

September 16, 2024

UM 1930 - Oregon Community Solar Program Financial Analysis

Background

In this report Staff presents a financial analysis of the Community Solar Program (CSP or Program) per Commission Order No. 24-026 at the January 16, 2024, public meeting.¹ The report is intended to provide the Commission with a better understanding of the Program’s current financial performance. Staff’s financial analysis consists of a comparison of modeled and actual Program costs and revenues impacting ratepayers to date. Following a discussion of its financial analysis, Staff identifies next steps in support of bringing policy and Program design recommendations to the Commission in the future that would balance the development of a viable Program with the Legislature’s directive to minimize shifting of CSP costs to non-participants.²

Current Program Status

Since Order No. 24-026, the Program has had two additional Pre-Certified projects (3.8 MW), eight projects achieving Certification (16.1 MW), and five Certified projects becoming operational (12.1 MW). Table 1 below represents the current status of Program capacity in Portland General Electric (PGE), Pacific Power (PAC), and Idaho Power (IPC) service territories.

Table 1. Status of CSP Capacity on August 22, 2024.

Utility Service Area	Capacity Type	Total Program Capacity (MW-AC)	Unallocated Capacity	Pre-Certified Capacity	Certified Non-Operational Capacity	Online & Billing Capacity
PGE	Regular Market	69.9	2.8	34.5	0.0	32.6
	Carve-Out	23.3	20.2	2.8	0.0	0.3
PAC	Regular Market	48.5	0.2	35.2	6.0	7.3
	Carve-Out	16.2	13.8	1.0	0.4	1.0
IPC	Regular Market	3.3	0.3	0.0	0.0	2.9
All	Regular Market	121.6	3.3	69.5	6.0	42.8
	Carve-out	39.4	33.9	3.8	0.4	1.4

¹ See Docket No. UM 1930, Order No. 24-026, January 26, 2024, Appendix A, page 6, <https://apps.puc.state.or.us/orders/2024ords/24-026.pdf>.

² See Oregon Revised Statutes 757.386(2)(b)(B), https://www.oregonlegislature.gov/bills_laws/ors/ors757.html.

Since launching the Program in 2020, the Program’s Low-Income Facilitator has verified and referred over 2,400 low-income households to CSP projects and participating low-income households have realized over \$250,000 in savings.

Staff’s overarching goal for CSP currently is for Program capacity to come online and for CSP to become financially self-sustaining as soon as possible. Despite the recent increase in operational capacity, Staff remains concerned about project development and interconnection delays. To address these concerns Staff and the CSP Program Administrator (PA) have continually stepped up programmatic reporting requirements. Starting in Q2 2023, projects must provide more detailed information when requesting Certification deadline extensions. Then in Q3 2023, Staff and the PA worked with PAC to begin providing a quarterly CSP interconnection queue update given the lack of online capacity. The goal was to improve the transparency of the utility’s interconnection process. Finally, in April 2024, Staff and the PA instituted a new process to publish monthly CSP project progress reports. These reports provide updated information for tracking all community solar project progress, with a focus on identifying and mitigating avoidable delays, increasing transparency and accountability, and improving Program performance.³ Staff appreciates the PA, PAC, PGE, and CSP Project Managers contributing to the data provided in the monthly report.

Staff is also closely monitoring contested cases in Docket Nos. UM 2305 and UM 2322 involving CSP projects and PAC.^{4,5} Going forward Staff is recommending Program Implementation Manual updates that strengthen the PA’s ability to obtain information from projects. Staff is also considering implementing penalties in 2025 for projects and utilities that continue to experience avoidable delays.

In addition to Staff’s concern about project development and interconnection delays, almost 34 MW of the Program’s 39 MW “carve-out” capacity remains unallocated. However, in April 2024, the U.S. Environmental Protection Agency announced funding of Oregon Department of Energy’s *Solar for All* grant application. Staff expects this funding will provide approximately \$16 million in incentives and technical support for projects that are eligible for the Program’s carve-out capacity by subscribing 50 percent of project capacity to low-income participants. Staff looks forward to the funding award stimulating the marketplace’s development of the Program’s remaining unallocated capacity, which is necessary for the Program to become financially self-sustaining.

