# SOMAH

**Solar on Multifamily Affordable Housing**

## SOMAH

# Semiannual Progress Report

Reporting period
July 1, 2021 – December 31, 2021

# Table of Contents

# Table of Figures

# 1. **Executive Summary**

In SOMAH's fifth reporting period, the program continued to virtually engage with stakeholders and program participants. The SOMAH Program Administrator's (PA) goals continued to emphasize understanding and adapting to the impacts of the COVID-19 public health crisis while continuing to implement a resilient and successful program. While participants reported industry impacts and supply chain challenges causing delays in construction timelines and project completion, the program celebrated an additional 13 completed and paid projects since July 2021 and attended two ribbon-cutting events to celebrate SOMAH systems and their benefits to the tenants and community. Additional funding was released for PG&E (Q3 and Q4) and Liberty Utilities (Q4), which maintained plentiful funding for all IOU territories, preventing waitlists for 2021 and allowing for immediate application review. The incentive step-down brought a surge of application activity at the end of October, yielding 125 new application submissions. Activity around progress payments increased along with final incentive payments, which helps provide SOMAH incentive dollars to the communities that need them the most. The SOMAH PA has continued its research efforts to improve the program. In 2021, the PA began a new effort of contractor and property owner focus groups. These focus groups will help the PA understand barriers to participation from contractors and property owners who are not participating in the program. Marketing, Education and Outreach (ME&O) efforts continued to focus on increasing awareness about SOMAH, Track A participation, the number of participating projects in disadvantaged communities (DACs), contractor diversity, job training opportunities and tenant benefits. The percentage of DAC projects in the program increased from 28% to 34% in the second half of 2021, further driving toward SOMAH's goal to increase DAC participation overall. The SOMAH PA also published a second revision on the updated Eligible SOMAH Properties Map from earlier in 2021, adding additional details and functionality to further the value and accessibility of the tool for program participants and stakeholders. COVID-19 restrictions lessening led to local governments focusing on post-pandemic economic recovery, which allowed the SOMAH PA to align its strategic outreach to include government and stakeholder efforts like establishing co-marketing partnerships with the three California Renewable Energy Networks (RENs).

## 1.1  COVID-19 Acknowledgement

The COVID-19 public health crisis, and the SOMAH PA's response, continued to impact the program in this reporting period. While 2020 and 2021 were affected by the impacts of the COVID-19 public health crisis, the SOMAH PA continues to acknowledge the

impacts and lingering effects to SOMAH participants, stakeholders and the solar industry. The SOMAH PA understands that the industry will be affected for some time to come and continues to encourage participants to provide feedback on the barriers and impacts they are facing. The SOMAH PA has heard through outreach and engagement and seen through queue and pipeline management that participants are committed to participating in SOMAH and are giving their best efforts to adapt and evolve in the new environment resulting from the public health crisis. Despite these impacts, the program has continued to see projects progress with their design, construction, and interconnection efforts. The SOMAH PA maintains 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 Rising Sun Center for Opportunity. 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 community-based organization (CBO) partners. Track A provides upfront technical assistance (TA) services for property owners to supply them with a well-rounded understanding of their property's energy needs and the educational, technical, and financial resources that are available to facilitate valuable energy efficiency upgrades and a solar installation. Participants that select Track A have their incentive funding earmarked for the duration of the three-month upfront TA period, prior to a reservation request. Track A participants typically do not have an identified contractor and are guided through a multiple bid process to select an eligible solar contractor for their project. The SOMAH PA has recently noted

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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.

instances of an owner opting to withdraw from Track A to reapply as Track B after receiving TA 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 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 TA, which is further described in Section 3.4, Technical Assistance.

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 P.U. Code 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). The SAER is posted twice a year to the California Distributed Generation Statistics website in conjunction with this Semiannual Progress Report (SAPR).

### 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 December 31, 2021.

**Figure 2 – Total Program Administrative Expenditures by Category**

| Category | |
|---|---:|
| SOMAH Program Administration | $13,084,633 |
| SOMAH Marketing, Education & Outreach (ME&O) | $7,068,908 |
| SOMAH Workforce Development | $1,313,639 |
| SOMAH Technical Assistance | $650,574 |
| SOMAH Evaluation Expenses[2] | $507,145 |
| Investor-owned Utility (IOU) Expenses | $3,635,176 |
| Total | $26,260,074 |

More detailed expenditure information can be found at
https://www.californiadgstats.ca.gov/programs/#_subsection_17.

## 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 reservation queues and up to five waitlist queues, when applicable. The funds for each utility territory may be released at different 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 second half of 2021 includes the following territories and dates: PG&E (Aug. 23, 2021 and Dec. 2, 2021) and Liberty Utilities (Nov. 17, 2021). 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.

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[2] 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 which are funded by SOMAH program administration 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 | 0 | 0.242 | 664,841 | 0.118 | 141,390 | 0 | 0 | 0.360 | 806,231 | 174,360,871 | 88,992,768 |
| | Track B | 0 | 0 | 0 | 0 | 14.860 | 31,280,802 | 25.696 | 52,687,348 | 0.296 | 593,722 | 40.852 | 84,561,872 | | |
| | Total | 0 | 0 | 0 | 0 | 15.102 | 31,945,643 | 25.814 | 52,828,738 | 0.296 | 593,722 | 41.212 | 85,368,103 | | |
| SCE | Track A | 0 | 0 | 0 | 0 | 0 | 0 | 0.433 | 1,090,344 | 0 | 0 | 0.433 | 1,090,344 | 202,691,059 | 135,219,311 |
| | Track B | 0 | 0 | 0 | 0 | 9.429 | 23,432,113 | 18.652 | 39,245,244 | 2.188 | 3,704,047 | 30.269 | 66,381,404 | | |
| | Total | 0 | 0 | 0 | 0 | 9.429 | 23,432,113 | 19.085 | 40,335,588 | 2.188 | 3,704,047 | 30.702 | 67,471,748 | | |
| SDG&E | Track A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49,843,974 | 28,877,015 |
| | Track B | 0 | 0 | 0 | 0 | 1.603 | 3,657,375 | 7.956 | 16,752,275 | 0.285 | 557,309 | 9.844 | 20,966,959 | | |
| | Total | 0 | 0 | 0 | 0 | 1.603 | 3,657,375 | 7.956 | 16,752,275 | 0.285 | 557,309 | 9.844 | 20,966,959 | | |
| 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 | 4,090,312 | 3,830,348 |
| | Track B | 0 | 0 | 0 | 0 | 0 | 0 | 0.134 | 259,964 | 0 | 0 | 0.134 | 259,964 | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0.134 | 259,964 | 0 | 0 | 0.134 | 259,964 | | |
| 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 | 1,751,447 | 1,430,633 |
| | Track B | 0 | 0 | 0 | 0 | 0 | 0 | 0.167 | 320,814 | 0 | 0 | 0.167 | 320,814 | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0.167 | 320,814 | 0 | 0 | 0.167 | 320,814 | | |
| TOTAL | Track A | 0 | 0 | 0 | 0 | 0.242 | 664,841 | 0.551 | 1,231,734 | 0 | 0 | 0.793 | 1,896,575 | 432,737,663 | 258,350,075 |
| | Track B | 0 | 0 | 0 | 0 | 25.892 | 58,370,290 | 52.605 | 109,265,645 | 2.769 | 4,855,078 | 81.266 | 172,491,013 | | |
| | Total | 0 | 0 | 0 | 0 | 26.134 | 59,035,131 | 53.156 | 110,497,379 | 2.769 | 4,855,078 | 82.059 | 174,387,588 | | |

**Figure 4 – Cumulative Program Budget**

| | 2016 Budget ($) | 2017 Budget ($) | 2018 Budget ($) | 2019 Budget ($) | Under-collections True-up ($) | 2020 Budget ($) | 2021 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 | 85,368,103 | 174,360,871 | 88,992,768 |
| SCE | 2,733,251 | 4,536,250 | 35,213,205 | 36,768,272 | 45,542,591 | 37,689,090 | 40,208,400 | 67,471,748 | 202,691,059 | 135,219,311 |
| SDG&E | 0 | 0 | 9,270,000 | 9,104,076 | 11,343,785 | 10,294,957 | 9,831,156 | 20,966,959 | 49,843,974 | 28,877,015 |
| PacifiCorp | 422,443 | 961,291 | 1,009,512 | 1,150,528 | 0 | 546,538 | TBD | 259,964 | 4,090,312 | 3,830,348 |
| Liberty Utilities | 132,440 | 258,329 | 314,706 | 419,517 | 0 | 326,327 | 300,128 | 320,814 | 1,751,447 | 1,430,633 |
| TOTAL | 5,029,126 | 10,114,980 | 85,137,423 | 81,405,693 | 88,506,960 | 83,755,517 | 78,787,964 | 174,387,588 | 432,737,663 | 258,350,075 |

# 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 Semiannual Progress Report (SAPR) on January 31, 2020.

### 3.1.1 Applications and Incentive Statistics

SOMAH continued to have ample funding available in all five IOU territories in the second half of 2021, with an available incentive budget of more than $258 million across the program at the end of 2021. Additionally, no IOU territory has had a waitlist since Q4 2020 (SDG&E). The SOMAH PA does not forecast any program waitlists in the immediate future based on the total amount of available funding along with the application submission trends in 2021. 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 or voluntarily withdrawn by the applicant or host customer. Second, incentive funds may become available through the course of application review. For example, adjustments made to system size after receiving consumption data from the IOU will affect the reserved incentive amount. The SOMAH PA has observed that most projects will reduce their system size after receiving site consumption data during the Reservation Request Milestone (or during upfront technical assistance for Track A projects), therefore, reducing the reserved 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 size and incentive amount 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 for review, additional steps are completed by the SOMAH PA and the applicant, which typically result in a longer reservation request review timeline.

**Figure 5 – Application Status by IOU Territory**

| Program | Active | Complete/ Incentive Paid | Waitlist | Canceled/ Withdrawn | **Total** |
|---|---|---|---|---|---|
| PG&E | 265 | 3 | 0 | 97 | **365** |
| SCE | 141 | 9 | 0 | 64 | **214** |
| SDG&E | 52 | 2 | 0 | 34 | **88** |
| Liberty Utilities | 2 | 0 | 0 | 0 | **2** |
| PacifiCorp | 1 | 0 | 0 | 0 | **1** |
| **Total** | **461** | **14** | **0** | **195** | **670** |

N = 670

Between July and December 2021, a total of 127 applications were submitted to the SOMAH Program, making this reporting period the largest amount of new application submissions since program launch in 2019 into early 2020. Of these, one new application was submitted in Q3, and 126 new applications were submitted in Q4. All 2021 new applications were submitted in the three larger IOU territories (PG&E, SCE and SDG&E), and no new projects were received for PacifiCorp or Liberty Utilities. Of the new applications, 64% were submitted to PG&E and 30% were submitted to SCE, with the remaining 6% to SDG&E. The previous reporting periods included 43 new applications in January–June 2021, 63 in July–December 2020 and 120 in January–June 2020. While the 2021 new applications represent a continued interest in the program, the SOMAH PA recognizes that new applications have been submitted at a slower pace overall. As outlined in both phases of the third-party evaluation, pipeline management is critical, but the SOMAH PA is highly motivated and focused on increasing and maintaining program participation with continued new applications. More information about SOMAH's ME&O efforts on pipeline management and increasing program participation is included in Section 3.2, Marketing, Education and Outreach.

**Figure 6 – Cumulative Applications Received**
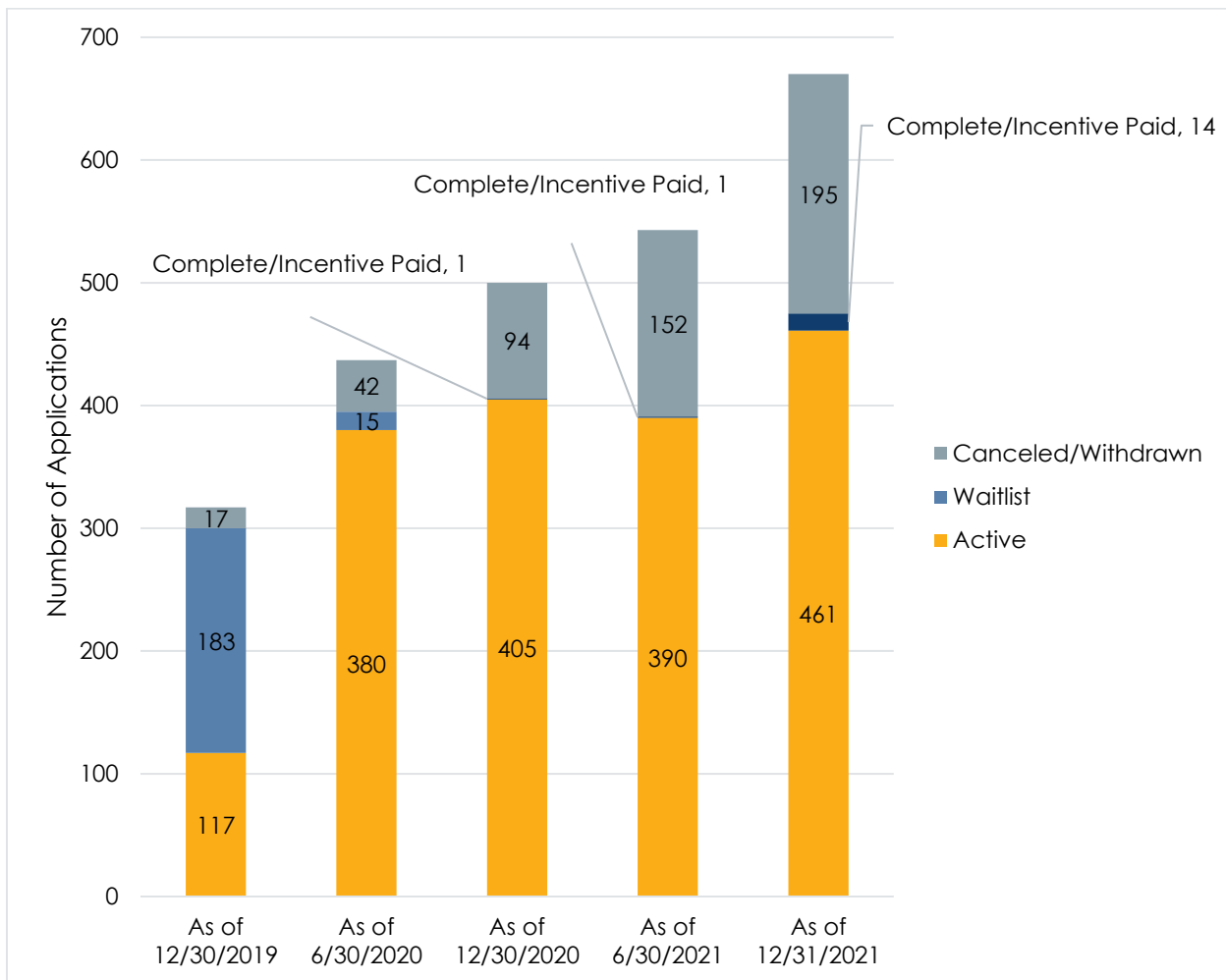


The SOMAH PA typically anticipates a large influx of submissions prior to July's incentive step-down due the changing incentive rate. In 2021, the July 1 incentive step-down was postponed due to a pending National Renewable Energy Laboratory (NREL) report that is used for the incentive step-down analysis. 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. The same pattern resulted with the incentive step-down as previously observed with the prior July step-down timelines, i.e., increased submission trickle and a larger flood of applications immediately before the incentive step-down. Preceding the incentive step-down, the following number of applications were submitted in the weeks prior to October 30.

