre-certification in late 2018.

While outside of the sub-group scope, Stakeholders extensively discussed both interim rates and alternate rates. The interim rate would be established in the event that the RVOS is not available by the drop dead date. The alternate rate would be established if the RVOS rate was found to be insufficient or inappropriate for the program. Some Stakeholders noted preliminary rates filed by utilities and argued that RVOS will not be sufficient for projects to pencil out, receive financing, or attract enough participants. Others supported the RVOS as the appropriate rate for the program. In addition, some Stakeholders proposed actual values for interim and alternate rates. Because these values were deemed outside of the sub-group's scope, those suggestions are not presented in this report.

Low-income Sub-Group

The Low-income sub-group held four meetings and produced consensus recommendations related to several of the seven issues identified in Order No. 17-458. The sub-group reached agreement on four recommendations, outlined below.

1) Definition of a low-income customer

OAR 860-088-0010 (4) directs the Commission to define the income threshold below which a Community Solar program participant qualifies as low-income. The Low-income sub-group, consisting of experts from utility and other low-income programs, was tasked with initiating the process to identify the appropriate income threshold. Stakeholders were able to arrive at a proposed consensus definition by examining other state and federal assistance program thresholds, as well as, lessons learned from other community solar for programs.⁷ Stakeholders agreed that many existing thresholds, such as those used to qualify utility customers for Oregon Energy Assistance Program (OEAP) programs, exclude a vulnerable population with incomes slightly above the threshold. In addition, the sub-group noted complexities in different levels of geographic granularity, reporting that:

⁷ See Appendix F Table 1.1 for other program thresholds reviewed by the sub-group.

“For areas with a low median income, State Median Income is the more inclusive measure, although it is not sufficiently flexible for those areas with median incomes above the state median. In order to create thresholds that are supportive of all parts of the state, the workgroup feels that it is best to provide a definition of low-income that is flexible and not tied to a single metric.”⁸

Based on these findings, the sub-group reached agreement on the following threshold recommendation for Commission review and approval:

“To be eligible as “low-income,” a subscriber must be at or below 80% of State Median Income (SMI) or 80% of the Area Median Income (AMI). A subscriber may qualify as “low-income” based on the higher of the two [thresholds] for the area in which the subscriber resides.”⁹

Stakeholders also agreed that subscribers enrolled in state or federal assistance programs should qualify automatically as low-income.

2) *Contract issues*

Stakeholders discussed several issues related to participation terms and contracts between low-income participants and Project Managers. Stakeholders noted several areas in which low-income participants may be subject to heightened risks and presented two formal recommendations to mitigate these risks.

- First, sub-group participants identified the increased likelihood of low-income households to move residences, often due to circumstances outside of their control. In the context of a 10-year subscription term¹⁰, the sub-group identified portability (i.e., ability of a customer to bring their subscription with them to a new address) and transferability (i.e., ability of a customer to transfer their subscription to another eligible customer) as necessary to prevent undue risk for low-income subscriptions. To account for this vulnerability, the sub-group formed a recommendation that portability and transferability should be allowed in all low-income participation contracts.¹¹
- Similar to the vulnerabilities surrounding portability and transferability, the sub-group identified specific risks to low-income participants associated with early contract termination. The sub-group proposed the following recommendation:

⁸ *Ibid*

⁹ See Appendix F

¹⁰ OAR 860-088-0010 Section (15).

¹¹ See Appendix F

“In order for transferability to be supportive for low-income subscribers and for the 10-year term not to be a barrier, contracts must allow anyone who qualifies as low-income under the community solar program to be held faultless and to owe no fees for termination or cancellation. This would not apply to housing or service providers who do not face the same subscription barriers as individual subscribers.”¹²

In addition to the two recommendations, Stakeholders memorialized several best practices to utilize a low-income lens in contract and disclosure language. These best practices are not presented as recommendations, rather intended to assist the PA in Manual development. The sub-group report notes:

“[S]takeholders did have agreement that supplemental contract materials should be educational and informational in nature and provide clear guidelines about expectations, subscriber responsibilities, and how to take certain actions. In addition, it is imperative that contracts and all consumer protection materials be available in multiple languages.”¹³

3) *Housing Provider Participation*

In discussing low-income participation challenges experienced by Community Solar programs in other states, the sub-group noted that low-income participation in Colorado’s program dramatically improved and expanded when low-income housing providers were permitted to tie subscriptions directly to their units. OAR 860-08800080 (2) requires, “the respective bill credits associated with [the 10-percent low income] allocation must be linked to discrete low-income residential customers.” While the bill credit must be applied to a discrete residential customer, the rules do not provide guidance about the entity that holds the participation agreement. Due to the heightened burden of 10-year commitments and the higher likelihood of low-income customers to relocate, the sub-group reached agreement that it is essential to permit housing providers to hold subscriptions for tenants or to tie subscriptions to housing units.¹⁴

4) *The role of the Low-Income Facilitator*

Program rules assign responsibility for low-income engagement and policy development to a Low-Income Facilitator that will be overseen by the Program Administrator. Stakeholders identified the importance of supporting low-income customer participation by maintaining a database of interested low-income customers and reached agreement that the Low-income Facilitator should “maintain a queue of potential low-income subscribers in each utility service territory so as to replace transferred or terminated subscriptions ...”¹⁵

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

The Low-income sub-group engaged in extensive discussion regarding other issues, without producing consensus or concrete recommendations for those issues at this time. Discussion focused on incentives for low-income participation and equity principles for participation.

Incentives for low-income participation

Program rules allow the Commission to, “establish by order a funding mechanism to facilitate participation of low-income residential customers.”¹⁶ Some stakeholders in the low-income workgroup feel that a low-income incentive or bill credit rate adder (i.e. guaranteed lower bills for low-income participants) is or may be essential to satisfy the low-income participation requirement. The sub-group’s summary makes the following argument in favor of low-income incentive support:

“In addition to utility bill savings for low-income subscribers, an incentive or adder can have additional benefits identified by stakeholders, including reduced arrearages for utility bills, reduced likelihood of unpaid subscription fees or program costs, and increased likelihood that project managers or developers would design projects to include more than the minimal 5% low-income participation, as incentives would help ensure subscriptions were filled. In short, it is in the interest of subscribers, project managers, utilities, and program administration that a funding mechanism be put in place to support a low-income incentive or adder.”¹⁷

Participant equity

Finally, the low-income group discussed the concept of equity principles for the Community Solar program. Some stakeholders would like to ensure that the program has goals for diversity, to truly reflect the success of the program in access across all customer demographics. Stakeholders have identified this as an issue of interest for the future. The low income group also identified a series of other issues and topics the group proposes to address in continued sub-group meetings, and identified important areas of overlap with other sub-groups.

