SOMAH

Solar on Multifamily Affordable Housing

SOMAH

Semiannual Progress Report

Reporting period
January 1, 2023 – June 30, 2023

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1. Executive Summary

The eighth Solar on Multifamily Affordable Housing (SOMAH) Program Semiannual Progress Report (SAPR) covers 2023 activities. It highlights a steady stream of projects completed and nearing completion, the utilization of the Progress Payment Pathway and Affordability Prescreen service and the impacts to date of the recently implemented 2023 increased incentive levels. An uptick in new applications in Q3 and Q4 2022 led to 35 new submissions before the end of the year. Seven of those newly submitted applications were found to be ineligible and were therefore canceled, while 29 remained active. The official launch of the Affordability Prescreen service in December 2022 has helped to lower cancellations based on ineligibility amid steady incoming application volume. Forty-six applications were submitted from Q1–Q2 2023, and of those, all have remained active.

Despite the steady but lower incoming application volume over the past few years, the SOMAH Program Administrator (PA) continues to emphasize understanding and adapting to current environmental and industry challenges while striving to implement a resilient and successful program. Supportive implementation efforts during the first half of 2023 included the recently approved and implemented Petition for Modification (PFM), which increased SOMAH incentives, and the implementation of the SOMAH Program Handbook 6.0 (Handbook 6.0), as well as expanded and revamped services for participants such as the Affordability Prescreen and a suite of Technical Assistance (TA) and Support Services. In-person conferences, tenant education workshops and ribbon-cuttings have helped celebrate SOMAH-funded systems and emphasized their benefits to tenants and communities. In-person conferences included Housing California's 2023 Conference in San Diego and the California Climate and Energy Forum in Santa Rosa. The SOMAH PA has continued its monitoring, evaluation and research efforts to garner valuable feedback for the program through tenant surveys, which included a pilot for in-person survey collection in Santa Ana. Marketing, education and outreach (ME&O) efforts have also resumed in-person outreach as COVID-19 restrictions have decreased during 2023.

Additional funding was released for PG&E, SCE and PacifiCorp, and the program maintained plentiful funding for all investor-owned utility (IOU) territories — and continues to provide immediate application review with no waitlists. Midway through the year, participants continued to report industry impacts such as historic inflation and supply chain challenges that perpetuated delays in construction timelines and project completion.

As completed projects continue to close out, the SOMAH PA has utilized these opportunities to showcase the impact SOMAH contributes to communities through success stories and video testimonials that have been posted on the SOMAH website and are available for outreach purposes. Stakeholder outreach by the SOMAH PA, SOMAH-contracted community-based organizations (CBOs) and new co-marketing partners have helped increase program awareness with external webinars and program announcements.

1.1   COVID-19 Acknowledgement

The COVID-19 public health crisis and the SOMAH PA's response have continued to impact the program for several years and many reporting periods. While the world has continued to navigate the impacts of the COVID-19 pandemic, the SOMAH PA acknowledges the impacts and lingering effects on SOMAH participants, stakeholders and the solar industry. The SOMAH PA understands that the industry will likely be affected for some time to come and encourages participants to provide feedback on the barriers and impacts they are facing. The SOMAH PA continues to receive and solicit participant and stakeholder feedback through outreach and engagement in order to support and maintain a pipeline of active SOMAH projects. The effects of the pandemic have notably impacted application progression. The industry, country and greater world are still navigating logistical challenges of supply chain issues, rising costs from inflation and an evolving workforce that is recovering from abrupt and unforeseen impacts.

The current project queue has demonstrated that participants are committed to participating in SOMAH and are making best efforts to adapt and evolve in the new environment resulting from the pandemic. Despite these impacts, the program has continued to see projects progress with their design, construction and interconnection efforts. The SOMAH PA has maintained a dedicated webpage, CalSOMAH.org/COVID19, to provide the most up-to-date program information and resources on this topic. The SOMAH PA remains committed to prioritizing health and safety during this time, while working to advance the goals of the SOMAH Program and help build a resilient California.

2.   Background

The Solar on Multifamily Affordable Housing (SOMAH) Program provides financial incentives for installing photovoltaic (PV) energy systems on multifamily affordable housing. The program is designed to deliver clean power and credits on energy bills to

hundreds of thousands of California's affordable housing residents. The program was created by California Assembly Bill (AB) 693 (Stats. 2015, Ch. 582), authored by State Senator Susan Talamantes Eggman (D-District 05) (then Assemblymember) and signed by Governor Jerry Brown in 2015. Senate Bill (SB) 92 (Stats. 2017, Ch. 26), adopted with the 2017-18 State Budget, further clarified the budget for the program. California Public Utilities Commission (CPUC) Decision (D.)17-12-022 (effective Dec. 14, 2017) implemented AB 693 and changed the name of the program to the Solar on Multifamily Affordable Housing (SOMAH) Program to distinguish it from other state clean energy and low-income solar programs. D.17-12-022 established the program's budget, incentive structure and eligibility policies, among other items.

The SOMAH Program serves electric utility and community choice aggregator (CCA) customers in the territories of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Liberty Utilities Company and PacifiCorp. Funded through greenhouse gas (GHG) allowance auction proceeds, SOMAH has a program budget of up to $100 million annually for 10 years and an overall target to install at least 300 megawatts (MW) of generating capacity by 2030.

The program is determined to be transparent and accountable to the communities it serves. It is administered by a team of nonprofit organizations that provides a host of no-cost services to maximize participation and community benefit. These services include comprehensive technical assistance for property owners and contractors, tenant education resources and job training opportunities. An advisory council of community advocates provides input into program implementation and helps ensure the program maximizes benefits to the communities it is designed to serve. The SOMAH Program is jointly administered by the Association for Energy Affordability, Center for Sustainable Energy® and GRID Alternatives, in collaboration with the California Housing Partnership and rotating CBOs. The SOMAH Program is overseen by the California Public Utilities Commission (CPUC).

2.1   Application Pathways: Track A and Track B

The SOMAH Program is designed to accommodate participation at varying stages of a solar PV installation, ranging from initial property owner engagement and assessment of a property's solar installation capacity to projects for which the contractor has already been selected or installations that are underway or recently completed. There are two tracks to apply for a SOMAH incentive: Track A and Track B. The SOMAH PA designed the program with two incentive track choices to tailor the user experience based on

the stage of a project, whether the program participant is just starting their journey going solar, has a shovel-ready project, or has recently completed the installation. Both tracks provide fixed, capacity-based incentives for qualifying solar energy systems, using the Expected Performance Based Buydown (EPBB)[1] methodology.

Track A is designed for property owners who receive direct program marketing and outreach from the SOMAH PA and its network of CBO partners, as well as referrals and coordination from other energy efficiency programs. Track A provides Technical Assistance (TA) and Support Services for property owners. These services supply them with a well-rounded understanding of their property's energy needs and provide access to the available educational, technical and financial resources which facilitate valuable energy efficiency upgrades and the solar installation. Participants that select Track A have their incentive funding earmarked for the duration of the six-month Upfront TA period,[2] prior to a reservation request. Track A participants typically do not have an identified solar contractor and are guided through a multiple bid process to select an eligible solar contractor for their project. The SOMAH PA has previously noted instances of an owner opting to withdraw from Track A to reapply as Track B after receiving Upfront TA support services, ahead of the multiple bid process. In these situations, the SOMAH PA will continue working with owners to tailor their experience to support the successful participation of each project, regardless of application track.

Track B is designed for property owners who receive direct program marketing and outreach from an eligible contractor, project developer or similar entity. Projects in this track have already identified an eligible solar contractor who has performed, or will provide, the client assessment and design services that may include a solar site assessment, initial design, financing options review, contract review, etc. Projects that select Track B are not eligible for Upfront TA support services and may waive the requirement to participate in the multiple bid process by submitting the Multiple Bid Waiver with the Reservation Request Package. Instead of Upfront TA, Track B projects are eligible for Standard Technical Assistance (TA) and Support Services, which are further described in Section 3.4, Technical Assistance.

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[1] EPBB incentives are based on the system's capacity and design, which provide an estimate of the system's future performance.
[2] Handbook 6.0 increased the time for earmarked funding with Track A projects from three months to 180 days to allow greater, necessary time to utilize Upfront Technical Assistance and complete the multiple bid process.

For Track A and B projects, incentive funding will be reserved for 18 months based on the date the Reservation Approval Notice is issued. Figure 1 shows the application steps for Track A and Track B.

Figure 1 – Track A and Track B Application Steps

2.2 Eligibility Options: Qualification Option A — Low-Income and Qualification Option B — Disadvantaged Communities

Regardless of the application track selected, properties can qualify for the SOMAH Program in one or both ways, known as Qualification Option A and Qualification Option B. A property may be eligible for SOMAH by meeting the requirements of Option A, Option B, or both. All properties must be at least five units and meet the definition of deed-restricted, affordable housing in PU Code Section 2852(A)(3)(a)(i) and also meet Qualification Option A or B. Qualification Option A refers to properties in which at least 80% of the units are reserved for households at or below 60% of the area median income (AMI); and Qualification Option B refers to properties that are located in a disadvantaged community (DAC) as identified by CalEnviroScreen and CalEPA. Section 3.1.1, Applications and Incentive Statistics, further elaborates on each type of the qualification options for the SOMAH Program.

2.3 Program Budget

SOMAH has a program budget of up to $100 million annually, with at least 90% of the funds allocated to incentives and up to 10% allocated to the administrative budget. To ensure transparency for program stakeholders, the SOMAH PA compiles and submits a Semiannual Expense Report (SAER). The SAER tracks expenditures by category, totaling program incentives and administration expenses incurred by the SOMAH PA, CPUC

Energy Division (ED) and the investor-owned utilities (IOUs). SAERs are posted twice a year to the California Distributed Generation Statistics website in conjunction with Semiannual Progress Reports (SAPRs).

2.3.1 Program Administrative Budget

The administrative budget is shared by the SOMAH PA, CPUC ED and the IOUs. The SOMAH PA tracks the program expenses in four main categories: SOMAH Program Administration; Marketing, Education & Outreach (ME&O); Technical Assistance; and Workforce Development. Figure 2 provides a snapshot from the SAER and outlines total program administrative expenditures through June 30, 2023.

Figure 2 – Total Program Administrative Expenditures by Category

Category	
SOMAH Program Administration	$18,555,968
SOMAH Marketing, Education & Outreach (ME&O)	$11,821,456
SOMAH Workforce Development	$2,120,087
SOMAH Technical Assistance	$1,350,790
SOMAH Evaluation Expenses[3]	$852,506
Investor-owned Utility (IOU) Expenses	$4,840,920
Total	$39,541,726

More detailed expenditure information can be found at California Distributed Generation Programs.

2.3.2 Program Incentive Budget

The SOMAH PA publishes updated program incentive budget information for each IOU territory to the California Distributed Generation Statistics website on a weekly basis. Because each IOU territory's annual incentive budget varies based on their specific GHG allowance auction proceeds, the SOMAH PA maintains five individual application queues and up to five waitlist queues, when applicable. The funds for each utility

[3] Prior to January 2022, Energy Division staffing costs were included in error under "SOMAH California Public Utilities Commission (CPUC) Expenditures." CPUC Energy Division staff overseeing SOMAH implementation are not funded through the SOMAH Program. Historical amounts are amended to show the expenditures directed by CPUC Energy Division staff to be spent on evaluation activities that are funded by SOMAH Program administration funds.

territory may be released at separate times, with the collections based on each utility's Energy Resource Recovery Account (ERRA) or Energy Cost Adjustment Clause (ECAC). PG&E and PacifiCorp funding are released quarterly versus the annual lump sum release of the other territories.

A summary of funding releases for the first half of 2023 includes the following territories: PG&E, SCE and PacifiCorp. Figure 3 summarizes the committed and remaining budget for the SOMAH Program. Figure 4 summarizes the program dollars collected by fiscal year to date and identifies application totals and available program funds.

Figure 3 – Project Capacity and Budget

		Waitlist		Earmarked		Pending Reservation		Reserved		Completed		Application Totals		Total Budget ($)	Remaining Budget ($)
		Capacity (MW)	Budget ($)	Capacity (MW)	Budget ($)	Capacity (MW)	Budget ($)	Capacity (MW)	Budget ($)	Capacity (MW)	Budget ($)	Capacity (MW)	Budget ($)		
PG&E	Track A	0	0	0.019	0	0.045	90,740	0.116	295,404	0	0	0.18	386,144		
	Track B	0	0	0	0	3.643	7,956,219	23.57	47,459,371	4.8	9,660,530	32.013	65,076,120	236,470,183	171,007,919
	Total	0	0	0.019	0	3.688	8,046,959	23.686	47,754,775	4.8	9,660,530	32.193	65,462,264		
SCE	Track A	0	0	0	0	0.139	260,166	0.344	929,757	0	0	0.483	1,189,923		
	Track B	0	0	0	0	0.727	1,789,932	16.479	34,719,629	8.881	16,349,994	26.087	52,859,555	310,593,729	256,544,251
	Total	0	0	0	0	0.866	2,050,098	16.823	35,649,386	8.881	16,349,994	26.57	54,049,478		
SDG&E	Track A	0	0	1.177	3,765,090	0	0	0	0	0	0	1.177	3,765,090		
	Track B	0	0	0	0	0.29	618,640	5.113	10,606,115	2.554	5,207,299	7.957	16,432,054	80,607,112	60,409,968
	Total	0	0	1.177	3,765,090	0.29	618,640	5.113	10,606,115	2.554	5,207,299	9.134	20,197,144		
PacifiCorp	Track A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0		
	Track B	0	0	0	0	0	0	0	0	0	0	0	0	7,550,761	7,550,761
	Total	0	0	0	0	0	0	0	0	0	0	0	0		
Liberty Utilities	Track A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0		
	Track B	0	0	0	0	0	0	0.148	280,540	0	0	0.148	280,540	2,153,055	1,872,515
	Total	0	0	0	0	0	0	0.148	280,540	0	0	0.148	280,540		
TOTAL	Track A	0	0	1.196	3,765,090	0.184	350,906	0.46	1,225,161	0	0	1.84	5,341,157		
	Track B	0	0	0	0	4.66	10,364,791	45.31	93,065,655	16.235	31,217,823	66.205	134,648,269	637,374,840	497,385,414
	Total	0	0	1.196	3,765,090	4.844	10,715,697	45.77	94,290,816	16.235	31,217,823	68.045	139,989,426		

Figure 4 – Cumulative Program Budget

	2016 Budget ($)	2017 Budget ($)	2018 Budget ($)	2019 Budget ($)	Under-collections True-up ($)	2020 Budget ($)	2021 Budget ($)	2022 Budget ($)	2023 Budget ($)	Application Totals ($)	Total Budget ($)	Remaining Budget ($)
PG&E	1,740,992	4,359,110	39,330,000	33,963,300	31,620,584	34,898,605	28,448,280	41,600,106	20,509,206	65,462,264	236,470,183	171,007,919
SCE	2,733,251	4,536,250	35,213,205	36,768,272	45,542,591	37,689,090	40,208,400	66,027,600	41,875,070	54,049,478	310,593,729	256,544,251
SDG&E	0	0	9,270,000	9,104,076	11,343,785	10,294,957	9,831,156	17,308,193	13,454,945	20,197,144	80,607,112	60,409,968
PacifiCorp	422,443	961,291	1,009,512	1,150,528	0	1,177,394	1,090,332	1,400,621	338,640	0	7,550,761	7,550,761
Liberty Utilities	132,440	258,329	314,706	419,517	0	326,327	300,128	401,608	TBD	280,540	2,153,055	1,872,515
TOTAL	5,029,126	10,114,980	85,137,423	81,405,693	88,506,960	84,386,373	79,878,296	126,738,128[4]	76,117,861	139,989,426	637,374,840	497,385,414

[4] D.22-09-009 modified D.17-12-022 for the SOMAH forecast budgeting process. Each IOU can propose to set aside their proportionate share of $100 million for SOMAH, if they adequately show that the IOUs' collective revenue will exceed $100 million. The SOMAH PA releases funds based on the IOUs' set-asides, then true-up the final three months of the year once the IOUs submit their Joint Advice Letter.

3. Program Progress — Key Performance Areas

The overall SOMAH Program budget is allocated between incentive budgets and administrative budgets. The SOMAH PA administrative budget is further tracked through four categories: Program Administration, ME&O, Workforce Development and Technical Assistance. The following sections describe progress to date and notable metrics in each of the four categories.

3.1 Program Administration

The SOMAH Program opened on July 1, 2019, which included the opening of the online application database (PowerClerk) for application submissions, launching the online bidding tool and commencing the publication of program statistics through the SOMAH Incentive Budget Report and SOMAH Working Data Set on the California Distributed Generation Statistics website. The first iteration of the Semiannual Expense Report (SAER) was submitted on July 31, 2019, and the initial Semiannual Progress Report (SAPR) on January 31, 2020.

3.1.1 Applications and Incentive Statistics

SOMAH continues to have ample funding available in all five IOU territories, with an available incentive budget of more than $495 million across the program for this reporting period. No IOU territory has had a waitlist since Q4 2020 (SDG&E). Stakeholders and interested applicants should refer to the Program Funding page on CalSOMAH.org for the most up-to-date information on recently released and available funding per territory and can subscribe to the SOMAH email list for real-time notifications when additional funding is released.

There are two main ways for previously allocated funds to become available for other projects. First, a project may be canceled by the SOMAH PA due to missed deadlines or not meeting program eligibility requirements, or voluntarily withdrawn by the applicant or host customer. Second, incentive funds may become available through the course of application review. For example, applicant's adjustments to the system size after receiving consumption data from the IOU will affect the reserved incentive amount. The SOMAH PA has observed that nearly all projects will adjust their system size after receiving site consumption data during the Reservation Request Milestone (or during Upfront TA for Track A projects), therefore, modifying the requested incentive with the system size adjustment. With adjustments like this, the previously allocated funds are then returned to the pot of available funding or applied to waitlisted projects (when

applicable) through an ongoing reconciliation process by the SOMAH PA. Similarly, the program maintains a small buffer in each territory's budget to accommodate potential increases in system sizes and incentive amounts resulting from consumption data from the IOU, anticipated future load additions, solar sizing tool recommendations or other reasons.

Without an easy method for applicants to retrieve the tenant consumption data before the program application is submitted to the Reservation Request Milestone, additional steps are completed by the SOMAH PA and the applicant, which historically have resulted in a longer reservation request review timeline. In response to Phase II third-party evaluation recommendation feedback finding the attainment and timing of consumption data as a barrier, the PA coordinated and implemented application-related program and process improvements throughout 2022 and 2023. The largest push for application streamlining efforts is included in the changes approved in early 2023 through Handbook 6.0. More information on handbook changes is outlined below and in Section 4.2.2, Program Handbook.

Efforts to streamline the Reservation Request Milestone were approved through Handbook 6.0 and implemented during Q1 2023. As a result, the Reservation Request Milestone is now split into two phases, Phase I and Phase II. This phased approach reduces the initial administrative burden of submitting the Reservation Request Milestone, improves user experience with integrated project timelines and provides a quicker timeline for an application to receive historical consumption data. A new status, Reservation Request – IOU Data Results Shared, was created to mark the completion of Phase I of the Reservation Request Package. This new status indicates utility consumption was shared for the application and the applicant can begin Phase II of the Reservation Request Package. In addition, the requirement for the Cover Sheet for Multifamily Low-Income Housing Eligibility Documentation was removed. By breaking the Reservation Request Milestone into two phases and removing the Cover Sheet for Multifamily Low-Income Housing Eligibility Documentation, the PA can review applications more efficiently and provide a quicker timeline for IOU data request and data sharing. Stakeholders and interested applicants should refer to the Apply page on CalSOMAH.org for the most up-to-date information on the application process.

In addition to the improvements made to the Reservation Request Milestone, an additional offering has been formalized to streamline eligibility review and support program engagement before the official application submission to PowerClerk. In September through November 2022, the Affordability Prescreen support service had a soft roll out where the SOMAH PA sent the dedicated prescreen link to potential

applicants and property owners who inquired about eligibility for their project(s). As of December 2022, the Affordability Prescreen service is live, providing applicants with a high-level review of a property's regulatory documentation prior to submitting a formal application through the application portal, PowerClerk. The opportunity to partially prescreen properties for SOMAH eligibility seeks to alleviate the administrative burden on both applicants and application assignees and has been well received.

Figure 5 – Application Status by IOU Territory

Program	Active	Complete/ Incentive Paid	Canceled/ Withdrawn	Total
PG&E	239	38	167	444
SCE	96	45	86	227
SDG&E	32	18	41	91
Liberty Utilities	2	0	0	2
PacifiCorp	0	0	1	1
Total	372	98	295	765

N = 765

Between January and June 2023, a total of 46 applications were submitted to the SOMAH Program. This is more than double the number of new applications submitted during the first half of 2022 as well as more than what was received during the last reporting period (second half of 2022), an important contribution to reviving new application activity for the program. Of the submitted applications from January through June 2023, eight new applications were submitted in Q1 while the remaining 38 applications were submitted in Q2. Five of the new applications were Track A projects, and all were submitted in the larger IOU territories (PG&E, SCE and SDG&E). No new 2023 applications were submitted in Liberty Utilities or PacifiCorp territories, with the last Liberty Utilities application submitted in 2020 and PacifiCorp's last submitted in 2019. The two applications in Liberty territory have reached their Proof of Project Milestone while the single application in PacifiCorp was canceled with plans to re-enter the program in the future after resolving extenuating circumstances with site conditions and project planning. The SOMAH PA has focused on marketing and outreach coordination with both Liberty and PacifiCorp in the latter half of 2022 and the beginning of 2023, with increased efforts planned for the remainder of 2023. The number of new applications submitted in the previous reporting periods are as follows:

- June–December 2022: 35 new applications.
- January–June 2022: 14 new applications.
- July–December 2021: 127 new applications.

- January–June 2021: 43 new applications.
- July–December 2020: 63 new applications.
- January–June 2020: 120 new applications.

The larger spikes in new application submissions (greater than 100) aligned in reporting periods where incentive step-downs occurred, spurring activity when applicants made the effort to submit new applications at the higher incentive rate before incentive levels decreased for the following program year (July 2020 and October 2021). The absence of an application submittal spike in 2022 aligns with the deferred incentive step-down resulting from the PA's Petition for Modification of the Incentive structure, as discussed in more detail in Section 4.2, Program Design and Updates. Efforts from the SOMAH PA resulted in the elimination of the annual incentive step-down per D.23-03-007.

Both the first (Phase I and Phase II) and second (2023 triennial evaluation) third-party evaluations of SOMAH highlight the importance of pipeline management, which continues to be a key focal point for the SOMAH PA. Pipeline management efforts aim to increase and maintain program participation with continued new application submissions to meet the program's 300 MW goal. Section 3.2, Marketing, Education and Outreach includes more information about SOMAH's ME&O efforts on pipeline management and increasing program participation and diversity. The SOMAH PA also recognizes that new applications were submitted at a continued slower pace throughout 2021 and 2022, which stalled overall growth and progression toward meeting program goals. As discussed throughout this report, program modifications and increased incentives that are now available are projected to jumpstart program activity in 2023 and continue with a higher level of participation to support reaching the program's 300 MW goal. The SOMAH PA is not only focused on new application submissions, but also application retention. Given the continued number of canceled projects, the SOMAH PA is focused on engaging recoverable applications that have previously canceled and using additional supportive measures like the Affordability Prescreen and suite of Technical Assistance and Support Services to ensure quality leads with viable projects are submitted for program applications in PowerClerk.

Historically, the program was required to step down incentive rates annually on July 1 of each year. In 2021, the July 1 incentive step-down was postponed due to a pending National Renewable Energy Laboratory (NREL) report used for the incentive step-down analysis. The CPUC approved the SOMAH PA's 120-day extension request, which provided the PA enough time to complete the analysis and stakeholder outreach prior to the Step 3 incentive rate deployed on October 30, 2021. Since the 2021 step-down, new application submissions have significantly stalled until recent program changes in

2023. With respect to the 2022 July 1 step-down cycle, the SOMAH PA was granted an extension to pause the incentive step-down until a Decision on the Petition for Modification was issued by the CPUC.[5] As a result of the extension for incentive step-down for 2022, the previous pattern of increased application submissions prior to July 1 did not occur in 2022. Per D.23-03-007, the annual incentive step-down is no longer part the program. See Section 4.2, Program Design and Updates for more information on these program changes.

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[5] Decision (D.) 23-03-007 amended D.17-12-022 incentive levels to raise the highest incentive level possible to $3.50/watt for tenant areas and $1.19/watt for common areas and ended the annual incentive step-down.

Figure 6 – Cumulative Applications Received
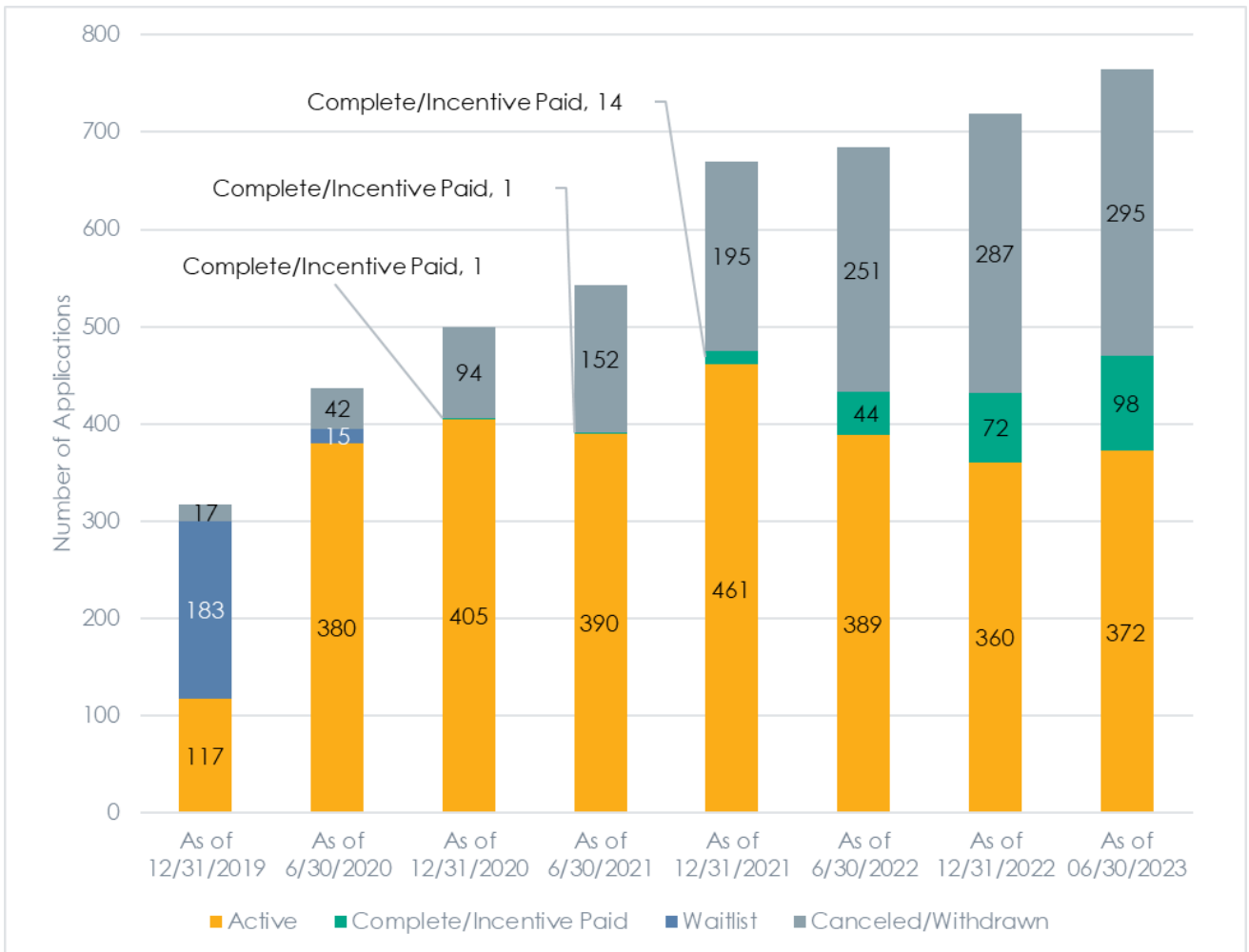
Since implementing the Affordability Prescreen service toward the end of 2022, none of the Affordability Prescreen service entries that have submitted formal applications have been canceled or withdrawn. The Affordability Prescreen service enables applicants to confidently submit applications that fulfill SOMAH eligibility requirements and adequately prepares them with potential additional documentation necessary to submit successful applications, such as the income affidavit or requests for further documentation supporting the original regulatory agreement. Utilizing the Affordability Prescreen service, participants and interested parties are provided the opportunity to engage with the SOMAH PA outside of a PowerClerk application submission. Participants create a dialogue with the SOMAH PA where questions that may arise during initial application review are answered and rapport is built prior to application submission. With this formalized offering, prescreen efforts are being tracked to record

projects with prescreens that turn into active application submissions and/or prescreened projects where eligibility was confirmed that may be a good fit for further marketing, education and outreach efforts. The volume of prescreens and throughput to new application submissions is as follows.