- **October 1–10**: 1
- **October 11–17**: 0
- **October 18–24**: 26
- **October 25–29**: 95
- **October 30–November 5:** 3[3]

Maintaining active applications once they are submitted is critical to pipeline management. While there are several reasons an application may drop out or be removed from the program after initial submission, it is important for the SOMAH PA to understand what is happening with these projects and if they are viable for re-entry to the program at a later date. In response to recommendations from the Phase 1 Program Evaluation Report (2020), the SOMAH PA implemented data fields to track reasons for canceled and withdrawn projects. The SOMAH PA uses this information to support follow-up with property owners on projects that were not feasible or interested at this time but still meet program eligibility and to better understand the application queue. Despite new application submissions, effects of the COVID-19 public health crisis are still impacting application progression and will continue to do so for the foreseeable future. The program saw an increase in canceled and withdrawn applications throughout 2021, both due to voluntary withdrawals and for failure to provide the required documentation by the required timeline. In the second reporting period of 2021, 45 applications were canceled or withdrawn, with COVID-19 impacts commonly cited as part of the reason why the project was no longer feasible or of interest. Several applications were also canceled because they did not meet eligibility criteria for the SOMAH Program after an in-depth review of the documentation provided and conversations with applicants and host customers. Although the SOMAH PA has extended considerable flexibility and support to help stakeholders and participants navigate the new environment caused by COVID-19, participants are still facing new challenges. For example, in 2021, applicants 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. Where appropriate, the PA is making efforts to follow up with these participants after cancellation or withdrawal to determine if the projects are still viable and/or interested in the SOMAH Program.

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[3] The applications from October 30 through November 5 were submitted as Step 3 applications, after the incentive step-down.

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 projects. Applicants and property owners have given 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. 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) and the Progress Payment Pathway, included in Section 3.1.2, Program Payments. The SOMAH PA is also committed to working with the IOUs to support interconnection efforts and rollout of virtual net energy metering (VNEM) billing credits to tenant and property owners.

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. Since July 2021, the SOMAH PA has processed 25 requests for Incentive Claim Package deadline extensions, which are reviewed and addressed on a case-by-case basis. All these extension requests have cited circumstances beyond the control of the reservation holder that prevented the system from being installed as described in the Reservation Request Package. The supporting documentation for these extension requests often relayed information relating to supply chain issues (such as steel for carport installations) and included unique situations with interconnection challenges and/or unforeseen engineering challenges.

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 points collected at the first application step, the Reservation Request Milestone, the applicant is required to enter the project's construction start date or projected construction start date. At the start of each subsequent milestone, Energy Efficiency Compliance Milestone, Proof of Project Milestone and Incentive Claim Milestone, applicants are prompted to report if construction has started or update the projected construction start date if not. Figure 7 shows the construction timeline information reported in applications through Q4 2022.

**Figure 7 – Construction Timeline Insights**

| Date | Construction has Commenced | Projected Construction Start Date |
|---|---|---|
| 2020 | 13 | 20 |
| Q1 2021 | 0 | 14 |
| Q2 2021 | 0 | 174 |
| Q3 2021 | 0 | 73 |
| Q4 2021 | 1 | 39 |
| Q1 2022 | 0 | 51 |
| Q2 2022 | 0 | 46 |
| Q3 2022 | 0 | 20 |
| Q4 2022 | 0 | 2 |

The number of projects reporting to have started construction (including completed projects) significantly increased from five projects at the end of 2020 to 14 projects at the end of 2021, not including completed and paid projects. Prior application data reported that most projects approximated their construction to begin in late 2020 and early 2021. However, current days shows the majority of projects expected to start construction in Q2 2021. This data may be refreshed in early 2022 as projects progress to new milestones and report current data. Construction estimates for 2022 also fluctuated — in the last reporting period, only eight projects were projected to start construction in 2022. There are now 119 projects slated to start construction in 2022, which was the biggest shift in anticipated start dates for this reporting period. In previous reporting periods, projects were projected to start construction primarily in early to mid-2020, which was largely affected by the heightened impacts of the COVID-19 public health crisis. As a result, construction timeline projections have continued to shift through 2020 and 2021 and are expected to continue fluctuating into 2022 as projects progress and are better able to forecast construction timelines with more certainty and less barriers. While lingering impacts on construction plans and project timelines are likely, the SOMAH PA looks forward to supporting the pipeline of SOMAH projects that have continued to persevere through uncertainty and unforeseen obstacles. Updated construction start dates will continue to be reported as projects progress to future milestones through their 18-month reservation period. Updated information on these timelines will continue to be made available in subsequent progress reports. The SOMAH PA predicts that estimated construction timelines will continue to stay in flux while California continues to navigate health and safety standards statewide.

## 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 | 3 | 76 | 46 | 136 | 3 | 1 | 3 |
| SCE | 3 | 35 | 13 | 82 | 5 | 3 | 9 |
| SDG&E | 2 | 6 | 9 | 28 | 2 | 5 | 2 |
| Liberty Utilities | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| PacifiCorp | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| **Total** | **8** | **117** | **70** | **247** | **10** | **9** | **14** |

## Figure 9 – Percentage of Active Applications by Milestone and Territory
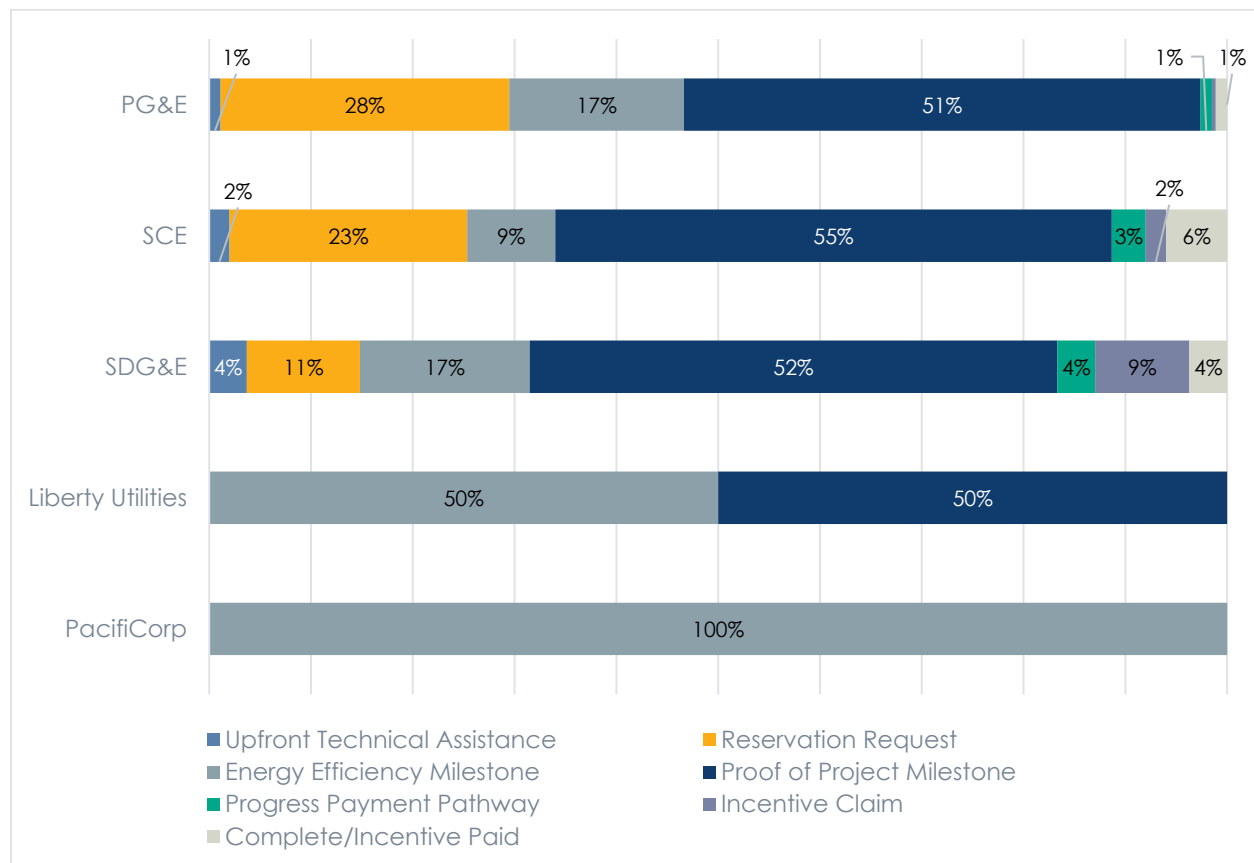


N=475

The project progress in 2021 was both encouraging for program goals and helpful for program data collection, especially with the Phase II third-party evaluation that was

released on October 14, 2021. See Section 4.1.4, Third-Party Program Evaluation, for more information on the evaluation effort. This program progress also aligns with application progression trends, as more than half of the active projects (62%) have reached or are getting close to the Proof of Project Milestone, the milestone indicating contract execution and construction will start shortly after if they have not already broken ground by the Proof of Project Milestone.

In Q3 and Q4 2021, a total of 127 applications were submitted, which was significantly more than the first half of the 2021. This difference in Q1 and Q2 submission versus Q3 and Q4 is largely attributed to the timing of the incentive step-down as discussed earlier. Eleven of the Q3 and Q4 projects submitted were Track A projects, with the remaining 116 as Track B. From the Track A applications submitted in 2021, one project has received Track A approval. This project was submitted in May, well before the incentive step-down. From the Track A applications submitted in Q4 2021, three are pending IOU data for the data request and system sizing process, and five are still undergoing document review for approval. 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 | Waitlist | Canceled/ Withdrawn |
|---|---|---|---|---|
| Track A | 12 | 0 | 0 | 22 |
| Track B | 449 | 14 | 0 | 173 |

N = 670

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[4]
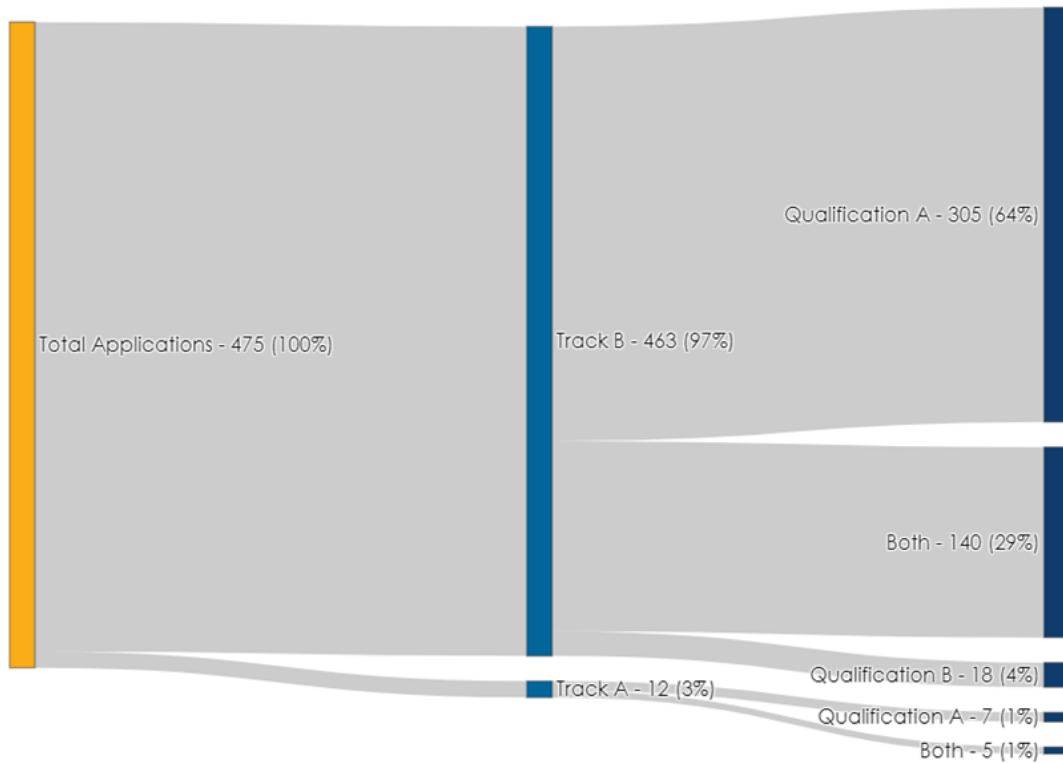


Of the 475 active applications[5] received, approximately 67% qualified for the program through Qualification Option A, approximately 4% qualified for the program through Qualification Option B, and approximately 29% qualified for the program through both options. DAC project participation has hovered between 25-31% since the program

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[4] Calculations used for this visual are subject to rounding and total percentages may not equal 100%.
[5] Active applications are those that have not been canceled or withdrawn. This figure includes waitlisted applications as well, which have not had their project information vetted, including their property eligibility qualification. Waitlisted applications are held in the waitlist status (categorized as Pending Reservation Approval) and reviewed once funding becomes available to move them off the waitlist.

opened in July 2019. The percentage of active applications located in DACs increased to 34% of total applications at the close of this reporting period, and the SOMAH PA continues its efforts to increase program participation from DACs. At the end of 2020, the SOMAH PA provided the Commissioner's Office a memo[6] with potential options for increasing participation by eligible properties located in DACs and conducted stakeholder outreach in 2021 to determine the best path forward. Figure 12 further breaks down the property eligibility statuses by count and percentage to highlight the number of DAC-qualifying properties.[7] The SOMAH PA continues to consider the different ways in which the program can increase participation for DAC-qualifying properties and will continue working on this effort in 2022. Further, the SOMAH PA will be including a formal DAC target in our next SOMAH Program Handbook edition, to be submitted through an Advice Letter in Q1 2022.