¹⁶ OAR 869-088-0080 (4)

¹⁷ See Appendix F

AR 603 Community Solar: Utility/Data Transfer Subgroup

Summary Document

December 29, 2017

This document is designed to summarize the discussion held by the Utility-Data Transfer Subgroup through November and December of 2017. It will be structured to by primary topics listing points of consensus and areas where commission input will be required where available for each topic.

Areas of Discussion

1. Tariff Regulatory Structure and Timing

Below is a list of regulatory proceedings that the group believes will need to be initiated to facilitate the community solar program. The dates included in the table were preliminary and should be adjusted to reflect the delays in third party administrator identification.

Issue	Who	Initiated?
Standardized QF/PPA Agreement between the utility and Project Managers for Unsubscribed Energy	Each Utility	1 st Quarter
Utility Administrative Cost Recovery Methodology discussions/filing	Each Utility	1 st Quarter
Community Solar RVOS Tariff	Each Utility	2 nd Quarter
Community Solar Program Tariff for Customers	Each Utility	Late 2 nd Quarter
Company Project Tariff	Each Utility	Upon decision to initiate project
Data Privacy Docket	Program Administrator	2 nd Quarter
Program Handbook Approval	Program Administrator	When Complete

2. Primary Subscription Models

There are two primary subscription models typically used for community solar.

Per kWh Model: (Dominant Model) Customer subscription fees are tied to the generation from their portion of the facility. Typically subscription fee is a per kWh fee. The subscription amount will vary throughout the year as facility production varies, but this increase is offset by the increased credit they receive. In some cases, the PPA subscription fee may vary during the subscription.

Lease Model: (Less Common) Fixed subscription fee per month based of capacity customer subscribes to.

3. On Bill Display

Each utility will have differing abilities to display information on the bill. There was some consensus on the general information that should be displayed.

Characteristic	Included, Where	Discussion
Facility Name	Yes: Description Somewhere	Probably needs to be something descriptive rather than too short
Admin Costs	Yes: Separate Line	There seemed to be consensus that this should be displayed separately. May be some concern that this adds an extra line. fixed fee, or a kWh rate x eligible generation
KWh Produced	Yes: Credit Line: PPA Subscription Fee Line	Included in Credit line with Credit Rate to show total credit. Also shown in PPA Model for computation of subscription fee
RVOS/Credit Rate	Yes: Credit Line	Included in credit line to show total credit the differential credit (\$) + (eligible generation (kWh) x bill credit rate (\$))
PPA Rate	For PPA Customers: Subscription fee line	Included in subscription fee line to explain amount
Lease rate and shares purchased	No	Not important to include breakdown of how Subscription fee is calculated if it does not vary throughout the year, and conforms with contracts provided to customers.
Banked kWh	Yes : Somewhere	Group thought this value is important to include on bills
Differential Credit Bank	Yes: Somewhere	Group thought this value is important to include on bills

4. Customer Information and Privacy Requirements

Discussion focused on customer usage information and how project managers would access that.

Common Understanding: The program administrator will have access to customer usage information through a Consumer Information Transfer Agreement similar to the agreement currently in place between ETO and the utilities.

Commission Direction requested: The program administrator will seek approval from the Commission of the necessary consent requirements that a project manager must get from a potential participant before this customer information can be shared with the project manager. The commission should also determine limits of what type of information can be shared.

5. On Bill Subscription Collection Mandatory/Permissive

There is interest from Project Managers in establishing guidelines for projects that seek to collect the subscription fees directly from participants, rather than use on bill collection methods. The rules create the possibility (860-088-0130), while the language in the order limits the applicability. A consensus recommendation has not been reached to present to the Commission at this point, but additional clarity on the process will be needed.

Commission Direction requested: It would be helpful if the Commission could provide their concerns related to direct subscription collection. This would allow Project Managers to have a better understanding of when direct subscription collection might be permitted.

If a concern is that administrative costs should be equitably shared between all participants. A solution could be to require all participants to share equally in the administrative costs whether or

not they use the on bill subscription collection process. In this way an individual projects decision to directly collect subscriptions will not negatively harm participants of other projects.

Again, no consensus recommendation has surfaced yet, but understanding the Commission position will allow a more concrete proposal to be developed.

From: Jon Miller [<mailto:jon@oseia.org>]
Sent: Thursday, December 28, 2017 4:50 PM
To: jason.zappe@pgn.com; Kitty Wang <kwang@energy-solution.com>; Martin Gavin <martingavin@gmail.com>; Melanie M <solarpowermelanie@gmail.com>; Rachel Bird <rbird@borregosolar.com>; Rich Peppers <richpeppers@gmail.com>; Rikki Seguin <rikki@renewablenw.org>; ryan.sheehy@viridianmgt.com; Silvia Tanner <silvia@renewablenw.org>; Tu Anh Tran <ttran@sunworksusa.com>; Dan.Elliott@oregon.gov; Lizzie Rubado <Lizzie.Rubado@energytrust.org>; PRAUSE Elaine <emprause@puc.state.or.us>; ann@oneenergyrenewables.com; Carolinalraheta@verdenw.org; Charlie Coggeshall <charlie.coggeshall@easycleanenergy.com>; David McClelland <david.mcclelland@energytrust.org>; IPCDockets <dockets@idahopower.com>; Erica S. McConnell <mccConnell@smwlaw.com>; joe.barra@pgn.com; Keith@caporegon.org; Kristina.Shih@nrg.com; Nordstrom, Lisa <lnordstrom@idahopower.com>; MOSER Nolan <nmmoser@puc.state.or.us>; knoe@idahopower.com; erik.anderson@pacificorp.com; Oriana Magnera <oriana@nwenergy.org>; Salar Naini <snaini@tpoint-e.com>; Tamara Perry <Tperry@energy-solution.com>; Jaimes Valdez <jaimes@sparknorthwest.org>; Apperson, Erin <Erin.Apperson@pacificorp.com>; Andrus Stephanie <stephanie.andrus@doj.state.or.us>; Bridget Callahan <bcallahan@sustainablenorthwest.org>; Joe Tierney <joe@sunrisenrg.com>
Subject: AR 603 Project Details subgroup - 2017 meetings summary

Nolan / Project Details subgroup,

First, thanks to all of you for contributing to this effort. It's not easy, takes significant time, and will require continued review and input to finish - your time and input is greatly appreciated!

Attached and below are the summary documents for the project details subgroup. Two of the attached documents are the final notes on the two meetings the group had this year. It's important to read those documents for more information on the items mentioned below, particularly the Dec 5th meeting notes which went into detail on questions that arose around pre-certification issues. Only several highlights are presented below.

The third attachment is the summary provided by Charlie, David, and Jaimes on a potential PM registration requirements. (thanks to all three of you!)