- September-December 2022 – 34 prescreens processed:
    - 25 eligible, 3 eligible with income affidavit, 6 ineligible.
- January-June 2023 – 40 prescreens processed:
    - 18 eligible, 8 eligible with income affidavit, 14 ineligible.
- 19% of processed prescreens resulting in eligible/eligible with income affidavit have submitted applications.

Since the rollout of the formalized prescreen offering, no applications have been canceled for eligibility issues that could have been identified through the less burdensome Affordability Prescreen service. The Affordability Prescreen service has lessened administrative burdens by identifying 20 ineligible properties that would have been canceled due to eligibility issues had they submitted a formal application in PowerClerk.

In previous years, the SOMAH PA has extended considerable flexibility and support to help stakeholders and participants navigate new environments caused by COVID-19, where participants were facing ongoing challenges. For example, applicants had cited industry impacts, such as supply chain shortages for steel and other PV system equipment, and shifting financial priorities based on the real-time needs of property owners and tenants. Many of these projects were still viable and/or interested in the SOMAH Program and the SOMAH PA was able to accommodate extension requests within reason. Going into 2023, the ramifications of COVID-19 were still felt with applicants continuing to cite supply chain shortages, however, most extension requests have switched focus to redesigning or refinancing systems, with pandemic impacts continuing to lessen.

From continued conversations with contractors and property owners through focus groups, survey responses and evaluation efforts, it is evident that contractors are continuing to prioritize their portfolios of SOMAH projects and are eager to move forward with completing installations and interconnections to finalize their projects. Applicants and property owners have also shared valuable cancellation feedback for the projects that have chosen not to or are unable to move forward with the SOMAH Program after initial application submission. The SOMAH PA solicits additional details from all canceled and withdrawn applications to best support program data for

tracking and reporting efforts. This feedback has helped the SOMAH PA better address barriers to program participation, which have been supported through offerings like the previous Energy Efficiency Compliance Milestone (EECM) Postponement option (ended Sept. 13, 2021); the Progress Payment Pathway, included in Section 3.1.2, Program Payments; the option (Handbook 5.0) to submit select milestones in tandem; and removing application deposits for projects located in disadvantaged communities or on tribal lands, as well as streamlining adjustments to the Reservation Request Milestone and adjusted Upfront TA and EECM submissions timelines (Handbook 6.0). The SOMAH PA is also dedicated to working with the IOUs to liaise with interconnection and SOMAH application efforts and rollout of virtual net energy metering (VNEM) billing credits to tenant and property owners. The PA is collecting data from the IOUs on VNEM billing credits and bill setup. The PA is committed to supporting SOMAH projects in ensuring timely delivery of SOMAH bill credits for completed projects and has structured ongoing check-ins with the IOUs to support and monitor this effort.

The SOMAH PA maintains consistent communication with SOMAH contractors with active applications to best understand their project timelines and any barriers they may be facing. This interface with contractors and program participants also helps to support forecasting efforts for program activities as well as tailored project assistance for unique application situations. Over the past year, as application activity picked up for 18-month reservation expiration due dates, a related increase in extension requests to the Incentive Claim Package deadline was also observed. While Q1 2023 extension request activity remained high, the SOMAH PA saw a slowly declining number of requests in Q2, leveling out toward the end of the quarter. The number of Incentive Claim Package deadline extensions submitted in the previous reporting periods are as follows:

- January 2023–June 2023: 242 extension requests.
- July 2022–December 2022: 171 extension requests processed.
- January 2022–June 2022: 98 extension requests processed.
- July 2021–December 2021: 24 extension requests processed.

Since January 1, 2023, the SOMAH PA has processed an additional 242 requests for Incentive Claim Package deadline extensions. Each extension request is reviewed and addressed on a case-by-case basis. From program start to date, the average length of an Incentive Claim Package deadline extension request is 172 days. The maximum term per extension request is 180 days, and most of the extension requests are for the full 180 days. Similar to previous reporting periods, the large majority of extension requests have cited one of three reasons: 1) circumstances beyond the control of the reservation

holder that prevented the system from being installed as described in the Reservation Request Package, 2) problems in the permitting process that caused a delay or 3) difficulties related to supply chain issues (such as steel for carport installations), permitting delays and interconnection challenges for unique and complex projects, as well as unforeseen engineering challenges. Despite these extensions, the program continues to observe a steady output of completed projects with 22 completed and paid projects from January through June 2023.

The SOMAH PA utilizes application milestone deadlines in conjunction with construction timelines in tracking efforts to assess progress of the application queue and broader program planning efforts, like project completion estimates. Of the data collected at the first application step, the Reservation Request Milestone, the applicant is required to enter the project's projected construction start date or actual construction start date. This information helps identify where the project is in the life cycle of installation at the time of the SOMAH application. While the construction and interconnection processes are bifurcated from the SOMAH incentive application, the timing of installation and interconnection directly relate to the project's ability to submit for the incentive claim and progress payment (optional). After receiving reservation approval, at the start of each milestone, Energy Efficiency Compliance, Proof of Project and Incentive Claim, applicants are prompted to report if construction has started, or update the projected construction start date, if not. Additionally, the recently updated extension request form now includes mandatory fields for applicants to provide an updated actual or projected construction start date to ensure quality information and the most up-to-date data capture. For delayed projects, the new extension request form fields provide an additional point of insight in addition to the milestone updates. The additional construction start date validation provided via the updated extension request form adds accuracy to the data represented in Figure 7. Figure 7 shows the construction timeline information reported in applications through Q2 2023.

Figure 7 – Construction Timeline Insights

Date	Construction Commenced	Projected Construction Start Date
2020	32	4
2021	75	78
Q1 2022	14	9
Q2 2022	15	7
Q3 2022	12	2
Q4 2022	8	5
Q1 2023	7	33
Q2 2023	0	15
Q3 2023	0	59
Q4 2023	0	79
Q1 2024	0	2

Impacts on construction plans and project timelines are still prevalent across active projects and will likely continue to delay project completion timelines for the immediate future. The number of projects reported to have started construction decreased by 74% between the end of 2021 and July 1, 2023. Application data from earlier in the program, Year 1 and into Year 2, reported that most projects approximated their construction to begin in 2021. However, with the dramatic shifts across the world in 2020 and continuing impacts into 2023, many of these projects have adjusted their timelines to accommodate delays due to the evolving state of the world and the solar industry. Construction timeline projections have continued to shift through 2023 as projects progress and are better able to forecast construction timelines with more certainty. The SOMAH PA anticipates 138 projects to begin construction in Q3 and Q4 2023 and predicts estimated construction timelines will continue to fluctuate. As previously mentioned, the SOMAH PA receives additional information on project timelines and delays with extension requests for projects that are unable to meet their incentive claim deadline due to circumstances beyond their control. Despite these challenges, the SOMAH PA aims to support the pipeline of SOMAH projects that have continued to persevere through uncertainty and continued obstacles. Updated construction start dates will continue to be reported via the updated extension request form (effective as of March 1, 2023) as well as by projects progress to future milestones through their 18-

month reservation period, as applicants are prompted to update their projected and executed construction start dates. These timeline updates will continue to be made available in subsequent progress reports. The SOMAH PA will continue to receive additional information on project timelines and delays with extension requests for projects that are unable to meet their incentive claim deadline due to circumstances beyond their control.

Since the implementation of the new extension request form, 115 new extension requests have been submitted containing the construction timeline. The additional data collected in the new mandatory fields shows more projects claiming actual construction start dates over projected construction start dates. In the projects that have submitted multiple extension requests, findings show the later extension requests (most recently submitted) are more likely to have already begun construction instead of providing a projected construction start date. The new extension request form allows the SOMAH PA to gain more visibility and transparency regarding construction timelines, progression in the project and necessity for extension requests.

Figure 8 – Milestones by IOU Territory

Program	Upfront Technical Assistance	Reservation Request	Energy Efficiency Milestone	Proof of Project Milestone	Progress Payment Pathway	Incentive Claim	Complete/ Incentive Paid
PG&E	5	39	23	142	29	3	36
SCE	0	7	6	65	14	5	44
SDG&E	2	1	2	16	9	2	18
Liberty Utilities	0	0	0	2	0	0	0
PacifiCorp	0	0	0	0	0	0	0
Total	7	47	31	225	52	10	98

N = 470

Figure 9 – Percentage of Active Applications by Milestone and Territory
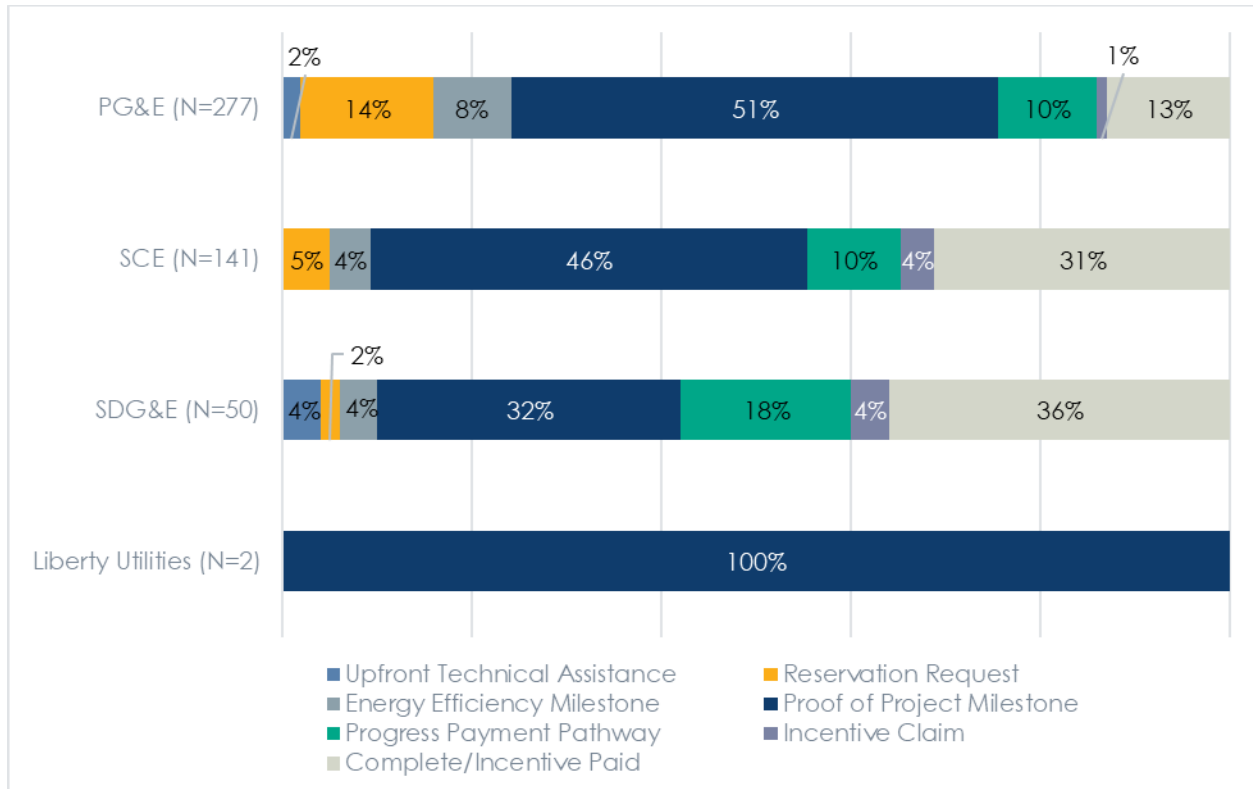
N = 470

PacifiCorp is not represented in Figure 9 because no projects are active in this territory at the time of reporting.

The slowdown of new application submissions from 2022 into 2023 was balanced by a consistent uptick in project completion with an increase in both the optional progress payment and project close-out activity through incentive claims. The project progress from 2022 into 2023 has been significant for program goals with completed projects and useful for program data collection at the later Proof of Project and Incentive Claim Milestones. This program progress also aligns with application progression trends, as 82% of all active and completed projects have reached or surpassed the Proof of Project Milestone (PPM). PPM indicates contract execution and construction will start shortly after if they have not already broken ground by PPM submission. This figure has increased notably from the close of 2021 when only 62% of projects had reached or surpassed PPM and closely resembles the close of 2022, when 86% of projects had reached PPM. This timing and increased activity for completed projects is particularly helpful to support the triennial third-party evaluation that was published in June 2023.

With more completed project data and activities across all milestones of the program, the SOMAH PA was able to support the evaluation work with more robust and vetted program data.

Of the new application activity in 2023, five Track A applications have been submitted to the program. Of these applications, one project has received Track A approval, three are in suspended status awaiting further documentation and one is undergoing review for program eligibility. Of the Track A projects submitted in 2022, one is currently in Upfront Technical Assistance Approved status while the other has entered the Reservation Request Phase. The lengthier review process for Track A projects can be attributed to the additional support that property owners require during the SOMAH application process as they familiarize themselves with the program requirements, platforms, etc. SOMAH's technical assistance and affordable housing specialists ensure property owners receive guidance through every part of the Track A application process. More information can be found in Section 3.4, Technical Assistance.

Figure 10 – Applications by Incentive Track

Assigned Incentive Track	Active	Complete/ Incentive Paid	Canceled/ Withdrawn	Total
Track A	12	0	38	50
Track B	360	98	257	715

N = 765

Along with the incentive track type (Track A or Track B) differentiating applications, the eligibility pathway for how the project qualifies for SOMAH is another key distinction for an application. Projects must satisfy one or both of the following options.

- Qualification Option A: 80% of property residents have incomes at or below 60% of the area median income as determined by the Department of Housing and Community Development.
- Qualification Option B: The property is located in a disadvantaged community (DAC) as identified by the California Environmental Protection Agency.
- Both: The property meets the requirement of 80% of property residents having incomes at or below 60% of the area median income and is located in a DAC.

Figure 11 shows the breakdown between application track and eligibility pathways during this period of performance.

Figure 11 – Property Eligibility by Incentive Track[6]
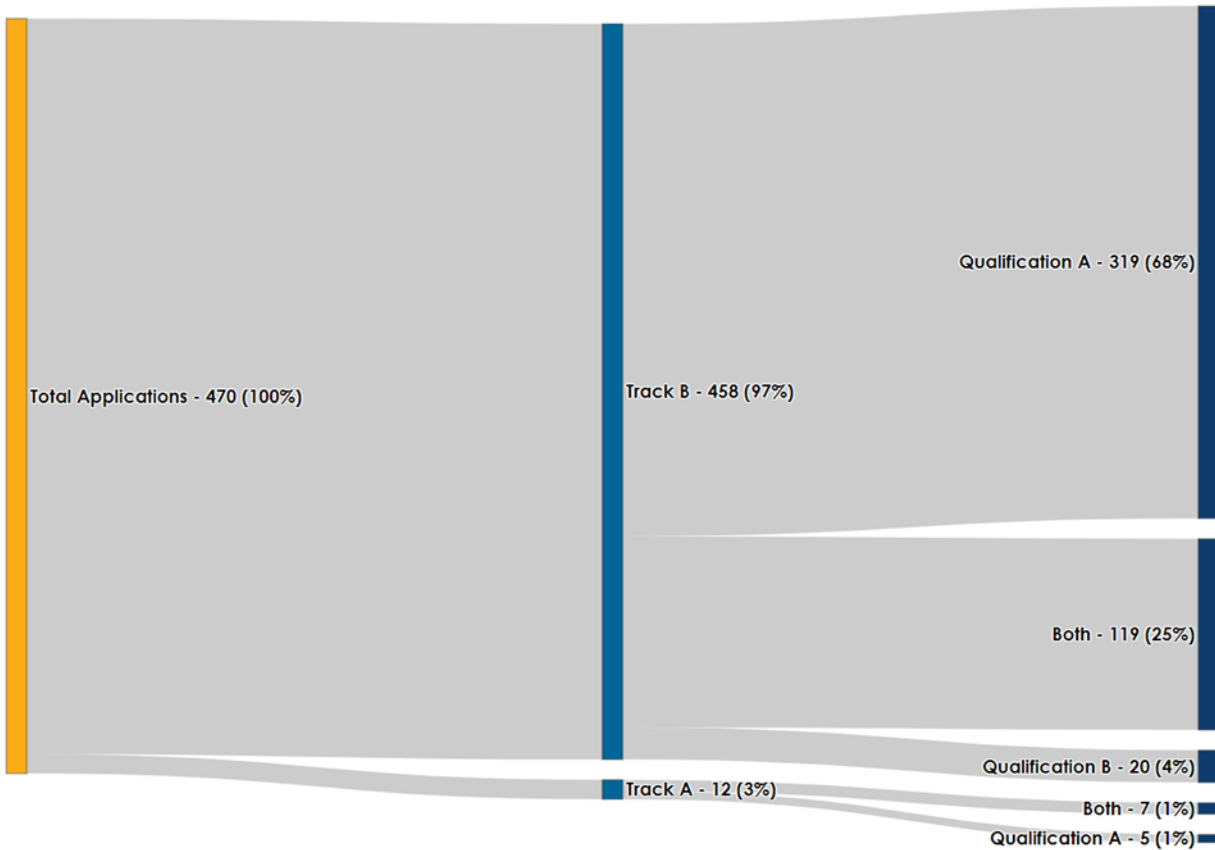
Of the 470 applications[7] received, approximately 69% qualified for the program through Qualification Option A, approximately 4% qualified for the program through Qualification Option B and approximately 27% qualified for the program through both options. In the first two years of the program, participation of DAC projects fluctuated between 25-30% of SOMAH projects. At the close of 2022, the percentage of applications located in DACs was 30% and has since increased slightly, with 31% of projects located in DACs at the close of the 2023 reporting period. At the end of 2020,

[6] Calculations used for this visual are subject to rounding and total percentages may not equal 100%.
[7] Active applications are those that have not been canceled or withdrawn. This figure includes applications pending reservation approval that have not had their project information fully finalized yet.

the SOMAH PA provided the Commissioner's Office a memo[8] with potential options for increasing participation by eligible properties located in DACs and conducted stakeholder outreach in 2021 to determine the best path forward. Combined with ME&O strategy and programmatic efforts to prioritize projects located in DACs, the SOMAH PA also included DAC benchmark language in the SOMAH Program Handbook 5.0 that was approved by the CPUC in late April 2022. "In an effort to prioritize and increase participation in DACs, the SOMAH PA has set a programmatic benchmark or target of 40% of all participating SOMAH projects to be located in DACs by 2026. The SOMAH PA acknowledges that this will take the support of program partners and stakeholders and may require new strategies and potential program changes to ensure the program can meet this target," Handbook 5.0, Section 1.1.3, SOMAH Program Goals.

Figure 12 further breaks down the property eligibility statuses by count and percentage to highlight the number of DAC-qualifying properties.[9] The SOMAH PA continues to consider the different ways in which the program can increase participation for DAC-qualifying properties and will continue ongoing work on this effort to meet the benchmark and support overall program goals. Two impactful updates that support increasing DAC project participation in SOMAH are: 1) the Handbook 5.0 update to uphold eligibility for otherwise eligible properties within both the current and immediately previous version of the CalEnviroScreen (CES) and 2) the inclusion of federally recognized tribal lands as part of the CES DAC designation. Both updates support additional potentially eligible properties to qualify for SOMAH through their DAC status for property eligibility. For more information on how the SOMAH PA is continuing efforts to eliminate barriers and increase participation, see Section 4.2, Program Design and Updates that discusses the next evolution of the program handbook, as well as the Incentives PFM.

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[8] The January 2021 Semiannual Progress Report includes a summary of the 2020 CPUC DAC Participation Memo.

[9] DACs are not distributed evenly across the IOU territories. The percentage of census tracts that are DACs in each IOU territory varies, along with the overlap of eligible properties in a DAC by each IOU territory. The SOMAH PA does not know of any properties located in DACs in Liberty Utilities or PacifiCorp territories.

SOMAH

Figure 12 – Property Eligibility by Reservation Status

Property Eligibility	Pending Reservation Approval	Reservation Approval Received	Complete/ Incentive Paid	Canceled/ Withdrawn
Option A - 80% of property residents have incomes at or below 60% of the area median income as determined by the Department of Housing and Community Development.	41	220	63	207
Both A and B	6	88	32	67
Option B - The property is located in a disadvantaged community as identified by the California Environmental Protection Agency.	2	15	3	20
Data not reported.	0	0	0	1

N = 765

Figure 13 – Overall Property Eligibility
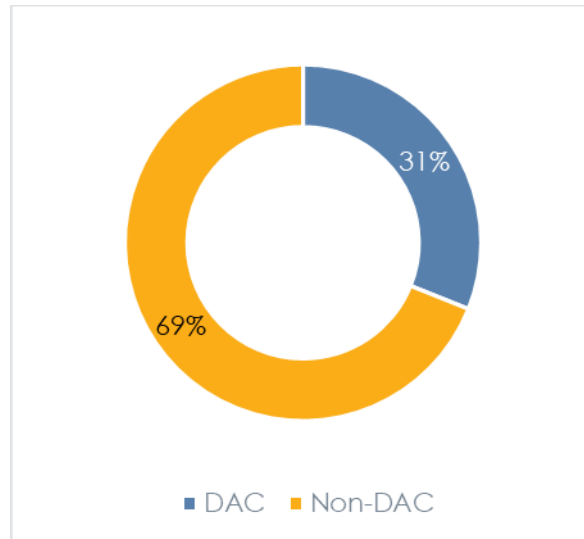
N = 470

Figure 14 – Property Eligibility by Reservation Status
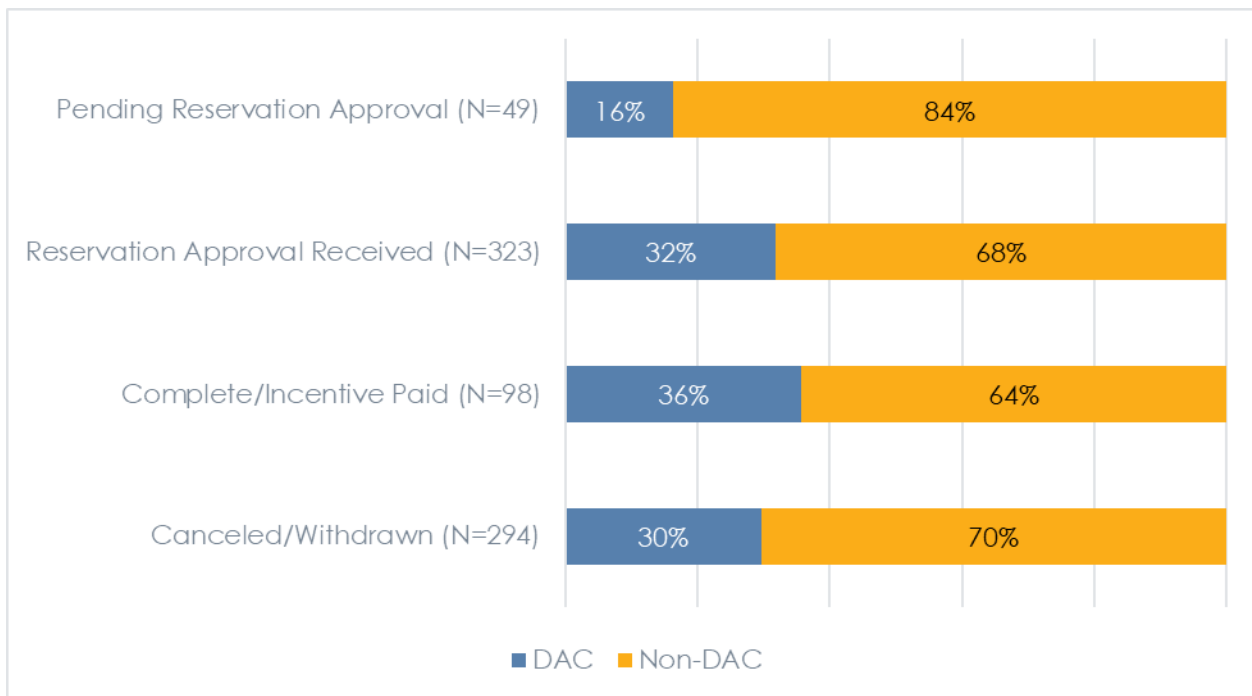
N = 764

Reservation request is the application entry point for Track B projects, the majority of SOMAH's application pipeline, and the second application step for Track A projects. The Reservation Request Package is a robust and distinguishable milestone for all projects to complete. Split into Phase I and Phase II, the Reservation Request Package includes up to eight required documents and an application deposit (for nonpriority groups) before achieving reservation approval in Phase II of the Reservation Request Milestone. The three main components of the Reservation Request Milestone are: 1) the eligibility verification through review of the associated eligibility documentation, 2) IOU data request for consumption data and system sizing and 3) the application deposit[10] before issuing a reservation approval. This approval is an important achievement for projects and for programmatic data and milestone tracking.

Application review timelines for newly submitted applications have decreased throughout 2022 and into the first half of 2023. The review time for the Reservation Request (RR) Milestone, from time of RR submittal to time of RR approval, averaged 92 days for applications submitted in 2022. This timeline decreased significantly to an average of 63 days for projects submitted in Q1 and Q2 2023. The SOMAH PA anticipates further efficiency increases in the average RR review timelines due to the following factors: the future phased RR milestone structure, cleaner initial application submittals due to the Affordability Prescreen service and increased applicant knowledge of the program, the application deposit waiver that eliminates a 30-day average invoice cycle[11] and smoother historical usage data request processes.

The sustained efforts and focus on application review progress during this reporting period increased the number of reservation approvals[12] from 397 at the end of 2022 to 421 at the close of Q2 2023. There are 38 new applications that are pending reservation approval and are very close to completing the Reservation Request Milestone. Twenty-four applications are currently processing data requests, in data result shared status, or pending application deposit receipt before receiving final reservation approval. The remaining 14 applications are in submitted, suspended and review status. For applications that have passed the Reservation Request Milestone, the majority, 385

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[10] Handbook 6.0 includes proposed language to waive the application deposit for all projects unless a waitlist is established.

[11] Application deposit waiver for priority groups (DAC and tribal projects) is included in Handbook 5.0.

[12] Reservation approvals for this reference include completed/incentive paid projects.

projects, have reached Proof of Project Milestone or have had their Proof of Milestone approved.

Not only is reservation approval a significant achievement for an application, but it also signals an important handoff of information between the SOMAH PA and IOUs. Based on mandates in the CPUC's D.17-12-022, the SOMAH PA sends monthly reports to the IOUs for Energy Savings Assistance Program (ESA) referrals of projects with reservation approval for each month, as well as a rolling list of all projects with approved reservations. These reports highlight an important part of data exchange between the SOMAH PA and IOUs, which encourages program benefits with "warm" ESA leads and valuable pipeline information for future interconnections from reservation approvals. The outcome of the monthly reported ESA leads is collected annually in Q4, with returned data from the IOUs based on completed projects that have received SOMAH incentives. The first IOU data collection was completed in Q4 2021 with information on whether the SOMAH project leads materialized into an ESA Common Area Measures (CAM) or in-unit referrals. With the limited number of completed projects at the time of the request in 2021, the available data was limited but increased significantly last year with the 2022 Q4 ESA data request.