## Figure 12 – Property Eligibility by Reservation Status

| Property Eligibility | Pending Reservation Approval | Reservation Approval Received | Complete/ Incentive Paid | Waitlist | 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 | 62 | 243 | 7 | 0 | 142 |
| Both A and B | 48 | 92 | 5 | 0 | 34 |
| Option B - The property is located in a disadvantaged community as identified by the California Environmental Protection Agency. | 7 | 9 | 2 | 0 | 18 |
| Data not reported[8] | 0 | 0 | 0 | 0 | 1 |

N = 670

[6] The January 2021 Semiannual Progress Report includes a summary of the 2020 CPUC DAC Participation Memo.
[7] 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.
[8] "Data not reported" represents one canceled Track A project that did not submit property eligibility documentation prior to cancellation.

**Figure 13 – Overall Property Eligibility**
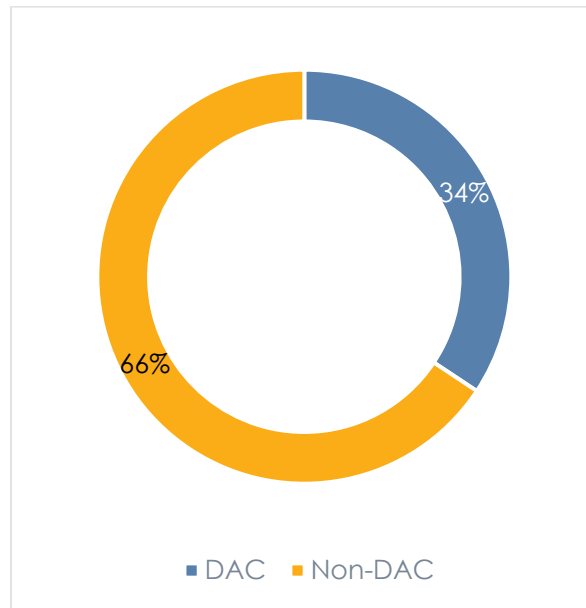


N=475

**Figure 14 – Property Eligibility by Reservation Status**



N=669

The Reservation Request Milestone is the first step of the application process for Track B projects and vets the project's eligibility to participate in the program. The Reservation Request Package is a robust and distinguishab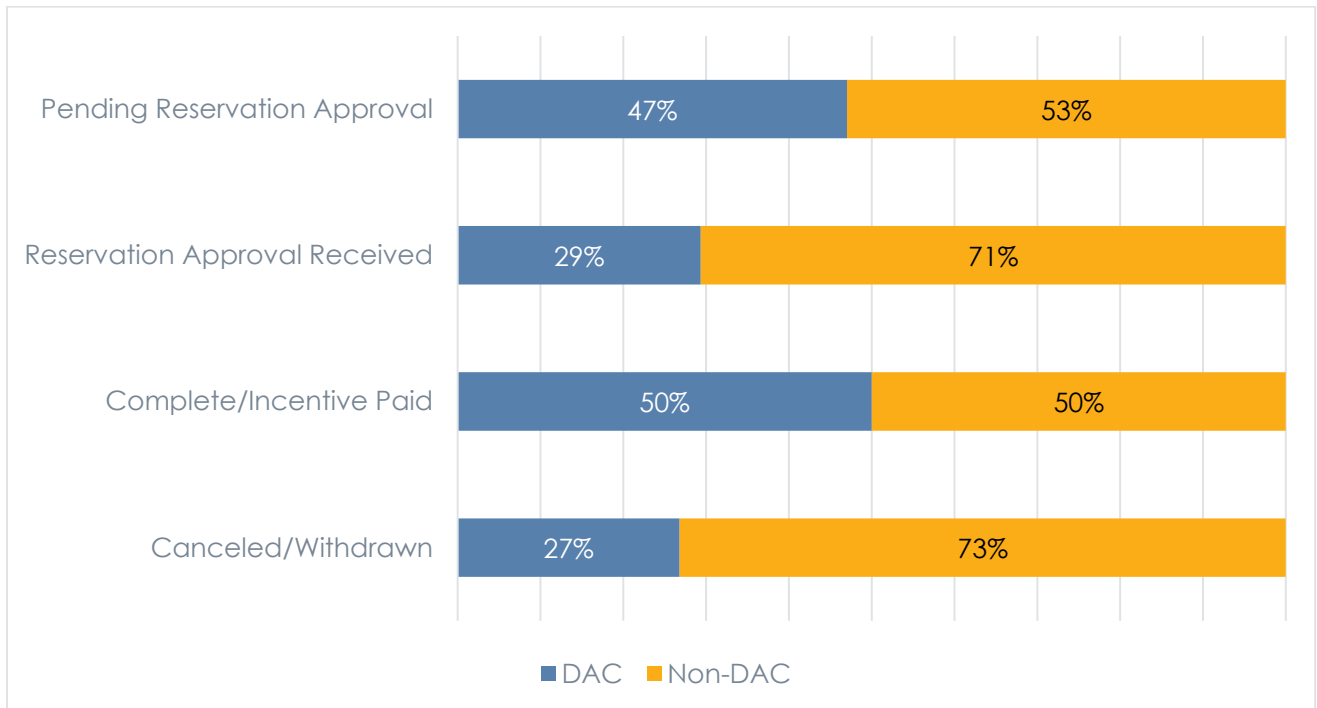le milestone for all projects to complete, including up to eight required documents and an application deposit before achieving reservation approval. Reservation approval is an important achievement for projects and for programmatic data and milestone tracking. After reservation approval, applications are known to be eligible and have furthered their commitment to the program with the application deposit. While some projects leave the program after receiving reservation approval, it is far less likely that this will occur after crossing the reservation approval threshold. With active applications being an important driver and indicator of program progress, the SOMAH PA maintains a focused effort on application review. In the spirit of continuous improvement and in response to the evaluation findings, the SOMAH PA is looking to review the application process in depth in 2022 with the goal to further eliminate barriers, streamline the process and create a better user experience where possible. The SOMAH PA maintained a strong focus on application review progress during this reporting period, with the number of reservation approvals during Q3-Q4 2021 increasing from 306 to 363. Four applications are very close to completing the Reservation Request Milestone, with their document review complete but currently pending application deposit receipt before final reservation approval. Most active SOMAH applications have moved past the Reservation Request Milestone and well into the Energy Efficiency Compliance Milestone, the Proof of Project Milestone and the Incentive Claim Milestone. For applications submitted prior to the incentive step-down, the majority (205) have reached Proof of Project Milestone or have had their Proof of Milestone approved. Additionally, 10 projects have reached or have had their Progress Payment Pathway approved, and nine projects have reached the Incentive Claim Milestone, not including completed and paid projects. Sixty applications are in various stages of the data request process, and 48 projects are undergoing the reservation request review process. Six projects that were submitted in Q4 2021 have obtained a reservation approval.

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 Decision, 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, the available data is still limited at this time. The SOMAH PA will share more information on this referral collection and data reporting as additional projects are completed and data is collected for reporting and analysis.

**Figure 15 – System Ownership Type**
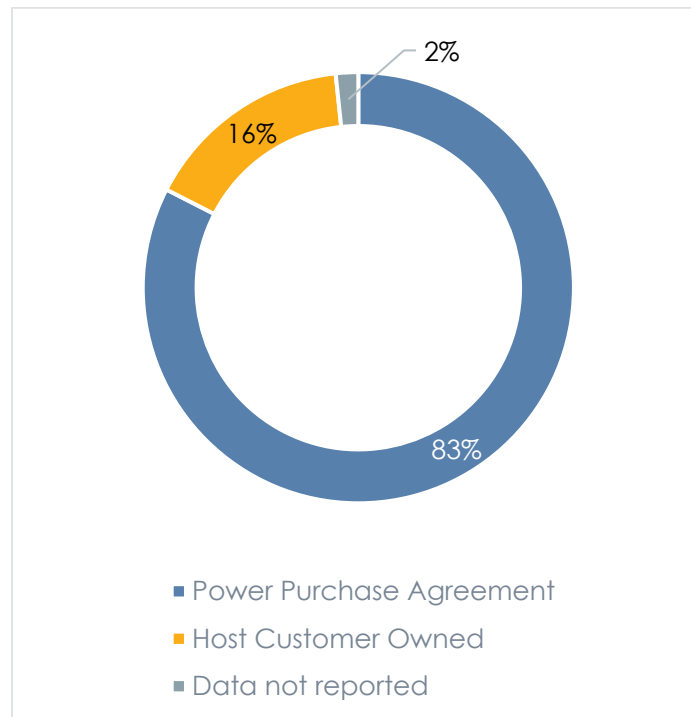


N=475

As Figure 15 shows, the majority of SOMAH projects, nearly 83%, are third-party owned (TPO) systems. The largest share of TPO systems are power purchase agreements (PPAs) or what some contractors term solar service agreements (SSAs). Preliminary property owner and contractor feedback suggests the third-party ownership option is more financially feasible for property owners. 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.

**Figure 16 – System Ownership Type by Property Eligibility**
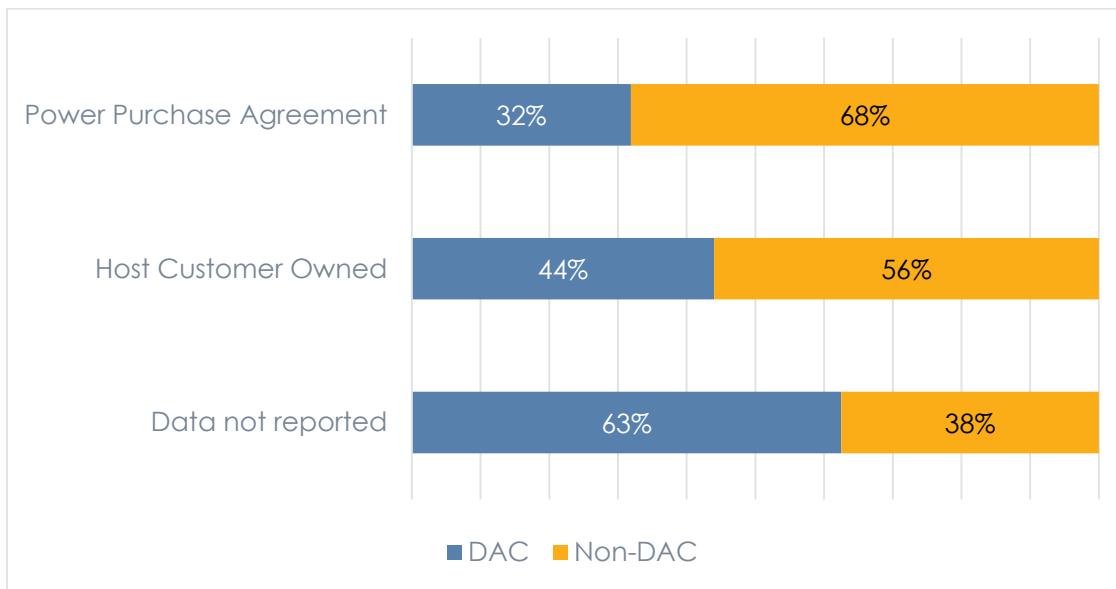


N=475

Figure 16 further segments system ownership types by DAC and non-DAC properties. The split of DAC and non-DAC projects is somewhat similar for host customer owned systems and PPAs, ranging around 32-44% by ownership type.

Completing application milestones is an important part of progressing applications and collection of project data for the program. In the fifth 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 unofficial milestone, Progress Payment Pathway). With application processing efforts yielding eight new projects advancing to approved reservation status, 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 Milestone and Incentive Claim Milestone 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 Status by Incentive Track[9]**
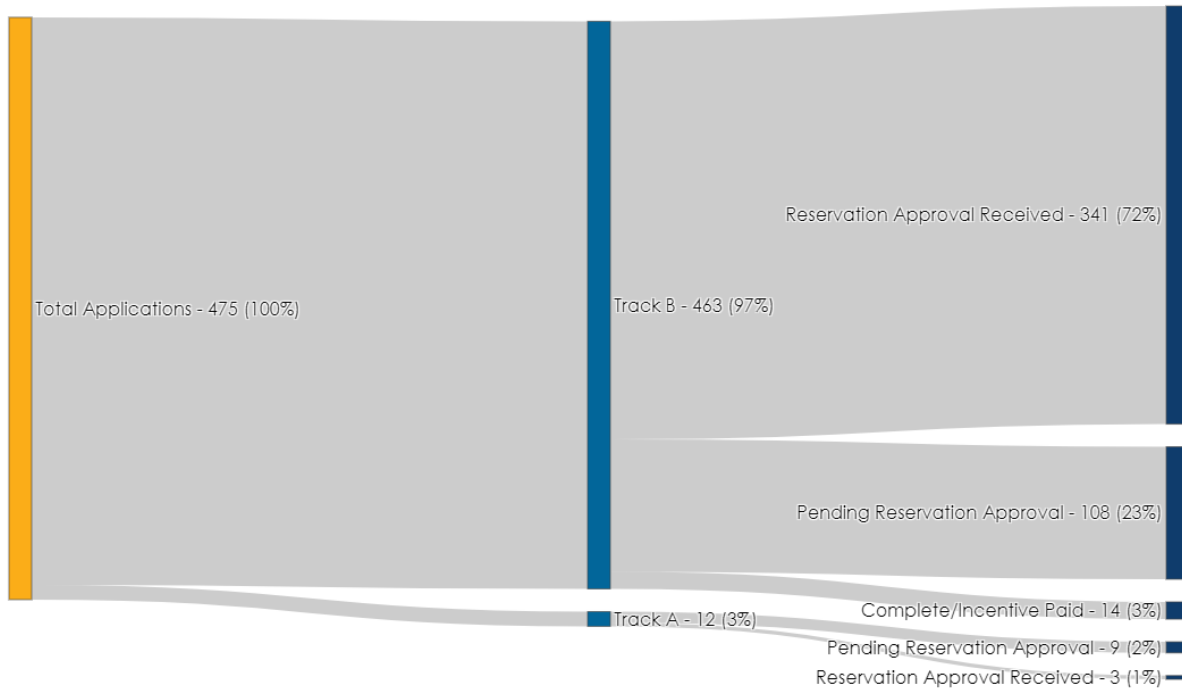


See Appendix A for a full list of application statuses and descriptions.