The group started with seven main topic areas and added one (project characteristics):

- Interconnection (initial discussion completed on Nov 9th)
- Requirements (certification, existing projects, carve outs...) (discussion started on Dec 5th - more discussion required)
- Flow of needs (land control -> interconnection -> PPA -> finance) (completed on Nov 9th)
- Deposits/process (discussion TBD)
- PPA requirements (discussion TBD)
- QF projects requirements (some discussed during interconnection but full discussion TBD)
- Program/Project Queue (discussion TBD)

- Project Characteristics (Size, location, residential & commercial requirements, max % / project / customer, etc) (discussion TBD)

To date the group has discussed interconnection, flow of needs, and requirements topics. The requirements discussion has several remaining issues to discuss. We are finding that after the discussions some questions come up to consider at a later date so it's likely that although we 'completed' the discussion on interconnection, some details will likely need to be further refined.

So far, the group came up with three general consensus items. These items were generally agreed to by the group during the meetings listed:

1. General Consensus Item (from Nov 9th): The subgroup generally agreed that interconnection process is an established process in Oregon that is separate from the Community Solar program.
 - The Community Solar program will not set up additional or parallel interconnection processes as they are already approved and being used in Oregon.
2. General Consensus Item (from Nov 9th): The subgroup generally agreed that developers can apply to the Community Solar program with projects that have previous interconnection queue status, regardless of previous development intent.
 - It is incumbent on the developer to work within the utility interconnection rules to ensure they do not lose their queue position during any transition of assets to the community solar program.
3. General Consensus item (from Dec 5th): It was generally agreed that either a receipt of a completed impact study or an actual interconnection agreement would suffice to meet the item 2(d) interconnection deliverable as a precondition to obtaining pre-certification.
 - It should be noted that if several projects are ahead of the developer in the interconnection queue at this point, it could bring the 18 month requirement to reach final certification into play.

Several questions came up that the group did not discuss fully or come to a consensus. Several of these questions are below:

Questions from Nov 9th:

1. What is the definition of a "small commercial" subscriber?
2. A minor possible issue: AC vs DC: in general interconnection is always written with respect to AC. The community solar program uses the defined term "Nameplate Capacity". Generally this implies AC, however, if there is any doubt, the PUC should consider clarifying the definition to avoid confusion between the community solar program and the interconnection process run by the utilities.
3. Could a larger project be split into separate projects (IE one large 20MW QF be split into a 17MW QF and one 3MW community solar)? This appears to be allowed by the utilities. Seemed ok as a possibility to others and the industry generally agrees with doing it,

however, the risk of losing a queue position is completely on the developer. They must follow all established utility interconnection rules. Commission to decide.

Questions from Dec 5th:

1. What assures you have a spot in the queue? Pre-certification approval appears to be the answer to this question, as apposed to an initial application.
2. What happens to unfinished applications when the initial program queue space is filled? Do existing applications in the process receive special consideration when new program allocations are created? Do projects continue to attempt to get pre-certified for queue space in future program openings?
3. Should there be an application fee? A deposit fee based on project kW's? MN's program was mentioned as having both.
4. When and how would a subscriber credit value be granted to the specific project? At pre-certification?

Significant issues raised on Dec 5th, but not completely resolved:

1. How does the project application start? If we wait until a project is fully ready to submit for pre-certification the program will have no idea of how successful (or not) the program is until very late in the process. Questions of how many projects, how many MW's, and how much program queue space is left will go unanswered until projects are nearly ready. See meeting minutes for full discussion.
2. What will be required to meet item 2(b) performance characteristics? This issue received significant discussion. See meeting minutes for more details.
3. Item 2(c) Permitting requirements. This issue received significant discussion. A possible resolution would be approve a project that can show significant progress toward obtaining any non-ministerial permits such as: all applications have been filed, any hearings have been completed, and any community meetings required by local jurisdictions have been held. Standard building permits can be obtained during the 18 month period prior to final certification.
4. Item 2(e) Participant Acquisition Approach and 2(f) Proposed Marketing Materials. This issue received significant discussion and seems problematic. The potential of having the program administrator and by extension the PUC "approve" developer marketing materials could create problems. Discussions focused around how to resolve this by relating any 'approval' to specific program requirements such as not conflicting with a code of conduct or other rules.
 - o One proposed solution is to use the following statement in the current rules as the primary requirement for assessing marketing materials: "Marketing materials must contain a Commission-approved disclaimer explaining that participation in the Community Solar Program is for the purpose of offsetting participants' energy usage with electricity generated by certified projects."
 - o Another line of reasoning with respect to this issue was brought up here:

- There are adequate channels for customers to raise complaints regarding deceptive advertising or bad actors – we don't need to create any complicated new structures and re-invent already existing safeguards.

The State of Oregon has a DoJ Consumer Protection website for filing complaints :<https://www.doj.state.or.us/consumer-protection/> . They also have a database of past complaints. Even though the PUC technically has oversight for telecom, utilities and internet, the DoJ also takes these complaints as well. They already have a category called “ Energy Conservation Services” that community solar could fit into. The PUC has a parallel complaint process too, but it is only for regulated utilities. If needed, complaints could go to the Program Manager, (not the PUC) but the Program Manager reports to PUC as part of their regular updates.

Also, PUC maintains a few fact sheets, including a general one that is called “Customer Rights and Responsibilities Summary “. We should task the PUC/ Program Manager with coming up with a similar community solar fact sheet as part of program rollout, and this would be shared with all customers by the project manager.

5. Item 2(g) Proposed forms and standard contracts. The group stopped the discussion here and did not finish this item, however, a similar dynamic applies to this item and item 2(f) marketing materials. The potential of having the program administrator and by extension the PUC “approve” developer contracts could create problems. A more robust conversation is needed.

Best,
Jon Miller
Executive Director
Oregon Solar Energy Industries Association - OSEIA
503-701-0792
jon@oseia.org
www.oseia.org

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

AR 603

In the Matter of

Community Solar Rulemaking (SB 1547)

**Resource Value of Solar (RVOS) /
Bill-Credit Rate Subgroup**

**Comments Collected by Renewable
Northwest**

I. Introduction

Renewable Northwest has collected comments from participants in the RVOS/Bill-Credit Rate Subgroup of AR 603. This Subgroup was unable to give a single set of recommendations due to the many different perspectives represented, and due to the relatively short period of time between the publication of utilities' UM 1716-related RVOS values (the end of November/beginning of December 2017) and the submission of these comments. The Subgroup participants were encouraged by Staff to provide feedback to two specific questions:

- The "Drop-Dead Date"—or, by when is a bill-credit rate absolutely needed (either a specific date or a number of months before the queue for pre-certification).
- Considerations for the Commission in relation to the timing for determination of a bill-credit rate.

The responses from the Subgroup were supplied to Renewable Northwest in confidence. Anonymized written responses, which contain both detailed and useful information, are provided in Section III. Renewable Northwest has attempted to summarize these comments in Section II. Some participants provided purely verbal responses and these have also been anonymized and incorporated. Immediately below is a very high-level bullet point list that collates the range of responses to the above questions. Note that not all of the responses are in alignment with each other.