³ See update to Docket No. UM 1930 on April 19, 2024, <https://edocs.puc.state.or.us/efdocs/HAH/um1930hah328012024.pdf>.

⁴ See Docket No. UM 2305, <https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=23897>.

⁵ See Docket No. UM 2322, <https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=24048>.

Program Financial Analysis

Comparing Modeled and Actual CSP Costs and Revenues Impacting Ratepayers to Date

Staff compared the modeled and actual CSP costs and revenues for the first five years of the Program—Q2 2019 through Q1 2024. Program costs and revenues impacting ratepayers include the following:

- Bill credits and incremental cost of subscribed energy,
- Program administration costs,
- Utility administration costs,
- Project application fee revenue, and
- Program administration fee revenue.

Table 2 presents these costs and revenues as modeled estimates and actual costs through Q1 2024. At the end of Q1 2024, the Program had 29.2 MW of operational capacity, whereas the CSP financial model last updated in September 2021, assumed 134.3 MW of operational capacity. Staff and the PA track actual Program costs and revenues, with modeled costs and revenues derived from the CSP financial model.

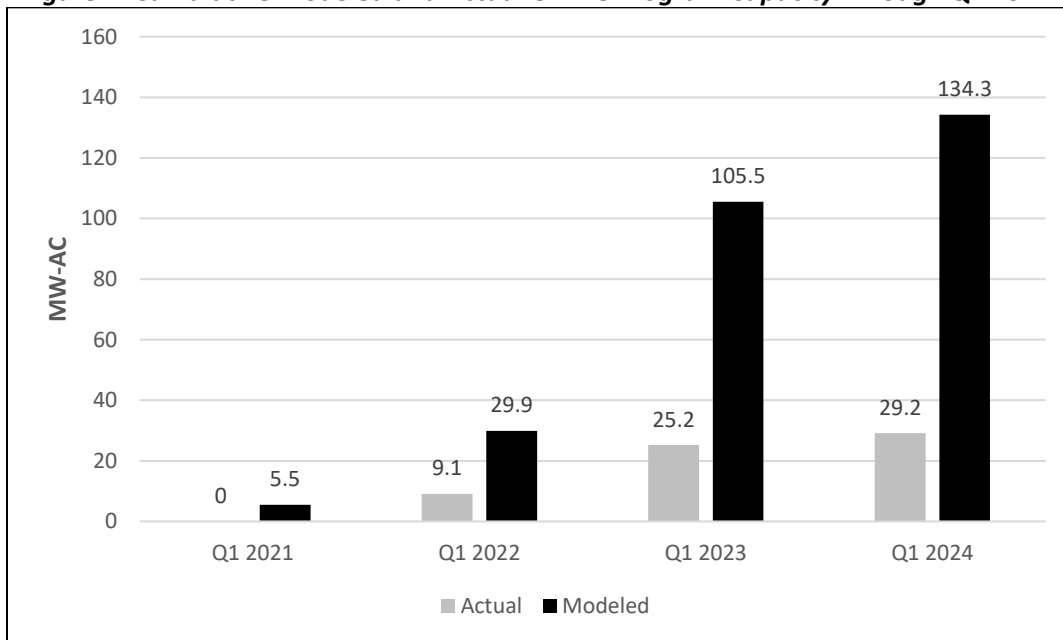
Table 2. Modeled and Actual Program Costs and Revenues, From Q2 2019 Through Q1 2024.