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. Thus, the SOMAH PA introduced a postponement option in which projects could enroll to submit the milestone at either the Proof of Project Milestone or the Incentive Claim Milestone. As of this reporting period, 307 total active projects have enrolled in the EECM Postponement since its rollout. Forty-four of those active projects are currently in "Energy Efficiency

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[9] Calculations used for this visual are subject to rounding and total percentage may not equal 100%.

Compliance Milestone Postponement Approved" status. Currently, there are six active projects that did not choose to postpone and have their EECM approved.

To accommodate challenges with completing program requirements due to COVID-19 restrictions, 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. This option was developed due to challenges with property restrictions creating barriers to completing the whole-building walk-through audit and other on-site activities. While a temporary offering, EECM Postponement was widely used to keep projects active in the program and progressing further. At the Q2 2021 Public Forum, the SOMAH PA announced an end to the EECM Postponement option effective September 13, 2021 and will continue to honor any projects that are approved for EECM Postponement with no impacts to those project timelines.

Looking beyond EECM, there are 207 active projects that have had their Proof of Project Milestone (PPM) approved. As more projects progress to PPM and beyond, the SOMAH PA anticipates receiving more information about subcontractors that some projects are utilizing. This subcontractor information helps to provide further insight on the diversity of contractors engaging in and benefiting from the SOMAH Program. Currently, three contractors are utilizing subcontractors on 15 different applications. In total, there are nine separate subcontracting companies that are working to support completion of these different applications.

In this reporting period, six contractors have progressed a portion of their application portfolios to the Proof of Project Milestone (PPM), Progress Payment Pathway, Incentive Claim Milestone and completion stages. The SOMAH PA continues to work closely with contractors to ensure compliance and understanding of the warranty and contracting program requirements for the documentation submitted at PPM. The first completed project, PGE-SOMAH-101, finalized its incentive claim and final payment in Q4 2020. Throughout 2021, 10 additional projects finalized their incentive claim and received their final incentive payments from SCE, PG&E and SDG&E territories. At the end of 2021, eight more projects have entered the Incentive Claim Milestone. Of those projects, five are in "Pending Inspection" status, indicating that the formal document review has been completed and are well on their way to payment processing. Further information on completed projects and incentive claim will be available in future reports as applications continue to progress through their 18-month reservations and ultimate project completion with incentive payment.

**Figure 18 – Average System Size (kW) by Reservation Status**
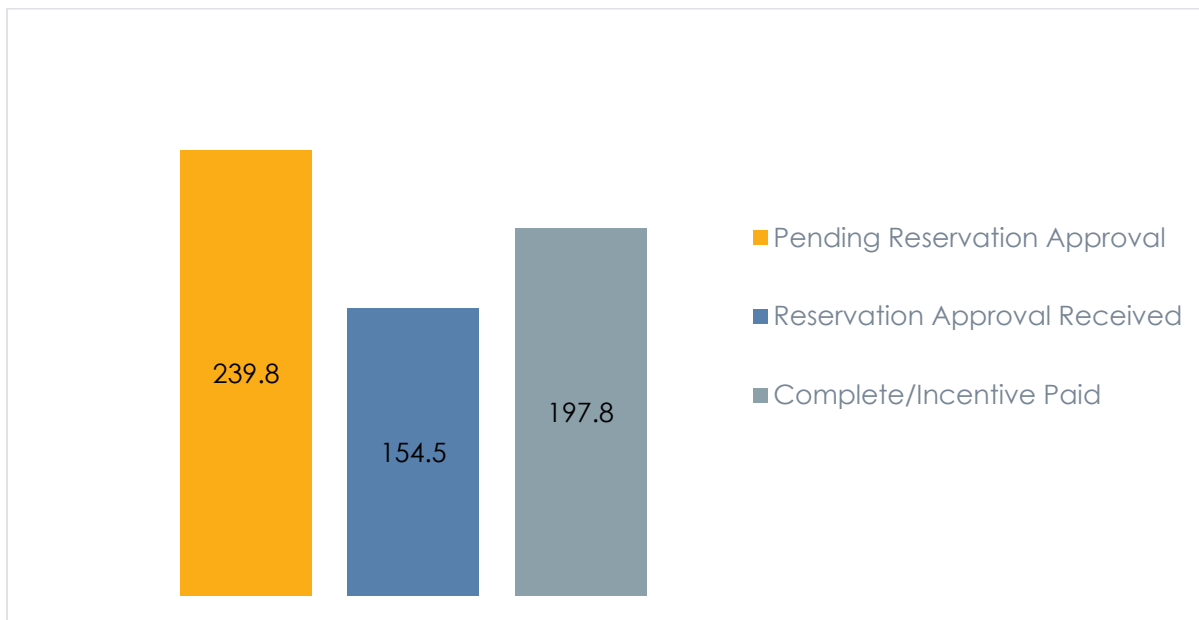


N = 467

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. 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**

| Program | Pending Reservation Approval | Reservation Approval Received | Complete/ Incentive Paid | Waitlist | Canceled/ Withdrawn |
|---|---|---|---|---|---|
| PG&E | 218.9 | 133.7 | 98.7 | 0.0 | 209.1 |
| SCE | 277.3 | 183.5 | 243.1 | 0.0 | 226.3 |
| SDG&E | 267.1 | 180.8 | 142.5 | 0.0 | 165.8 |
| Liberty Utilities | 0.0 | 83.5 | 0.0 | 0.0 | 0.0 |
| PacifiCorp | 0.0 | 134.5 | 0.0 | 0.0 | 0.0 |

N = 640

**SOMAH**

**Figure 20 – Distribution of System Sizes (kW)**
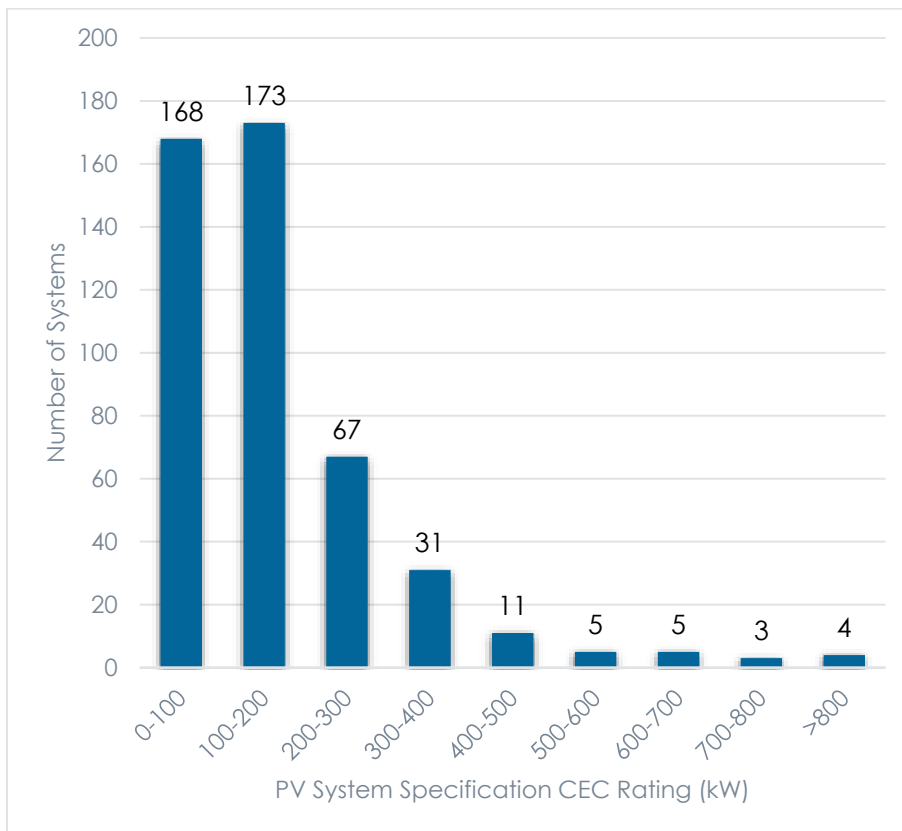


N = 467

From the approved reservations, data shows that projects reduce their system size by an average of 32% from initial submission. The data has shown a continued trend in the percent of total system size adjustment between initial application submission and reservation approval but notes that newer projects (submitted later in 2020 and 2021) are trending with smaller adjustments overall. 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 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. Additionally, the average system cost is

$3.87/watt[10] CEC-AC with a total expected aggregate annual output of 135,467,604 kWh[11] for the active SOMAH projects in queue.

Since the last reporting period, the program has seen a 5% increase in progress to the 300 MW goal, up to 27% (82.1 MW) from 22% (65.6 MW). Additionally, completed projects increased from 0.1% of the application queue to 3% of the queue, resulting from the newly completed and paid projects in Q3 and Q4 2021. While the percentage of pending reservation approval projects increased from 25% to 32%, that is mostly due to the large influx of applications submitted at incentive step-down where the final steps to reservation request approval (data request, system sizing and application deposit) are being completed.

[10] 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.

[11] 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 on-site inspection at the Incentive Claim Milestone, which directly impact the expected output of the PV system.

**Figure 21 – Progress to 300 MW**



Active and complete applications make up **27%** of total program MW goals

82.1 MWs

Overall MWs
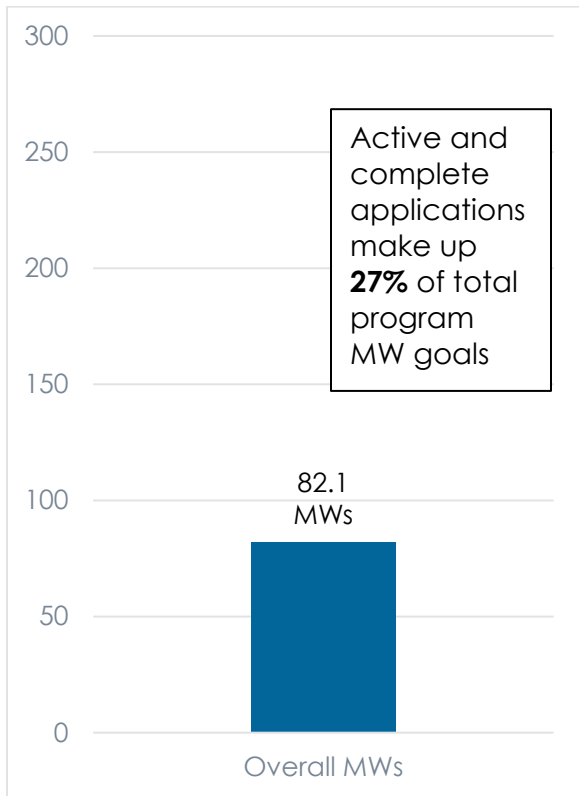
N = 467

**Figure 22 – Percent of Program MW by Reservation Type**



3%

32%

65%

- Pending Reservation Approval
- Reservation Approval Received
- Complete/Incentive Paid
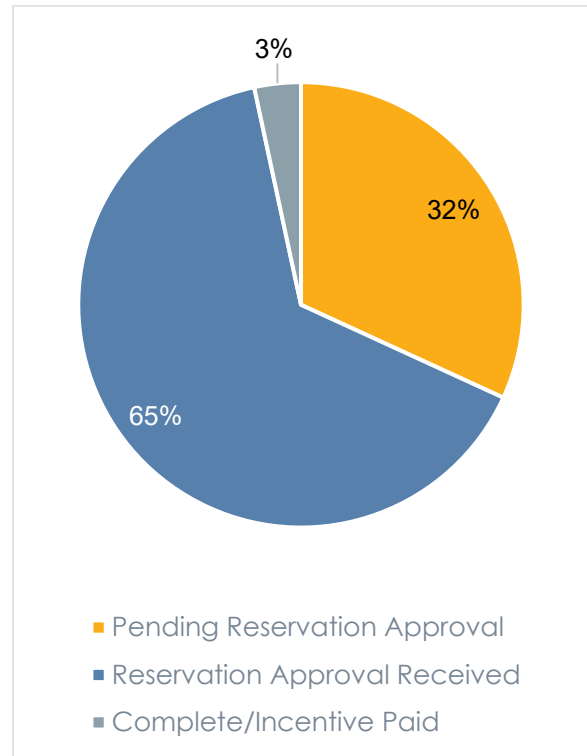
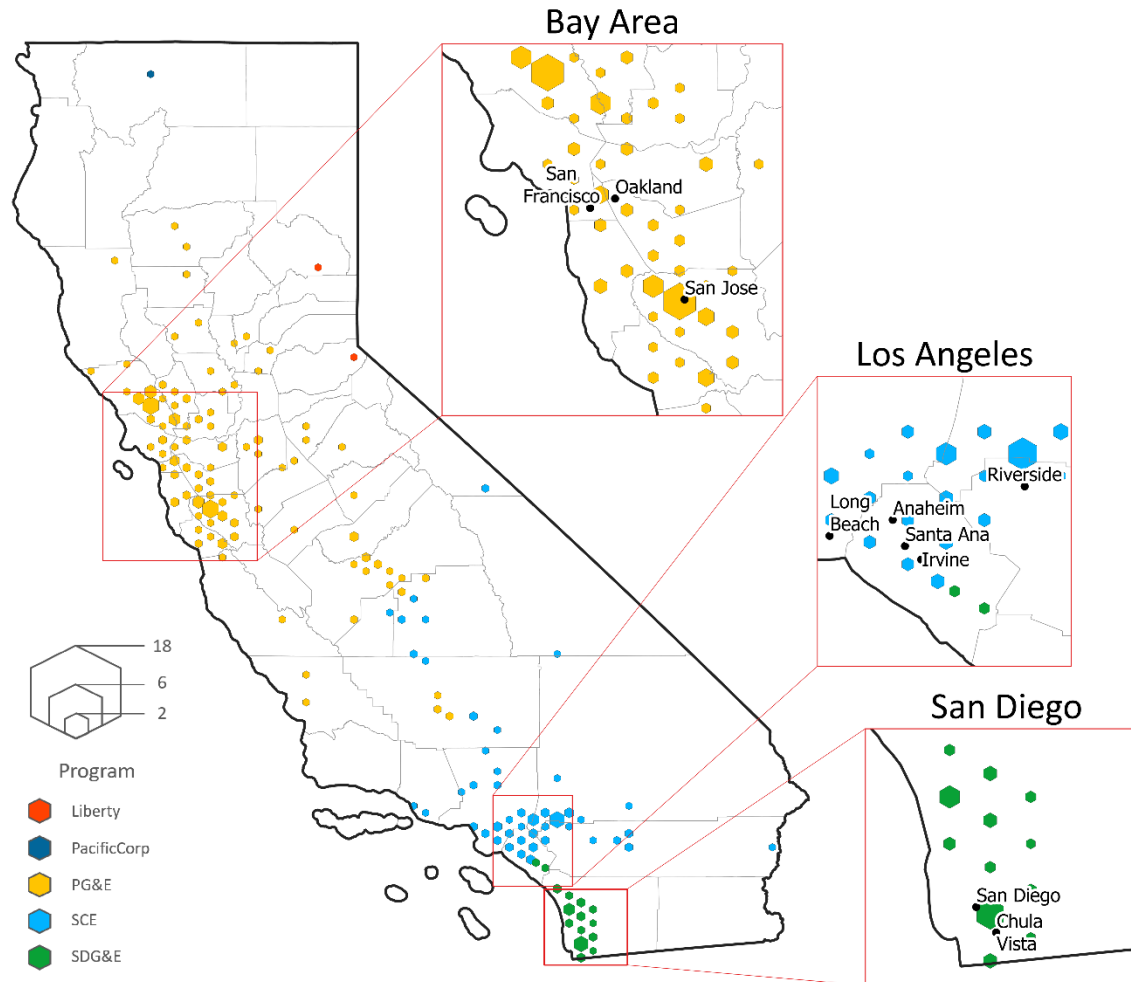**Figure 23 – Project Density and Location Visualizations**



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

## 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 process 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 spent Q1 2021 focused on preparation to launch progress payments in April 2021.