Drop-Dead Date for Bill-Credit Rate

- An April 2018 drop-dead date would enable a significant level of pre-certification to be submitted immediately following program launch.

- Low-income projects will require the federal Investment Tax Credit (“ITC”) at the 30% level, which requires construction to begin by the end of 2019. Combined with an estimated 18-months for a project to go from application to operation, this gives a drop-dead date of July 2018.
- If a project intends to pre-certify soon after the program goes live in January 2019, the bill-credit rate must be known 8-months to a year in advance, so the drop-date date is as early as now.
- If the program is to launch Q3 or Q4 of 2018, the drop-dead rate should be March 31, 2018, or sooner.
- The drop-date rate for the bill-credit rate needs to be 3-months prior to the finalization of the Program Implementation Manual in order for Low-Income Facilitators and Program Administrators to provide quantitative feedback on any proposed low-income participation methodology.
- The initial RVOS calculations filed by the utilities are legitimate values that developers could use to determine if a project pencils out.

Bill-Credit Rate Timing and Considerations

- To obtain the full 30% ITC a project must begin construction by the end of 2019.
- The ITC steps down from 30% in 2019, to 26% in 2020, 22% in 2021, then 10% in 2022.
- Many solar projects across the country will be striving to secure the ITC at the 30% level at the end of 2019, which could put pressure on project development in Oregon.
- If the precertification process takes 6–9 months, and then final certification takes another 12 months, in order to qualify for the 30% ITC the bill-credit rate needs to be known immediately or by Q2 2018.
- Low-income community solar projects are unlikely to pencil out at the RVOS rates filed by the utilities in Direct Testimony (UM 1910, UM 1911, UM 1912). The Commission should consider setting an initial bill-credit floor until 2020, possible in the range of \$0.10–\$0.12/kWh.
- California’s community solar program is not getting off the ground with a bill-credit rate of \$0.06–\$0.07/kWh; Oregon’s bill-credit rate needs to be at least around \$0.10/kWh.
- The federal Weatherization Assistance Project (“WAP”) program year begins on July 1, so low-income projects seeking to leverage this assistance need to know the bill-credit rate by that date in 2018.
- A minimum bill-credit rate, until the RVOS is established, would enable interested parties to gauge the financial feasibility of a project.
- A 2.5 MW community solar project will be difficult to finance unless the bill-credit rate is close to the \$0.10/kWh level.
- Numerous RVOS values based on location could enable developers to site better projects.
- A proxy or interim bill-credit rate, if necessary, could be based on the utilities’ initial RVOS filings in UM 1910, UM 1911, and UM 1912.

II. Summary of Written Responses from RVOS/Bill-Credit Rate Subgroup Participants

This section contains a summary of responses collected from participants in the RVOS/Bill-Credit Rate Subgroup. The summary, and the policy context, have been provided by Renewable Northwest. Full, anonymized, responses can be found in Section III.

Stakeholder Comment 1

PacifiCorp (UM 1910) and Idaho Power (UM 1911) submitted their Direct Testimony on the RVOS at the end of November 2017, while Portland General Electric (UM 1912) submitted its Direct Testimony at the beginning of December 2017. The proposed Staff schedule has stakeholders' Opening Testimony due February 16, 2018, followed by the utilities' Reply Testimony on March 16, 2018. All parties' Cross-Examination Statements and Cross-Examination Exhibits are due ten days before the RVOS filings hearing date, which Staff have requested be held in early April 2018. At that stage in the RVOS proceeds "[...] we should have a much higher level of confidence of both the RVOS rates and the timeline for competition", and therefore April 2018 is an appropriate drop-dead date. An April 2018, drop-dead date would also enable "[...] a significant level of pre-certification to be submitted immediately following program launch." In terms of Commission timing in relation to the determination of a bill-credit rate, it is noted that the ITC steps down from 30% in 2019 to 26% in 2020.

Stakeholder Comment 2

Low-income community solar projects "[...] will require the Solar ITC to pay for 30% of the project." To qualify for the ITC at the 30% level a project must be in the ground by the end of 2019. Combined with an estimated 18-months for a project to go from application to operation gives a drop-dead date of July, 2018. However, the bill-credit rate needs to be known immediately if the developer's intention is to pre-certify soon after the community solar program potentially goes live in January, 2019: "the bill credit rate must be known for 8-months to a year before to secure funding and work out the business model for customers."

SB 1547 (2016) states that, "The commission may adopt a rate for an electric company to use in crediting an owner's or subscriber's electric bill other than the rate described in paragraph (a) of this subsection if the commission has good cause to adopt the different rate".¹ It is recommended that a bill-credit floor be set at a level "we know will work" to enable projects to "get[] off the ground", possibly \$0.10–\$0.12/kWh and "[...] then let that expire in 2020 (for future projects) with the requirement to re-evaluate."

It is not expected that a low-income community solar project will be able to "pencil out" at the RVOS rates contained in the utilities' Direct Testimonies. Furthermore, low-income subscribers

¹ Oregon SB 1547 (2016), Section (22)(6)(b).

“[...] will have no interest in paying more for energy” so will likely be uninterested in a premium green-energy product.

Stakeholder Comment 3

Actual RVOS values are needed for a company to determine whether to do business in Oregon. Community solar projects could be facilitated by a multiplicity of RVOS values based on location, enabling developers to potentially site projects in areas that are more likely to pencil out.

It is likely that RVOS values will not be known until July 2018, at the earliest. Consider a 3 MW solar system commencing construction at the end of 2019 in order to qualify for the ITC at the 30% level. If final-certification could be achieved in 12-months, the program would then need to accept applications at the end of 2018. If it took 6–9 months to pre-certify a system, the developer would then need to know the bill credit rate immediately or in Q2 of 2018. If final-certification took longer than 12-months it becomes difficult to calculate financial projections confidently.

It should also be noted that there could be a surge of development in Q4 2019, as solar developers across the country attempt to maximize the tax credits they can generate. This could lead to a constraint on the availability of equipment and labor, putting further pressure on the financials of Oregon community solar projects.

Stakeholder Comment 4

A minimum bill-credit rate in the interim period—until the RVOS is determined—would enable interested parties to undertake financial forecasts to determine whether there is any possibility of profitability. If the community solar program is to launch in Q3 or Q4 of 2018, the drop-dead rate for a bill credit rate should be March 31, 2018 (the sooner the better).

Stakeholder Comment 5

The U.S. Department of Energy Weatherization Assistance Program (“WAP”) reduces energy costs for low-income households by increasing the energy efficiency of their homes. The WAP program year begins on July 1, so low-income projects looking to leverage these weatherization funds would need to know the bill-credit rate by that date in 2018 or else risk delaying the project to the 2019 program year.