Program Costs and Revenues	Modeled (Real 2020\$)	Actual (Nominal)
Bill Credits and incremental cost of subscribed energy	\$ 18,493,496	\$ 862,994
Program administration costs	\$ 9,002,301	\$ 12,730,688
Utility administration costs	\$ 1,153,863	\$ 998,395
Program administration fee revenue	\$ -1,110,598	\$ -373,326
Utility administration fee revenue	\$ -175,293	\$ -61,203
Project application fee revenue	\$ -680,000	\$ -180,643
Total net ratepayer cost through Q1 2024	\$ 26,683,769	\$ 13,976,905

The majority of the \$12.7 million difference between modeled and actual Program ratepayer cost in Table 2 is due to the much lower actual online capacity. This difference includes \$17.6 million less in bill credits and incremental costs of subscribed energy that the CSP financial model estimated ratepayers would have paid through Q1 2024. The \$12.7 million will ultimately be paid by ratepayers in the future and should not be seen as a reduction in ratepayer cost over the life of the Program.

The CSP financial model assumed that 134.3 MW of Program capacity would be online and billing by January 1, 2024. Of that, over 32.3 MW is carve-out capacity. However, only 1.4 MW of carve-out capacity has come online to date. In fact, unallocated carve-out capacity represents approximately one-third of the 105.1 MW difference between actual and modeled online capacity at the end of Q1 2024. The remaining two-thirds, or 74 MW, are Pre-Certified and Certified projects that have yet to come online. Figure 1 below illustrates the difference between modeled and actual cumulative online capacity through Q1 2024.

Figure 1. Cumulative Modeled and Actual Online Program Capacity Through Q1 2024.



The difference between modeled and actual Program capacity online by Q1 2024 explains the difference between modeled and actual program fee revenue in Table 2. Except for low-income participants, CSP participants begin paying the program administration fees once their subscribed projects come online. Also, project application fee revenue is paid by projects at Pre-Certification but is not counted as revenue until projects are Certified. Similar to program and utility administration fees, actual project application fee revenue is far lower than modeled as a result of fewer projects becoming Certified by Q1 2024.

Staff has also found in its analysis that ratepayer costs over the life of the Program appear to be much higher than previously anticipated. To address this, Staff is currently working with the PA to update the CSP financial model before the end of 2024. To develop a clearer financial picture of CSP and its costs to ratepayers, Staff intends to update model assumptions, including Program capacity development to date, utility avoided cost rates, and other parameters.

Utility Administration Costs

Ratepayers assume the utility administration costs in Table 2 on the basis of authorization the Commission granted to participating utilities to recover CSP costs. Utility administration costs reflect the utilities' prudently incurred costs resulting from their participation in the Program, such as changes to their information technology and billing systems, and legal and other professional fees. Staff's financial analysis shows actual utility administration costs tracking close to modeled. Staff will continue to monitor these costs and work with the PA and utilities as needed to ensure actual costs continue to track with modeled.

Program Administration Costs

Program administration costs are incurred by the PA under its contract administered by the OPUC. Staff regularly invoices program administration costs to the utilities, which in turn remit payment directly to the PA. The utilities then recover program administration costs from ratepayers through deferral processes approved by the Commission. However, as projects come online participants increasingly pay these costs through PA fees.

Actual program administration costs through Q1 of 2024 are approximately \$3.7 million greater than modeled. Staff finds the additional \$3.7 million is the result of three factors. First, project delays and unallocated carve-out capacity have reduced project and program administration fee revenue relative to modeled by approximately \$1.35 million. This fee revenue would have otherwise reduced program administration costs by the same amount. Second, the model assumes that Program administration costs decrease in year five (i.e., Q2 2023 – Q1 2024) by approximately \$850,000 from the year before. The model then assumes PA costs remain stable for the rest of the Program. This assumption in the model is reasonable but overly optimistic relative to the actual timeline for implementing the Program's necessary information systems. Staff continues to identify ways to keep program administrative costs down and expects that reductions similar to modeled can be realized beginning in 2026.

The third factor explaining the additional \$3.7 million in program administrative costs is the impact of Staff's recommendation approved by the Commission's in Order No. 21-317. Specifically, the release of Tier 2 Program capacity with program rules and bill credit rates different than Tier 1 capacity required the PA to implement a significant modification of the CSP information system. Staff estimates this modification cost an additional \$1 million - \$1.5 million in software development. Staff's recommendation and the resulting costs were not reflected in the CSP financial model. Staff negotiated with the PA to add this additional scope and cost to the PA contract with a goal of implementing with minimal cost.