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 (NGO) meter 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 four 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 on-site 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 on-site inspection as a standard incentive payment.

After launching the Progress Payment Pathway in April 2021, four progress payment requests (all SCE territory) were submitted by the end of Q2. Eleven more progress payment requests were submitted in Q3 and Q4, with 125 projects eligible to submit for progress payment request at the end of 2021. The SOMAH PA anticipates additional progress payment activity in future reporting periods and is collecting feedback on the value and experience of progress payments through the Project Completion Survey

being deployed with final incentive payments. Upon launching progress payments in Q2 2021, the SOMAH PA added additional data fields to the working data set on California DG Stats that indicate an approved opt-in to the Progress Payment Pathway and the resulting progress payment amount. While completed and paid project volume and data are still relatively low, the program has collected enough data to publish the phase 2 charts and graphs on DG Stats, which includes four additional visuals relating to installed projects and their impacts. More information on these charts and graphs is included in Section 3.1.4, California Distributed Generation Statistics.

Application activity in 2021 brought a valuable increase in project progression (number of projects eligible for progress payment) as well as completed and paid projects. With forecasts and deadlines upcoming for Q1 and Q2 2022, the program plans to see a substantial increase in completed project activity in the first half of 2022. Figure 24 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.

**Figure 24 – Program Payment Statistics**

| Program | Progress Payments Issued | Progress Payments Total ($) | Final Incentive Payments Issued | Incentive Payments Total ($) |
|---|---|---|---|---|
| PG&E | 3 | $733,839 | 3 | $591,828 |
| SCE | 8 | $2,089,726 | 9 | $3,229,477 |
| SDG&E | 0 | $0 | 2 | $557,309 |
| Liberty Utilities | 0 | $0 | 0 | $0 |
| PacifiCorp | 0 | $0 | 0 | $0 |
| **Total** | **11** | **$2,823,565** | **14** | **$4,378,614** |

The Progress Payment Pathway continues to be a valuable offering for projects at the end of 2021. By the end of the year, nine additional projects enrolled in the Progress Payment Pathway and received their progress payment approval in addition to those from Q2. As of this reporting period, a total of 11 projects have received approval and payment for their progress payments. Two of the projects that enrolled in the Progress Payments Pathway have reached the Incentive Claim Milestone. Both projects received their progress payment in July 2021 and their final incentive payment in December 2021. The timeline for these two projects shows that the progress payment

offering allowed the participants to receive the benefit of a partial incentive payment nearly six months prior to their final incentive payment. This timeline supports the SOMAH PA's goal to alleviate financial barriers and support project viability. Future Semiannual Progress Reports will continue to include an update of program payment activity as highlighted in Figure 24, as well as analysis of payment timelines and progression details as additional projects are completed and paid.

The electronic payment options for application deposits continues to be a very popular option for participants, which is also an asset for the SOMAH PA to streamline the application deposit, progress 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 end of 2021, all but two payments issued thus far 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.

The online bidding tool serves three distinct functions. First, it allows the host customer to indicate their interest in receiving a bid from three contractors of their choice. This encourages the customer to do basic research on a contractor ahead of time, such as researching reviews, and then gives them the opportunity to select their top three contractors. Then, after the customer's selection of bidders, the tool notifies the SOMAH-eligible contractors, who then get in touch to begin the process of building a site-specific proposal. Finally, once all three contractors have completed 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. Whereas contractors have unique proposal generation tools and layouts with different underlying assumptions, SOMAH's requirement of a standardized bidding form harmonizes the detailed elements of a proposal into a consistent format containing objective and verifiable information.

While there was no new activity with the bidding tool in the first half of 2021, three Track A SOMAH projects have utilized the platform in this reporting period. In Q3, the SOMAH PA updated the bidding tool to include a warning message if no application number is provided with the bid request to ensure that the bid has been vetted as a SOMAH-eligible project. 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.
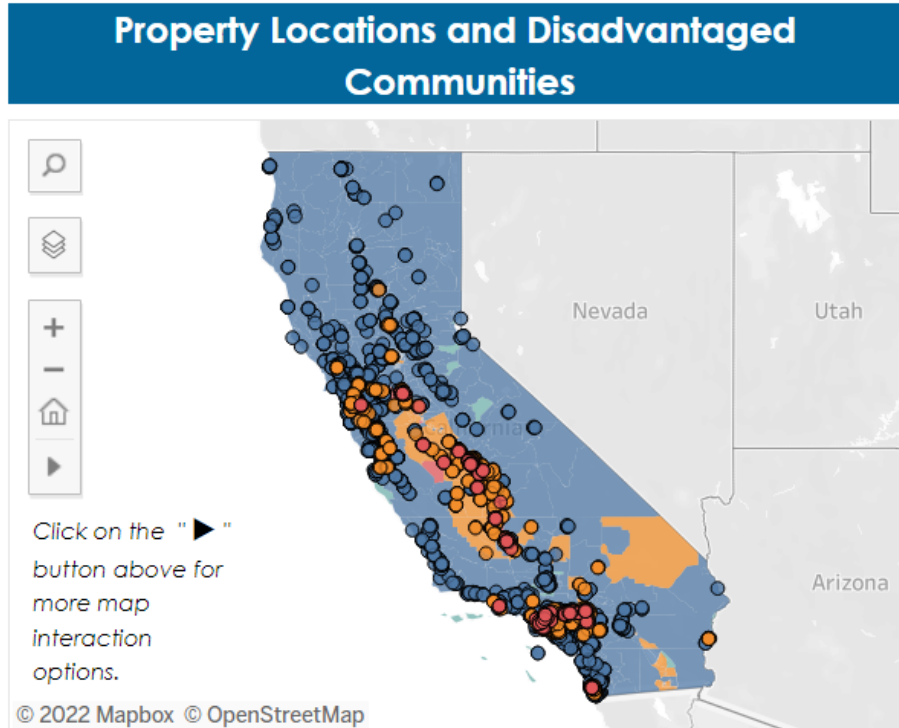
## 3.1.4 Eligible SOMAH Properties Map

Figure 25 provides an overview of the Eligible SOMAH Properties Map. A new version of the map was launched in March 2021 and included new features to make it more user friendly. The map edits include county and federal legislative district filters, as well as breakdowns of the total property count and percentage of active applications based on filters. The map webpage has received over 1,000 page views in Q3 and Q4 of 2021. These features will help users quickly see properties based on their specific search parameters.

In December 2021, the SOMAH PA launched additional edits to the map based on stakeholder feedback. This version has enhanced search capabilities that include county search function, adaptive filtering, result sorting and percentage breakdown by filter criteria. Additional updates will be made to the map during Q2-Q3 2022, 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 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. The map provides color coding based on a property's location in CalEnviroScreen defined disadvantaged communities, utility territories, legislative districts and climate zones.

## Figure 25 – Eligible SOMAH Properties Map

### Property Locations and Disadvantaged Communities



© 2022 Mapbox © OpenStreetMap

The **[5] Property Locations by [1] Disadvantaged Community** 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 3.0 criteria.

Communities
- 🟥 Top 5% (Most Disadvantaged)
- 🟧 75-95% (Disadvantaged)
- 🟦 Bottom 75% (Least Disadvantaged)
- 🟩 No percentile available

### Affordable Housing Units by Disadvantaged Community



| | Units |
|---|---|
| Top 5% (Most Disadvantaged) | 19,593 |
| 75-95% (Disadvantaged) | 71,266 |
| Bottom 75% (Least Disadvantaged) | 173,042 |
| No percentile available | 1,029 |
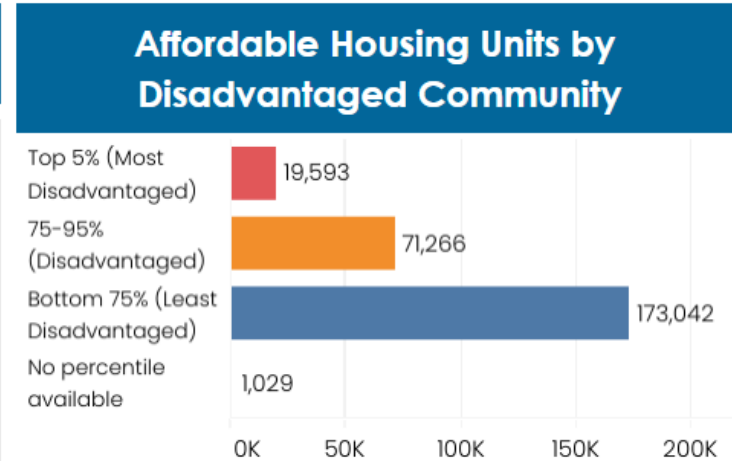
This chart shows the number of affordable housing units by disadvantaged community status.

### Percent of Total Based on Filter Criteria



65.32%   26.90%
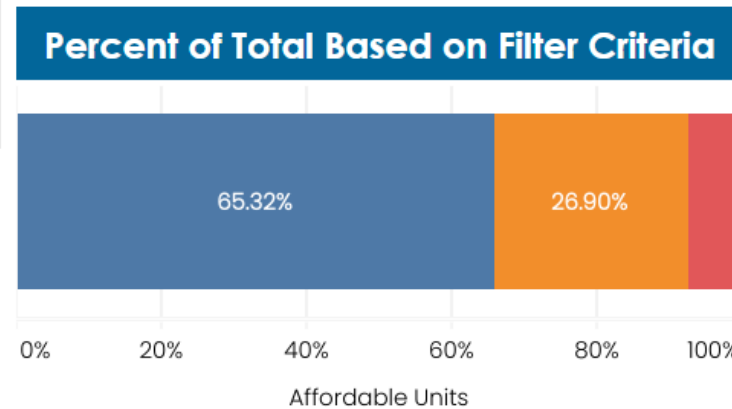
Affordable Units

This chart shows the percentage of affordable housing units by disadvantaged community status. The chart is sorted from largest percentage to smallest percentage.

### 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 (DG stats) 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 Chart page of California Distributed Generation Statistics. Eleven charts and graphs are currently displayed on the page, including the recent release of four additional phase 2 charts in Q4 2021 to display capacity installed, size of installed systems, average project and incentive costs, installed capacity and type of work performed by trainees. The charts and graphs on DG stats were separated into phases due to the slower timeline of project completion and smaller availability of data until mid-2021. With the expected increase in project completion activity in 2022, these newly released charts and graphs will continue to populate over time with valuable data highlighting the noteworthy impacts of completed SOMAH projects and will include enhanced features for filtering in early 2022. 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

The SOMAH PA focused ME&O efforts mostly online in 2021 with respect for public health and safety concerns. The PA was able to safely resume limited, in-person engagement for ribbon-cutting ceremonies at SOMAH project sites, as well as tenant education workshops. The program celebrated many successes in the second half of the year, as outlined by audience below. The SOMAH PA also developed solutions to

bridge gaps in underrepresented populations in the program through expanded community-based organization (CBO) partnerships and leveraging regional and local government stakeholder networks to co-market the program. ME&O efforts were guided by the PA's 2021 ME&O plan and focused on: 1) property owner outreach and growing the property owner pipeline; 2) efforts to increase contractor diversity; and 3) formalizing several co-marketing partnerships with Regional Energy Networks (RENs). Efforts were monitored through surveys, while focus groups were conducted to identify opportunities to build the SOMAH pipeline.

## 3.2.1 2022 ME&O Plan

SOMAH's annual 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 2022. The 2022 ME&O Plan is in the final stages of review and will undergo a public comment process before being finalized in Q1 2022. SOMAH's 2022 ME&O Plan is centered on the same five goals as the 2021 plan (listed below).

**SOMAH's 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 or relevant careers.

> **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.

## 3.2.2 Monitoring, Evaluation and Research

Central to the SOMAH ME&O strategy is monitoring and evaluating the PA's efforts. Monitoring and evaluation efforts led by the PA are based on surveys. Survey efforts are supplemented with qualitative interviews. What the PA surveys is determined by the program implementation plan, handbook, annual ME&O plans, and other needs as may be determined. Surveys are issued to all SOMAH audiences at different stages in the process, from ME&O efforts, through the application, to post-application. In Q3-Q4

2021, the SOMAH PA launched surveys for applicants, tenants and job trainees. Surveys were issued to gauge program stakeholders' motivation to participate in the program, barriers they faced, post-installation satisfaction and willingness to promote the program. Feedback from these surveys will be used to inform ongoing ME&O outreach efforts and the application process. The PA anticipates reporting on these surveys by the end of 2022, if not sooner. The ability to report on surveys depends on when the PA receives statistically significant data for each survey. See Figure 26 for a summary of planned and completed surveys. Some surveys previously reported on have been removed.

In addition to monitoring and evaluation efforts, 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 in SOMAH; and 3) evaluate program retention. These research projects are outlined below.