Stakeholder Comment 6

Order 17–372 states that when the Commission adopts “[...] the program implementation manual, [it] intends to either reaffirm the five percent project plus five percent program [low-income] requirement or to adopt another approach that is more likely to result in achieving the

full 10 percent allocation by the end of the initial program capacity tiers.”² The Low-income Facilitator and the Program Administrator will need to know the bill-credit rate in order to provide useful feedback on the low-income requirement methodology. The drop-dead date for the bill-credit rate should be three months prior to the finalization of the Program Implementation Manual, allowing Staff and stakeholders sufficient time to work on the low-income methodology with actual numbers.

III. Anonymized Written Full Responses from RVOS/Bill-Credit Rate Subgroup Participants

This section contains the full, anonymized responses collected from participants in the RVOS/Bill-Credit Rate subgroup.

Stakeholder Comments 1

1. The "drop dead date" or when do we absolutely need a bill credit rate (stated either a specific date or as months before the queue for pre-certification opens).

- April 2018 is a good drop-dead target
 - Ideally the credit rate is known at least 6 months prior to actually opening the program up for applications, so that developers have time for analyzing the costs and benefits of the program with greater confidence in determining whether real project development investments are warranted.
 - At the very least, there should be a higher confidence level of what to expect by that timeframe.
 - If actual final rates aren't available until 3 months in advance, that may be OK so long as there's a reasonable expectation of where the credit rate will likely land 6 months in advance.
 - April will be late in the RVOS proceeding (i.e., there will have already been reply testimonies, cross examinations, a hearing, and by the end of the month – briefs), so we should have a much higher level of confidence of both the RVOS rates and timeline for completion).

2. Considerations for the Commission to consider in relation to the timing for determination of a bill credit rate.

- Reasons to accelerate implementation process (in general):
 - ITC steps down from 30% in 2019 to 26% in 2020. (projects need to have commenced construction in 2019 to leverage the 30% ITC).
 - This is a major deadline for developers and investors in the solar industry that could make or break projects in markets across the country, including Oregon.
 - The PUC stands to save state tax payer money by taking advantage of a higher federal ITC.
 - The ball is in the PUC court to follow through on legislation passed in early 2016, and provide the industry and consumers with an opportunity to make community solar work for the state within a reasonable time following that passage. At this rate consumers may not be marketed to by pre-certified projects until early 2019, three years after the legislation passed. The PUC should be doing everything they can to make this opportunity available as soon as possible.
- Reasons to identify a credit rate or at least close approximation by April 2018.
 - The goal should be for a significant level of pre-certification applications to be submitted immediately following the program launch.

² Order 17-232, June 29, 2017, at 11.

- Any significant investment in project development will not happen without a credit rate or at least a higher level of confidence in what that credit will be.
 - Most developers are not seriously looking at Oregon yet ...particularly after seeing the initial RVOS filings. If we're looking at similar RVOS estimates in March and/or no other steps have been taken to developing an interim rate there will continue to be little to no serious project development in Oregon for the community solar program.
 - Stakeholders appear aligned in recommending that either a system impact study or actual interconnection agreement be required for pre-certification in Oregon. To get this far in the interconnection process requires real investments by developers (e.g., costs tens of thousands of dollars on average and take at least a year). This is on top of an array of other pre-certification requirements outlined in the rules that also entail real time and resource costs for potential project manager applicants.
- If it's clear that the PUC is determined to establish a credit rate that will truly enable the program to "function" and for customers to be able obtain actual savings from participating in the program, then developers will feel more confident to pursue development, analyze the market and potential partners, and begin locking in components required for pre-certification.
 - E.g., Illinois is also in the process of refining rules for a community solar program associated with their RPS. Developers are confident that the program will be designed in a manner that ensures cost recovery for developers and benefits to consumers and therefore – even without knowing final REC prices – developers are already confidently moving through project development steps in the market.
- April will be late in the RVOS proceeding and we should have a much higher level of confidence of both the RVOS rates and timeline for completion. It will be less acceptable to stakeholders to maintain a holding pattern if the RVOS rate continues to look too low, or the RVOS proceeding itself is moving too slowly and not providing enough transparency on the rate itself or timeline.
- Other timeline considerations.
 - Stakeholders appear amenable to leveraging projects that are already in the interconnection queue (i.e., rather than requiring new interconnection applications to be submitted). This can help with accelerating the development cycle, though a good chance those queue projects do not yet have system impact studies (since they may be speculative projects (queue holds)).
 - Just because projects already in the interconnection queue can be leveraged, an opportunity should also be available for developers interested in "green fielding" their own projects to participate in the program. In other words, the program shouldn't force all developers to purchase projects from speculators holding positions in the interconnection queue just in order to make the time cut of the ITC drop off. There should be adequate time for completely new projects to be developed and submitted into the interconnection queue, and ultimately the program pre-certification process and still be able to leverage the ITC.
 - If program doesn't open until 2019, it's even more important that the credit rate is known further in advance in order to enable confident project development and ultimately preparedness to submit applications and begin project construction in the same year to leverage the 30% ITC.
 - In other words, knowing the credit rate well in advance becomes increasingly important the later the actual program launch occurs.

Stakeholder Comment 2

We have been trying for years to put solar on the roofs of our [affordable housing] buildings but fiscally it has not been possible for various reasons. We now see economies of scale involved in community solar as a way to pursue our vision. Again, fiscal reality will play a critical role. If the project doesn't pencil out financially, we won't be able to proceed.

-Even with falling solar prices and scale, our planned projects will require the Solar ITC to pay for 30% of the project. This is the timeline according to the government, unless things change:

- The ITC will be extended from Dec. 31, 2016, and instead stepped down from 30% to 10% until 2024. Projects that start construction by 2019 will receive the current 30% ITC, while projects that begin

construction in 2020 and 2021 will receive 26% and 22%, respectively. All projects must be completed by 2024 to obtain these elevated ITC rates.

-This means our project must go in the ground by 2019. ETO estimated 18-months for our project to go from application to operational. That would indicate July of this year would be the absolute drop dead. However, we intend to pre-cert soon after the program goes live in January 2019 (or sooner). That means I need the RVOS now. Most of the work I am doing on our project is just out of curiosity. Until we know if the project can pencil, we will not seriously tackle something of that magnitude. Someone in the discussion said that they thought the bill credit needed to be set on the day the project applies for pre-certification. That will not work for developers. The bill credit rate must be known for 8-months to a year before to secure funding and work out the business model for customers. What should happen on pre-cert date is the "lock -n" of the bill credit rate for the life of the project.