With the increase in completed projects to request information for, the SOMAH PA was able to collect reportable feedback from the annual ESA referral data request (Q4) from the IOUs with completed SOMAH projects. The annual ESA referral data request is a rolling list of completed projects. The IOU reporting will capture ongoing efforts of ESA CAM and in-unit engagement for SOMAH projects. The summary below shows the available information on the number of projects shared in the PA's annual 2022 Q4 request to the IOUs and the level of engagement across each territory. While this information was originally reported in the January 2023 SAPR, it remains the most current information for this reporting period as the IOU data collection is completed annually in Q4 and won't be refreshed for 2023 until later this year. It will be included in the January 2024 semiannual report.

SCE:
- 32 projects referred, equating to 3,027 tenant units.
- 6 projects enrolled in ESA CAM.
- 284 units enrolled in ESA in-unit.
- Measures installed include HVAC, smart thermostats, re-lamping, indoor fixtures, outdoor fixtures, refrigerators, weatherization.

PG&E:
- 17 projects referred, equating to 1,231 tenant units.

- 0 projects enrolled in ESA CAM.
- 446 units enrolled in ESA in-unit.
- Measures installed include weatherization and AC tune-up.

SDG&E:
- 10 projects referred, equating to 818 tenant units.
- 0 projects enrolled in ESA CAM.
- 23 units enrolled in ESA in-unit.
- Measures installed include LED bulb replacements, re-lamping, smart strips, faucet aerators, in-home energy education and outreach & assessment.

Information on this referral collection and data reporting will continue to be shared as additional projects are completed and data is collected for reporting and analysis on an annual basis.

Figure 15 – System Ownership Type

■ Solar Service Agreement   ■ Host Customer Owned
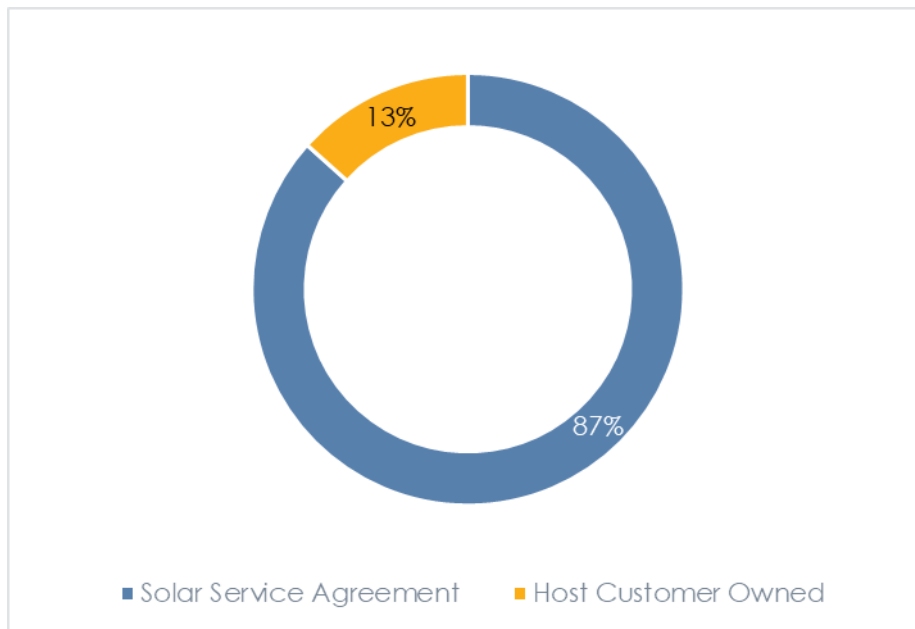
N = 434

As Figure 15 shows, the majority of SOMAH projects, 87%, are third-party owned (TPO) systems. The largest share of TPO systems are solar service agreements (SSAs), similar to what some contractors term power purchase agreements (PPAs). With the Handbook

5.0, the SOMAH PA began differentiating contract types between SSAs and PPAs to capture the most accurate information based on the solar PV contract. Feedback shared by past third-party program evaluations, and by both property owners and contractors, suggests the third-party ownership option is more financially feasible for property owners given the minimal upfront costs associated with the third-party ownership arrangement. Additionally, some contractor companies have preferred system financing/ownership options for their installations, which is a likely influence on the system ownership breakdown for the current application queue. The SOMAH PA has continued to engage with interested parties to support additional PPA providers approved for the program. Additional information on PPA providers can be found in Section 3.2.3 Contractors.

Figure 16 – System Ownership Type by Property Eligibility
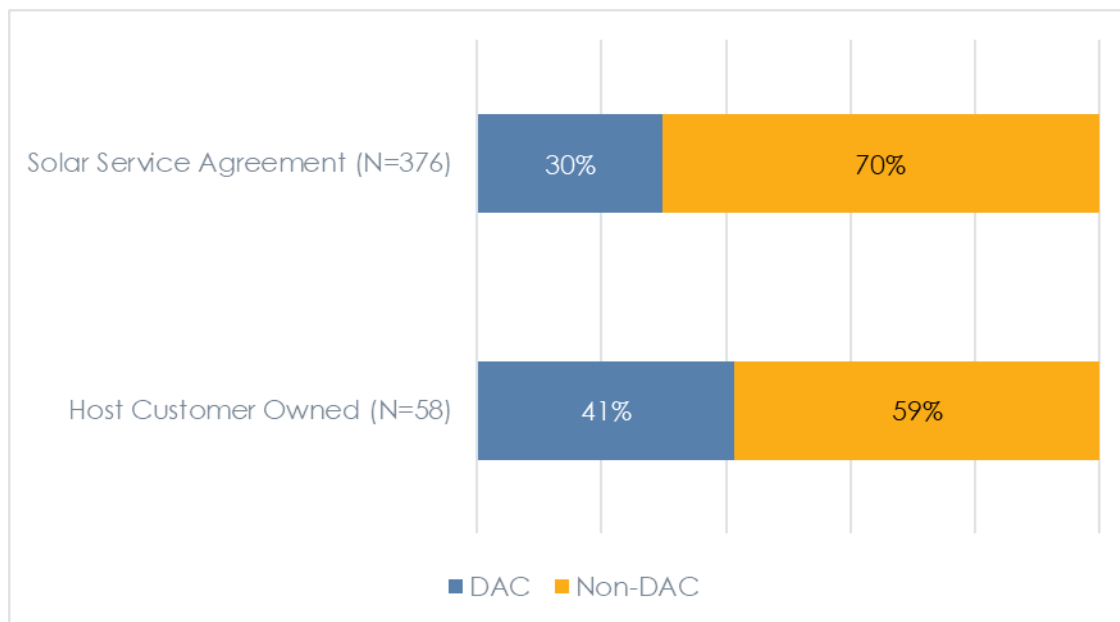
N = 434

Figure 16 further segments system ownership types by DAC and non-DAC properties. The split of DAC and non-DAC projects shows a larger percentage of host customer-owned systems located in DACs as compared to TPO systems. Although different, the percentage of systems located in DACs, for both host customer-owned systems and SSAs, ranges from 30-41% by ownership type.

Completing application milestones is an important part of progressing applications and collection of project data for the program. In the seventh reporting period for SOMAH, the program has applications in all stages of the application, construction and completion processes representing each of the program's four application milestones (plus the fifth optional milestone, Progress Payment Pathway). The Reservation Request and Energy Efficiency Compliance Milestones are important steps in determining project eligibility and the eligible system size, as they consider consumption history and available energy efficiency upgrades. Proof of Project and Incentive Claim Milestones provide information on the contracted and executed system as well as proof of compliance with the program's job training and tenant education requirements.

Figure 17 – Application Reservation Status by Incentive Track[13]
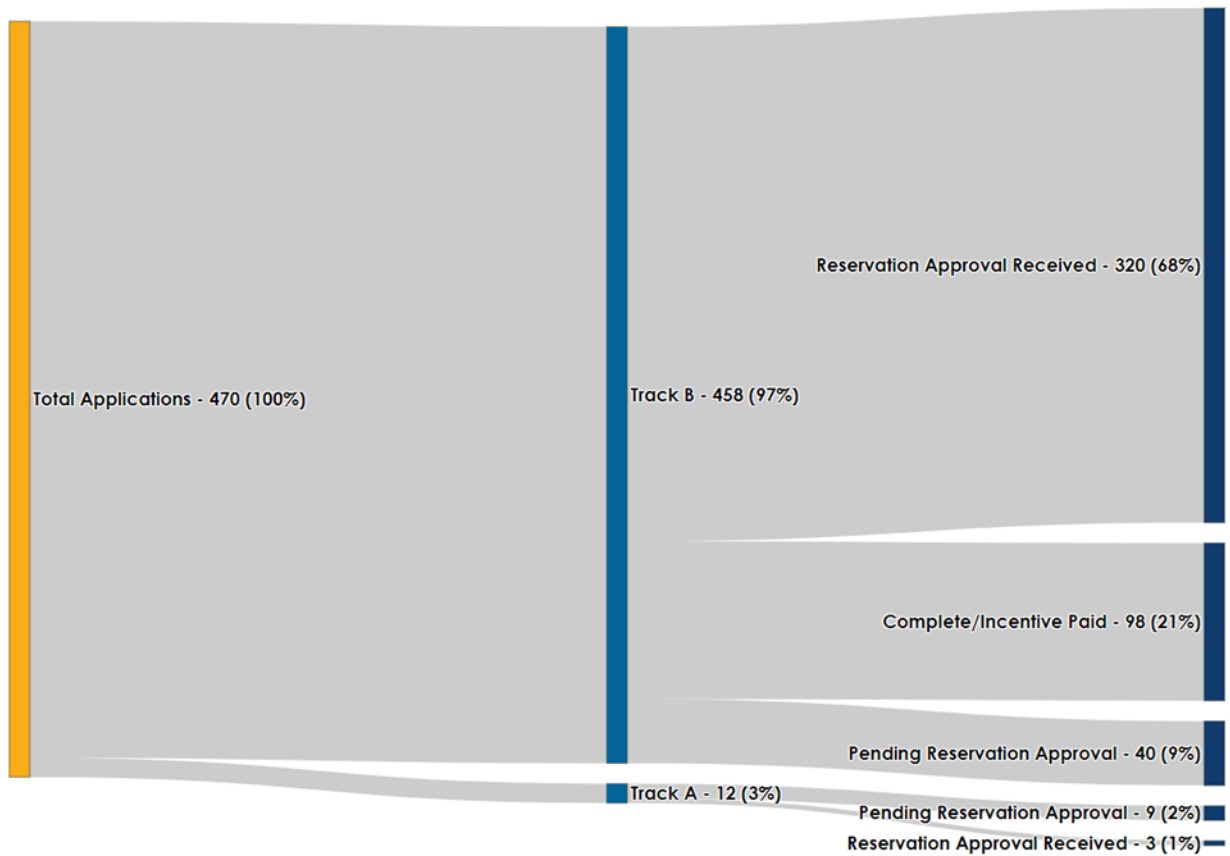
[13] Calculations used for this visual are subject to rounding and total percentage may not equal 100%.

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See Appendix A for a full list of application statuses and descriptions.

The goal for the Energy Efficiency Compliance Milestone (EECM) is to assess the project site for energy efficiency opportunities, focusing on reducing site consumption before producing solar energy at the property. There are two pathways to fulfill the EECM requirement: Pathway 1 – energy efficiency whole-building walk-through audit and Pathway 2 – recent or active participation in an approved whole-building energy upgrade program, documentation of a recent California Tax Credit Allocation Committee (TCAC) rehabilitation or documentation that the property was completely constructed under a recent version of Title 24.

Pathway 1, whole-building walk-through audit, has posed some challenges during the COVID-19 health crisis for SOMAH participants. To accommodate these challenges with completing program requirements, the SOMAH PA introduced the EECM Postponement option in early July 2020 as a temporary program response, allowing projects that have received reservation approval to postpone submitting their EECM documentation up to submission of the Incentive Claim Milestone. At the Q2 2021 Public Forum, the SOMAH PA announced an end to the EECM Postponement option effective September 13, 2021, and continued to honor projects that were approved for EECM Postponement with no impacts to those project timelines. As projects continue to progress to latter milestone statuses, and ultimately project completion, the postponed EECM documentation is submitted to and reconciled by the SOMAH PA.

As more projects progress to the later milestones, after EECM and ultimately completion, the SOMAH PA is continuing to receive information about subcontractors being utilized at SOMAH projects. Over the past 12 months, the PA has witnessed a significant increase in reporting of subcontractor utilization overall. As highlighted in the triennial evaluation, subcontractors are increasing overall contractor diversity despite a lack of diversity of prime contractors because the subcontractors being utilized are often diverse businesses.[14] Additionally, the SOMAH PA conducted subcontractor interviews in Q3 and Q4 2022 that provided further insights and information on the relationships between primary and subcontractors as well as their roles and overall engagement in the program. More information on the interviews can be found in Section 3.2.2, Monitoring, Evaluation and Research. The subcontractor information

[14] Diverse businesses are small (i.e., < 25 employees) or underrepresented owned businesses.

collected from the application process also helps to provide further insight into the diversity of contractors engaging in and benefiting from the SOMAH Program. Currently, thirteen contractors are utilizing subcontractors on 32 different projects. In total, there are 16 separate subcontracting companies working in support of completing SOMAH projects.

In this reporting period, eight contractors have progressed a portion of their application portfolios to the Proof of Project Milestone (PPM), Progress Payment Pathway, Incentive Claim Milestone and project completion. The first completed project, PGE-SOMAH-101, finalized its incentive claim and final payment in Q4 2020. Throughout 2021, 13 projects in SCE, PG&E and SDG&E territories finalized their incentive claim and received their final incentive payments. By the close of 2022, an additional 57 projects were completed. In Q1 and Q2 2023, 21 projects have reached Incentive Claim and have received their incentive check, totaling 98 completed projects throughout the program's lifetime.

At the close of Q2 2023, nine projects are currently working through the Incentive Claim Milestone. Of those incentive claim projects, four projects are in the inspection phase, three projects are pending payment, one is in resubmitted status and one is in suspended status awaiting corrections. With the implementation of increased incentives, the SOMAH PA anticipates an increase in projects moving toward incentive payment in 2023. Applications that were retroactively eligible for increased incentives experienced an average 17% incentive increase. Host customers of active applications that are eligible for the increased incentive levels were provided with a link to VersaForm – Request for 2023 Revised Incentive. Submission of the VersaForm does not guarantee the increased incentive levels as applicants must provide required supporting documentation during the next applicant milestone. As of June 30, 2023, 91 VersaForms were submitted by host customers and all were conditionally approved by the SOMAH PA, pending forthcoming submissions of supporting documentation.

Further information on completed projects will be available in future reports as applications continue to progress through their 18-month reservations and receive their incentive payment. The SOMAH PA is encouraged by the project completion movement that has occurred throughout 2022 and expects a continued high rate of project completion and incentive payment throughout 2023 as well.

Figure 18 – Average System Size (kW) by Reservation Status
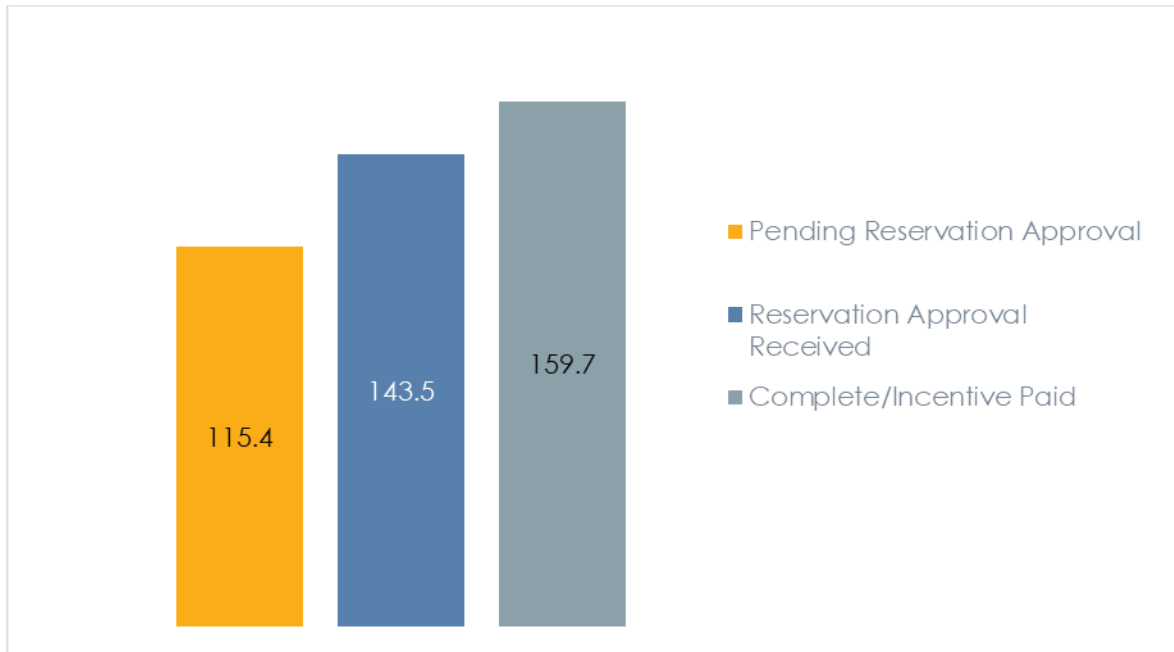
N = 463

Validating each project's system size with aggregated annual electrical consumption history from IOU data requests is a key step of the reservation request, prior to approval. The historic electrical consumption directly influences the system's final sizing. Figures 18, 19 and 20 outline system size statistics for the average and largest projects across the IOU territories.

Figure 19 – Average System Size (kW) by IOU Territory and Reservation Status

Program	Pending Reservation Approval	Reservation Approval Received	Complete/ Incentive Paid	Canceled/ Withdrawn
PG&E	99.7	120.8	123.4	190.5
SCE	216.7	183.3	196.8	219.8
SDG&E	290.2	176.3	141.9	165.7
Liberty Utilities	0.0	74.2	0.0	0.0
PacifiCorp	0.0	0.0	0.0	111.6

N = 721

Figure 20 – Distribution of System Sizes (kW)
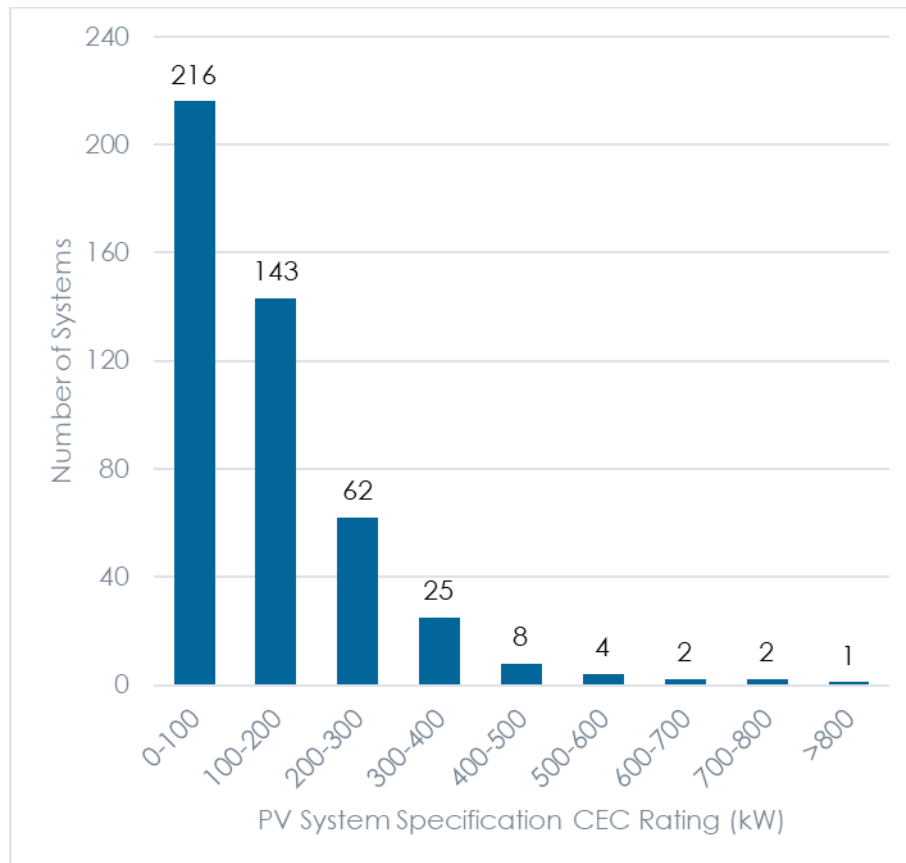
N = 463

From the projects with approved reservations, application data from PowerClerk shows that projects reduce their system size by an average of 42.9% from initial submission. The trend to reduce the system size after IOU consumption data sharing (post-reservation submittal and pre-reservation approval) continues. However, application data from PowerClerk also shows that newer projects (submitted later in 2021-2023) are trending with smaller adjustments overall. Of the five applications that reached reservation approval in Q1-Q2 2023, only one project adjusted their system size during the Reservation Request Phase, while the other four maintained their originally submitted system size through reservation approval. The SOMAH PA attributes this shift to contractors' evolving experience with the program and availability to assess the project sites and solar potential prior to submitting the incentive application. While using standard measurements assumptions like kW/square foot can be a helpful starting point, this trend shows that contractors are using all resources available and taking a

real-world approach to system sizing as projects are developed and compared with site consumption history by the SOMAH PA.

Figure 21 – Progress to 300 MW

Active and complete applications make up **22%** of total program MW goals

66.9 MWs

Overall MWs
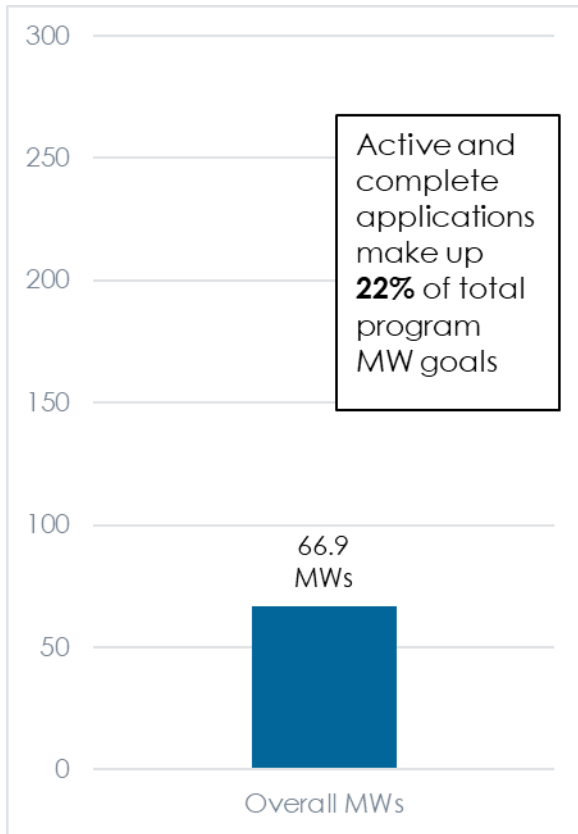
N = 463

Figure 22 – Percent of Program MW by Reservation Type

7%

23%

69%

- Pending Reservation Approval
- Reservation Approval Received
- Complete/Incentive Paid
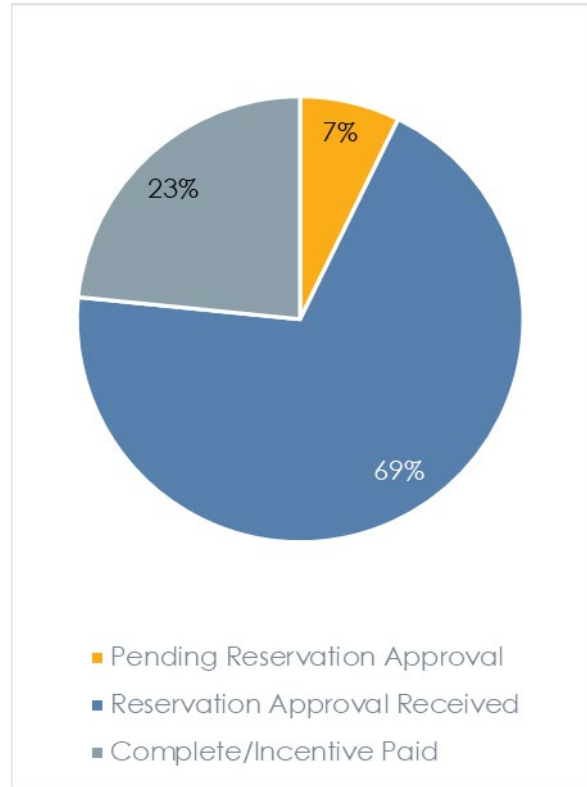
N = 463

Additionally, the average system cost is $4.00/watt CEC-AC [15] with a total expected aggregated annual output of 107,003,378 kWh[16] for the active SOMAH projects in queue. Completed projects increased from 20% of the queue at the end of 2022 to 23% at the close of Q2 2023. The percentage of pending reservation approval projects increased from 6% at the end of 2022 to 7.1% at the close of this reporting period. This increase is attributed to the uptick in volume of new applications received throughout Q1 and Q2 2023.

Figures 23 and 24 show the geographic distribution of property locations for applications received to date and completed projects to date. For additional detail, a closer view is provided for areas of higher density project regions in the San Francisco Bay Area, San Diego and the greater Los Angeles area.

[15] Project costs are not considered verified until review of the installation contract and associated costs at the Proof of Project Milestone. The numbers used in this average are estimates reported for the projects currently in queue and are likely to fluctuate in future reporting periods.
[16] Expected aggregated annual output is an estimate based off the PV equipment and system configuration specifications currently listed for all active applications in PowerClerk. This figure is subject to change based on updated system designs for projects in queue. System components and configuration are not verified until the final inspection at the Incentive Claim Milestone, which directly impact the expected output of the PV system.