**Surveys**

In the second half of 2021, the PA launched both planned (noted in prior SAPRs) and new surveys developed and deployed in 2021. Planned surveys launched in Q3 and Q4 included the job training/trainee surveys and tenant education surveys. The PA created and launched one new survey during this reporting period, the Technical Assistance Pre-Questionnaire and Survey. This survey will evaluate the effectiveness of the program's technical assistance early in the application process. The inclusion of a pre-questionnaire survey gives the PA the ability to evaluate participant knowledge before and after upfront TA.

An important survey milestone was met with the launch of the Project Completion Survey: Applicant in Q4 2021. This survey evaluates the entire application experience for the individual completing the PowerClerk application after each project is completed (survey is launched with incentive claim approval). This survey data is a valuable insight into the application process and will be available in statistically significant numbers after Q2 2022. While many projects may have the same primary applicant, that applicant's experience may vary across projects. To capture this variability, the PA requires primary applicants to complete the Project Completion Survey: Applicant for every project they complete. As the Project Completion Survey: Applicant survey is only evaluating the PowerClerk applicant's experience, and applicants are mostly contractors, the SOMAH PA is developing a secondary survey to capture property owners' application experiences as well.

**Figure 26 – Number of Completed and Planned Surveys by Category**

| Audience | Survey Name | Milestone/ Timeline | Launch Date | Frequency |
|---|---|---|---|---|
| Contractors | Contractor Workforce Needs Assessment | Varies | Q2 2022 | Single launch and close |
| 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 |
| 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 | 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 | Ongoing |
| Property Owners | Technical Assistance (TA) | Post-TA, pre-Reservation Request | Launched Q4 2021 | Ongoing post-TA |
| Tenants | Tenant Education | Post-project installation | Launched Q4 2021 | 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.*

**Research**

SOMAH's research projects are outlined in Figure 27. During Q3 2021, the PA created a research plan to better understand the program's participants, audiences and success. This plan encompasses the focus groups previously discussed, qualitative interviews of subcontractors and application data analysis. A focal point of this research will include a property owner pipeline analysis. This analysis will 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 into 2022 and will be reported on in future Semiannual Progress Reports.

**Figure 27 – SOMAH 2021-2022 Program Research**

| Project Descriptions | Research Objectives | Audience | Timeline |
|---|---|---|---|
| Contractor Focus Groups | • Understand barriers to contractor participation in SOMAH, especially small, minority-owned and woman-owned businesses<br>• Identify solutions to encourage more contractor participation in SOMAH | Non-Participating Solar Contractors | Phase I: Q2-Q4, 2022<br>Phase II: Q2-Q3, 2022 |
| Property Owner Pipeline Analysis | • Understand notable gaps in pipeline development and applicant retention<br>• Identify what ME&O activities are likely to result in lead generation<br>• Understand the type of contractor and property owner support likely to lead to completed projects<br>• Analyze 2019-2021 cancellation reasons | Participating Property Owners<br><br>SOMAH PA | Q4 2021-Q2, 2022 |
| Property Owner Focus Groups | • Gauge the property owner interest in installing solar on their properties | Non-Participating | Q4, 2021-Q1, 2022 |

| | • Understand solar installation priorities for property owners (including general operations as well as capital projects)<br>• Identify structural barriers to participation<br>• Identify ways SOMAH can use its resources to support target audience participation | Property Owners | |
|---|---|---|---|
| Sub-Contractor Interviews | • Understand subcontractors' experiences in the SOMAH Program and what structures facilitated their participation<br>• Determine what aspects of their experience are replicable for like-sized contractors | Participating Subcontractors | Q4, 2021-Q2, 2022 |

**Focus Groups**

To better understand barriers to participating in SOMAH, the SOMAH PA organized focus groups with contractors and property owners who were registered in PowerClerk and subscribed to the program listserv, respectively, and 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.

**Contractor Focus Groups**

In July 2021, the T&I team conducted focus groups with non-participating solar contractors. The focus groups identified barriers to participation for minority- and woman-owned contractors and small (50 employees or less) contractors in addition to identifying solutions to those barriers.

- The SOMAH PA identified 62 solar contractors to invite for focus group participation and were able to engage six participants after multiple outreach attempts. One participant was a multifamily property developer. Participants were primarily small contractors. Participants ranged from regional to statewide

service and represented an array of experience with large-scale solar installations.

Focus group participants identified several key themes that pose barriers to their participation in SOMAH. The following four key barriers were identified.

- Lack of clarity about SOMAH Program components, particularly funding availability, incentive calculations and stacking tax credits with SOMAH's incentive
- Concern over meeting SOMAH Program requirements, specifically job training and associated expenses, energy efficiency compliance, incentive split, in addition to post-installation contractor obligations
- Small business challenges, such as:
  - Reliance on referrals
  - Lack of time to cultivate SOMAH-eligible projects
  - Multifamily housing not being their core business
  - Competition with other larger solar companies
- Explaining business return on investment to property owners, answering questions about when the system will pay for itself and assuaging concerns regarding property owners' out-of-pocket costs considering the tenant benefit requirements.

The two most common suggestions for addressing the barriers identified were: 1) to connect contractors to prospective clients; and 2) for SOMAH to engage with contractors more proactively. Suggestions ranged from sending simple email blasts and collateral to creating specific support positions to proactively help contractors find and bid work. Two additional benefits resulting from the focus groups were: 1) contractors said that they appreciated being asked for their feedback and felt valued; and 2) contractors used this focus group as an opportunity to connect with each other to determine if they could work together to take part in the program. Based on the focus group findings, the T&I team provided the following recommendations to the SOMAH PA.

- Offer more opportunities for contractor engagement
- Expand and market resources for contractors
- Consider creating an internal contractor engagement position(s)
- Consider making specific requirement exemptions for small contractors or providing more support for small contractors to meet requirements
- Support small contractors to participate as subcontractors.

The SOMAH PA has reviewed these recommendations and is incorporating them into 2022 outreach efforts.

**Property Owner Focus Groups**

Property owner focus groups expanded on feedback the PA received from the third-party evaluator. The focus groups began in November 2021. Due to property owner availability, the focus groups were extended through December 2022. The T&I team will provide a report and corresponding recommendations to the PA by February 2022 to help the SOMAH PA understand how to better build the SOMAH property owner pipeline, especially within DACs.

## 3.2.3 Contractors

The SOMAH PA has seen active contractor participation due to Track B applications, where contractors apply for SOMAH on behalf of the property owner. Due to restrictions from COVID-19, the SOMAH PA continued to focus outreach efforts to contractors through digital channels and virtual events. A deep dive into current barriers to entry was launched with two contractor focus groups in July (see Section 3.2.2).

A central ongoing contractor engagement method is the bimonthly Applicant and Contractor Eligibility Trainings. These eligibility trainings were held in July, September and December 2021. These eligibility trainings had a 68% attendance rate out of 41 registrations. Attendees included new contractor companies and new staff members from already eligible contractor companies, as well as multiple members from the same companies. Virtual outreach tactics to get new contractors to participate in these eligibility trainings included an in-app ad campaign in the Central Valley, a press release in Solar Builder Magazine, email announcements by California Solar & Storage Association and direct phone calls and emails to contractors in the Central Valley and the IOU service territories of Liberty Utilities and PacifiCorp (see more in 2022 ME&O Plan). During this period, the program had four contractors complete the eligibility training process (attending training and submitting contact information). This period saw a total number of 130 SOMAH-eligible contractors, as shown in Figure 28.

**Figure 28 – Number of Eligible Contractors Over Time**
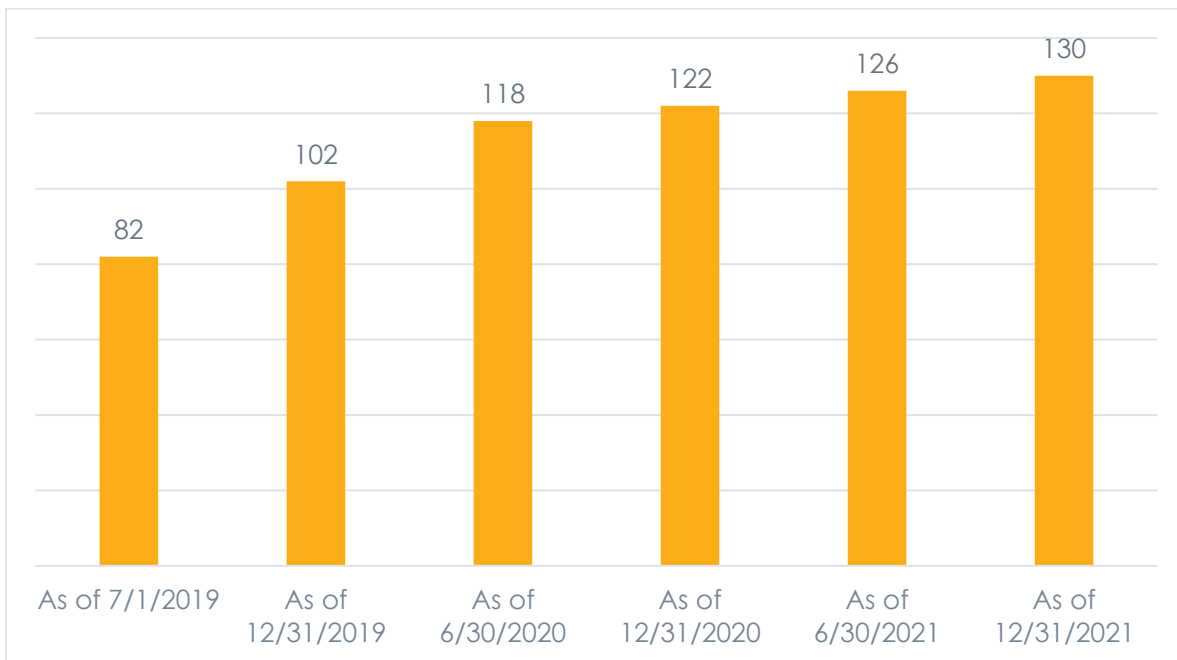


Of the four new SOMAH-eligible contractors, four self-reported being minority-owned including one woman- and minority-owned company. The incentive step-down application rush in October 2021 included three new contractor companies that submitted applications. These contractors did not self-report diversity classifications of being a woman, minority or LGBTQIA+ owned business.[12]

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[12] Per General Order 156: "Women-owned" is a business at least 51% owned by one or more women and whose management and daily business operations are controlled by one or more women. "Minority-owned" is a business at least 51% owned by one or more minority individuals and whose management and daily operations are controlled by one or more minority individuals. Recognized minorities include Asian Americans, African Americans, Hispanic Americans and Native Americans, among others. "LGBT-owned" is a business at least 51% owned by a lesbian, gay, bisexual or transgender person or persons and whose management and daily operations are controlled by one or more of those individuals

**Figure 29 – Eligible Contractor Statistics**
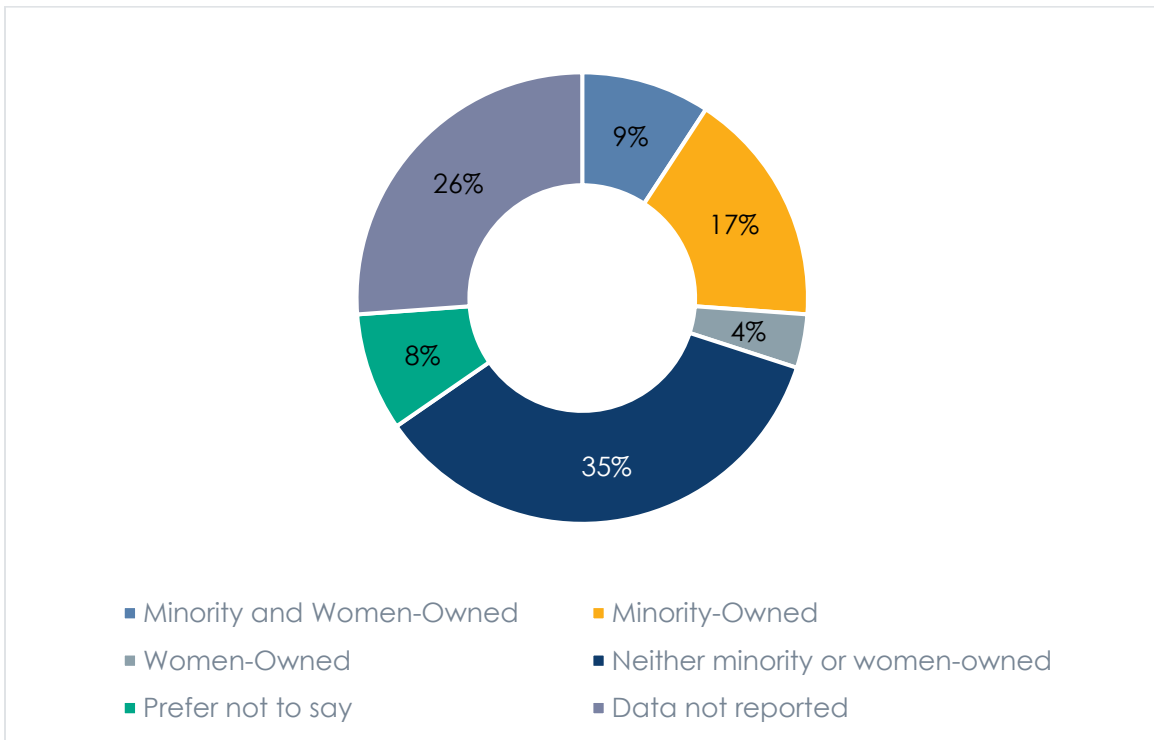


N = 130

SOMAH strives to continuously increase diverse contractors participating in the program. However, since diversity classifications are self-reported during the eligibility process, the SOMAH Program has reached barriers in finding contractors who would be classified under our classification criteria. Therefore, the biggest push in this reporting period was to obtain contractors from the regions where we have the least number of eligible contractors, which are the Central Valley and the PacifiCorp and Liberty Utilities service territories. During this reporting period, SOMAH solicited co-marketing ventures with 38 diverse contractor associations. Unfortunately, partnerships were not solidified.