Next Steps

Staff will continue its Program financial and policy analysis in support of the Commission's intent to balance Program development with minimization of cost shifting. In this regard, Staff has identified increasing program participation by bringing projects online as the most important activity to improve the Program's financial independence. The lack of operating projects online at this point in the Program's development is troubling, especially given the billing infrastructure's ability to support full Program participation. So too is the infrastructure ready to enroll more low-income customers; the Program just needs projects up and operating.

As noted previously, Staff has directed the PA to publish for public review a monthly project status update to address the lack of progress in projects coming online. Monthly reports began to be published in April 2024. The goal of the monthly report is to raise the transparency on issues slowing or halting the development of projects and the interconnection process. Staff and the PA have identified this as the first step to bringing the critical mass of projects needed online so the Program can be better poised for financial independence, as was envisioned when the Program launched.

Staff will leverage the following key next steps and bring policy and Program design recommendations to the Commission by Q4 2025.

1. **Ensuring Pre-Certified and Certified projects do not experience additional avoidable delays.** Building on the Program's newly implemented monthly reporting Staff will analyze additional policy options for incentivizing and penalizing projects and utilities that Staff finds cause additional avoidable delays. Staff will bring recommendations to the Commission as early as Q1 2025. It is worth reiterating that if all currently non-operational Pre-Certified and Certified projects (82.6 MW) meet their current Certification and operational deadlines, online program capacity will increase from 41.2 MW to 124 MW by Q2 2026. Staff will continue to closely monitor project development and interconnection progress through monthly project progress reports.⁶
2. **Developing remaining Program carve-out capacity.** The \$86.6 million *Solar for All* grant awarded to the Oregon Department of Energy includes approximately \$16 million in incentives and technical support available from 2025 through 2029 for developing the majority of the remaining 33.9 MW of unallocated carve-out capacity. Staff understands that these funds will become available in 2025 after the U.S. EPA approves a final workplan and budget. Staff intends to work closely with the PA and with Energy Trust of Oregon, which will administer the *Solar for All* funds for CSP, to ensure the marketplace

⁶ Monthly CSP project progress reports are accessible from the CSP website at <https://www.oregoncsp.org/monthly-reports/>.

and the Program maximize the value of the grant.

- 3. Updating timeframe for participants to cover ongoing Program costs.** Actual Program administration fees paid by participants that are intended to eventually cover ongoing Program administration costs continue to lag behind modeled expectations. This is again due to too few projects coming online compared to modeled and most of the carve-out capacity remaining unallocated. This undercuts the ability of the Program to stand on its own and minimize ongoing cost shifting.⁷ Further, as more projects come online—and more ratepayers enroll as participants—a better understanding of CSP’s financial future will emerge. To facilitate this and better analyze policy and program design options in the future, Staff is currently working with the PA to update the Program’s financial model. Staff intends to update model assumptions regarding Program capacity development to reflect actual development to date. Staff will also develop additional model functionality to consider future capacity development scenarios that reflect *Solar for All* funding incentives. Staff expects to complete model updates by late Q3 2024 at no additional cost to the Program and complete this analysis in Q4 2024.

Conclusion

The Program currently has less than a third of the capacity Staff assumed would be online and billing in Q3 2024. While this has reduced costs for ratepayers to date, Staff’s financial analysis confirms that the Program’s cost to ratepayers remains higher than it should be at this point in time. To address the situation, Staff is focused on mitigating additional CSP project delays, developing remaining Program capacity, and identifying policy and program design changes that improve Program performance. Should overall financial performance continue to lag expectations, Staff expects to bring recommendations to the Commission by Q4 2025 that would establish a more financially independent Program.

⁷ OAR 860-088-160 requires that all on-going costs, including costs associated with the Program Administrator and the Low-Income Facilitator, are collected from participants.