![SOMAH]

Figure 23 – Active Project Density and Location Visualizations
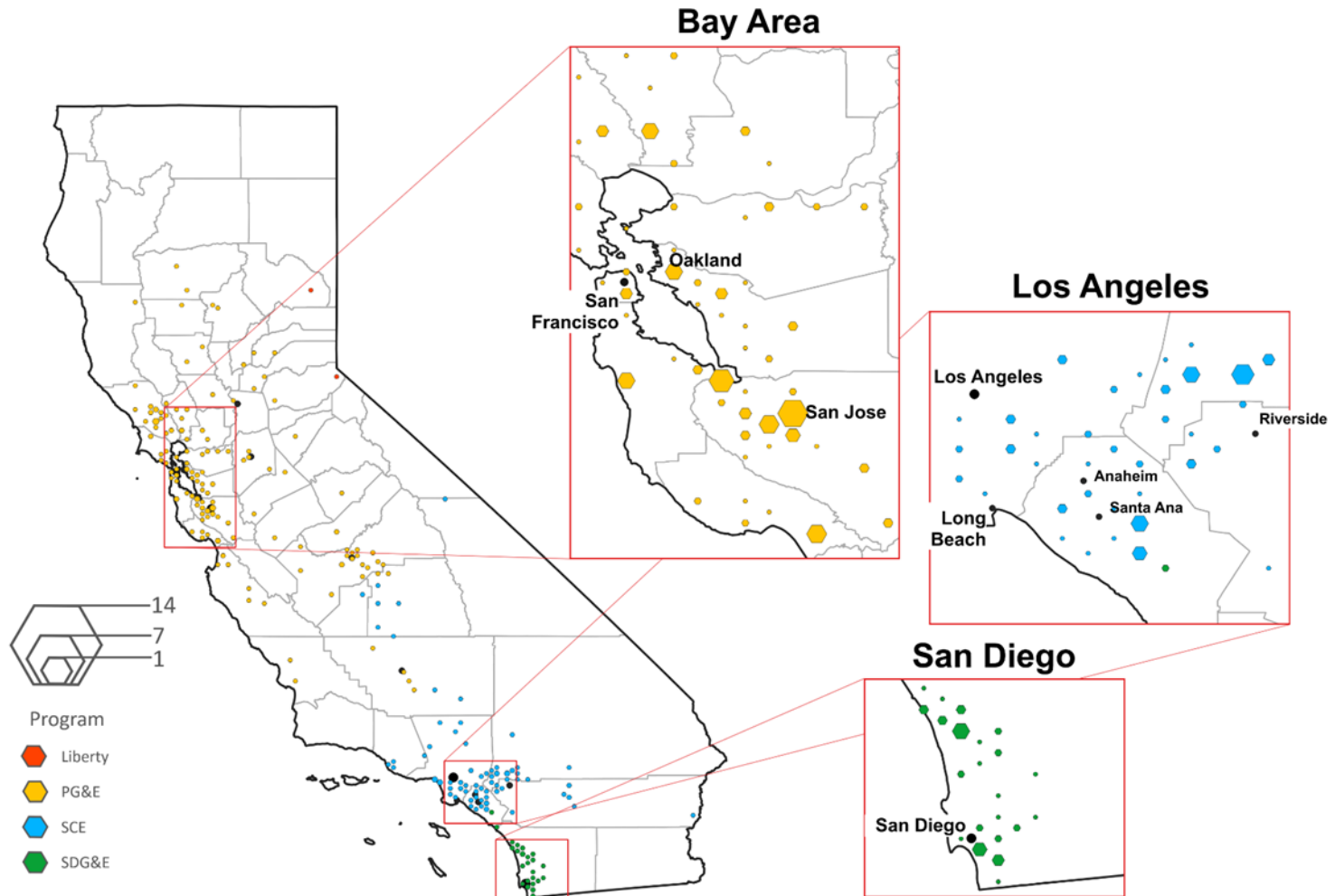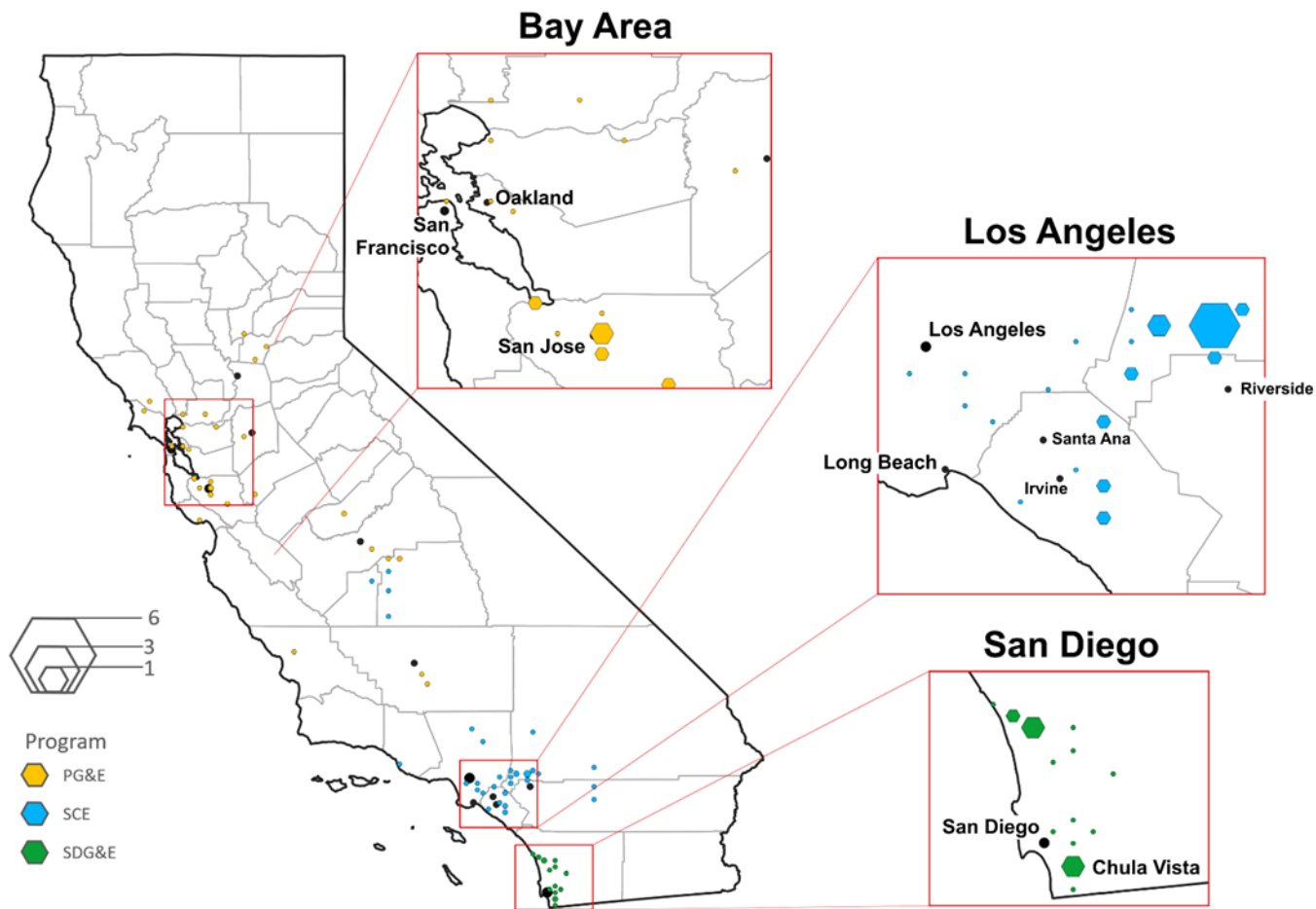
Figure 24 – Completed Project Density and Location Visualizations

3.1.2 Program Payments

The Progress Payment Pathway was designed to alleviate cash flow issues reported by participating contractors and helps dismantle barriers to increase contractor diversity. The development of progress payments included PA consultation with program participants and stakeholders to develop the two-payment pathway for progress payments with Advice Letter 118-E submission on September 18, 2020. Energy Division then approved Advice Letter 118-E on December 21, 2020, and the SOMAH PA focused on preparation in Q1 2021 to launch progress payments in April 2021. Based on stakeholder feedback from public comments to Handbook 5.0 and Advice Letter 133-E, the SOMAH PA later amended the eligibility window for the minimum time requirement between progress payment and incentive claim from the prior four-month requirement to two months based on process flows and timelines in April 2022 with the revisions in Handbook 5.0.

Depending on the application timeline and installation status, a project can participate with the standard, one-payment at the Incentive Claim Milestone or apply for a progress payment after completing the Proof of Project Milestone (PPM). A project is eligible for the Progress Payment Pathway after it has received a PPM approval and the system has been fully installed or mechanically complete. Mechanical completion is defined as the point at which all PV equipment has been installed, including the net generation output meter (NGOM) socket and the system wiring has been completed, but the authority having jurisdiction (AHJ) and local utility inspections have not yet taken place, and the system has not yet been granted permission to operate (PTO) from the utility. If a PV system has already been granted PTO, the project is not eligible for a progress payment. In addition, the incentive claim deadline can be no less than two months from the Progress Payments Pathway submission date. All projects requesting a progress payment are required to complete a live virtual walk-through (VWT) with the SOMAH PA to verify the system installation. The VWT consists of a video call, with the participant walking the SOMAH PA through the site to show the system components, including the installed PV modules, installed inverter and the project site address with the street number visible. After a completed VWT, the SOMAH PA grants approval for the progress payment, which is 60% of the calculated incentive amount. The remaining incentive amount is issued after an approved incentive claim and verified final inspection by the SOMAH PA. Alternatively, should a project be ineligible or not interested in the Progress Payment Pathway, the full incentive is issued as a single payment to the designated payee after an approved incentive claim and verified final inspection as a standard incentive payment. Upon launching the progress payment offering, additional data fields were added to the working data set on the California

Distributed Generation Statistics website that indicates an approved opt-in to the Progress Payment Pathway and the resulting progress payment amount.

While utilization started slowly after launching the Progress Payment Pathway in April 2021, the offering's popularity has continued to increase over time, now totaling 80 projects benefitting from a progress payment in just over two years of availability. The program's progress payment history is summarized below:

- January–June 2023: 80 progress payments issued.
- July–December 2022: 58 progress payments issued.
- January–June 2022: 39 progress payments issued.
- July–December 2021: 11 progress payments issued.
- April–June 2021: 2 progress payments issued.

The increase of progress payments has remained consist throughout its launch. After its first year in 2021, 2022 saw an increase of 47 progress payments issued, and with Q1 and Q2 2023 receiving 22 progress payments so far, its expected 2023 will issue more progress payments than 2022. Eleven of the projects received in Q1 and Q2 2023 have received a final incentive. In total, 30 of the projects that enrolled in the Progress Payments Pathway have reached the Incentive Claim Milestone and have received their final incentive payment. The timeline for these projects shows that the progress payment offering allowed the participants to receive the benefit of a partial incentive payment, on average, eight months prior to their final incentive payment. This timeline supports the SOMAH PA's goal to alleviate financial barriers and support project viability.

After receiving a total of 13 new progress payment requests in Q3 and Q4 2022, Q1 and Q2 2023 saw 22 more project payment requests submitted. The program's progress payment request history since inception is summarized below:

- January–June 2023: 22 progress payment requests received.
- July–December 2022: 13 progress payment requests received.
- January–June 2022: 28 progress payment requests received.
- July–December 2021: 9 progress payment requests received.
- April–June 2021: 4 progress payment requests received.

The program expects ongoing progress payment activity for future reporting periods and is collecting feedback on the value and experience of progress payments through the Project Completion Survey that is deployed with final incentive payments. To increase survey responses, the SOMAH PA conducted direct email outreach to property

owners and applicants. As of June 30, 2023, 19 applicants and three property owners submitted the Project Completion Survey. The PA plans to review this feedback in Q3 and Q4 2023. Figure 25 outlines payment details for the program with a summary of the number of progress payments and standard payments issued and the applicable associated dollar amounts since its launch.

Figure 25 – Program Payment Statistics[17]

Program	Progress Payments Issued	Progress Payment Amount	Final Incentive Payments Issued	Final Incentive Payment Amount	Total Incentive Payment Amount
PG&E	41	$6,407,057	36	$6,733,785	$13,140,843
SCE	24	$6,771,876	44	$13,186,686	$19,958,562
SDG&E	15	$2,858,815	18	$4,532,272	$7,391,087
Liberty Utilities	0	$0	0	$0	$0
PacifiCorp	0	$0	0	$0	$0
Total	80	$16,037,749	98	$24,452,744	$40,490,492

In Q1 and Q2 2023, 22 projects received a progress payment, and 11 of those projects received a final incentive payment. Not all the reported projects have completed installations and received the final incentive payment as show in Figure 25.

There have been no instances of projects dropping out between the disbursement of progress payments and the completion of the incentive claim process. Future Semiannual Progress Reports will continue to include an update of program payment activity as highlighted in Figure 25, as well as analysis of payment timelines and progression details as additional projects are completed and paid.

The electronic payment option for application deposits has become a very popular option for participants, which was a motivation for the SOMAH PA to streamline other payment and incentive claim processing. The electronic payment offering started with application deposits and was further extended to progress payments and final incentive claim payments as well. At the close of this reporting period, all but five

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[17] Progress Payment Amount total and Final Incentive Payment Amount total include some invoiced, pending payments.

incentive payments and 10 deposit fee refund payments issued were via electronic payment method.

3.1.3 Online Bidding Tool

The online bidding tool is a platform used to connect property owners with eligible SOMAH contractors, providing an apples-to-apples bid comparison. The platform is available for all SOMAH participants and supports the multiple bid requirement for Track A projects. The online bidding tool maintains a repository of eligible SOMAH contractors that have completed the Contractor Eligibility Training webinar and registered their primary contact information with the SOMAH PA. SOMAH contractors can use the online platform to gain access to job leads, respond to project bid requests and demonstrate program compliance.

In this reporting period, the PA worked to incorporate a meaningful update to the contractor selection process within the online bidding tool. The update now allows host customers to request a bid from up to eight eligible SOMAH contractors. Updating the selection from three to eight contractors increases the chances for host customers to receive informative, cost-competitive bids in a timely manner.

The online bidding tool serves three distinct functions. First, it allows the host customer to indicate their interest in receiving a bid from up to eight contractors of their choice. This encourages the host customer to do basic research on a contractor ahead of time, such as researching reviews, and then gives them the opportunity to select up to eight contractors. Then, after the customer's selection of bidders, the tool notifies the eligible SOMAH contractors, who then can accept or decline the bid request. If the contractor accepts the bid request, they can then contact the host customer to begin the process of preparing a site-specific bid proposal. Finally, once all contractors who have accepted the bid request have completed and submitted proposals, the tool aggregates basic information about the proposal into a single user interface, which allows the host customer to compare topline proposal information, including project cost, size, estimated date of completion and ownership type. The online bidding tool integrates with SOMAH's Project Bid Form, the eligible format to meet the multiple bid requirement for Track A projects. Whereas contractors have unique proposal generation tools and layouts with different underlying assumptions, SOMAH's requirement of a standardized project bid form harmonizes the detailed elements of a proposal into a consistent format containing objective and verifiable information. To provide the most accurate and best user experience, the online bidding tool is reviewed weekly by the PA to engage unresponsive contractors, perform outreach to contractors with expired licenses and remove contractors with suspended licenses.
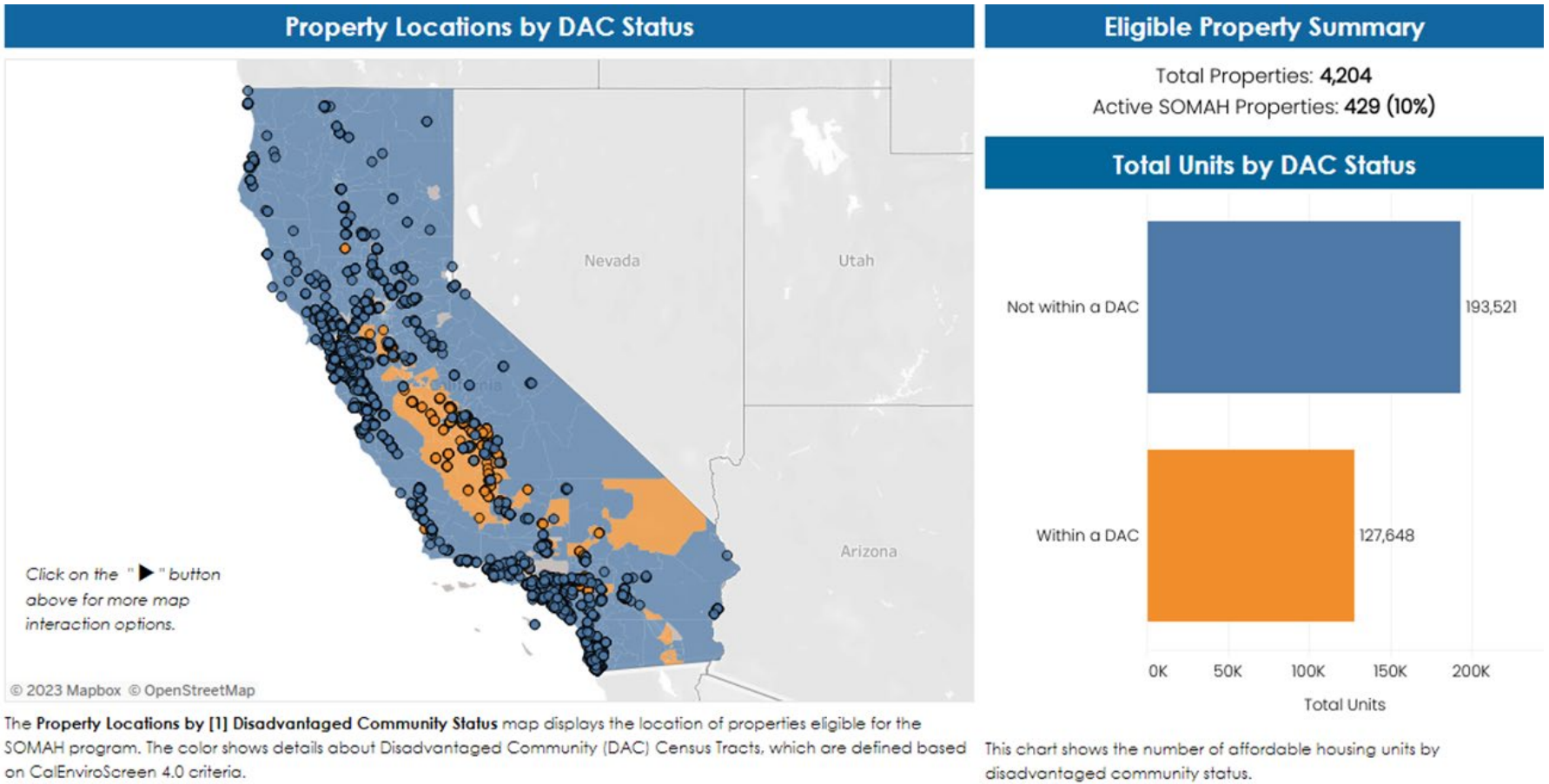
While there was no new activity with the bidding tool in the first half of 2023, several Track A projects were submitted in Q2 2023 and will likely be utilizing the tool during the next reporting period. The lower engagement volume of the bidding tool limits the amount of meaningful feedback and data available at this time. The SOMAH PA looks forward to reporting tool usage metrics and customer experience information in subsequent Semiannual Progress Reports when more data is available in aggregate.

3.1.4 Eligible SOMAH Properties Map

Figure 26 provides an overview of the Eligible SOMAH Properties Map. The PA focused on updates to the map during Q2 2023, including the forthcoming addition of a cities filter, refreshing legislative districts to reflect redistricting and adding a ZIP code filter to the full data set download. This refreshed user interface will make the map even more user friendly and streamline the access and navigation of key features and data points. The map webpage received over 1,020 page views in Q1 and Q2 2023. This update release was underway in Q4 2022 with additional updates to the map data, including incorporating CalEnviroScreen 4.0 properties.

Map data is based on data from the California Housing Partnership's Preservation Clearinghouse. It is designed for use by SOMAH participants and stakeholders, especially solar contractors. The SOMAH PA intends to update the underlying map data for potentially eligible SOMAH properties on an annual basis in the second half of each year. This year's update, completed on January 27th, 2023, was due to additional data screening and scrubbing for CalEnviroScreen 3.0/4.0 properties and evolving eligibility criteria at properties reviewed. The interactive visuals show multifamily affordable housing as well as current SOMAH applications, allowing users to filter by street address, ZIP code, main SOMAH eligibility requirements, legislative districts, utility territories and SOMAH applications. A forthcoming update will also include a city filter. The map provides color coding based on a property's location in CalEnviroScreen defined disadvantaged communities, utility territories, legislative districts and climate zone.

![SOMAH logo]

Figure 26 – Eligible SOMAH Properties Map

Property Locations by DAC Status

Eligible Property Summary

Total Properties: **4,204**
Active SOMAH Properties: **429 (10%)**

Total Units by DAC Status

	Total Units
Not within a DAC	193,521
Within a DAC	127,648

Click on the " ▶ " button above for more map interaction options.

© 2023 Mapbox © OpenStreetMap

The **Property Locations by [1] Disadvantaged Community Status** map displays the location of properties eligible for the SOMAH program. The color shows details about Disadvantaged Community (DAC) Census Tracts, which are defined based on CalEnviroScreen 4.0 criteria.

This chart shows the number of affordable housing units by disadvantaged community status.

3.1.5 California Distributed Generation Statistics

The SOMAH Working Data Set, which reports on all applications received for the program across the five utility territories, is updated weekly on the California Distributed Generation Statistics website. The website (previously named California Solar Statistics) has been a valuable tool for customer-sited solar projects since its inception under the auspices of the California Solar Initiative. The working data set report includes data associated with all in process (active), completed (installed and paid), waitlisted (when applicable), withdrawn and/or canceled projects. Reported data includes, but is not limited to, application data, contractor information, incentive amounts and solar PV system cost and technical specifications. All personally identifiable information is scrubbed from the data set to ensure customer privacy. The data set includes two resources, a "Data Key" and "Read Me" PDF for download. The Data Key is a short summary of the data fields displayed in the working data set, and the Read Me includes a summary table of fields added and/or removed from the working data set, as well as the effective date, for further transparency and ease of use to stakeholders accessing the data set.

The working data set continues to be a frequented resource for program stakeholders and participants to glean insights on program progress and trends. Program data from the working data set also populates data visualizations on the SOMAH Statistics and Charts page of the California Distributed Generation Statistics website. Eleven charts and graphs are currently displayed on the page covering essential program metrics and participation statistics. With the increased activity for project completion over the past year, these charts and graphs have continued to populate with valuable data highlighting the noteworthy impacts of completed SOMAH projects. Throughout 2022, valuable edits were made to the page including deploying additional filtering features to the SOMAH charts and graphs, fine tuning filters to reflect accurate reporting for program statics and revising fields on the working data set such as adding "Application Submission Date." Section 4, Program Planning and Development, further elaborates on additional public reporting and transparency measures of the SOMAH Program.

3.2   Marketing, Education and Outreach

As the SOMAH Program increases the number of completed projects, the PA's audience engagement has emphasized storytelling through success stories, blogs and social media posts. Activities have included planning ribbon-cuttings, resuming in-person events and redesigning and launching a revised SOMAH website with a new application flow and improved resources and tools. The program celebrated many successes during this reporting period, as outlined by each audience type below.

ME&O efforts were guided by the PA's 2023 ME&O Plan and focused on: 1) property owner outreach and growing the property owner pipeline, 2) efforts to increase contractor and subcontractor diversity, 3) providing job trainee opportunities and promoting job trainee participation, 4) increasing in-person tenant education workshops and 5) increasing stakeholder outreach.

3.2.1 ME&O Plan

SOMAH's annual Marketing, Education and Outreach Plan (ME&O Plan) guides the program's marketing, education and outreach activities, setting goals, objectives and tactics to reach SOMAH's priority audiences and supporting the overall program goals for 2023. Ultimately, the ME&O Plan uses outreach tactics to increase application submissions and to spread equitable sustainability for low-income and underserved communities.

The 2023 ME&O Plan was finalized in February after a public comment process. The 2022 ME&O Plan used Phase II evaluation recommendations, SOMAH internal surveys and focus group evaluations to help address outreach gaps per audience. SOMAH's 2023 ME&O Plan is centered on the same five goals as listed in the 2022 plan.

SOMAH's 2023 ME&O Goals

Goal 1: Engage property owners to build and maintain a multiyear pipeline of diverse projects.

Goal 2: Continue building a robust and diverse contractor base and support eligible contractor retention.

Goal 3: Ensure sufficient job trainee participation and preparation for SOMAH job training opportunities and careers in renewable energy.

Goal 4: Educate SOMAH-eligible tenants and tenants living in participating SOMAH properties about the program and how to maximize their benefits.

Goal 5: Ensure stakeholders are informed of and helping to co-market the program.

Though the 2023 ME&O Plan's primary goals remain the same as last year's, outreach strategies are continuously refined where successful outreach approaches lead to higher engagement.

3.2.2 Monitoring, Evaluation and Research

Central to the SOMAH ME&O strategy is monitoring and evaluating the SOMAH PA's efforts. The PA uses mixed methods to monitor and evaluate ME&O efforts, including surveys, qualitative interviews and program data analysis as well as reporting and transparency activities. The efforts are determined by the PA based on the program implementation plan, handbook, annual ME&O plans and other ongoing needs as determined. The objectives of SOMAH Program participants research are:

- Understand audiences' motivations for program participation and barriers they may face to participating.
- Gauge program participants' overall satisfaction with SOMAH.
- Determine program participants' willingness to continue participating and recommend SOMAH to others.

Surveys are issued to all SOMAH audiences at different stages in the process, from ME&O efforts, through the application, to post-application. Feedback from surveys of SOMAH key audiences are used to inform ongoing ME&O outreach efforts and the application process. The PA anticipates reporting on these surveys in Q3 2023, pending adequate project completion and survey response rates (i.e., the ability to report on surveys depends on when the PA receives statistically significant data for each survey). See Figure 27 for a summary of planned and completed surveys. Some surveys previously reported on have been removed.

In addition to surveys, the SOMAH PA began conducting future-focused research. This research is designed to: 1) identify opportunities to increase diverse contractor participation in SOMAH as prime or subcontractors, 2) spot opportunities to increase overall property owner participation, 3) evaluate program retention and 4) understand the market for SOMAH. These research projects are outlined.

Surveys

Several surveys to key audiences are ongoing. To date, responses for project completion surveys have not reached a statistically significant number of responses. The SOMAH PA is making a coordinated effort to boost response rates for these surveys. Statistically significant numbers for these surveys are expected by Q3 2023 and should yield actionable insights into the program experience of contractors and property owners.

Figure 27 – Number of Completed and Planned Surveys by Category

Audience	Survey Name	Milestone/ Timeline	Launch Date	Frequency
Contractors	Job Trainee Performance Survey	Post-project installation	Launched Q3-Q4 2021	Ongoing post-installation
Contractors	Job Trainee Employed Survey	Post-project installation	Launched Q3-Q4 2021	Ongoing: 3, 6 and 9 months after reported trainee hiring
Contractors	Contractor Workforce Survey	As available	Launched Q2-Q4 2023	One-time administration
Applicants	Project Completion Survey: Applicant	Deployed with final incentive payments.	Launched Q3 2021	Ongoing post-incentive claim
Property Owners	Project Completion Survey: Property Owner (non-applicant)	After incentive claim approval	Launched Q2 2022	Ongoing post-incentive claim
Property Owners	Property Owner Survey – No Application – In listserv	In SOMAH email listserv, no application	Launched Q3 2020	Annually*
Property Owners	Property Owner Survey – No Application – Not in listserv	Before joining SOMAH email listserv	Launched Q3 2020	Annually*
Property Owners	Technical Assistance (TA)	Post-TA, pre-reservation request	Launched Q4 2021	Ongoing post-TA
Tenants	Tenant Education	Post-project installation	Launched Q1 2022	Ongoing post-install
Job Trainees	Job Trainee Experience Survey	Post-project installation	Q1-Q2 2022	Ongoing post-install

* Paused in 2021 due to redundancy with third-party evaluator survey.

ME&O Program Research

SOMAH's research projects are outlined in Figure 28. During Q3 2021, the PA created a research plan to better understand the program's participants, audiences and successful projects. This plan is routinely updated as focus and priorities change. This plan encompasses a mixed methods approach that includes research to evaluate: 1) where and how property owners learn about SOMAH, 2) what motivates them to participate and 3) what causes them to withdraw their applications. The research will continue during 2023 and be reported in future Semiannual Progress Reports. In addition to participant research, the PA has conducted a deeper dive into eligible property to better understand the market for SOMAH properties. This analysis is presented under the Building Inventory analysis and may be built upon in future analysis of the market.

Figure 28 – SOMAH 2022-23 Program Research

Project Descriptions	Research Objectives	Audience	Timeline
Contractor Focus Groups	• Understand barriers to contractor participation in SOMAH, especially small, minority-owned and women-owned businesses. • Identify solutions to encourage more contractor participation in SOMAH.	Nonparticipating solar contractors	Delivered Q1 2022
Property Owner Pipeline Analysis	• Understand notable gaps in pipeline development and applicant retention. • Identify what ME&O activities are likely to result in lead generation.	Participating property owners SOMAH PA	Q3 2022
Property Owner Focus Groups	• Gauge property owner interest in installing solar on their properties. • Understand solar installation priorities for property owners (including general operations as well as capital projects). • Identify structural barriers to participation. • Identify ways SOMAH can use its resources to support target audience participation.	Nonparticipating property owners	Q2-Q3 2022

Subcontractor Interviews	• Understand subcontractors' experiences in the SOMAH Program and what structures facilitated their participation. • Determine what aspects of their experience are replicable for like-sized contractors.	Participating subcontractors	Q3-Q4 2022
Tenant Education Focus Groups	• Evaluate the effectiveness of SOMAH's tenant education materials. • Create engaging and effective materials for residents receiving solar through the SOMAH Program.	Participating SOMAH tenants	Q2 2022
Building Inventory Analysis	• Understand the market for likely eligible SOMAH properties by comparing building sizes between active SOMAH projects and available inventory. • Segment results by utility territory and DACs.	SOMAH PA	Q1 2022

Contractor Focus Groups

To better understand barriers to participating in SOMAH, the SOMAH PA organized focus groups with targeted eligible contractors (small businesses, minority/women-owned) who had not yet participated in the program. These focus groups were developed with the Transparency and Insights (T&I) team at the Center for Sustainable Energy. To provide anonymity to participants, the T&I team led these focus groups, handled all analysis and provided a summary report with recommendations to the SOMAH PA.