**Figure 30 – Active Contractor Diversity**
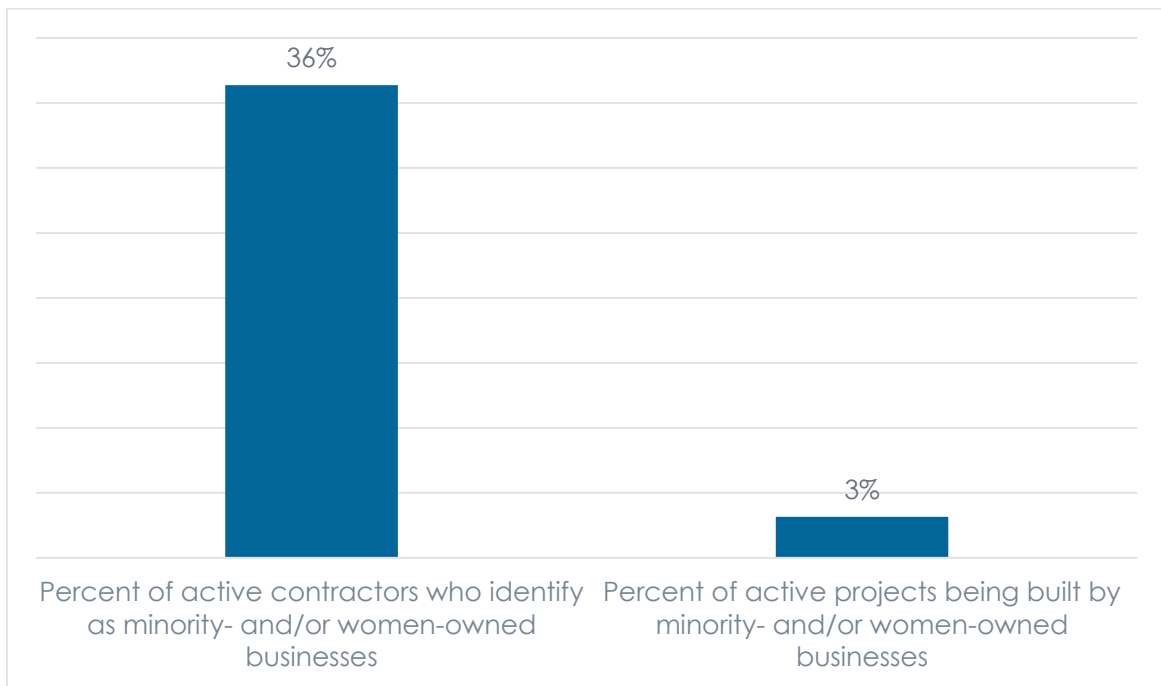


N = 11

At the different application milestones, the SOMAH PA receives data on subcontractors utilized on each project. A breakdown of these subcontractors is shown in Figure 31. This period had two new subcontractor companies, including one minority-owned subcontractor. The PA will use this data to better understand the diversity of all participating contractors in the program, not just primary contractors. In 2021, the SOMAH Program saw an increase in the hiring of subcontractors for installations. As such, in 2022 the SOMAH PA will focus on connecting primary contractors with applications to current SOMAH-eligible contractors (who have not submitted applications) to create opportunities for prime-subcontractor partnerships. In 2022, active subcontractor interviews will be conducted to learn from and better accommodate nonparticipating SOMAH-eligible contractors who find program requirements difficult to navigate, per focus group and external reporting feedback.

**Figure 31 – Subcontractor Statistics**
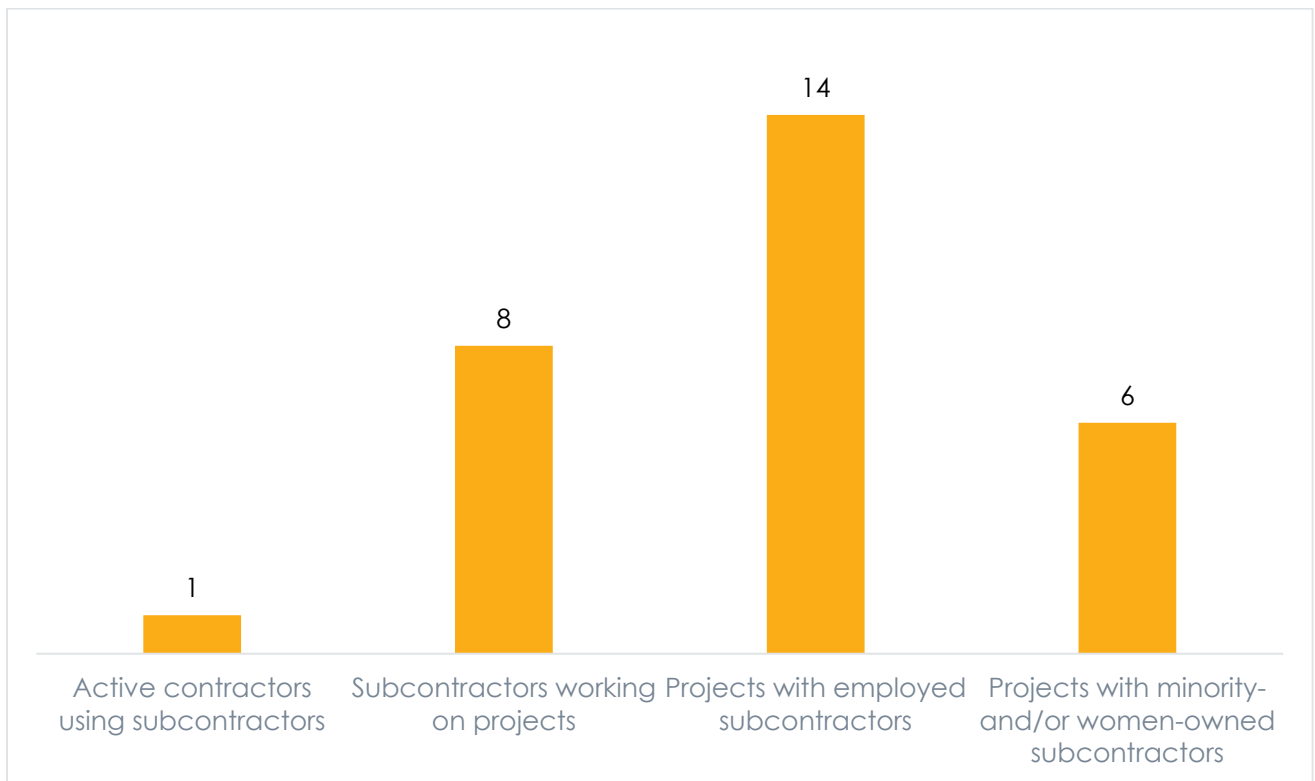


Marketing efforts attributed to the contractors' pages on the SOMAH website being the second most visited collection of pages for this period, second to property owner pages. The website had 806 returning users and 479 first-time visitors. Additionally, there were 1,844 pageviews (user only looks at one page), including 1,507 unique pageviews (user visits several SOMAH webpages).

Contractors also attended the following webinars in Q3-Q4 2021:

- Tenant Education Webinar (August 19: 14 attendees)*
- Q3 Public Forum (September 1: 45 attendees)*
- Incentive Step-down Analysis (October 6: 18 attendees)*
- Tenant Education Webinar (October 12: 8 attendees)*
- Job Training Overview (October 14: 6 attendees)
- Q4 Public Forum (November 3: 31 attendees)*
- Fair Chance Hiring Webinar (November 16: 37 attendees)

*Attendees include contractors and property owners.

Attendance at additional webinars is not a program requirement for eligibility. The webinars are informative and delve into specific topics that can aid contractors during the application process or help provide program updates and changes in the case of the quarterly Public Forums and the Incentive Step-down Analysis.

## 3.2.4 Property Owners

Property owner outreach and engagement has continued within the digital space, due to COVID-19 impacts. The SOMAH PA has engaged property owners through a variety of channels, including direct emails, the CalSOMAH listserv, webinars, attending virtual conferences, social media posts, paid digital media and YouTube video content.

Direct emails were sent to 431 property management companies, or developers, which includes 45 housing authorities. These companies represent a large portion of the total amount of eligible properties, as a single property management company can have numerous properties in their portfolio. Due to low open rates with direct emails in the first half of 2021, the SOMAH PA revisited email language to make emails more personalized, including specific company and individuals' names. Also, the email body lengths were shortened to keep property owners engaged. Additionally, Salesforce data was utilized for an email campaign to drive attendance to the Financial Technical Assistance webinar. In Salesforce, data is logged on property owners tied to DAC properties, and these specific owners were prioritized for outreach via direct email efforts.

Aligning with the SOMAH PA's goal of increased participation in DACs, 435 out of the 1,096 properties contacted were located in DACs, as shown in Figure 32. Additionally, the SOMAH PA completed six interest calls with SOMAH-eligible property owners, providing a portfolio review, a brief overview of the SOMAH Program and time for any questions at the end. Connecting with property owners will continue to be a focus in 2022, with an emphasis on DAC owners. The SOMAH PA also engaged with tribal entities through the participation from the Northern Circle Indian Housing Authority in the property owner focus groups in November. Additionally, relationships were established with the California Energy Commission (CEC) and tribal liaison teams who provided support through feedback and strategies to better engage with tribal entities for future outreach efforts.

In early 2022, the PA will be working on co-marketing with the IOUs, as outlined in Section 3.2.6., Stakeholders. Co-marketing with IOUs in this way helps to build credibility of the SOMAH Program, as property owners are already familiar with their utility service providers.

In 2022, the SOMAH PA will also launch a property owner nurture campaign. This email campaign will provide property owners relevant information based on where they are in their SOMAH journey and provide additional content based on how they interact with the previous email. Some content pieces in development include an upfront technical assistance e-book and a property eligibility quiz to quickly determine if an owner has a property that may be a good fit for a SOMAH project.

**Figure 32 – Properties Contacted by DAC Status**
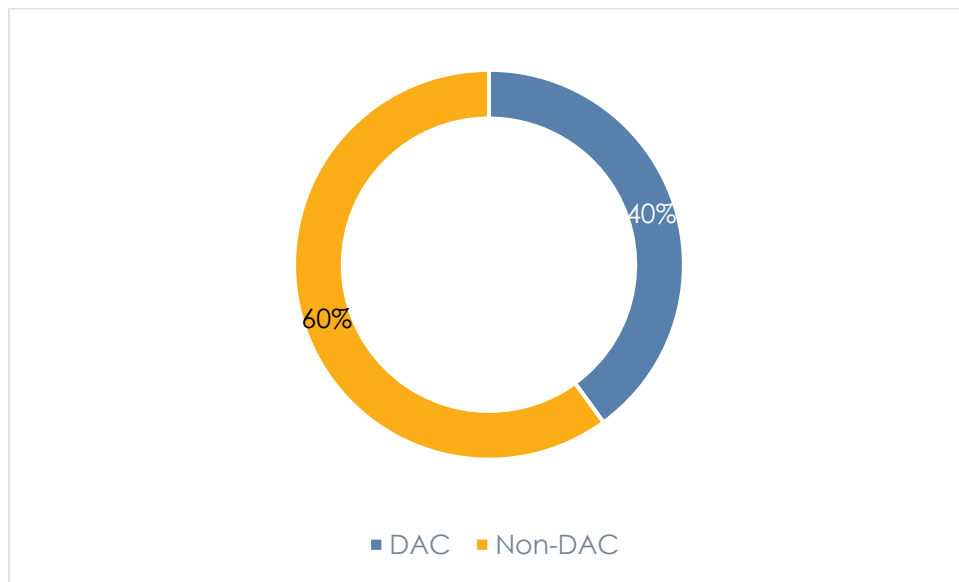


N = 1,096

Webinars during this reporting period were focused on promotion of SOMAH technical assistance services, including one specifically on the topic of financial technical assistance — a topic that is a barrier to participation for property owners. The attendance and engagement for this webinar was one of the highest the SOMAH PA has seen, with 15 attendees and roughly 10 questions from the audience, indicating the audience was engaged and interested in this topic. The following webinars/conferences were hosted through SOMAH and partner channels.

**SOMAH Channels**

- Upfront Technical Assistance Webinar (July 2021: 7 attendees, 16 registered)
- Financial Technical Assistance Basics: Know Your Solar Options (December 2021: 15 attendees, 30 registered)

**Virtual Conferences**

- California Council for Affordable Housing Conference (sponsorship) (September 2021)
- San Joaquin Valley Housing Collaborative Summit (tabling) (September 2021: 15 attendees)
- California Coalition for Rural Housing Summit (tabling) (November 2021: 13 visitors)
- San Joaquin Valley Affordable Housing Summit: Preparing for Growth in the Valley: How Grid Resiliency Creates a Secure and Sustainable Future (panelist) (September 2021: 25 attendees)
- SCANPH's 2021 Virtual Conference (virtual booth) (October 2021: 114 visitors)

Additional digital marketing efforts were made through the SOMAH website and social media channels. The main webpage designated for property owners on the SOMAH website performed well during this reporting period. There was a total of 1,179 pageviews, 989 of those being unique pageviews. Both measures were higher than the previous timeframe.

The SOMAH PA deployed a paid digital marketing campaign via Facebook and LinkedIn channels. These campaigns utilized geotargeting and were specifically focused on areas with a high amount of DAC properties, in hopes of increasing applications for DAC properties. One campaign had a focus on driving users to attend the Upfront Technical Assistance Webinar, and the second campaign was to increase general program awareness, driving users to the main webpage for property owners. These efforts led to 775 website visits and 185,000 impressions on LinkedIn and 692 link clicks and 75+ impressions on Facebook.

The email listserv increased to 41 new property owner subscribers for 2021, with 24 new subscribers specifically in this reporting period. The listserv provides important program updates, including funding announcements and program changes and alerts about upcoming events and webinars.