-The RVOS docket was established in February of 2015. We are approaching 3-years of discussion on the value of solar. It is certainly a complicated subject, but it's time to make a decision. Any further delays will close the window for the majority of projects. There is increasing pressure on the legislature (and therefore on the PUC) by friends of community solar to get the program in gear regardless of RVOS. Despite the warnings by Staff reps, the statute does authorize the PUC to set a bill credit rate for cause. My recommendation is to set a floor that we know will work \$.10-.12 and then let that expire in 2020 (for future projects) with the requirement to re-evaluate. That way the program gets off the ground. The Utilities' are already protected by the 160-MW cap so even if the program became red hot, they have already calculated that their business can survive the loss of 160 MW of customers. Also, the utilities valued their future RPS compliance at "0" which leads to an artificially low RVOS filing below \$.052

-Regarding whether the CS should save a customer money. Yes and know. Some will certainly be interested in paying more for community solar because of its "greenness". I think it is reasonable that when someone signs on for a subscription, they may not receive a savings that first year or two. However, with a 10-year contract, as the price of electricity inflates, they will begin to see a larger and larger savings. With regard to low-income subscribers, they will have no interest in paying more for energy. This means, low-income projects will need to be very economically constructed. RVOS/bill credit rates will be critical, or access to zero-interest loans and grants for construction. Even with grants and 0% interest loans, I don't believe a low-income project will pencil out at the utility-proposed RVOS.

Stakeholder Comment 3

We need to know what will be produced at the end of the RVOS docket (estimated in July).

- Is it a model? or is it actual RVOS values that can be plugged into financial pro formas? PUC staff was unclear on this at the meeting yesterday.
- The industry needs actual values to evaluate whether they want to do business in OR or not.
- The best outcome, given OR is not using a single RVOS value, is to have the utilities provide several RVOS values that could be used by industry as a proxy. Pick several sites/systems that illustrate potential community solar projects.
- A poor outcome is a model that waits until someone submits a system for pre-certification in the hopes that a good number will be produced - this would be an unacceptable approach.

We know the earliest an RVOS will be produced is July (assuming no delays).

- We know the solar ITC ramps down in 2020 so we want systems to commence construction in 2019
- A 3MW system commencing construction in Q4 of 2019 may need 12 - 18 months allowed in the pre-certification period to get to final certification (note that pushing this to Q4 is very risky for Oregon. Many systems in other states will be in the same situation to maximize the tax credits - OR systems may have a very hard time acquiring modules at that late date - the industry has been through this before).
- Using 12 months, the program should accept applications in Q4 2018
- Assuming it can take 6 - 9 months minimum to be in position to pre-certify a system, the developer should know by Q1 or Q2 of 2018 how confident they are with financial projections in order to spend time and money developing projects. The earlier estimate of having a credit value in April of 2018 is a

decent estimate supported by this conservative outline. If we used the full 18 months to get to final certification the math gets worse...

Stakeholder Comment 4

1. From a project manager's, participant/subscriber's, and project finance perspective it is really important to get at least a target bill credit rate established. I realize that the actual bill credit rate is tied to RVOS which complicates matters, especially timing, but having some confidence that the community solar program has the potential for profitability during the early stage development period is key to moving this program forward in a timely matter. Perhaps some consideration should be given to establishing a **minimum** bill credit rate for the interim until the RVOS details are worked out. This way at least interested parties can base a financial forecast or proforma using the **minimum** rate.

2. Based on what I understand to be the current status of the community solar program it is looking like an official program launch will likely be in Q3 or Q4 2018. I think that the drop dead date for establishing the bill credit rate should be no later than March 31, 2018. Of course I would like to see it sooner, perhaps by the end of January 2018.

Stakeholder Comment 5

Drop dead date: Before or by July 1, 2018.

Why: [The project] is attempting to leverage federal weatherization (WAP) funds for certain low-income projects where 100% of the benefits of participation is delivered directly to low-income customers living in affordable housing. They need to have the financials for the first project of this type lined up by July 1, 2018, which is the start of the program year for WAP. If the bill credit is not known until after that point, the window of opportunity to demonstrate WAP could be delayed to the following program year (July 2019). Once WAP approval has been provided for the first project, the whole network will have a basis to do community solar projects. Projects like this could be a model for achieving the program-wide low-income goals of the program.

Stakeholder Comment 6

Proposed deadline for bill credit rate: 3 months prior to finalization of the Program Implementation Manual

Considerations: Prior to the launch of the program, the Low-income Facilitator and the Program Administrator must develop a proposal for how to implement the low-income requirement of the program. Order 17-232 directs this methodology to be included in the Program Implementation Manual. The Facilitator and Administrator will need to know the bill credit value in order to develop a rational model for achieving the 10 percent low-income target of the program and guidelines for how project managers must apply any requirements in the development and financing of their projects. We suggest allowing three months prior to the adoption of the Program Implementation Manual to develop a workable model and seek input and feedback from stakeholders.

Additionally, it may be challenging for the Low-income Facilitator to accurately budget for their role prior to knowing the value proposition of participation for low-income customers. If the benefit of participating in the program is relatively low, it may be more challenging to recruit low-income participants, resulting in higher outreach and facilitation costs than if the benefits are more attractive.

IV. Conclusion

Renewable Northwest gratefully submits these comments on behalf of the RVOS/Bill-Credit Rate Subgroup of AR 603.

Respectfully submitted this 3rd day of January, 2018.

/s/ Michael O'Brien

Michael O'Brien

Regulatory Director

Renewable Northwest

421 SW Sixth Ave, Suite 975

Portland, OR 97204

(503) 223-4544

michael@renewableNW.org

December 29, 2017

[by email]

To: Oregon Public Utility Commission Staff

AR 603 Low-Income Subgroup Report

The AR 603 Low-Income Workgroup is a stakeholder subgroup created by Oregon Public Utility Commission Order 17-458 and tasked with exploring a number of questions related to the low-income aspects of Oregon's impending community solar program. The order identified priorities for the group as:

- a. Providing clarity to interested community groups on implementation status
- b. Ideas for community engagement
- c. Income threshold definition review
- d. Consideration of how low-income projects will be placed in the queue
- e. Definition of principles for low-income engagement, benefits flowing to individual customers, etc.
- f. Portability or locational attributes
- g. Incentive adders discussion within low income subgroup

Stakeholders involved in the workgroup included: Dan Elliott (Oregon Housing and Community Services (OHCS)); Michael Figueredo (OHCS), Jon Miller (Oregon Solar Energy Industries Association (OSEIA)), Becky Eberle (Pacific Power), Tim Lynch (Multnomah County Office of Sustainability), Keith Keuny (Community Action Partnership of Oregon (CAPO)), Sherrie Pelsma (Community Energy Project (CEP)), Carolina Iraheta Gonzalez (Verde), Laurie King (Climate Jobs PDX), **Charlie Coggeshall (Clean Energy Collective)**, **Rikki Seguin (Renewable Northwest (RNW))**, Caroline Moore (Pacific Power), Steve Diven (OHCS), Ryan Sheehy (Virdian Management), Kelly Noe (Idaho Power), Cheryl Paoli (Idaho Power), Erica McConnell (Interstate Renewable Energy Council (IREC)), Giulia Donzelli (NRG Energy Inc.(NRG)), Lucas Kappel (Bonneville Environmental Foundation, (BEF)), Evan Ramsey (BEF), Silvia Tanner (RNW), Oriana Magnera (Northwest Energy Colation (NWECE)), Jaimes Valdez (Spark Northwest), Margo Bryant

(Portland General Electric (PGE)), **Lizzie Rubado (Energy Trust of Oregon (ETO))**, and Ryan Bird (Energy Solutions).