The SOMAH Program identified 62 solar contractors for focus group participation, engaging six participants, including one multifamily property developer. Focus groups were held virtually on July 13 and 14, 2021. Participants were primarily small contractors, as minority/women-owned contractors proved difficult to engage. Participants represented a wide range of service territories ranging from regional to statewide as well as experience with large-scale solar installations. Focus group participants identified several key themes that pose barriers to their participation in SOMAH. The key barriers identified were:

- Lack of clarity about SOMAH Program components.
- SOMAH Program requirement concerns.

- Small business challenges.
  - Reliance on referrals.
  - Lack of time to cultivate SOMAH-eligible projects.
  - Multifamily not their core business.
  - Competition.
- Business return on investment.

Key recommendations coming from these focus groups were to:

- Offer more opportunities for contractor engagement.
- Expand resources for contractors and marketing their availability.
- Consider creating a contractor engagement position(s).
- Provide additional workforce development support for small contractors to meet job trainee requirements.
- Support small contractors to participate as subcontractors.

Subcontractor Interviews

The purpose of this research was to understand why prime contractors (primes) use subcontractors for SOMAH projects and how these two program stakeholders develop partnerships. The SOMAH PA engaged program stakeholders in interviews designed to:

- Explore participating contractors' and subcontractors' experience in the SOMAH Program to understand what structures facilitated their relationship and participation.
- Determine what aspects of the contractor and subcontractor relationship and experience are replicable for like-sized contractors to scale up participation from both entities.

The SOMAH Program identified two prime contractors using 13 subcontractors for SOMAH projects. Interviews were held virtually with the prime contractors on May 19, 2022, and May 25, 2022, and subcontractor interviews were held virtually between May 20, 2022, and July 20, 2022. In total, two primes and five subcontractors were interviewed for this study.

Prime contractors stated their reasons for subcontracting were to support SOMAH's mission to diversify its contractor base, fill in gaps of crew experience and availability, expand their service regions, increase their pipeline of projects and maintain project costs. Primes and subcontractors connected with each other primarily through a prior connection or network referral before primes utilized the SOMAH-eligible contractor list and met subcontractors after the acceptance of a bid. The qualities that prime

contractors look for in selecting subcontractors are, in the order of importance, their commercial building, prior installation and interconnection experience.

When working on a SOMAH project, each entity was responsible for specific roles. The prime contractors were typically in charge of making the project sale, handling the SOMAH Program application and designing the system and interconnection along with submitting the interconnection permit. Subcontractors typically took care of the installation with either or both entities in charge of procurement. Subcontractors' overall experience working on SOMAH projects largely went as expected, although not always. This caused some concerns such as project delays, increased costs and getting paid on time. All subcontractors were interested in becoming primes in the SOMAH Program, but they face several challenges to stepping into that role. The key challenges to becoming a prime were identified as:

- Bandwidth to handle and manage the program application.
- Ability to engineer the system and create and submit the interconnection design.
- Lack of an operations team.
- Lack of a sales team.

Based on the interview findings, the following topics for consideration were crafted to help support prime contractor and subcontractor engagement with the SOMAH Program:

- Opportunities for networking.
- Further vetting contractors.
- Resources for program support.

Further details on the methods, findings and considerations from these interviews can be found below.

Building Inventory Analysis

The objective of this research was to better understand the market for likely eligible SOMAH properties by comparing available inventory with active/completed SOMAH projects both overall and within utility/DAC territories. The PA compared the proportion of active SOMAH projects and likely eligible properties within binned segments of total unit size. The PA aimed to see if enough available inventory existed for building sizes most likely to achieve success in the SOMAH Program.

Findings revealed that there should be adequate available inventory to meet project demand and program goals. In addition, while small differentiations exist within segments, active projects largely mirror the percent of available inventory remaining in the state. This indicates that if current building size proportions for buildings in SOMAH stays constant, there should be enough available inventory to meet that demand.

Figure 29 - Percent of Eligible SOMAH Properties by Application Status
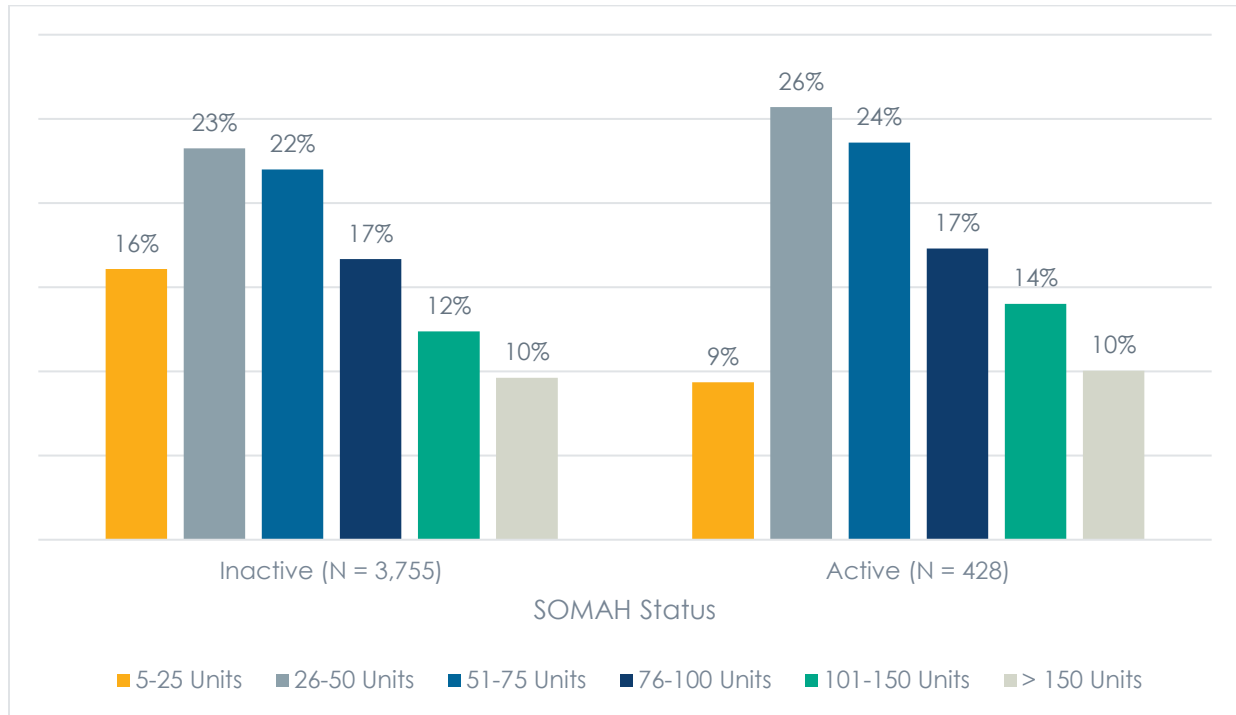
Further results segmented by utility and DAC territory show similar findings. While in some building size segments, active projects are outpacing available inventory, there is still an adequate number of properties available to participate.

These findings suggest that available inventory is enough to meet demand, however, further research is needed to complement this research with more details on available properties that might be eligible for SOMAH but face structural barriers other than eligibility when considering participation.

3.2.3 Contractors

The SOMAH PA engages with active SOMAH contractors through the Track B application pathway and with prospective contractors through direct outreach and

webinars. During this reporting period, the SOMAH PA continued to focus outreach efforts to contractors through direct outreach, digital channels and virtual events.

The PA continues to engage contractors through ongoing bimonthly Applicant and Contractor Eligibility Trainings. During this reporting period, eligibility training sessions were held in February and April 2023. The applicant and contractor trainings had a total of 39 attendees out of 66 registrants. Attendees included new contractor companies, new staff members for already eligible contractors and representatives from energy efficiency agencies. There was a collective marketing effort in promoting the eligibility training starting with several social media posts in SOMAH's Facebook, LinkedIn and Twitter, as well as direct outreach to prospective contractors in the PacifiCorp, Liberty Utilities and the Central Valley. At the end of this reporting period, there were a total of 178 SOMAH-eligible contractors, as shown in Figure 30.

In 2023, there was a new webinar series rolled out for contractors. This webinar series was created to provide useful information for contractors that are already eligible and enrolled in SOMAH, but do not have active SOMAH applications. This is an area with potential for major growth and an increase in participation, as these nonparticipating contractors are clearly interested in the program but have likely encountered some sort of barrier to participation. Topics for this series were determined by reviewing contractor survey and focus groups results to identify areas of the SOMAH Program that are barriers to participation. During this reporting period, there were two office hours webinars hosted. In March, the focus was Virtual Net Energy Metering, and in June, the focus was Fleet Monitoring. In total, the series had 50 registered, and 22 attended. An additional office hours webinar will be held in the second half of the year focused on lead generation strategies and tribal engagement. This topic has been brought to the PA's attention by multiple nonparticipating contractors and will aim to support smaller contractors get started with the program.

In May, the contractor email nurture campaign was launched for contractors in the email listserv. The campaign will run through the end of July and will go out to a recipient list comprised of 487 recipients, both participating and nonparticipating contractors. The email campaign contains seven different email pieces focusing on financing, program eligibility and case studies. Additional resources were created for this campaign, including e-books, videos and web content. The goal of this campaign is to reengage contractors and provide relevant information to support application submissions.
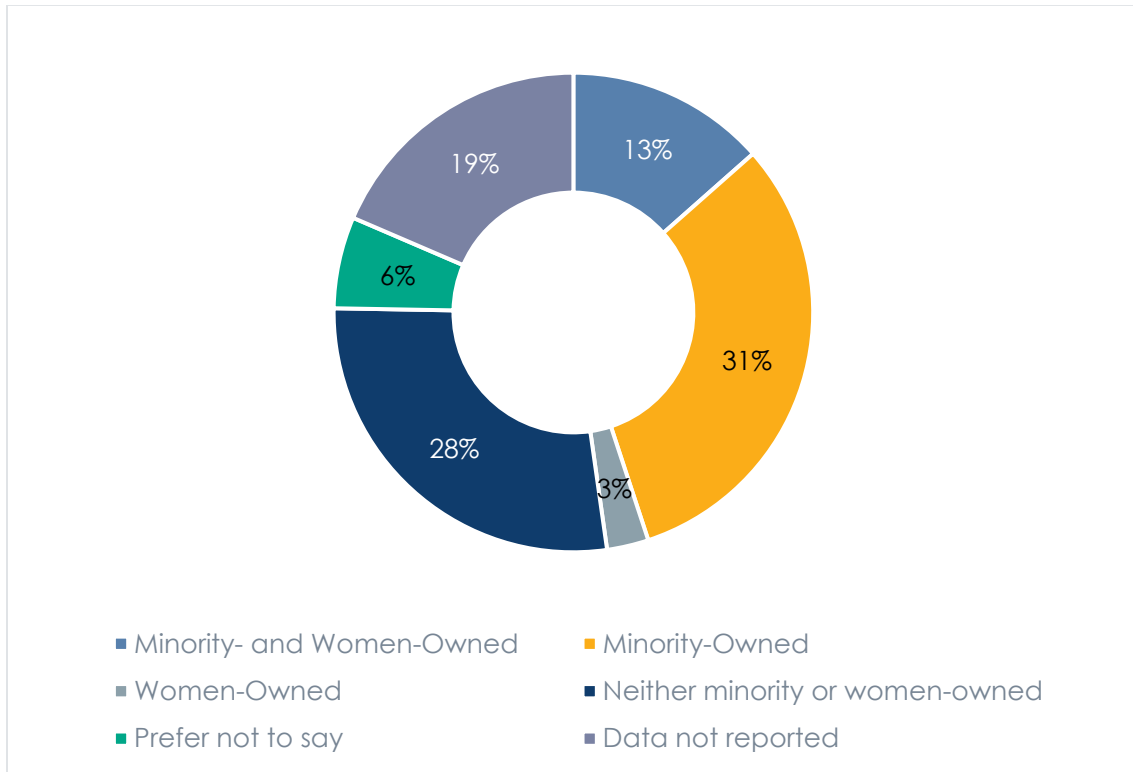
Figure 30 – Number of Eligible Contractors Over Time
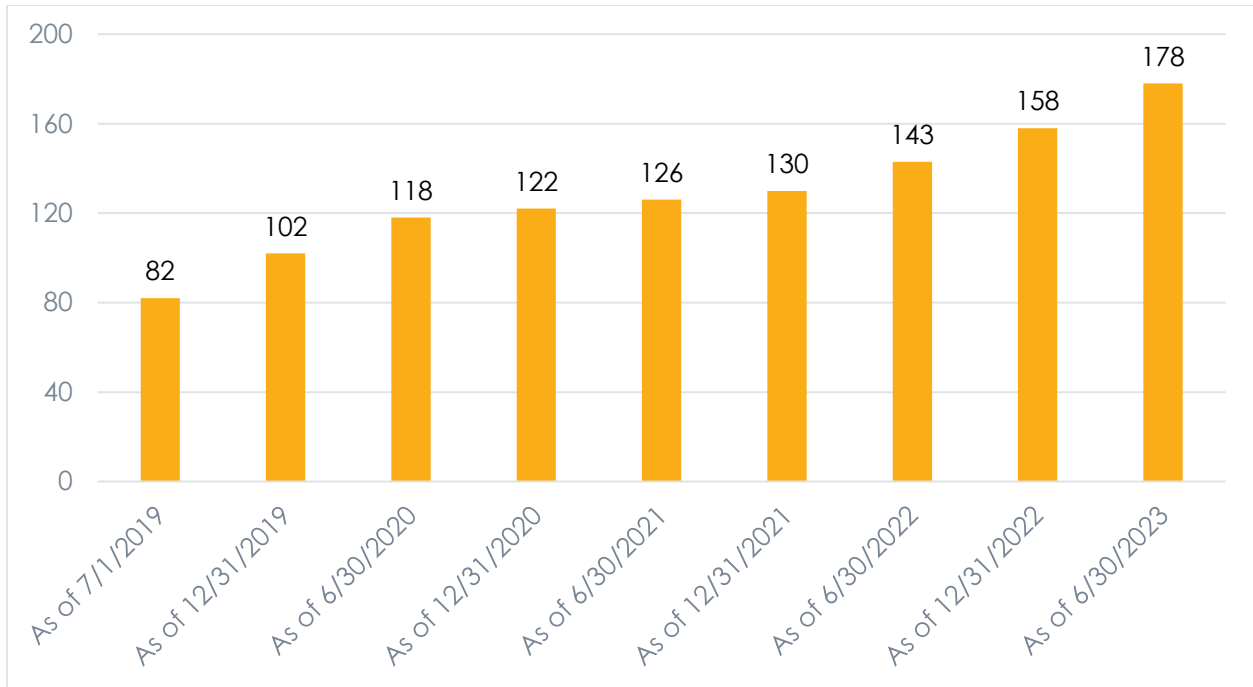
This reporting period, there were 20 new SOMAH-eligible contractors and three new subcontractors, totaling 179 eligible contractors. Of these new contractors, there were two primary contractors located in the Central Valley. The Central Valley, PacifiCorp and Liberty Utilities are all geographic regions that the ME&O team is targeting for direct outreach efforts. These direct outreach efforts will continue into the second half of the year, aiming to increase the number of eligible contractors located in these specific regions. The program gained two contractors in the Central Valley during the February and April trainings, which is a specific area that has been targeted for outreach.

Figure 31 – Eligible Contractor Statistics

Legend:
- Minority- and Women-Owned
- Minority-Owned
- Women-Owned
- Neither minority or women-owned
- Prefer not to say
- Data not reported

Pie chart values: 13%, 31%, 3%, 28%, 6%, 19%

N = 178

SOMAH continues to strive to increase participation by diverse contractors, defined by SOMAH as minority, women and/or LGBTQIA+ owned companies, as well as small companies with less than 25 employees. As mentioned, most of the new contractors, plus the new subcontractor participating in the program, are identified as minority-owned, which paired with an overall increase in diverse contractor participation in the program.

Figure 32 – Active Contractor Diversity
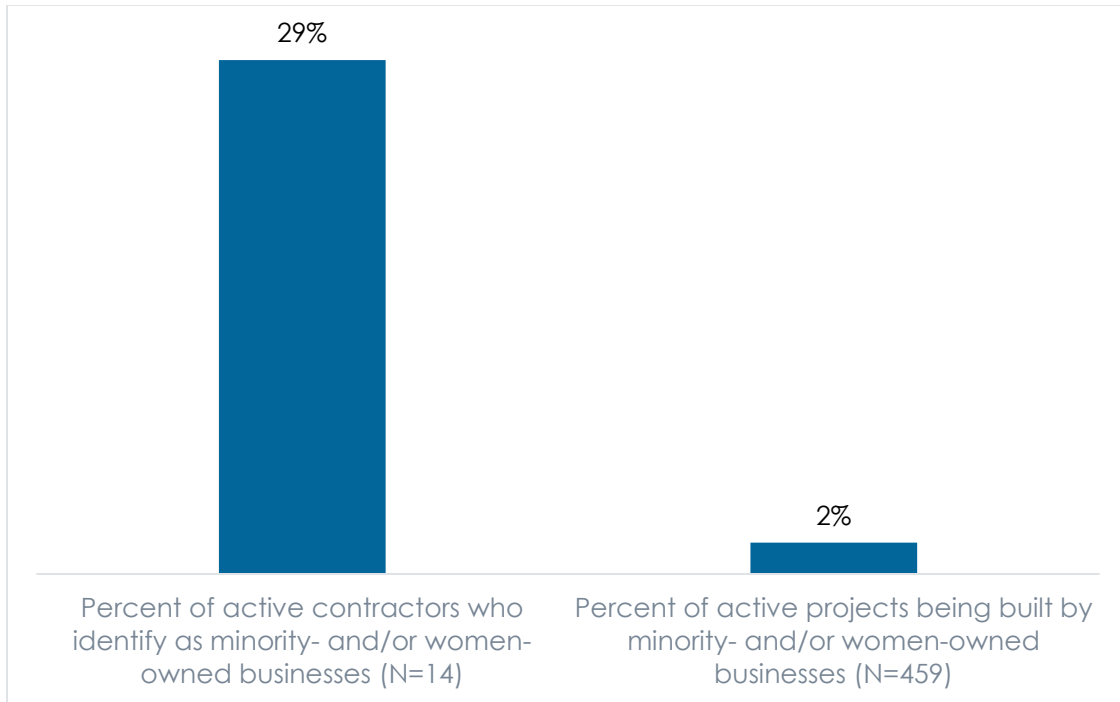
In 2023, the SOMAH PA approved two additional power purchase agreement (PPA) providers who would like to be paired with contractors and subcontractors working on SOMAH projects, as well as requests for this information from participants. A PPA Providers webpage was created to support this interest and provides the names of PPA companies that are preapproved along with their contact information. The PA continues to do outreach and meet with new providers to increase the number of providers in the program. This pairing will help with overcoming financial burdens and limitations with ownership options that smaller contractors have listed as a barrier to participating in SOMAH.

Subcontractor pairing with contractors with applications is ideal once an application has met Reservation Request Approval. To support subcontractor pairing, the PA created a subcontractor directory available on the website. The directory includes contact information for all eligible contractors in the program. By providing this information publicly, the goals are to support prime contractors to identify subcontractors in their area and to increase overall new contractors participating in the program.

Figure 33 – Subcontractor Statistics
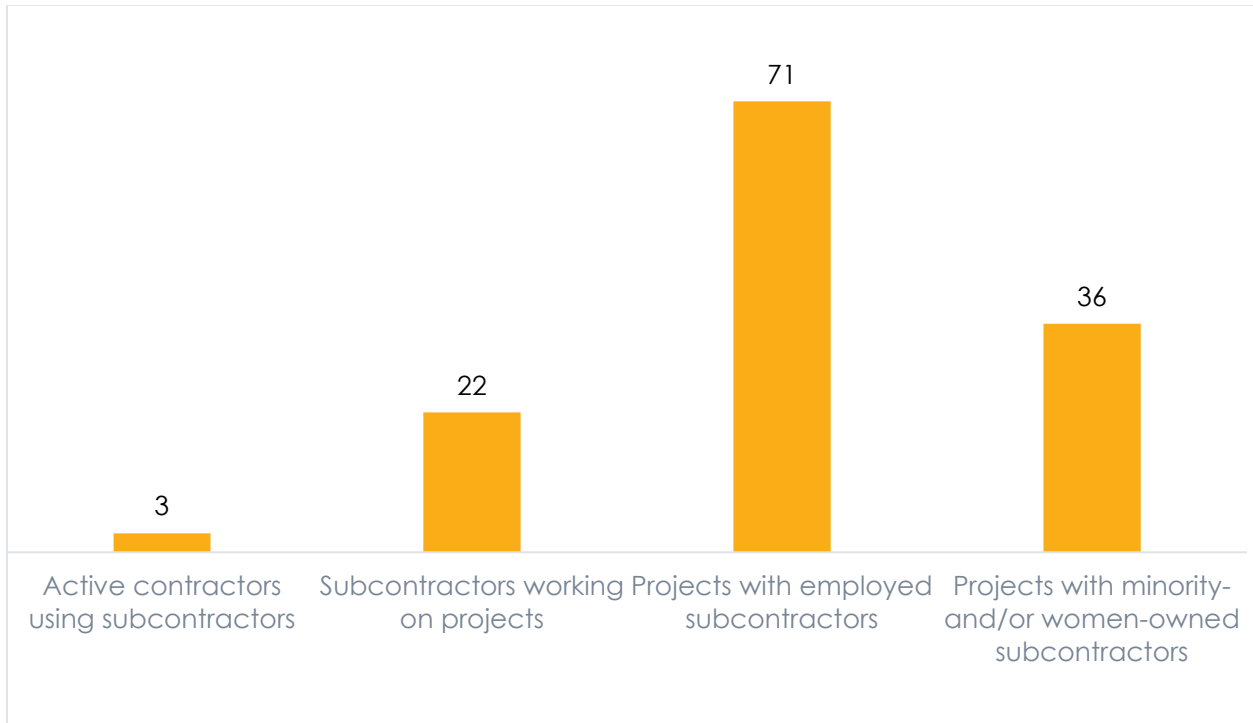
3.2.4 Property Owners

Both in-person and digital outreach approaches were conducted with property owners during the first half of the year. The SOMAH PA began attending in-person conferences and events in early 2022, which has continued into 2023. Primary channels of engagement with property owners are through direct email outreach, interest calls, email announcements through the CalSOMAH listserv, webinars, conferences, social media, paid media campaigns and video content.

Direct outreach

During this reporting period, direct emails were sent to 117 for-profit property management companies (PMCs) and 68 nonprofit PMCs, including eight housing authorities and six tribal entities. These companies represent a large portion of the total number of eligible properties, as a single PMC can have numerous SOMAH-eligible properties in their portfolio. Direct outreach emails were sent to invite property owners to webinars and events, highlight prospective SOMAH projects through Technical

Assistance Preview reports, offer portfolio reviews and make the initial introduction to the SOMAH Program through a PowerPoint presentation that covers an overview of the program, eligibility and a breakdown of the incentives.

A specific focus of direct outreach during this reporting period was PacifiCorp and Liberty property owners. These areas are a large focus for outreach efforts, as they have significantly fewer applications and less overall engagement from property owners. An effort to engage these property owners focused on creating Technical Assistance Preview reports and sending them to property owners. These reports include a variety of insightful information, including estimates on current energy usage patterns and preferences, the solar power system size best suited for a property's needs, a financial analysis to estimate the SOMAH incentive level, return on investment (ROI) and project feasibility, as well as financing options. Twenty-six Technical Assistance Preview reports have been compiled and sent to property owners to provide them with key information to consider before getting started with a SOMAH project. The reports emphasize the financial aspects of projects, a main topic of interest for property owners. The SOMAH PA intends to continue outreach efforts throughout the year to actively target properties in the Liberty and PacifiCorp territories. Planned activities include collaborating with the Liberty and PacifiCorp utility providers on a co-marketing effort, exploring avenues to host in-person events and continuing to disseminate direct outreach emails.

The recent approval of Handbook 7.0, which includes increased incentive rates, presents a valuable opportunity for reengagement with property owners with canceled applications, especially those that canceled due to financial challenges. With this effort currently underway, the PA has developed email messaging that focuses on the increased incentives and benefits, as well as how to access the program's Technical Assistance and Support Services.

An additional outreach effort that continued from last year was building out the property owner contact base in Salesforce. The SOMAH PA utilizes a database called RocketReach to obtain current contact information for PMCs, whereas this information may have been outdated or even nonexistent in some cases. Building out this contact database allows for outreach to be more impactful by casting a wider net. In addition to RocketReach, the SOMAH PA utilizes public data from a variety of affordable housing agency websites such as the California Tax Credit Allocation Committee (CTCAC) and the California Department of Housing and Community Development (HCD) to further build out the contact information in Salesforce. This database maintenance and expansion is a key step in getting more engagement and interest in

the SOMAH Program from property owners. The PA also plans to request attendee lists at future conferences and events where possible to further increase this list of contacts, a continuation of efforts in 2022.

DAC and Tribal Outreach

One of the SOMAH PA's goals is to increase participation among properties located in DACs. During this reporting period, property owner outreach in DACs accounted for 368 properties contacted out of the 1,354 total, as shown in Figure 34. Direct outreach efforts via Salesforce emails were able to specifically target PMCs with properties in DACs, by drilling down to the property level within a specific PMC. Furthermore, the SOMAH PA completed 30 interest calls with SOMAH-eligible property owners, providing portfolio reviews, a brief overview of the SOMAH Program and a Q&A session to wrap up. Connecting with property owners in DACs will continue to be a priority in the second half of 2023.

Figure 34 – Properties Contacted by DAC Status

DAC ■ Non-DAC
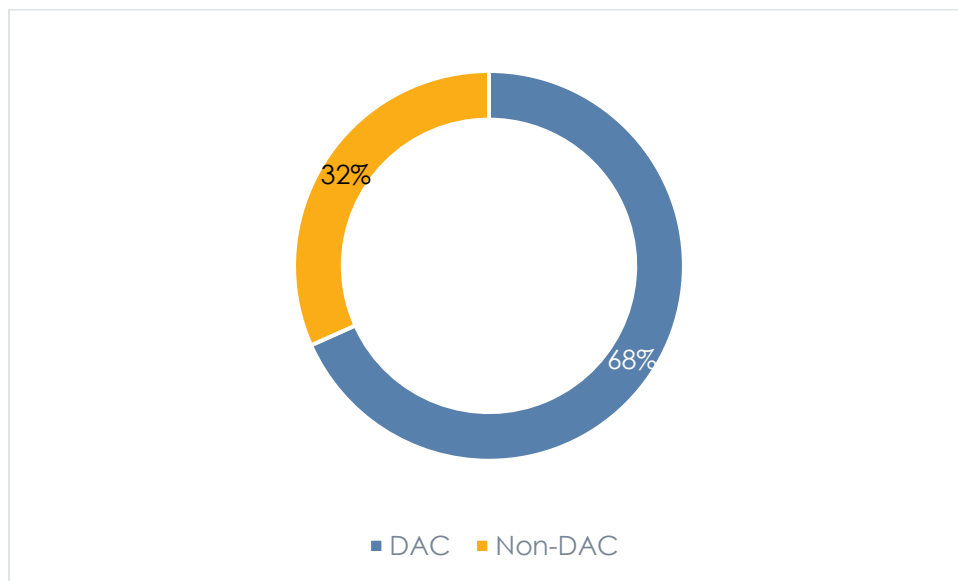
N = 1,354

The SOMAH PA is focused on engaging tribal entities and increasing the number of applications on tribal lands. This reporting period, the SOMAH PA placed an emphasis on information gathering through research on the structure of tribal entities and looking into pathways for program participation, considering the complications that tribal properties face with SOMAH Program eligibility. Through gathering background

information on tribal entities, the SOMAH PA is better positioned to engage with tribes and will likely have more success with outreach attempts. The PA developed an application resource for tribal properties and made it available on the website. This document provides insight into program eligibility, including common regulatory/deed restriction documentation packages, considerations for drafting a tribal government or tribal housing authority resolution and links to external resources.

The SOMAH PA has a ribbon-cutting event planned with the Bishop Paiute Tribe Community Development in August 2023. Case study content will be created from this ribbon-cutting, which will help build credibility among tribal communities by showcasing a successful project and the benefits it brings.

Digital Marketing and Events

In Q1 2023, the SOMAH PA launched a property owner nurture email campaign to engage property owners who are already interested in SOMAH and subscribed to the program's email list but may not have any active projects. The recipient list included 161 property owners and managers, and content was delivered biweekly. The campaign ran for two months, and moving forward, as new subscribers join the listserv, they will be added for future nurture campaigns. The campaign's goal was to provide property owners with informational content pieces about SOMAH designed to make them feel encouraged and confident about submitting applications. The campaign highlighted no-cost services that the PA provides, including Technical Assistance and the Affordability Prescreen service. Additional content was created specifically for this campaign and is now featured on the website, including e-books about costs and finance and property eligibility as well as project case studies. Statistics on the performance of this email nurture campaign will be included in the next reporting period.

The SOMAH PA hosted/co-hosted two webinars during the first part of the year. The first on March 15 was in partnership with the Energy Smart Homes program and focused on highlighting clean energy programs that can be stacked, including SOMAH, Energy Smart Homes (ESH) and the Low-Income Weatherization Program (LIWP). There were 58 registrants and 36 attendees. Additionally, the SOMAH PA hosted a webinar, "SOMAH Program and Technical Assistance Services Overview," on April 11. This webinar focused on SOMAH's resources for applicants and featured a case study that leveraged these services. There were 18 registrants and six attendees. Later this year, the PA plans to host a webinar for property owners on financing, including gap funding and a breakdown of the new incentive rates that were approved with Program Handbook 7.0.

Property Owner Outreach Events

- Housing California's 2023 Conference (March 27-29, 2023)

Website and Social Media

The SOMAH website and social media channels served as additional channels for digital marketing and engagement with the property owner audience. The main property owner's webpages on the SOMAH website performed well during this period with 2,829 page views, plus 1,149 page views of the property owner paid media landing page, totaling to nearly 4,000 page views across all property owner-focused webpages. In Q4 2022, the new program website launched, with updates that aim to greatly improve user experience and provide program information in a clear manner supporting user engagement for all audiences. A link to the Check Eligibility Form was added to the homepage, which had 33 submissions leading to six communication emails in the first two months from going live.

The SOMAH PA also deployed a paid digital marketing campaign via Google Ads targeting property owners starting in January 2023. During this reporting period, the campaign generated 346,867 impressions and 976 clicks.[18] The campaign integrated an interest form sign-up sheet on a landing page, which prompted users to provide contact information. Once submitted, the SOMAH PA reached out to schedule an interest call and discuss program eligibility, incentives and benefits. From January 1 to June 30, 2023, 44 interest forms were submitted, with four from nonprofit property owners and 40 from for-profit developers. The SOMAH PA will continue these engagement efforts and coordination of interest calls, which allow for a deeper look into property eligibility.

The CalSOMAH email listserv provides important program updates, including funding announcements, program changes and alerts about upcoming events and webinars. The listserv increased to 55 additional property owners during this reporting period, with 21 subscribers attained while the paid marketing campaign was deployed, indicating it was a successful method to generate leads for increased property owner engagement. An email listserv reengagement campaign also was created in May 2023, which brought back 11 inactive property owner subscribers. The SOMAH platform Marketo

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[18] An impression means a platform user saw the ad, while a click is a user who interacted with the ad. When the ad was clicked, the user was sent to the SOMAH website to review content specified in the ad.

marks users as inactive when they are inactive and do not interact with email content after three instances. Maintaining regular email communications is key to engaging and reengage property owners and increasing interest in the SOMAH Program. Additionally, listserv subscribers received the nurture campaign content, which launched in March 2023.

Figure 35 – Property Owner Subscribers Over Time
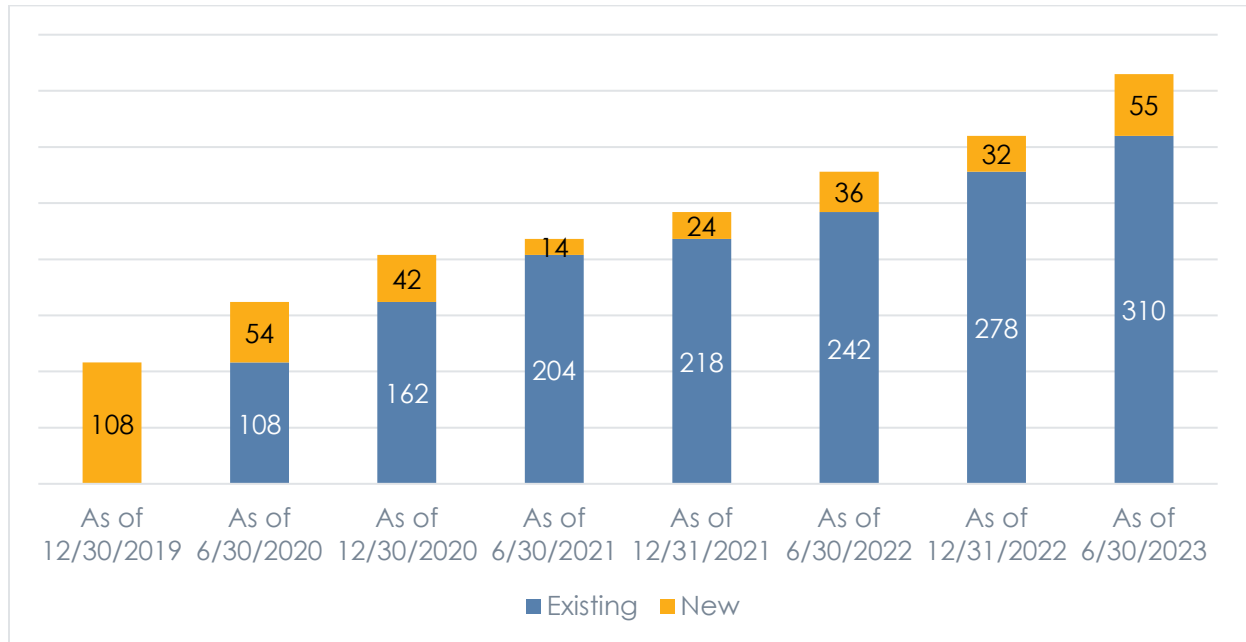
Finally, SOMAH's community-based organization (CBO) partners continue to support property owner outreach through direct outreach efforts, leading to interest calls. CBO partners conduct direct outreach including emails, phone calls and in-person site visits to properties located in communities with whom they have working relationships. During this reporting period, there were property owner handoffs from the CBO partners, which led to four interest calls and 16 additional Technical Assistance Preview report requests, further exemplifying the benefits of SOMAH's CBO partnerships in bringing new connections to the program.

CBO partnerships have proven to be extremely important to ensuring SOMAH outreach messaging and materials are appropriate and well-informed to reach multifamily affordable housing providers and their residents across the state. Additionally, CBO partners have provided invaluable marketing support for the promotion of SOMAH events and program updates. See Section 3.2.5 for more information about SOMAH's CBO partnerships.

3.2.5 Tenants

The primary objective of tenant education (TE) is to ensure residents of potentially eligible SOMAH buildings and those living in buildings participating in SOMAH are aware of and able to benefit from SOMAH in an equitable manner.

Community-Based Organization (CBO) Partnerships

The SOMAH PA continues to work closely with the program's now eight CBO partners[19] to support outreach to the community at large, property owners, governmental stakeholders, job trainees and tenants, aiming to increase SOMAH awareness and participation in the program. During this reporting period, CBOs organized or participated in 17 community outreach events or workshops. Additionally, CBOs conducted 907 outreach activities, including email, one-on-one meetings, presentations and mailers to engage property owners. CBOs also participated in 40 outreach activities to engage government stakeholders.

CBO administrative loads decreased as the organizations built more capacity and gained deeper technical understanding of the program. This reduction in administrative effort has allowed CBO partners to increase their community outreach and focus on reaching their diverse audience types.

Tenant Education

Updated Strategies

The SOMAH PA continues to promote its Tenant Education Services for applicants through continued quarterly Tenant Education Trainings/Webinars for SOMAH applicants, including the Applicant and Contractor Eligibility Trainings and public forums. The SOMAH PA received 15 calls to the Tenant Hotline in 2023. Eight of the calls were connected to seven unique SOMAH projects. The PA has noticed as tenants and on-site managers take advantage of the Tenant Hotline, the team is able to engage properties and often able to provide an on-site tenant education workshop.

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[19] SOMAH CBO partners include California Environmental Justice Alliance, The Asian Pacific Environmental Network, Communities for a Better Environment, Community Environmental Council, Environmental Health Coalition, OC Goes Solar, Self-Help Enterprises and The Niles Foundation.

Over the last two quarters, the SOMAH PA and CBO partners have responded to a total of five tenant education service requests, converting to three in-person tenant workshops taking place in Q3 2023. Additionally, the SOMAH PA extended contracts with two additional CBO partners through December 2023, totaling eight extended contracts for 2023.

Tenant Education Surveys

The SOMAH PA continues to implement and analyze tenant education surveys and evaluations. In Q1, the SOMAH PA analyzed 74 returned surveys submitted by tenants through prepaid mailers or online surveys sent in November 2022. The SOMAH PA deployed its full tenant education survey to a total of nine properties, three each in SCE, PG&E and SDG&E territories, for a total of 695 tenant units. Surveys were modified from the pilot deployment to allow online responses in addition to direct delivery. The goals of these evaluations were to: 1) assess existing tenant education materials; 2) evaluate how tenant education requirements are being met, as well as challenges and barriers faced; and 3) ensure that survey participation is significant. Additionally, tenants received a $20 incentive upon returning their survey to the SOMAH PA. The survey results findings are depicted in Figures 36-39.

Figure 36 – Documents Received by Tenants from Property Owners/Managers, Contractors or Other Stakeholders
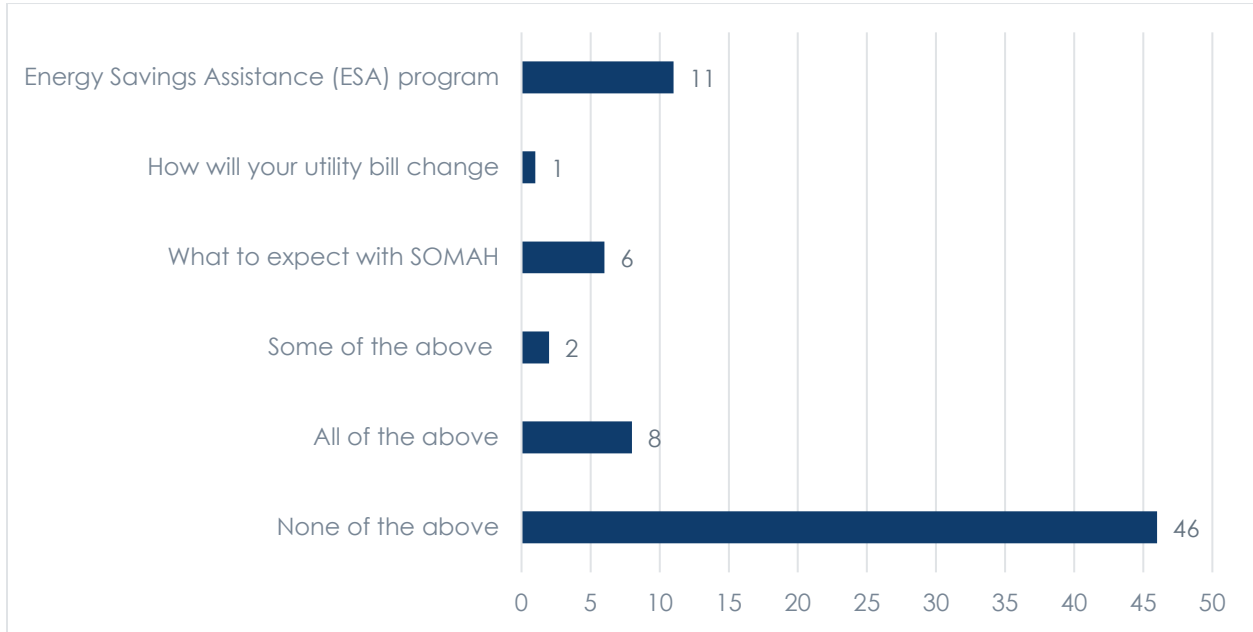
N = 74

Of the 74 responses, 62% of SOMAH tenants did not receive the required SOMAH materials. This captures how a lack of tenant resource distribution limits tenants from gaining access to knowledge about SOMAH, the direct tenant financial benefits, energy savings programs associated with SOMAH and job training opportunities, as well as understanding how VNEM, solar credits and their utility rate structure will impact their bill changes.

Figure 37 – Impact of "How will your utility bill change?" Material on Tenant Understanding of Expected Bill Changes
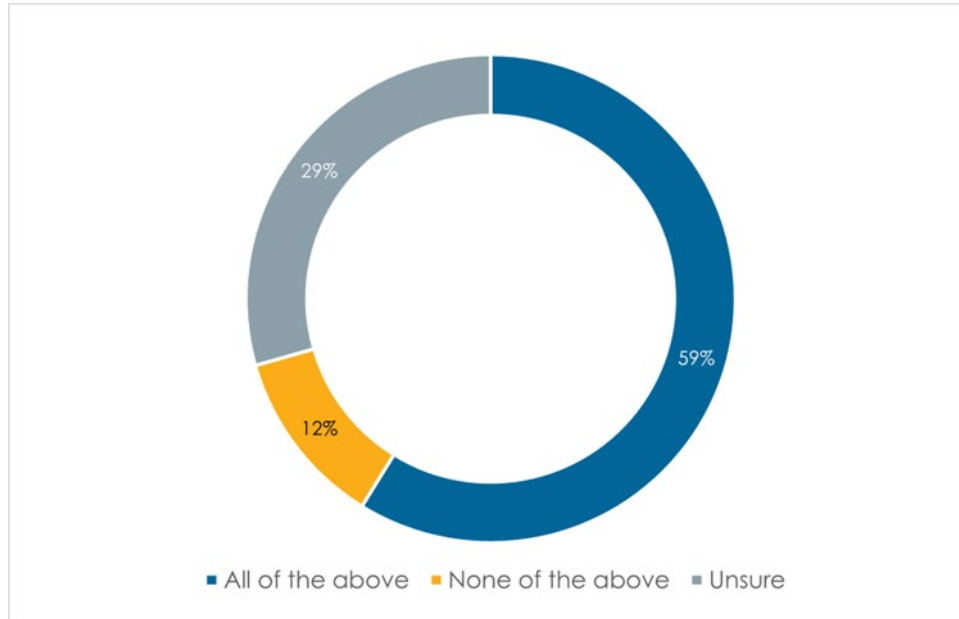
N = 24

After reviewing the document, "How will your utility bill change?" did you know the following details of the SOMAH Program?

- The solar panels send electricity to the electric grid, resulting in bill credits for me and my community.
- My utility company will calculate the savings I will see on my bill.
- My bill will change due to getting solar.
- I can call the SOMAH Tenant Hotline or my utility company if I have questions

Twenty-four respondents shared 59% confidence when combining all four points above. Tenants reported when they do receive the materials — whether it be through the tenant education toolkit, notices in the common area space or resources received from tenant engagement — there is a greater opportunity of understanding the VNEM process, solar credit application on utility bills and awareness of the SOMAH Tenant Hotline to ask questions about SOMAH and specifics to their building.

Figure 38 – "Did your property owner/manager or contractor provide an in-person or virtual workshop or presentation about the SOMAH Program?"
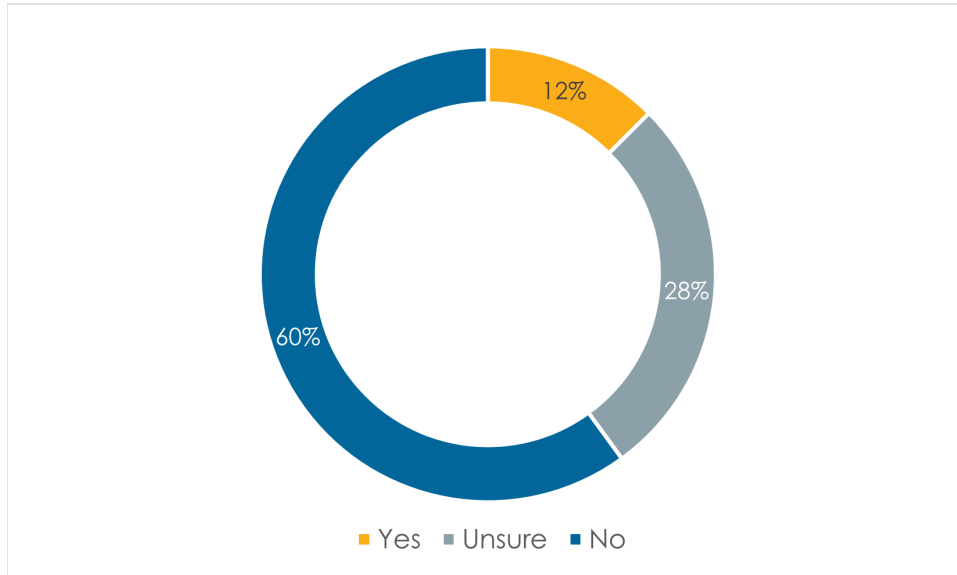
N = 40

Based on the 40 SOMAH tenants who responded to this question, tenant education workshop services have yet to be actively performed by their property owner/manager or contractor. Although property owners/managers or contractors have completed the second tenant education requirement, the 60% of tenants reporting no workshop was performed indicates property owners and contractors are still not taking advantage of the free tenant education workshop services to prepare tenants for the solar installation process.

Figure 39 – "How did your utility bill change after SOMAH solar bill credits were applied?"
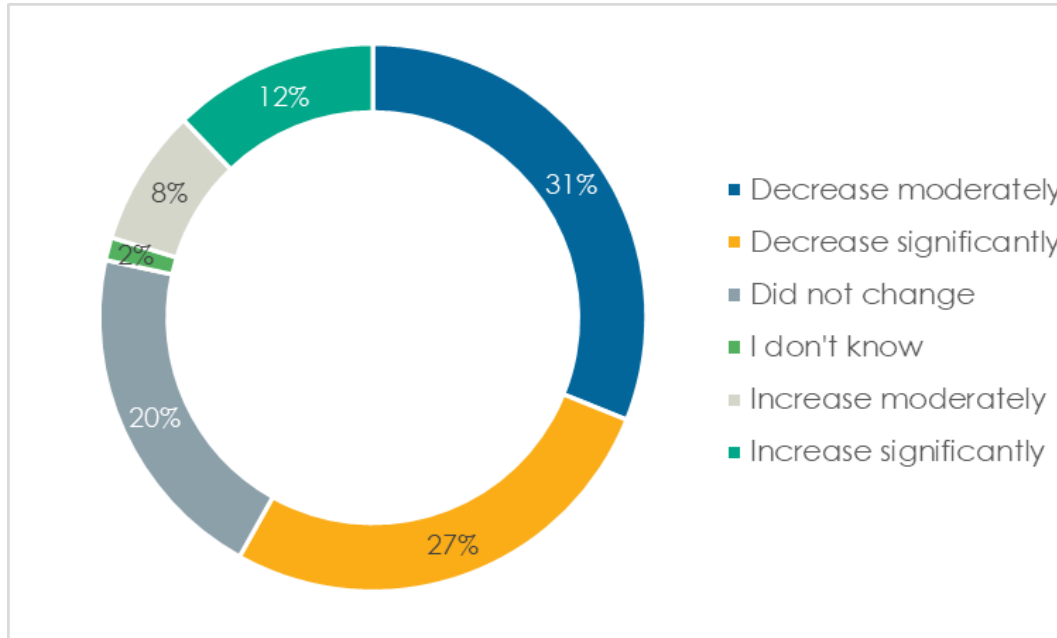
N = 74

Based on tenants' experience with utility bill changes and readability from the SOMAH tenant education shared: Of the 74 responses, the majority found that their bills decreased significantly (27%) or moderately (31%) after solar credits were applied. It is important to note that SOMAH-required resources provide an understanding of how the VNEM process works, solar credits are applied and utility rate structures affect their energy bills. Because 20% saw no change, and a small number of tenants indicated bill increases, this emphasizes a lack of SOMAH tenant resource distribution and tenant workshops to increase their knowledge.

Preliminary survey results convey that tenants primarily receive the required SOMAH tenant education materials through direct delivery methods from the property manager/on-site staff.

- Tenants reported that SOMAH TE materials have increased:
    - Knowledge of SOMAH's benefits (e.g., direct financial benefits, job training opportunities).
    - Readability of utility bill changes.

- Understanding of solar credits generated by SOMAH PV systems.
- However, results also indicate that there are barriers and inconsistencies:
    - Many SOMAH tenants are not receiving the SOMAH-required materials.
    - There is an inconsistency in what materials are being received by tenant populations.
    - Property owners/managers or contractors are less likely to conduct tenant education workshops.

Based on the current response rate, the SOMAH PA determined that in the second round of outreach, it is crucial to meet tenants where they are. The SOMAH PA and its CBO partners from the California Environmental Justice Alliance (CEJA) conducted in-person surveys at a Santa Ana property, one of the original nine properties surveyed. A total of 40 surveys were completed. The SOMAH PA will analyze these results and include them in survey reflections that will support TE changes.

Lastly, the SOMAH PA submitted TE requirement changes with input from various stakeholders, including SOMAH's CBO partners, Advisory Council, Job Training Organization (JTO) Task Force and public forum attendees. Expected additions and changes include:

1. NEW: Contractor TE Requirement
    - Share the following materials 60 days or more before install:
        - Get paid to install solar.
        - What to expect with SOMAH.
        - Site safety map.
2. CHANGE: Host Customer/Property Owner
    - Share the following materials 60 days or more after install:
        - IOU ESA materials.
        - How will your utility bill change?
        - Simple ways to save on energy.
3. NEW: Required online Tenant Education Training in addition to contractor training.
    - By project leads:
        - Track A: host customer/property owner.
        - Track B: contractors.

<u>Affidavit Ensuring Tenant Education</u>

The SOMAH PA also continues to review the Affidavit Ensuring Tenant Education to understand how tenant education is being conducted. Currently, there are 158 signed affidavits, of which 4.4% of projects met the first tenant education requirement outreach method via USPS, and 95.5% via direct delivery to tenants. For the second tenant education outreach method, 119 of the 158 signed affidavits, or 75%, indicate that the SOMAH-approved materials are provided in common areas within the property.

While the second method of tenant education outreach is not prescribed, the SOMAH PA wants to ensure that the methods of engagement utilized effectively inform tenants of the benefits of SOMAH. The SOMAH PA intends to utilize the data collected from the Affidavit Ensuring Tenant Education, along with the tenant education surveys, to inform the tenant education requirement changes, revision of tenant education toolkit and Tenant Education Services.

3.2.6 Stakeholders

Stakeholder outreach is an important part of the SOMAH Program's ME&O efforts. SOMAH stakeholders include, but are not limited to, local government offices, elected officials, IOUs, CCAs, regional energy networks (RENs) and California energy efficiency program administrators. Building and maintaining partnerships with stakeholders strengthens the credibility of the SOMAH Program and ensures the program is reaching target audiences across the state. The goals of stakeholder outreach are to 1) spread awareness of the SOMAH Program and 2) encourage actions such as co-marketing efforts to reach potential participants and ultimately generate new projects.

The SOMAH PA engaged in activities across these two focuses, including, but not limited to, collaborating with energy efficiency programs through RENs and the IOUs, speaking at conferences and webinars and developing co-marketing materials. There was also a focus on planning for the year and developing a strategy for effectively reaching out to the stakeholder audience. The following sections summarize the PA's accomplishments from January to June 30, 2023.

IOUs, CCAs and RENs

This reporting period, the SOMAH PA maintained collaboration with the IOUs — Liberty Utilities, PacificCorp, PG&E, SCE and SDG&E. The SOMAH PA met regularly throughout the year with representatives of PG&E and SCE's Single Point of Contact (SPOC)

services and Energy Saving Assistance Common Area Measures (ESA CAM) programs. On March 15, 2023, in collaboration with The California Energy Smart Homes Program, the PA co-hosted a webinar targeted for property owners on clean energy programs, including SOMAH, Energy Smart Homes and the Low-Income Weatherization Program. There were 58 registered and 36 attendees for this webinar. The new Multifamily Whole Building (MFWB) Program will be launched in July 2023. To raise awareness of this program, it has been added to the stackable program webpage on the SOMAH website and featured in the Q2 newsletter, the SOMAH Scoop. The PA will be looking into further collaboration opportunities and referrals between the programs.

Community choice aggregators (CCAs) outreach was a large focus of efforts during this time. This work began with direct email outreach to all active CCAs in California in March 2023. From there, the PA hosted introductory meetings with CCAs including East Bay Community Energy (EBCE), Peninsula Clean Energy (PCE) and Orange County Power Authority (OCPA). The goal of these meetings was to discuss opportunities to co-market the SOMAH Program to customers, ideally a website or newsletter feature, or co-host a webinar event including SOMAH information. These efforts will continue through the remainder of this year, with additional direct outreach and meetings, ideally resulting to a partnership with a CCA in each of the large IOU territories by the end of 2023.

Local Governments and Elected Officials

The PA held interest calls with a variety of stakeholders, including city councilmembers, a community solar program, an advocacy group and CCAs. Targeted direct outreach efforts were made to local governments and elected officials to share about completed SOMAH projects in their jurisdictions, including the County of Alameda, the County of San Bernardino and Congressman Mike Levin. In late April 2023, Congressman Levin and staff attended a SOMAH ribbon-cutting at Villa Loma Apartments in Carlsbad. From there, a meeting was held in June 2023 to discuss potential collaboration and promotion of the Carlsbad case study. The PA plans to continue exploring this partnership. The SOMAH PA also participated in a panel at the 14th Annual California Climate and Energy Forum in collaboration with the Association for Energy Affordability, StopWaste and Eden Housing, Inc. The panel session focused on a case study of Maple Gardens, a project that leveraged multiple funding sources to complete comprehensive clean energy and electrification retrofits. The programs leveraged were SOMAH, LIWP, Bay Area Multifamily Building Enhancements (BAMBE) program and TECH Clean California. In the second half of 2023, SOMAH will participate

in a panel for the San Diego Green Building Conference and anticipates additional engagements that will be shared in the next reporting period.

The stakeholder marketing toolkit, which is available on the SOMAH website, was updated during the reporting period. The marketing toolkit contains a SOMAH overview flyer, a newsletter template, social media copy and imagery. Stakeholder partners can use these assets to raise awareness of the program and ensure consistent and accurate messaging is being shared.

Stakeholder Outreach in Collaboration with SOMAH CBOs

The SOMAH PA meets regularly with participating community-based organizations (CBOs) on stakeholder outreach, on either a monthly or quarterly basis depending on the CBO. The following leads were made by the SOMAH CBOs in the first half of 2023:

- California Environmental Justice Alliance (CEJA) – Introduced to East Bay Community Energy (EBCE), which led to an interest call to discuss opportunities to collaborate. Additionally, CEJA introduced the PA to a representative from District 4 Councilmember Nithya Raman's office, which led to an interest call to discuss the program on February 1, 2023.
- OC Goes Solar (OCGS) – Presented on the SOMAH Program during a Solarize Irvine Program presentation for the Irvine City Council on May 12, 2023. As a result, Councilmember Kathleen Treseder featured a SOMAH blurb in her June newsletter. Additionally, scheduled an interest call with Orange County Power Authority (OCPA), the CCA in Orange County. Self Help Enterprises (SHE) – Presented to the City of Shafer city councilmembers and mayor on January 18, 2023. This presentation led to discussion on a partnership/sharing of logos for co-marketing opportunities.
- Environmental Health Coalition (EHC) – Direct outreach efforts to the City of National City, ideally to be added to the city council meeting agenda and advocate on behalf of SOMAH.

3.3 Workforce Development

A primary goal of the SOMAH Program is to promote economic development in low-income and underserved communities through paid job training opportunities, emphasizing local and targeted hiring of individuals who experience barriers to entering the solar workforce. The SOMAH PA continues to reach this goal by:

- Conducting targeted outreach to job training organizations (JTOs) across the state to engage prospective job trainees.