The workgroup met on four separate occasions in 2017 (11/6, 11/27, 12/5, 12/18) to discuss the aforementioned issues and chose to focus on three primary areas of discussion: income threshold definition review, portability or locational attributes and other contract issues, and the incentive adders discussion. Stakeholders also discussed equity principles, an additional area for exploration that should be part of continued stakeholder engagement along with other unresolved issues enumerated at the end of this report.

Income Threshold Definition Review

Stakeholders are in agreement as to a recommended definition of “low-income”:

To be eligible as “low-income,” a subscriber must be at or below 80% of State Median Income (SMI) or 80% of the Area Median Income (AMI). A subscriber may qualify as “low-income” based on the higher of the two thresholds for the area in which the subscriber resides. A subscriber may qualify automatically if they are enrolled in a state or federal low-income assistance program such as, but not limited to, energy assistance or weatherization services.

In order to arrive at this definition, the workgroup looked at thresholds for other state assistance programs (Table 1.1) and found that these levels may leave out anyone who is effectively low-income – due to medical expense or other life circumstances – but above the threshold. Stakeholders determined that community solar should be as inclusive as possible in serving an expanded low-income population and recommended 80% AMI as a measure. Some stakeholders pointed out, however, that area median incomes are lower for more rural parts of Oregon than more developed parts of the state.¹ As such, 80% of AMI in Baker County will be a lower threshold than 80% AMI in Benton County and would create a more restrictive definition in the former region.

¹ See supplemental document, “Income Thresholds by OR County”

Table 1.1 Income Thresholds for Oregon State Programs (Source: OHCS)

Program	Definition	Individual	Family of 4
OEAP (OHCS)	60% State Median Income	\$23,095	\$44,414
DOE-WAP (OHCS)	200% Federal Poverty Level	\$24,120	\$49,200
ECHO (OHCS)	200% Federal Poverty Level	\$24,120	\$49,200
Savings Within Reach (ETO)		\$23,340-52,530	\$47,700-\$75,025
SNAP (food assistance)	185% Federal Poverty Level	\$21,978	\$44,955
ERDC (childcare)	185% Federal Poverty Level	—	\$44,955

For those areas with a low median income, State Median Income is the more inclusive measure, although it is not sufficiently flexible for those areas with median incomes above the state median.² In order to create thresholds that are supportive of all parts of the state, the workgroup feels that it is best to provide a definition of low-income that is flexible and not tied to a single metric.³ In the spirit of SB 1547 and Commission Order 17-232, community is an integral part of community solar and an inclusive definition of low-income will help to facilitate participation from a diverse group of community members who might not otherwise be able to afford to be part of the program.

It is important to note that the proposed definition does not a **definition of “income”**, but stakeholders did raise concerns in this arena: **an overly narrow definition of “income” could qualify individuals as low-income who have higher actual incomes. For example, a definition of “income” that only includes W-2 reported wages and salary could result in individuals with significant amounts of retirement, pension and personal business income**

² *ibid.*

³ *ibid.*

qualifying as low-income. Oregon Housing and Community Services supplied a matrix⁴ that the agency uses to determine income eligibility as a possible program tool, but stakeholders from community-based organizations expressed concern that an overly complicated qualification process would exclude smaller and less-resourced organizations from helping to identify and subscribe community members. Stakeholders did agree that subscribers enrolled in state or federal assistance programs should qualify automatically as low-income.

**Portability or locational attributes
(including other contract issues as they relate to low-income subscribers)**

The low-income workgroup did not discuss a consensus definition of portability or transferability, but for the purposes of this report, “portability” will be defined as the ability for a subscriber to move a subscription from one site address to another within a utility service territory, and “transferability” will be defined as the ability for a subscriber or the low-income facilitator to transfer a subscription, **or part of a subscription term**, from one individual or entity to another.

Stakeholders felt that both portability and transferability were essential contract issues for low-income subscribers due to the mobility of that population, often due to circumstances outside their control. A 10-year subscription would be high-risk, and without proper considerations, these terms may lead to difficulty in meeting the 10% low-income program requirements. There are four general recommendations that stem from stakeholder conversations: allow portability and transferability in all contracts, allow the low-income facilitator to act as a conduit for individual low-income subscriptions, allow housing providers to tie subscriptions to housing units, and hold individual low-income subscribers faultless for terminating or transferring community solar subscriptions. **Developer-stakeholders also want to stress the importance of financeability of low-income subscribers as a necessary condition to underlie the aforementioned recommendations. If developers can’t fully underwrite the**

value of the potential subscription revenue from low-income capacity, then it will be difficult to make the cost of developing community solar projects work.

In terms of high-level functionality, the low-income facilitator should maintain a queue of potential low-income subscribers in each utility service territory so as to replace transferred or terminated subscriptions, “to help meet any low-income capacity requirements,”⁵ **and to guarantee that a project manager always has a low-income subscriber to fill an allocated subscription throughout the 10-year subscription term. A low-income subscriber would terminate their contract and the low-income facilitator would transfer the remaining contract term to a new subscriber from the queue through a new contract. In short, it is the subscription term for a designated low-income subscription that is transferred rather than the contract itself.**

Additionally, allowing housing providers to hold subscriptions for tenants or to tie subscriptions to housing units is an essential aspect of transferability and financeability in the eyes of stakeholders, as it enables a credit-worthy backstop for low-income subscription capacity. The group did not discuss at length allowing for service providers or community-based organizations to hold subscriptions as a part of community services, but this warrants additional investigation, as there are other entities in addition to housing providers who may meet similar needs.

If service providers, housing authorities, and other community-service based organizations hold subscriptions on behalf of low-income participants, it will be a critical policy tool to enable developers to finance the low-income component of a community solar project. And looking to Colorado, the decision to manage subscriptions through housing authorities was crucial to turning an initial lack of low-income enrollment in community solar gardens into a more robust program.

⁵ OAR 860-088-0030 (1-C)

In order for transferability to be supportive for individual low-income subscribers and for the 10-year term to not be a barrier, contracts must allow anyone who qualifies as low-income under the community solar program to be held faultless and to owe no fees for termination or cancellation. This would not apply to housing or service providers who do not face the same subscription barriers as individual subscribers.