- Empowering SOMAH's CBO partners with tools and resources to connect local job seekers to training opportunities.
- Engaging tenants of SOMAH properties to take advantage of SOMAH job training opportunities.
- Organizing career development workshops and resources for job trainees to promote awareness of job training opportunities and address barriers to employment.
- Supporting contractors with trainee recruitment and workforce development to augment participation in SOMAH and ensure requirements are met efficiently.
- Gathering feedback from SOMAH's Job Training Organization (JTO) Task Force.

Job Training Organization Outreach & Job Trainee Engagement

The current SOMAH application pipeline has created 850 job training opportunities and 53,680 trainee hours. To broaden SOMAH's pool of eligible job trainees to participate in these opportunities, the SOMAH PA continues to actively contact and vet JTOs that serve targeted trainees and geographic regions where there is lower JTO engagement, including Northern California, the Central Valley, Inland Empire and San Diego County. The SOMAH PA also continues to focus outreach to JTOs that serve priority populations, such as justice system-impacted individuals, trainees residing in rural areas and tribal communities.

Since the last reporting period, the SOMAH PA has verified the eligibility of eight new JTOs, for a total of 93 active JTOs. This reporting period, the SOMAH PA has been able to increase engagement with JTOs with increased team capacity to specifically focus on JTO partnerships. The SOMAH PA also continues to maintain strong engagement with existing JTO partners, who connect their students and graduates with the SOMAH Program. The SOMAH PA has added 37 new job trainees to the SOMAH Job Training Portal for a total of 502 job trainees engaged on the Job Training Portal.

In addition to engaging with JTOs across the state to expand SOMAH's network of eligible job trainees, the SOMAH PA continues to work with CBOs to inform their local communities about SOMAH's job training opportunities and facilitate local JTO connections. The SOMAH PA is also increasing tenant participation in job training opportunities through Tenant Education Services.

The SOMAH PA continues to engage with job trainees and solar job seekers by facilitating career development workshops. In July 2023, the SOMAH PA will host a Fair Chance Hiring webinar to encourage contractors to adopt fair chance hiring as a model and to learn more about the importance of hiring reentry and system-impacted

workers in order to improve their current workforce. In Q2 2023, the SOMAH PA launched the HeatSpring SOMAH Academy, a curated list of free self-study courses that provide a broad overview of the solar industry. Once all the courses are completed, a trainee meets eligibility requirements and can apply for a paid job training opportunity. The SOMAH PA is also in the process of developing a resources page on the Job Training Portal that will include access to the HeatSpring SOMAH Academy and a directory of local supportive services where job seekers can access support for transportation, childcare and other barriers to employment.

Contractor Job Training Support

This reporting period, the SOMAH PA maintained supportive efforts for participating contractors in meeting the job training requirements by directly connecting local job seekers and job trainees from the Job Training Portal to contractors with projects near installation. In 2023, the SOMAH PA received and facilitated 20 requests for support with job training from SOMAH contractors. As a result of this support, 100% of SOMAH projects that submitted the Job Training Affidavit with the Incentive Claim Milestone met all job training requirements.

Additionally, the SOMAH PA continues to organize and host programming to help contractors meet their job training requirements and support local and targeted hiring goals. In February 2023, the SOMAH PA hosted a Job Training Overview webinar for contractors that detailed SOMAH's job training requirements and the workforce development resources and services provided through the program. Contractors also received a live demonstration of the job training portal explaining how it can be leveraged to help meet their job training requirements.

Lastly, the SOMAH PA has launched a Workforce Needs Assessment to gauge hiring, training and workforce development needs of solar contractors eligible for SOMAH. Insights from the assessment will be used to better support contractors in complying with SOMAH's job training requirements and staying competitive in the solar industry and to improve experience and participation in the program. Analysis from this assessment will be presented by Q4 2023.

3.3.1 Local Hiring and Job Training Data

During this reporting period, the SOMAH PA received 20 Job Training Affidavits from projects that reached the Incentive Claim Milestone for a total of 98 projects that submitted affidavits. The Job Training Affidavits report 73 job trainees hired to work on
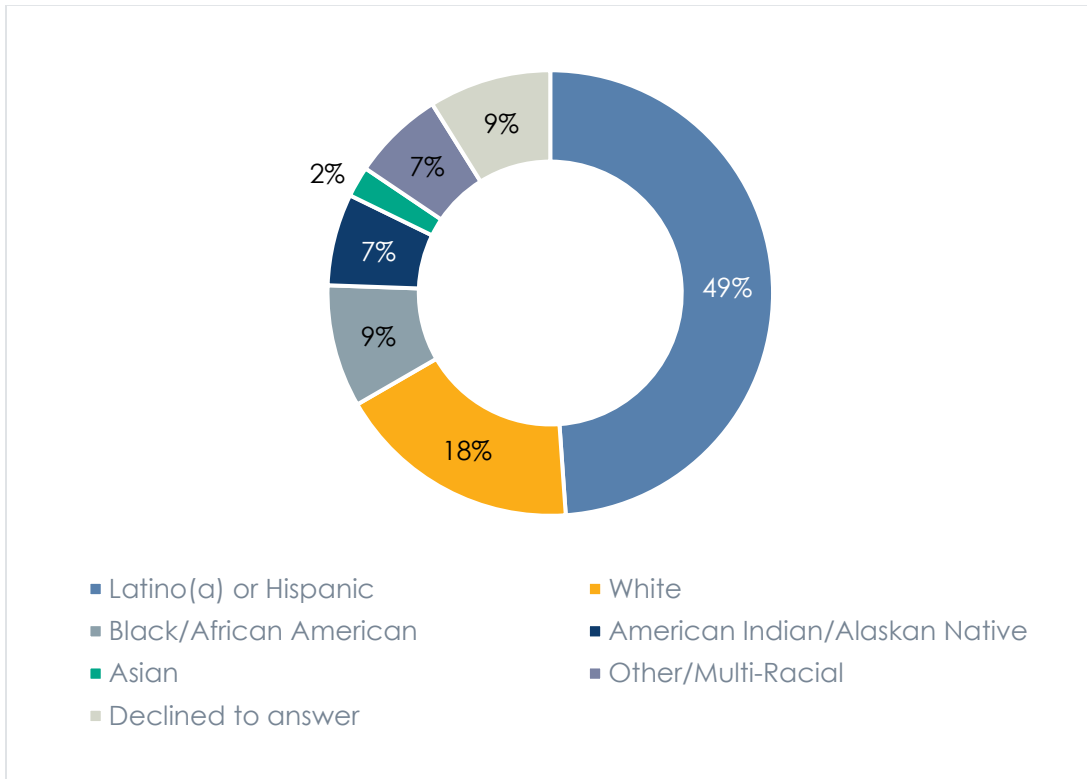
SOMAH projects for 180 job training opportunities, with many of the job trainees working on multiple SOMAH projects, gaining valuable hands-on experience and solar installation skills. The SOMAH PA has collected demographic information on 44 of the 73 hired job trainees (shown below). Data on job trainee advancement (i.e., the number of SOMAH trainees who become full-time solar employees) and retention is collected through surveys to contractors after each project reaches the Incentive Claim Milestone. To date, the SOMAH PA has received 534 job training surveys, with 28 job trainees reported as hired by contractors for continued employment.
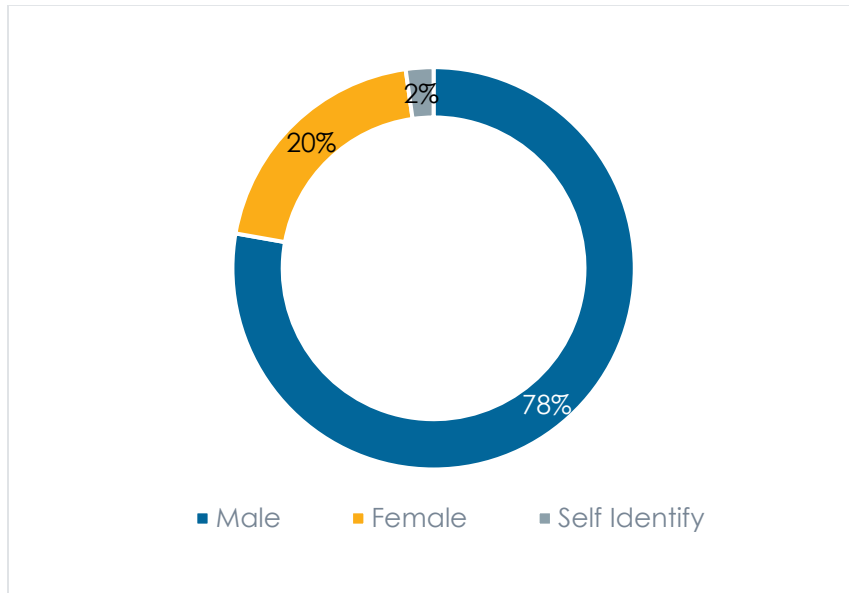
Local & Targeted Hires
- 28% of job trainees reside in DACs.
- 25% of job trainees were local hires (live in the same county as the SOMAH project).
- 78% of trainees were hired on a temporary basis while 15% were permanent hires.
- 53% of job trainees were targeted hires.
- 83% of trainees worked on direct PV installation.
- 7% of trainees worked on post-installation operations and maintenance.
- 3% of trainees worked on pre-installation design and engineering.
- 21% reported as unemployed or underemployed at the time of SOMAH intake.
- 15 tenants of SOMAH properties participated as job trainees.
- 17 job training organizations have students or graduates that have participated in SOMAH job training opportunities.
- $20.56: average trainee wage.
- 70.75: Average number of training hours per project per trainee.

SOMAH

Figure 4040 – Job Trainee Race/Ethnicity Breakdown

- Latino(a) or Hispanic
- White
- Black/African American
- American Indian/Alaskan Native
- Asian
- Other/Multi-Racial
- Declined to answer
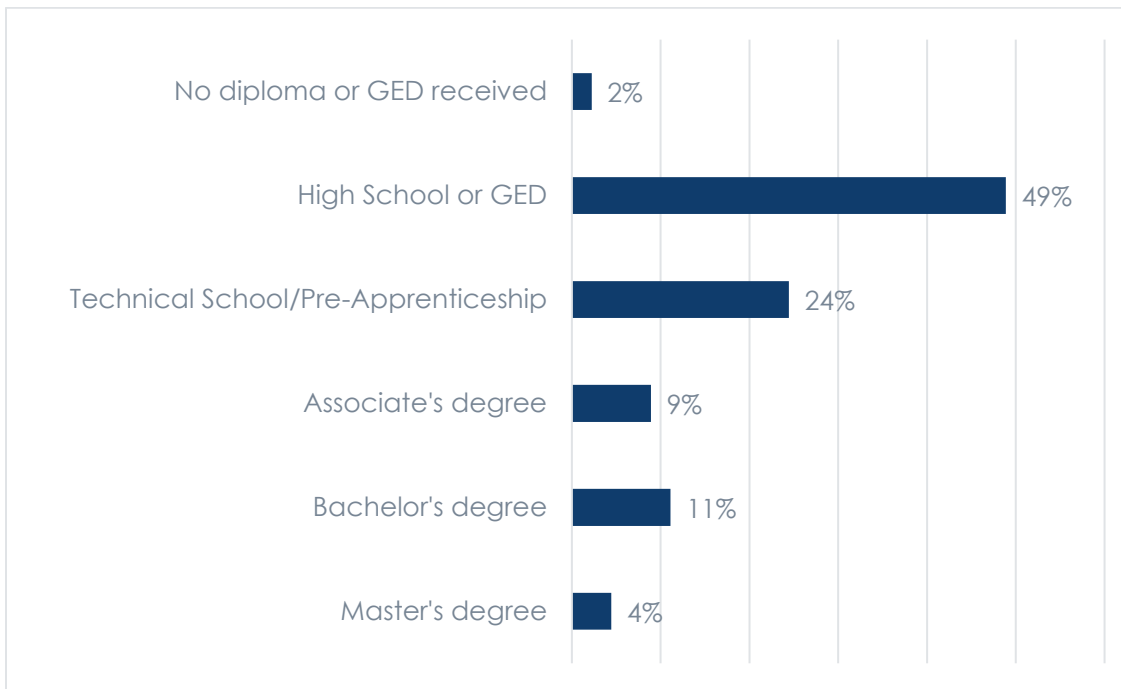
N = 45

Figure 4141 – Job Trainee Gender Breakdown

N = 45

Figure 4242 – Highest Level of Job Trainee Education

N = 45

Figure 43 – Percent of Trainee Placements by Project Role
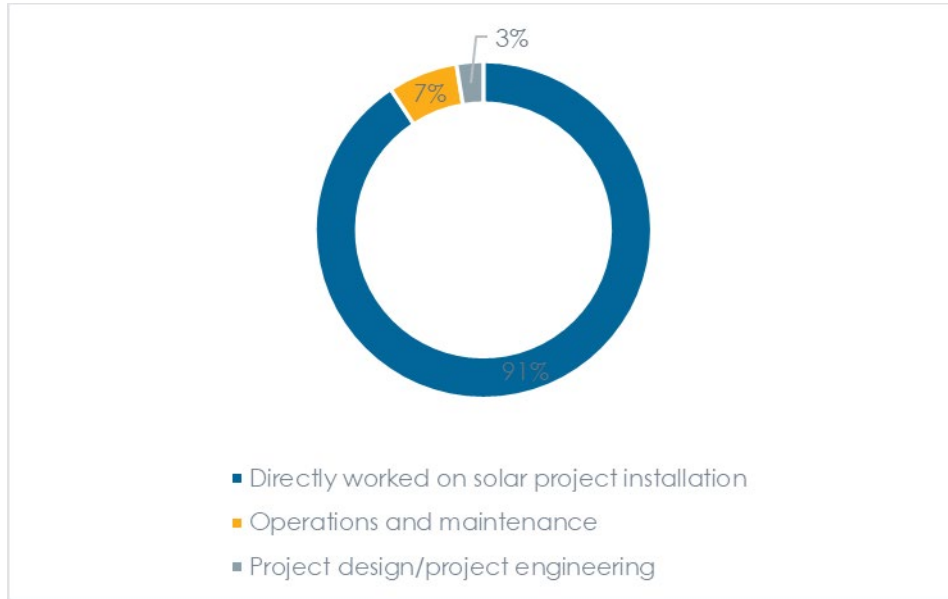

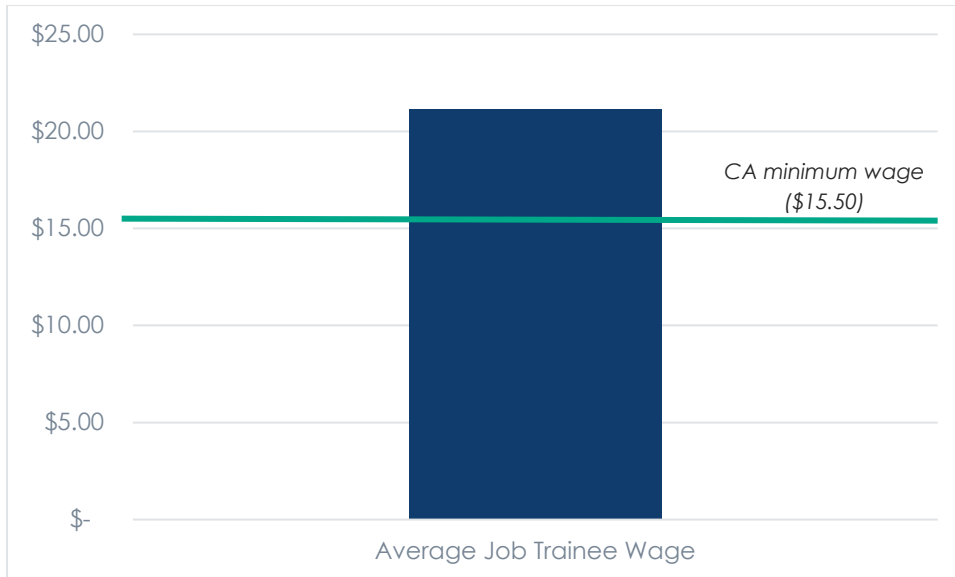**Figure 4444 – Average Trainee Wage Compared to CA Minimum Wage**

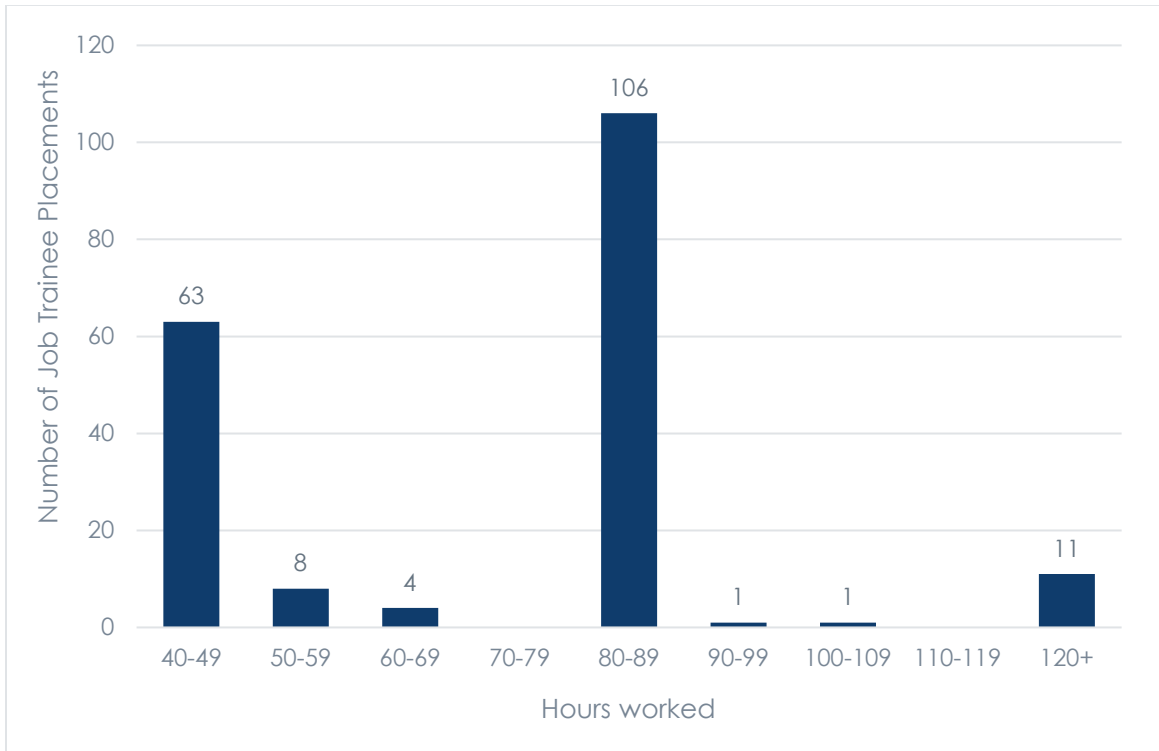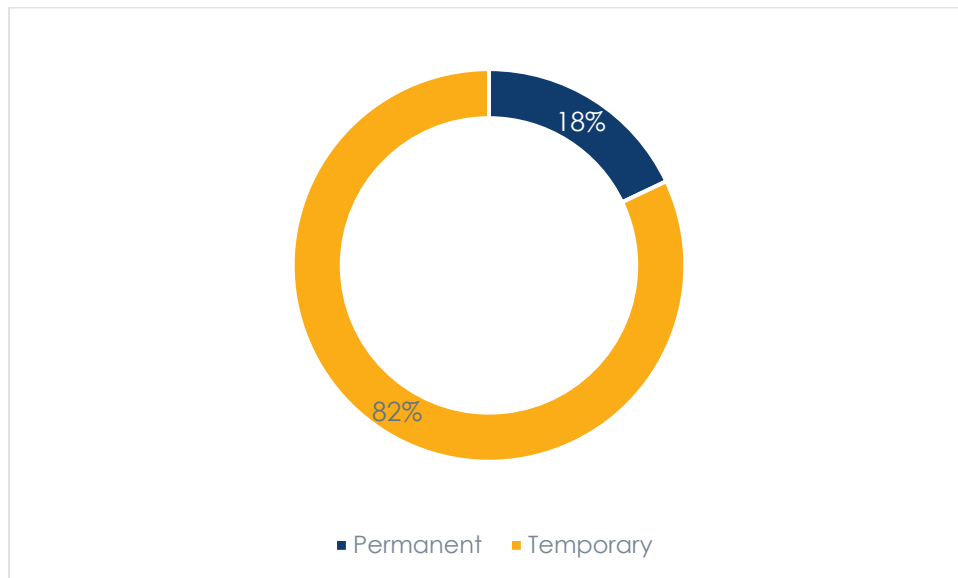**Figure 4545 – Hours per Job Trainee Placement**

Figure 4646 – Percent of Trainee Placements by Employment Status

3.4 Technical Assistance

The primary objective behind the SOMAH Program's technical assistance (TA) offerings is to ensure property owners and solar contractors receive accurate, useful and educational information. Installing solar PV on existing multifamily properties often requires property owners to navigate and overcome barriers, including complicated ownership and financing structures as well as crunching the numbers on solar costs and benefits.

Even with the majority of SOMAH projects enrolled in Track B, there is still a vital need for SOMAH to offer and provide objective third-party expertise and resources to protect property owners and low-income communities the program serves. The program's TA offerings are designed to balance information provided by solar contractors to ensure that property owners and those receiving benefits from the SOMAH Program are receiving objective, unbiased information related to their solar installation.

SOMAH's TA offerings cover a wide range of services from preliminary system designs to interconnection support, including job training and tenant education support services — all offered with the goal to provide consumer protection and education in support of reducing the burden of participation and increasing access to objective expertise and resources.

In Q1 2023, SOMAH rolled out the program's fleet monitoring service. Fleet monitoring is a program requirement to ensure SOMAH incentivized PV systems are performing as expected and economic benefits are realized. As of June 30, 2023, 85 SOMAH PV systems were connected and monitored in SOMAH's monitoring platform Sunspot. Sunspot identifies and flags PV systems that are underperforming compared to expected performance. If a system is flagged, the SOMAH PA reaches out to the system contact to discuss the underperformance and next steps. The SOMAH PA expects to have more substantial performance data in the next reporting period.

The SOMAH Program is flexible in meeting the needs of property owners and solar contractors, both those participating in the program and those considering program participation. For this reason, SOMAH can provide personalized support through several TA offerings, including TA Previews, Upfront TA and Standard TA.

3.4.1 Technical Assistance Preview Reports

SOMAH provides a no-cost and no-obligation offering called Technical Assistance (TA) Preview reports. TA Preview reports can help property owners decide if taking the next step and enrolling in SOMAH is right for them. TA Preview reports are condensed versions

of the solar feasibility report presented to owners as a part of the program's Upfront TA services that highlight a few key details that can help a property owner decide if they should take the next step toward program enrollment. TA Previews are customized for each property and include a preliminary solar PV system design and sizing, estimated incentive amount and financial analysis.

TA Preview reports support property owners in weighing the prospective costs and benefits of installing solar. To date, a total of 55 TA Preview reports have been created for unique properties and presented to prospective property owners. In Q1 and Q2 2023, 25 requests were made for TA Preview reports. Almost 50% of the requests came from the program's community-based organization (CBO) partners and over 30% of the requests came from direct outreach by the property owner engagement team.

3.4.2 Upfront TA

Upfront TA services are designed to supply property owners participating in Track A with educational, technical and financial resources to facilitate their solar PV installation. Offering Upfront TA services sets the SOMAH Program apart from similar previous programs and provides property owners who are less familiar with solar equal access to program benefits. As a part of Track A Upfront TA, property owners are assigned an Energy Project Manager who serves as an objective third-party resource to answer questions and provide education and support as needed.

Property owners enter Track A with varying levels of solar knowledge. Through guidance from their Energy Project Manager, each property owner receives personalized support to accommodate their specific needs, including:

- Understanding the SOMAH Program process.
- Investigating the solar potential at their property through the presentation of a solar feasibility report.
- Selecting an eligible contractor using a multiple bid process.
- Evaluating the costs and benefits of moving forward with a solar PV project.

To date, there have been 13 Track A projects that have received Upfront TA services. Of those 13 projects, eight are active Track A projects either currently receiving Upfront TA services or a later milestone in the SOMAH application lifecycle.

Tenant benefits continue to be a central pillar of the SOMAH Program as well as a focus within Track A. For the eight active Track A projects, 89% of the clean energy produced from the solar PV systems is projected to directly benefit the more than 500 low-income households via VNEM bill credits. The energy produced by these proposed systems is

expected to offset approximately 76% of the tenants' historic annual electrical consumption.

Additionally, many of the tenants in the active Track A projects will receive added benefits from deep energy retrofits in conjunction with solar. Four out of the eight projects were either referred to SOMAH by a comprehensive energy efficiency program they are enrolled in or used Upfront TA services to receive a referral to, and enroll in, a comprehensive energy efficiency program. Because it is important to think about energy efficiency upgrades and electrification when considering solar PV, one goal of Upfront TA is to connect property owners with other energy efficiency programs or discuss what programs may be a good fit for their property.

The average estimated system size for the eight active Track A projects is 114 CEC-AC kW with an average expected aggregate annual output of 194,730 kWh. Figure 47 outlines additional system statistics across the IOU territories for the projects.

Figure 4747 – Track A Summary

IOU	Number of Active Track A Projects	Estimated SOMAH Incentive	Estimated System Size (CEC-AC kW)	Expected Aggregated Annual Output (kWh)
PG&E	3	$435,179	179	284,333
SCE	3	$1,189,923	484	860,416
SDG&E	2	$715,556	248	413,089
Liberty Utilities	0	$0	0	0
PacifiCorp	0	$0	0	0
Total	8	$2,340,658	911	1,557,838

To improve property owners' understanding of the intricate ownership and financing structures for their projects, the solar feasibility report presented as part of Upfront TA services was updated to provide additional clarity on the options available. Additionally, the solar feasibility report was further updated to include new information about changes to the federal investment tax credit that can enhance the financial benefits. These updates ensure property owners are presented with offerings that they are likely to find in the market from solar contractors who bid on their projects.

3.4.3 Standard TA

The SOMAH Program understands that challenges and barriers can arise at any point during a solar project, and as a result, the program's Standard TA offerings are available to Track A and B project property owners and solar contractors at any time during their enrollment in SOMAH.

Most of the Standard TA provided to date has been financial assistance and referrals for projects looking to leverage SOMAH with other energy-related programs. Standard TA has helped two projects identify pathways to consider electrification and provided assistance sizing their PV systems to account for energy efficiency upgrades. Standard TA has also been provided to support with the Energy Efficiency Compliance Milestone, meeting general program requirements, solar feasibility, utility data analyses and navigating interconnection.

To date, 43 projects have made a total of 72 requests for Standard TA. Figure 48 shows the breakdown of the services provided through Standard TA across the IOU territories.

Of the 43 projects, two that came into SOMAH via Track A used their existing relationships with TA to reach out and request Standard TA support. One project requested contractor bidding support to find a new solar contractor. A second round of project bid solicitations was facilitated, which allowed the host customer to select a new solar contractor and keep the project viable. Another project with the same host customer was a canceled Track A project requesting support in meeting program requirements, which lead to the completion of a tenant education workshop and job training support services.

Figure 4848 – Standard TA Services Requested
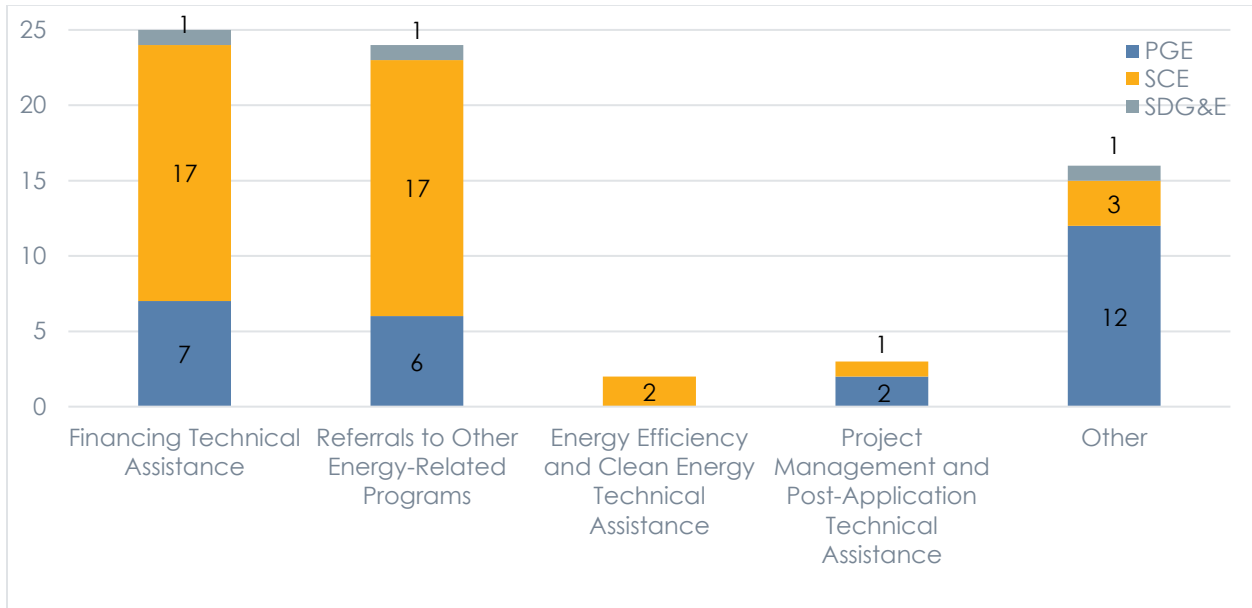
4. Program Planning and Development

The SOMAH PA takes an adaptive approach to ensure feedback is regularly solicited from program participants and stakeholders and that decisions about the program are made with transparency. The SOMAH PA works in close partnership with the program's advisory bodies and CBO partners, with input from other stakeholders, to ensure the program remains accountable to the communities it is intended to benefit. The following section provides information on the SOMAH PA's maintenance of official records as well as its feedback mechanisms.

Official Record Maintenance

The SOMAH Program has various types and frequencies of public reporting. The information below outlines these reports and their location.

- SOMAH Incentive Budget Report and Working Data Set (updated weekly)
- Semiannual Progress Report
- Semiannual Expense Report
- Annual Marketing, Education and Outreach (ME&O) Plan

Place of record: https://www.californiadgstats.ca.gov/programs/#_subsection_17

- Special reports to the California Legislature
- Third-party evaluation reports

Place of record: https://www.cpuc.ca.gov/somah

During this reporting period, the SOMAH PA highlights: 1) an update on activities related to reporting, feedback and accountability and 2) approved handbook updates, including revised incentive level amounts.

4.1 Reporting, Feedback and Accountability Mechanisms

The SOMAH Program has several accountability and feedback mechanisms to ensure key stakeholders contribute to program development and implementation. These include two advisory bodies, quarterly public forums and monthly working meetings with the participating SOMAH IOUs.

4.1.1 Public Forums

SOMAH public forums are held quarterly to allow the SOMAH PA to 1) share program updates, 2) propose program modifications and design changes and 3) solicit feedback from program stakeholders about their experiences with the program, including challenges, barriers and areas for improvement.

The SOMAH PA held one public forum during this reporting period. The Q1 2023 Public Forum included an update on key program statistics and activities across SOMAH's different program areas. It also included sessions that presented updates on SOMAH's new system monitoring program rollout and the SOMAH PA's strategic priorities for 2023.

The SOMAH PA publishes the presentation slide decks and meeting notes, including stakeholder questions and SOMAH PA answers, via the CalSOMAH.org website following each public forum event.

Q1 2023 Public Forum place of record:

- SOMAH Public Forum Q1 2023 Presentation
- SOMAH Public Forum Q1 2023 Notes

4.1.2 IOU Working Group

During the reporting period, the SOMAH PA held six IOU Working Group meetings through the first half of the year. The Q1 and Q2 2023 working group meetings focused on the following topics:

- January 2023 – General program and marketing coordination updates, IOU budget coordination.
- February 2023 – General program and marketing coordination updates.
- March 2023 – General program and marketing coordination updates, IOU budget coordination.
- April 2023 – General program and marketing coordination updates, incentive claim application processing review.
- May 2023 – General program and marketing coordination updates, SPOC contacts update, incentive claim application processing review.
- June 2023 – General program and marketing coordination updates, incentive claim application processing update, VNEM bill date review.

Referrals and co-marketing between the IOUs and SOMAH are explored further under Section 3.2.6, Stakeholders.

4.1.3 SOMAH Advisory Groups

SOMAH's two advisory groups are the SOMAH Advisory Council and the Job Training Organization (JTO) Task Force. These advisory groups help ensure that the program stays accountable to the communities that it was intended to serve.

Advisory Council

The purpose of the SOMAH Advisory Council (SOMAH AC) is to ensure the voices and interests of equity-focused community advocates and key stakeholders remain at the center of the SOMAH Program and to make certain SOMAH maximizes benefits to low-income tenants and DACs by advising the SOMAH PA on program development and implementation. Since the last reporting period, there have been no changes to SOMAH AC membership. There are 11 members in this cohort that represent the fields of environmental justice, workforce development/labor, tenant rights and economic justice, affordable housing, tribal communities and the solar industry. The SOMAH AC meets virtually on a quarterly basis.

Q1 2023 topics and discussions included:

- An overview of SOMAH Program stats and program area updates since the previous quarterly meeting.
- Relevant regulatory and policy updates and their impacts on the SOMAH Program.
- An introduction to SOMAH's new system monitoring program and its associated benefits and challenges.

Q2 2023 meeting topics and discussions included:

- An overview of SOMAH Program stats and program area updates since the previous quarterly meeting.
- Updates on and challenges regarding tribal participation in the SOMAH Program.
- Relevant regulatory updates and draft findings and recommendations from SOMAH's third-party triennial evaluation.

Job Training Organization Task Force

The purpose of the Job Training Organization Task Force (JTO Task Force) is to ensure that the voices and interests of job training organizations remain at the forefront of the SOMAH Program's job training efforts. It advises the SOMAH PA on strategies for engaging job trainees and the creation of resources to ensure that trainees obtain maximum benefit from training opportunities on SOMAH installation projects, including subsequent, full-time employment in the solar industry and, over time, career advancement and wage growth. The SOMAH PA and JTO Task Force have created a strategy that encompasses outreach methods and pathways, targeted applicants and priority gaps.

The JTO Task Force is composed of ten regionally diverse representatives from JTOs, including California Community Colleges, career technical education programs, community nonprofits and private job training centers. Like the SOMAH AC, the JTO Task Force meets quarterly. Since the last reporting period, the JTO Task Force has held two quarterly meetings.

Q1 2023 topics included:

- Briefing on SOMAH and the Self-Generation Incentive Program (SGIP), specifically the work done by SGIP and potential overlap on multifamily dwellings.

- Discussion on how to better support trainees, including short-term and long-term initiatives, such as updating handbook requirements and integrating comprehensive services.
- Discussion on the creation of an Apprenticeship Working Group, including background, expectations, proposed timelines and membership.

Q2 2023:

- Briefing on policy and regulatory updates, including the CPUC Ruling, the third-party evaluation draft findings and recommendations, SB 355 and AB 2143.
- Update from the Apprenticeship Working Group, briefing on previous partner efforts regarding solar apprenticeships (SEIA and IREC) and discussion on potential next steps.
- Notification that the SOMAH PA will be releasing the 2024-25 JTO Task Force application in early July 2023, with a tentative closing date of November 3, 2023. Six out of the ten current representatives are eligible to apply for a second term. The SOMAH PA will reach out to members individually to ensure continuity in the work started by previous cohorts.

4.1.4 Third-Party Program Evaluation

As directed in D.17-12-022, Energy Division (ED) is to provide regular evaluations of the SOMAH Program to the Legislature. Verdant Associates has operated as the third-party evaluator for the SOMAH Program for Phase I and Phase II evaluations, SOMAH Vendor Assessment and the 2023 SOMAH Second Triennial Report. These evaluation efforts are designed to assess program impacts and progress on metrics and reaching program goals.

Phase I, Phase II and Vendor Assessment

The Phase II evaluation was finalized in October 2021, followed by the SOMAH PA working closely with the ED to complete the CPUC Response to Recommendation (RTR) process. The RTR was then finalized with public comments and replies in February 2022. Subsequently, the SOMAH Vendor Assessment was released later in February 2022, and the SOMAH PA completed the RTR process for that evaluation in the following weeks. The CPUC website maintains records of all files relating to the SOMAH evaluation reports.

Through the RTR process for both the Phase II evaluation and Vendor Assessment, the PA formally indicated the response to or implementation plan for the evaluation's

recommendations and addressed public comments where applicable. The SOMAH PA continues to work closely with the ED to identify opportunities to incorporate key recommendations into the program's overall priorities and strategic efforts. During regular check-ins with ED, the SOMAH PA and ED discuss ongoing actions for RTR implementation and overall program administration efforts.

2023 Triennial Evaluation

With a significant shift in program activity through application milestone advances and completed projects since the data available at the Phase II evaluation, the 2023 SOMAH Second Triennial Report is a valuable opportunity to re-align on available program and project data, assess accomplishments and impacts thus far and analyze viability and expectations for what's to come in future years of the program. Verdant held a public webinar on October 4, 2022, to share the research plan with stakeholders followed by public comments that were due October 14, 2022. The SOMAH PA then engaged in coordination efforts with Verdant at the end of 2022 into early 2023 to support their data collection efforts and analysis for the assessment.

On June 16, 2023, Verdant held a triennial SOMAH evaluation report webinar with a high-level presentation of their findings and an opportunity for attendees to ask questions. The comment period for stakeholders and for the SOMAH PA to provide feedback concluded on June 30, 2023. Given the timing in relation to this reporting period, the SOMAH PA aims to summarize and address the findings and implementation plans from the evaluation and its recommendations in the next Semiannual Progress Report. Taken together, feedback and input from key audiences, participants, stakeholders and advisors will help inform and modify program areas to ensure the approaches are successful in reaching the audiences and communities SOMAH is designed to serve.

4.2 Program Design and Updates

This section provides an overview of program design changes and prospective changes as well as updates on related regulatory activity.

4.2.1 Incentives Petition for Modification

On August 11, 2022, the SOMAH PA submitted a Petition for Modification (PFM) to address the program's annual incentive step-down and incentive levels. The SOMAH PA was intent on making the proposal as straightforward as possible to address the standstill of applications without bringing additional complexity to the program. The goals of the PFM were to: 1) eliminate the current annual incentive step-down

methodology, 2) increase the incentive levels to better align with project costs, 3) prioritize DAC and tribal land properties with a higher incentive and 4) authorize the SOMAH PA to propose future modifications through a Tier 2 Advice Letter. Through increased incentives, the SOMAH PA intended to improve the program's value proposition after hearing that increasing project costs (supply chain issues, inflation, labor challenges) and decreasing incentives created a financial barrier to participation. These changes would support both the existing project pipeline and attract new applications. With slowing of applications in 2021 and 2022 (aside from the October 2021 incentive step-down spike), the high level of available funding represented an unnecessary delay in delivering energy credits and direct financial benefit to tenants across the state at a time of historic inflation. Increasing incentives to the levels proposed by the SOMAH PA is anticipated to spur participation, allowing for the SOMAH Program to achieve the 300 MW minimum installation target and support the programmatic benchmark of 40% of participating projects located in DACs.

To address the timing of the annual July step-down, the SOMAH PA also submitted an extension request on June 24, 2022, to pause the incentive step-down. The request was subsequently approved on June 30, 2022, providing the SOMAH PA the opportunity to submit the PFM by October 1, 2022, with the incentive step-down paused until an outcome of the PFM was determined by the CPUC.

A Final Decision for the SOMAH Incentive PFM was issued on March 21, 2023. Decision (D.) 23-03-007 amended D.17-12-022 incentive levels to raise the highest incentive level possible to $3.50/watt for tenant areas and $1.19/watt for common areas and ended the annual incentive step-down. D.23-03-007 also ordered the SOMAH PA to make relevant updates to the program handbook (Handbook 7.0) and program implementation plan (PIP) to true-up records, processes and implementation efforts through a Tier 2 Advice Letter that was approved on June 12, 2023. See more details on handbook versions and timelines in Section, 4.2.2, Program Handbook. With higher incentives fully rolled out and available for current and future applications, the SOMAH PA anticipates additional reporting information and data analytics to be available in the next semiannual report. See Section 3.1.1, Applications and Incentive Statistics and Section 3.1.2, Program Payments for more information on application activity and the impacts of the available higher incentives.

Following D.23-03-007 was the deferred Ruling to "seek further data on the necessity of increased incentives for DACs, as well as other information; [...] to increase uptake in DACs in the most effective manner that most directly benefits the communities

themes."[20] The Ruling was released on May 5, 2023, with 28 questions directed to IOUs, the SOMAH PA and other parties to "seek[s] party comments on potential SOMAH Program modifications, in particular those aimed at increasing participation by projects in disadvantaged communities."[21] The SOMAH PA provided comments on June 2, 2023, and reply comments on June 16, 2023, as directed by the Ruling and appreciated the opportunity to engage with the Commission and other stakeholders in support of the SOMAH Program.

4.2.2 Program Handbook

This subsection reviews the SOMAH PA's work to update the SOMAH Program Handbook conducted during this reporting period, as well as relevant regulatory decisions not attached to the PA's work to update the handbook. The table below provides a non-exhaustive overview of the SOMAH Program Handbook since the inaugural edition, including major updates by version.

Figure 4949 – Handbook Versions

Version	Major Updates	Approval Date
Handbook 1.0 (original)	• Established original program offerings and requirements	March 2019
Handbook 2.0	• SOMAH & MASH stacking	May 2020
Handbook 3.0	• Progress payments	December 2020
Handbook 4.0	• Application pipeline management (Lottery) • Required notification for early job trainee termination • System changes affecting incentive amounts • Assorted minor updates	May 2021
Handbook 5.0	• Code of conduct • Application fee waiver for target groups (i.e., DACs) • Formal program benchmark targeting 40% of projects in DACs by 2026 • Clarification of eligibility across CalEnviroScreen versions	May 2022

[20] D.23-03-007, page 10
[21] R.14-07-002, page 1

	• Option to submit PPM with EECM • Minimum time requirement for progress payment filing from four to two months	
Handbook 6.0	• Splitting Reservation Request into two phases to streamline application process • Removal of Multifamily Affordable Housing Document Cover Sheet • Removing the requirement of checklist for program participants • Increased time for earmarked funding with Track A projects from three to six months • Adjusted timeline from reservation approval to Energy Efficiency Compliance Milestone submission from two to three months • Option for SOMAH PA to perform remote site inspections at Incentive Claim	February 2023
Handbook 7.0	• Elimination of the annual incentive step-down • Increased incentive levels	Effective March 21, 2023 Approved June 12, 2023

Seventh Handbook Edition: Higher Incentive Approved and Step-down Eliminated

The SOMAH PA is committed to continuous improvement in program planning and development, while balancing the needs for robust stakeholder engagement in proposing updates and reducing program complexity to the maximum extent possible. With those guiding principles, the SOMAH PA works closely with stakeholders to address program gaps and ensure the program is being implemented in ways that provide meaningful economic benefits to participating tenants and properties, particularly in the state's environmental justice communities. The majority of relevant activity from Handbook 6.0 occurred in the prior reporting period, with the final Advice Letter approval this period in February 2023. Unlike past handbook versions, where the program modifications are proposed by the SOMAH PA, Handbook 7.0 resulted from the Final Decision of the Incentives PFM.

Per direction from D.23-03-007, the SOMAH PA's proposed seventh handbook edition was submitted via a Tier 2 Advice Letter this period and substitute sheets submitted for additional clarification and continuity. Below provides a summary timeline regarding CSE Advice Letter 141-E:

- CSE Advice Letter 141-E filed: April 18, 2023.
- No stakeholder comments or protests received.
- Substitute sheets filed for CSE Advice Letter 138-E: March 15, 2023 (Handbook) and March 31,2023 (PIP).
- Advice Letter approved: June 12, 2023.

Advice Letter 141-E was submitted to address the program's change of incentives, higher incentives approved and elimination of the annual incentive step-down model resulting from the Incentives PFM. Please refer to Section 4.2.1, Incentives Petition for Modification for more information on the PFM.

5.   Conclusions

The SOMAH PA continues its commitment to supporting applicants and property owners through environmental and economic barriers along with industry and site challenges to ensure maximum program benefits are available to the communities SOMAH is intended to serve. The SOMAH PA acknowledges historic inflation, supply chain challenges, ongoing effects of COVID-19 and construction delays have greatly impacted project completions to date. However, with a rebalancing economy, influential program changes like the increased incentives and ongoing efforts to reduce program barriers and expand eligibility, the SOMAH PA is encouraged by recent participation and continued interest in the program. The SOMAH PA continues to expand services for participants such as the Affordability Prescreen and Technical Assistance (TA) and Support Services that have proven to be well utilized resources and assets for participants. In a season of reflection, evaluation and feedback solicitation, the SOMAH PA is appreciative of the opportunities to improve the program and better understand the experiences and challenges of its participants. Handbooks 6 and 7, the PFM process, recent Ruling and triennial evaluation all played an important part of positioning the program for continued and future success. The SOMAH PA also recognizes the importance of offering trainings and feedback opportunities to applicants and values the input provided from tenant surveys, subcontractor interviews and tenant education workshops.

The program continues to emphasize DAC and tribal communities as priority groups, who continue to benefit from the waiver of application deposits in an effort to decrease the financial barrier to participation. Furthermore, the SOMAH PA is focused on continued engagement with tribal entities to increase applications on tribal lands. Engagement included conducting research on the structure of tribal entities and points of contacts and creating an application resource document for special considerations

for tribal properties. The SOMAH PA will continue to focus on understanding barriers faced by tribal properties throughout 2023.

SOMAH's annual marketing plan continues to guide the program's overarching outreach and marketing strategies to its key audiences. Similar to 2022, the plan focuses on property owner outreach, the newly DAC-designated federal tribal land properties, contractor and subcontractor diversity, in-person tenant education workshops, showcasing job trainee solar career success stories and increasing stakeholder outreach. Survey responses and research to evaluate property owner's engagement, motivation and application obstacles are projected to be reported in Q3 2023. Connecting with property owners, with an emphasis on reaching out to owners in DACs, will remain a focus in 2023. The SOMAH PA plans to host a variety of webinars for the property audience and is planning a ribbon-cutting event with the Bishop Paiute Tribe Community Development in 2023.

The SOMAH PA anticipates a sustained rate of project completion along with an increased volume of progress payments and final incentive payments through the end of the year and into 2024. While new application submissions have been increasingly active in Q2, the SOMAH PA looks forward to reporting on maintaining a baseline and increased number of new project entries through the rest of this year with impactful progress to the programs 300 MW goal. The SOMAH Program was designed to deliver renewable energy and financial benefits to tenants of multifamily affordable housing. To ensure the communities the SOMAH Program is intended to serve are being supported equitably with a dynamic and adaptive program, the SOMAH PA continues to engage in evaluation efforts and solicits feedback and input from CBOs, participants, stakeholders and trusted advisors.

6. Appendix A

As referenced in Section 3.1.1, Application and Incentive Statistics, the following is the description of PowerClerk statuses.

Upfront Technical Assistance

- Upfront Technical Assistance Request Submitted: Applicant has entered the required information and uploaded the Upfront Technical Assistance Request documentation for program administrator review.
- Upfront Technical Assistance Review: Upfront Technical Assistance Request is under review by the program administrator.
- Pending QA – Upfront Technical Assistance Request: The Upfront Technical Assistance Request has been reviewed by the program administrator and is pending quality assurance check.
- Suspended – Upfront Technical Assistance Request: Upfront Technical Assistance Request is incomplete or requires further action by the applicant. The program administrator sent correction information via email from the PowerClerk portal.
- Overdue – Technical Assistance Request Follow-up: The requested corrections for the Upfront Technical Assistance Request are overdue and should be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Resubmitted – Upfront Technical Assistance Request: The Upfront Technical Assistance Request has been resubmitted with corrections and is in queue for review by the program administrator.
- Upfront Technical Assistance Approved: Applicant has entered the required information and uploaded the reservation request documentation for review.

Reservation Request Milestone

- Reservation Request Submitted: Applicant has entered the required information and uploaded the reservation request documentation for review.
- Reservation Request Review: Reservation request is in queue for review by the program administrator.
- Pending QA – Reservation Request: Reservation request is under final review by the program administrator.
- Reservation Request – IOU Data Results Shared: The Reservation Request - Phase I is complete. The IOU data results have been shared and Phase II may now be started.

- Suspended – Reservation Request: Errors were found during reservation request review and require corrections by the applicant. The program administrator sent correction information via email from the PowerClerk portal.
- Suspended – Reservation Request II: Errors were found during Reservation Request Phase II Review and require corrections by the applicant. The program administrator sent correction information via email from the PowerClerk portal.
- Overdue Corrections – Reservation Request: The requested corrections for the reservation request are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Resubmitted – Reservation Request: The reservation request has been resubmitted with corrections and is in queue for review by the program administrator.
- Pending Data Request: The application is in queue to be sent to the IOUs for electric usage data request.
- Pending IOU Data: Electric usage data has been requested from the IOU.
- Processing IOU Data: Electric usage data has been received and is under review by the program administrator.
- Pending Application Deposit: Reservation request is free of errors and pending receipt of the application deposit before moving to reservation approved status.
- Overdue – Application Deposit: The application deposit is overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Reservation Approved: Reservation request requirements have been met and the application deposit has been received. The project's funding will be reserved for 18 months, starting from the reservation approval date.

Energy Efficiency Compliance Milestone

- Overdue – Energy Efficiency Compliance Milestone: The Energy Efficiency Compliance Milestone is overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Energy Efficiency Compliance Milestone Submitted: Applicant has entered the required information and uploaded the Energy Efficiency Compliance Milestone documentation for review.
- Energy Efficiency Compliance Milestone Review: Energy Efficiency Compliance Milestone is in queue for review by the program administrator.
- Pending QA – Energy Efficiency Compliance Milestone: The Energy Efficiency Compliance Milestone has been reviewed by the program administrator and is pending quality assurance check.

- Suspended – Energy Efficiency Compliance Milestone: Errors were found during Energy Efficiency Compliance Milestone Review and require corrections by the applicant. The program administrator sent correction information via email from PowerClerk.
- Overdue Corrections – Energy Efficiency Compliance Milestone: The requested corrections for the Energy Efficiency Compliance Milestone are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Resubmitted – Energy Efficiency Compliance Milestone: The Energy Efficiency Compliance Milestone has been resubmitted with corrections and is in queue for review by the program administrator.
- Energy Efficiency Compliance Milestone Approved: Energy Efficiency Compliance Milestone requirements have been met.
- Pending Site Verification: Program administrator is completing a Site Verification. The application is held in this status until results are received and processed.
- Energy Efficiency Compliance Milestone Postponement Approved: The Energy Efficiency Compliance Milestone Postponement has been approved. The energy efficiency requirements must be submitted with the Proof of Project Milestone or Incentive Claim Milestone.

Proof of Project Milestone

- Overdue – Proof of Project Milestone: The Proof of Project Milestone is overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Proof of Project Milestone Submitted: Applicant has entered the required information and uploaded the Proof of Project Milestone documentation for review.
- Proof of Project Milestone Review: Proof of Project Milestone is in queue for review by the program administrator.
- Pending QA – Proof of Project Milestone: The Proof of Project Milestone has been reviewed by the program administrator and is pending quality assurance check.
- Suspended – Proof of Project Milestone: Errors were found during Proof of Project Milestone Review and require corrections by the applicant. The program administrator sent correction information via email from the PowerClerk portal.
- Overdue Corrections – Proof of Project Milestone: The requested corrections for the Proof of Project Milestone are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.

- Resubmitted – Proof of Project Milestone: The Proof of Project Milestone has been resubmitted with corrections and is in queue for review by the program administrator.
- Proof of Project Milestone Approved: Proof of Project Milestone requirements have been met.

Progress Payment Pathway

- Overdue Corrections Progress Payment Pathway: The requested corrections for the Progress Payment Pathway are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Pending IOU Approval – Progress Payment: The program administrator has completed the application review and is now pending payment approval by the IOU.
- Pending QA – Progress Payment Pathway: The Progress Payment Pathway has been reviewed by the program administrator and is pending quality assurance check.
- Pending Virtual Walk-through: Program administrator is completing a virtual walk-through. The application is held in this status until results are received and processed.
- Progress Payment Pathway Approved: Progress Payment Pathway is in queue for review by the program administrator.
- Progress Payment Pathway Submitted: Applicant has entered the information and uploaded progress payment documentation for review.
- Resubmitted – Progress Payment Pathway: The application has been reviewed by the IOU and is in queue for review by the program administrator.
- Resubmitted IOU Approval – Progress Payment: The application has been reviewed by the IOU and is in queue for review by the program administrator.
- Suspended – Progress Payment Pathway: Errors were found during Progress Payment Pathway Review and require corrections by the applicant. The program administrator sent correction information via email from the PowerClerk portal.

Incentive Claim Milestone

- Overdue – Incentive Claim Package: The incentive claim is overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Incentive Claim Submitted: Applicant has entered the required information and uploaded the incentive claim documentation for review.

- Incentive Claim Review: Incentive claim is in queue for review by the program administrator.
- Pending QA – Incentive Claim: The incentive claim has been reviewed by the program administrator and is pending quality assurance check.
- Suspended – Incentive Claim: Errors were found during Incentive Claim Review and require corrections by the applicant. The program administrator sent correction information via email from the PowerClerk portal.
- Overdue Corrections – Incentive Claim: The requested corrections for the incentive claim are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Resubmitted – Incentive Claim: The incentive claim has been resubmitted with corrections and is in queue for review by the program administrator.
- Pending Inspection: Project has been selected for a final PV system inspection and a final field inspection will be conducted. The application is held in this status until inspection results are received and processed.
- Incentive Claim Approved: Incentive claim requirements have been met and inspection results have been processed (if applicable).
- Pending Payment: The application has been approved for payment. The application is pending payment and the status will change to Incentive Check Mailed status once payment has been issued.
- Incentive Check Mailed: The incentive check has been mailed and should be received by the payee within 30 days of the status date (check date).

Waitlist

- Waitlist: Applicant has entered the required information and uploaded the Technical Assistance Request Form or reservation request documentation for program administrator review in a fully subscribed program.
- Waitlist: Upfront Technical Assistance Review: The Upfront Technical Assistance Request is in queue for review by the program administrator in a fully subscribed program.
- Waitlist: Pending QA – Upfront Technical Assistance Request: The Upfront Technical Assistance Request has been reviewed by the program administrator and is pending quality assurance check.
- Waitlist: Suspended – Upfront Technical Assistance Request: Waitlisted Upfront Technical Assistance Request is incomplete or requires further action by the applicant. The program administrator sent correction information via email from the PowerClerk portal.

- Waitlist: Overdue – Technical Assistance Request Follow-up: The requested corrections for the Upfront Technical Assistance Request are overdue and must be submitted as soon as possible. Please contact the program administrator if assistance is required.
- Waitlist: Resubmitted – Upfront Technical Assistance Request: The Upfront Technical Assistance Request has been resubmitted with corrections and is in queue for review by the program administrator in a fully subscribed program.
- Waitlist: Pending Data Request: The Upfront Technical Assistance Request has been reviewed by the program administrator and is in queue to be submitted to the IOU for historical electric usage data at the project site.
- Waitlist: Pending IOU Data: Electric usage data has been requested from the IOU and is pending review by the program administrator in a fully subscribed program.
- Waitlist: Processing IOU Data: The program administrator has received historical electric usage data for the project site from the IOUs and is processing the data.
- Waitlist: Upfront Technical Assistance Request Approved: Program administrator has reviewed and approved the Technical Assistance Request in a fully subscribed program. The project may now submit a Reservation Request Package.

Other statuses

- Canceled: The application is no longer eligible due to missing a deadline or project requirement. The project can be resubmitted with a new application at the current incentive rate.
- Withdrawn: Host customer or applicant requested that the application be removed and permanently marked with the inactive, withdrawn status. Withdrawn applications are moved to canceled status after 14 days.
- Unsubmitted: Applicant has started the application, but the information is incomplete and not fully submitted.