Stakeholders have also identified a number of challenges that will need to be addressed with regard to portability and transferability. These concerns center around utility and data issues relating to usage calculations. New usage profiles will need to be determined when a subscriber moves to a new site address and when a subscription is transferred between subscribers. The program administrator and utilities will have to determine how often usage is calculated and this may take additional administrative or program costs. There is also a question of responsibility for the generation and cost of terminated but un-transferred subscription terms that must be addressed. Some stakeholders feel, however, that the value of flexibility outweighs these concerns; a functional community solar program will rely upon successful acquisition and execution of the low-income portion of the program.

Additional Contract Issues:

The workgroup feels that it is important to include a low-income lens on the development of a disclosure checklist or other supplemental consumer protection materials for contracts. There was not agreement as to what should be included in the checklist, but stakeholders did provide some feedback:

- What it costs to participate and what subscribers receive in return
- Clear explanation of how billing works
- Clear explanation of the timing of the application of bill credits
- Clear explanation of when subscribers will begin receiving credits and making payments
- Clear statement that participants will never receive a cash payment

- Clear statement that the participant does not have any responsibility for the operation or maintenance of the project
- Explanation of what happens if they can't pay their electricity bill/community solar payments
- What to do if a subscriber moves within their utility/community service territory
- What to do if a subscriber moves outside their utility/community service territory
- **Contract documents should include a summary of the legal language of the contract in plain, universal, and short form language**

To summarize and synthesize the above recommendations, stakeholders did have agreement that supplemental contract materials should be educational and informational in nature and provide clear guidelines about expectations, subscriber responsibilities, and how to take certain actions. In addition, it is imperative that contracts and all consumer protection materials be available in multiple languages.

Incentive Adders Discussion:

While Staff feel that it is premature to discuss a funding mechanism to facilitate the participation of low-income residential customers,⁶ stakeholders in the low-income workgroup feel that a low-income incentive or adder is essential to success of the program and there is a high likelihood that it will be needed regardless of bill credit value. Low-income communities lack resources and wealth, and community solar will not provide benefit nor be an appealing proposition unless program participation comes at a no cost and maximum benefit and utility bill savings. The average household benefit for energy assistance for 2016 was \$533⁷ and for households below 200% of the federal poverty line, the average dollar amount by which actual

⁶ OAR 860-088-0080 (4)

⁷ OHCS (June, 2017). "Energy Assistance Quarterly Snapshot [July-June 2017]."

< <http://www.oregon.gov/ohcs/ISD/RA/energy/EA-Annual-%20Snapshot-July-1-June-30-2017-Draft.pdf> >

home energy bills exceed affordable home energy bills was \$536.⁸ The average energy burden (the percentage of income used to pay energy bills) for homes at 50% of the federal poverty line was 23%.⁹ **Moreover, existing energy assistance and weatherization programs are oversubscribed.**

In addition to utility bill savings for low-income subscribers, an incentive or adder can have additional benefits identified by stakeholders, including reduced arrearages for utility bills, reduced likelihood of unpaid subscription fees or program costs, and increased likelihood that project managers or developers would design projects to include more than the minimal 5% low-income participation, as incentives would help ensure that subscriptions were filled. In short, it is in the interest of subscribers, project managers, utilities, and program administration that a funding mechanism be put in place to support a low-income incentive or adder.

Stakeholders understand that need is not doubted, but the question is timing of the discussion. The workgroup feels that it is prudent to tackle the problem sooner rather than later given the complexity and potential costs of designing a financial mechanism for incentives. Understanding possible models, potential ratepayer impact, and necessary bill credit values for feasibility during the start-up period can provide the program administrator and the Commission with enough information to make a decision once a bill credit value is determined. In lieu of developing a funding mechanism, Staff and stakeholders should discuss what bill credit value may be necessary for success of the program – independent of the Resource Value of Solar process. Within that exploration they also could determine how a viable bill credit value might affect low-income subscribers, what financing mechanisms may be possible or necessary under that scenario, **and how best to balance energy assistance and its funding mechanisms versus incentives for community solar.** There should also be discussion of other policy mechanisms, such as a credit back-stop solution¹⁰ that can help to facilitate no-cost low-income participation.

⁸ Fisher, Sheehan & Colton (April, 2017). The Home Energy Affordability Gap 2016 (2nd Series).

⁹ *Ibid.* See also County data: Fisher, Sheehan & Colton (April, 2017). "Oregon 2016 Home Energy Affordability Gap."

¹⁰ Like ones used for the NYSEDA community solar program or for some Minnesota community solar projects.

Equity Principles:

During discussion, stakeholders identified an additional issue that must be addressed in program implementation. It is not enough for the program to have a mandate for low-income participation, but in order to truly reflect the diverse communities of Oregon it must have diverse subscriber participation from all parts of PGE, Pacific Power, and Idaho Power territory and across demographics. This will only be achieved through thoughtful program design and tracking and metrics that help describe the scope and accessibility of community solar. Stakeholders did not discuss what equity principles and demographic tracking might look like, nor did the discussion seek consensus, but these are issues for continued engagement.

Low-Income Facilitator

Pulling from the above comments, the low-income facilitator should serve an essential and active role in community solar program administration. They should be responsible for working with community-based organizations, and service and housing providers to find subscribers for a low-income queue, and also, to establish when it is appropriate for those partners to hold subscriptions for participants through housing units or service packages. The low-income facilitator should also be responsible for ensuring that the 10-year-contract-terms for 5%-low-income, per-project requirements are met continually, and even for some stakeholders, that contracts should be written so that responsibility for that term is held by the low-income facilitator. The low-income facilitator would manage the transfer of subscriptions for individuals leaving the program to potential subscribers in the queue, effectively terminating one subscription and starting a new one in order to maintain the 10-year term for 5% of each project's subscription capacity. The low-income facilitator would also be responsible for ensuring that project contracts include necessary consumer protection elements for low-income subscribers.

Issues for Continued Discussion:

Finally, there are additional issues either left untouched by the low-income workgroup or identified as topics for other workgroups should the stakeholder engagement process continue:

Continued Issues for Low-Income Workgroup:

- Providing clarity to interested community groups on implementation status
- Ideas for community engagement
- Consideration of how projects with more than 5% low-income subscribers will be placed in the queue
 - Overlap with Project Details workgroup
- Definition of principles for low-income engagement, benefits flowing to individual customers, etc.
- Continued discussion of contract issues (possible new workgroup)
- Continued discussion of Incentives/adders
 - Overlap with RVOS workgroup
- Equity Principles
- **Discussion of how the subscriptions should be allocated to low-income subscribers. Based on need? First come first served? How do transferability and portability apply to the order of allocation?**

Continued issues for Utilities/Data Exchange Workgroup:

- Calculating usage
- Transferability/portability (when someone moves a subscription within a service territory, when a subscription is transferred from one subscriber to a new subscriber, other changes is subscriber or dwelling)

Continued Issues for Project Details Workgroup:

- Consideration of how projects with more than 5% low-income subscribers will be placed in the queue

Continued Issues for RVOS Workgroup:

- Continued discussion of Incentives/adders