**Figure 33 – Property Owner Subscribers Over Time**
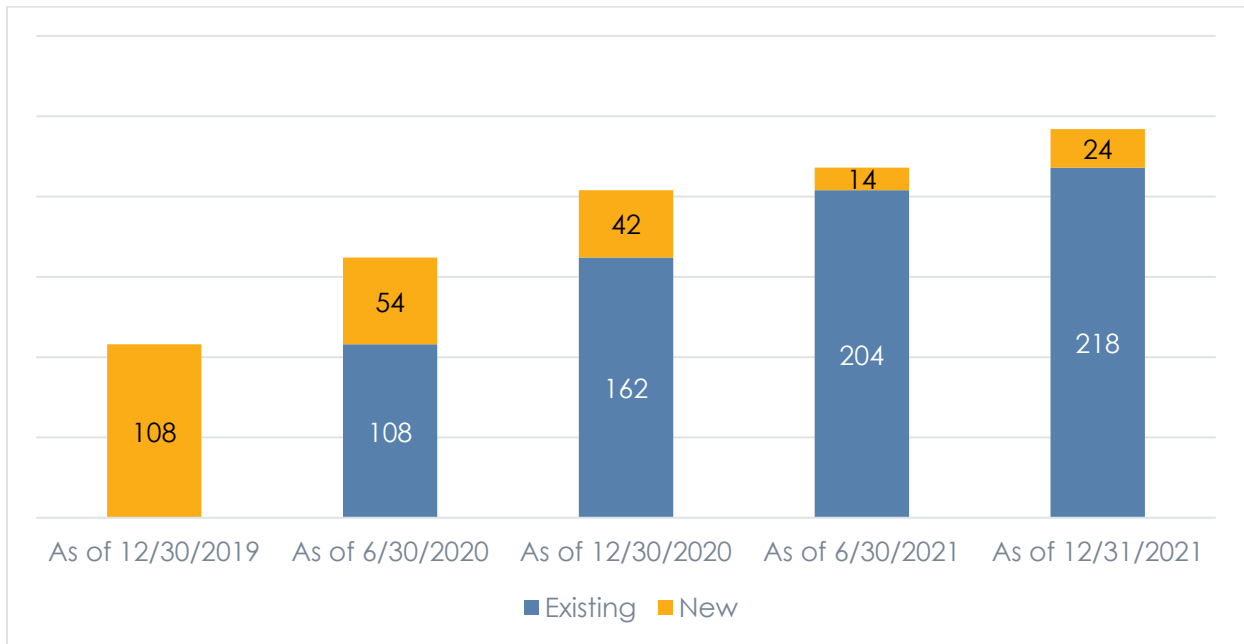


## 3.2.5 Tenants

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

**Community-based Organization Partnerships**

The SOMAH PA continues to work closely with the program's five CBO partners. Despite continuing to navigate the health and safety challenges of the COVID-19 pandemic, CBOs organized and/or attended 18 in-person outreach events or workshops, engaging over 668 community members (while ensuring that COVID-19 safety protocols were followed). Additionally, CBOs referred 19 community members to local job training organizations and contacted 371 property owners.

The Niles Foundation (TNF) has been added as the newest SOMAH CBO partner. Serving the Los Angeles region, TNF brings its experience with building garden roof tops and its passion for community-led solutions to the program. TNF will aim to increase SOMAH's impact in Inglewood and Westmont, among other areas in the LA region. The SOMAH PA, along with its current CBO partners, worked to recruit additional CBO partnerships in summer 2021 to engage CBOs in SOMAH geographic gaps. The PA is currently working to create partnerships with additional CBOs in the Central Coast and Orange County.

Additionally, in Q3-Q4 2021, CBOs began developing work plans to support the SOMAH PA's stakeholder outreach to local and regional government entities. See Section 3.2.6, Stakeholders, for more details.

**Tenant Education**

In September 2021, the SOMAH PA and CBO partners completed its first tenant education service request with a series of four, outdoor tenant education workshops for residents at a property in Stockton, CA. These workshops were conducted over three days, with materials tailored to serve a range of residents' needs including residents with special needs, youth residents ages 4-14, and 44 residents with limited access to technology. SOMAH's job training opportunities were spotlighted, with the SOMAH workforce manager and the project contractor on site to speak with interested residents, who were able to create job training portal accounts in real time.

The SOMAH PA launched its first set of evaluations for tenants who reside in properties who have installed solar through SOMAH in December 2021 and will continue evaluation efforts through Q1 2022. The first round of surveys will be used to determine the best survey methodology. The goals of these evaluations are to: 1) assess existing tenant education materials; 2) evaluate how tenant education requirements are being met and challenges and barriers faced; and 3) ensure that survey participation is significant. The SOMAH PA will distribute these surveys via contactless methods — primarily mailers. Surveys will be formatted as one-page documents and will go to all tenants (along with a participation incentive) who have gone through at least three SOMAH VNEM billing cycles. Other survey tools include focus groups and interviews to evaluate tenant education and inform outreach efforts.

## 3.2.6 Stakeholders

During 2021, many stakeholders, especially local governments, began COVID-19 recovery efforts. For many local governments these efforts centered on job creation and sustainable development. This created an opportunity to align SOMAH's stakeholder engagement efforts with local government recovery efforts. In early 2021, the SOMAH PA created a revised stakeholder outreach plan that focused on building brand awareness about SOMAH within local governments and establishing co-marketing partnerships with local governments, CCAs, and IOUs to promote SOMAH through trusted entities. In the second half of 2021, the SOMAH PA expanded its goals to include creating partnerships with energy efficiency programs to promote incentive layering and to increase referrals from complementary incentive programs.

Many stakeholders, especially local governments, have limited capacity to do direct outreach in partnership with SOMAH. To meet these stakeholders where they are at, the SOMAH PA has tried to identify and offer a suite of co-marketing options that vary in scope. This suite of co-marketing options ranges from mutual social media posts and co-branded digital materials to co-hosted webinars and presentations.

The Phase II third-party evaluation and internally administered surveys indicate that SOMAH needs to increase its brand awareness. These evaluations noted that multifamily affordable housing owners may not be aware of the SOMAH Program. This is because of the program's relative newness and niche eligible portion of California's rental population. In 2021, SOMAH built its brand awareness through presentations to the Local Government Commission and direct outreach to local government sustainability offices. The SOMAH PA also presented to stakeholder audiences at the California Climate & Energy Collaborative, Resilient SLO, and the California Polytechnic State University Climate Solutions Now conferences.

## IOUs & CCAs

IOUs represented key stakeholders with whom the SOMAH PA engaged in the Q3-Q4 2021. This engagement included IOU representatives during the monthly SOMAH IOU Working Group meetings. Through these meetings and with the help of Energy Division, the SOMAH PA began working with the Single Point of Contact (SPOC) at PG&E, SCE and SDG&E. The SOMAH PA has coordinated co-marketing efforts between the SPOC and the Energy Savings Assistance Common Area Measures (ESA CAM) programs. SOMAH and ESA CAM will now be sharing referrals between programs on a quarterly basis. CCA outreach was successful in 2021, with direct referrals to SOMAH from CCA websites and outreach efforts to Clean Power Alliance, San Jose Clean Energy, and CleanPowerSF.

## Local Governments

In 2021, the SOMAH PA efforts focused on establishing more formal co-marketing partnerships, which has resulted in higher engagement with fewer offices. Outreach was conducted to 25 government and legislative offices, 16 of which represented DACs and 15 of which represented DACS with identified eligible properties that have not applied for SOMAH. Governments met with since the last reporting period include the City of San Diego and South Bay Cities Council of Governments.

Local governments were generally interested in partnering or co-marketing with SOMAH to increase participation within their city/county/region. Due to low staff capacity, most city governments directed SOMAH to work with their county

governments or Regional Energy Networks (RENs). As such, the second half of 2021 was more focused on REN relationships. In 2022, local government efforts will be focused on the Central Valley, an area which is not covered by any REN and is part of SOMAH's strategic outreach.

**CBO Stakeholder Outreach**

During the second half of 2021, the SOMAH PA expanded the scope of its contracted CBOs to include government outreach. SOMAH's CBOs have existing relationships with local governments across the state that can be leveraged to support SOMAH's local government outreach. Starting in August 2021, the SOMAH PA began meeting with each CBO to set strategic local government outreach goals. The SOMAH PA and CBOs utilized Q3 for planning and began outreach in Q4. In 2022, CBO outreach efforts will be focused on engaging government offices in DACs, as well as engaging elected local government officials, including city council members and mayors.

**Regional Energy Networks**

Since the last reporting period, SOMAH established co-marketing efforts with local and regional stakeholders including the Tri-County Regional Energy Network (3C-REN), Bay Area Regional Energy Network (BayREN), Southern California Regional Energy Network (SoCalREN), and Switch Is On. These partnerships help encourage property owners to complete energy efficiency and decarbonization efforts through other multifamily incentive programs before or during their SOMAH application. These co-marketing efforts have included co-branded materials and adding SOMAH to the REN websites. In 2022 these efforts will include newsletter posts and co-hosted webinars.

In 2022, the SOMAH PA will implement a referral process between SOMAH, IOUs, SPOCs, and RENs. This process will involve IOUs (Liberty Utilities and PacifiCorp), SPOCs, and RENs completing an online form for leads from their respective programs, which are then sent to the PA for technical assistance. This effort has been a collaboration across these stakeholders and will ideally remove barriers to stacking eligible incentive programs with SOMAH. The SOMAH PA will track which referrals are sent from specific RENs and IOUs and which referrals turn into applications.

## 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

outreach to job training organizations (JTOs) across the state in partnership with Rising Sun Center for Opportunity, as well as organizing career development workshops for job trainees, supporting contractors with trainee recruitment, and gathering feedback from SOMAH's Job Training Organization (JTO) Task Force.

During this reporting period, the SOMAH PA has monitored a decision from the California Contractors State License Board (CSLB) regarding installing battery energy storage systems. In July, CSLB voted to restrict the installation of energy storage systems to C-10 electrical contractors beginning November 1, 2021, preventing C-46 solar contractors from installing battery systems. However, the Attorney General of California recently filed a written stipulation agreeing to a voluntarily stay of enforcement of this decision, so C-46 contractors may continue to install solar plus storage systems beyond November 1, 2021, with their existing, trained workforce. The SOMAH PA will continue to monitor this decision and its potential impacts on industry workforce needs.

The SOMAH PA is also working with the CPUC's Energy Division (ED) to extend the eligibility of prospective job trainees that expired in the first two years of the program. This is to ensure that job trainees whose eligibility timelines were impacted by the COVID-19 pandemic and delayed project timelines are still able to equitably participate in the SOMAH Program. As of December 2021, the SOMAH PA has received confirmation from the ED that an extension can be granted but before implementation will suggest an official framework and vote from SOMAH's Job Training Organization Task Force.

**Job Training Organization Outreach & Job Trainee Engagement**

At the close of 2021, the SOMAH PA has verified eligibility of 62 active JTOs (nine new JTOs engaged this year) and continues to actively contact and vet over 300[13] JTOs, with the goal of broadening SOMAH's job trainee pool. Rising Sun Center for Opportunity, SOMAH's workforce development partner, facilitated targeted calls and emails to JTOs in regions where there was a high volume of SOMAH projects and limited JTO engagement including the Central Valley, Inland Empire, and San Diego County. The SOMAH PA also focused outreach to JTOs that serve priority populations, such as justice system-impacted individuals and those facing other barriers to employment.

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[13] The number of JTOs with active SOMAH-eligible training programs has fluctuated over the course of the program as JTOs have paused, discontinued or added new training programs.

Since the last reporting period, the SOMAH PA has added 60 new job trainees to the portal for a total of 100 new job trainees being added to the Job Training Portal in 2021. As of this reporting period, a total of 369 job trainees are engaged on the Job Training Portal. The SOMAH PA continues to engage with job trainees and solar job seekers by facilitating career development workshops. In December, the SOMAH PA offered a Know Your Employment Rights workshop for job trainees. This workshop provided a detailed overview of California employment rights and labor laws that protect employees. The SOMAH PA is developing a resources page on the Job Training Portal that will include access to free online solar training courses and a directory of local supportive services where job seekers can access support for transportation, childcare, or other barriers to employment.

**Contractor Job Training Support**

Since the last reporting period, the SOMAH PA continued support 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 as projects near installation phase. In 2021, the SOMAH PA connected a total of 81 job seekers to 21 SOMAH projects. As a result of this support, 100% of SOMAH projects that submitted the Job Training Affidavit with the Incentive Claim Milestone met all the 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 October, the SOMAH PA hosted a Job Training Overview webinar for contractors with 14 registrants and six attendees to provide a detailed overview of the job training requirements, helpful resources, and tips for facilitating a meaningful job training experience. In November, the SOMAH PA hosted a Fair Chance Hiring Workshop for contractors and solar employers with 62 registrants and 37 attendees to learn about the benefits, resources, and strategies for using fair chance hiring practices to meet their workforce needs.

## 3.3.1 Local Hiring and Job Training

Since the last reporting period, the SOMAH PA has received 15 more Job Training Affidavits from projects that have reached the Incentive Claim Milestone for a total of 23 projects that have submitted affidavits. Job training data for these completed projects is reported in the subsection, Hired Job Trainee Data. This preliminary data shows that nearly all hired job trainees (93.33%) meet SOMAH's definition of a targeted hire. Additionally, 44.19% of job trainees were local hires (i.e., live in the same county as the SOMAH project), 26.67% of job trainees reside in disadvantaged communities, and 11 tenants participated in job training opportunities. Data on job trainee advancement

(i.e., the number of SOMAH trainees who become full-time solar employees) and retention will be collected through future surveys, which have not been deployed at this time due to the limited number of projects that have reached the Incentive Claim Milestone in 2021.

The following data is collected from 23 SOMAH projects that have submitted the Job Training Affidavit as of December 2021. The Job Training Affidavits report 25 job trainees hired to work on SOMAH projects, with several of the job trainees working on multiple SOMAH projects, gaining more hands-on experience and solar installation skills. The SOMAH PA is also collecting demographic data, however, the SOMAH PA has only received demographic data on 15 of 25 hired job trainees. Additionally, the SOMAH PA has included projected data, including the projected number of job trainee hours and number of job training opportunities generated by current SOMAH projects to show SOMAH's potential impact (based on current SOMAH project application data).

**Figure 34 – Projected and Confirmed Job Trainee Count and Metrics[14]**

| Job Trainee Metrics | Active applications (projected numbers) | Completed projects (confirmed numbers) | Total |
|---|---|---|---|
| Number of SOMAH project applications | 461 | 14 | 475 |
| Number of training opportunities | 856 | 28 | 884 |
| Number of job hours | 57,200 | 2080 | 59,280 |
| Number of job weeks | 1,430 | 52 | 1,482 |
| Number of job years | 27.5 | 1 | 28.5 |

**Hired Job Trainee Data**

Local & Targeted Hires

- 26.67% of job trainees reside in DACs

[14] For the purposes of presenting job training data, active applications represent current SOMAH applications including reservations and projects in the Energy Efficiency Compliance Milestone and Proof of Project Milestone. Active applications exclude Track A applications in upfront technical assistance status and applications that have submitted the Incentive Claim Milestone. Completed applications represent those that have submitted the Incentive Claim Milestone along with the Job Training Affidavit.

- 44.19% of job trainees were local hires[15]
- 11 tenants of SOMAH properties participated as job trainees
- 93.33% of job trainees were targeted hires[16]
  - 20% of job trainees reported that they have been involved in the criminal justice system
  - 40% of job trainees reported being unemployed or underemployed at the time of SOMAH intake
- 8 job training organizations have students or graduates that have participated in SOMAH job training opportunities

**Figure 35 – Job Trainee Race/Ethnicity Breakdown**
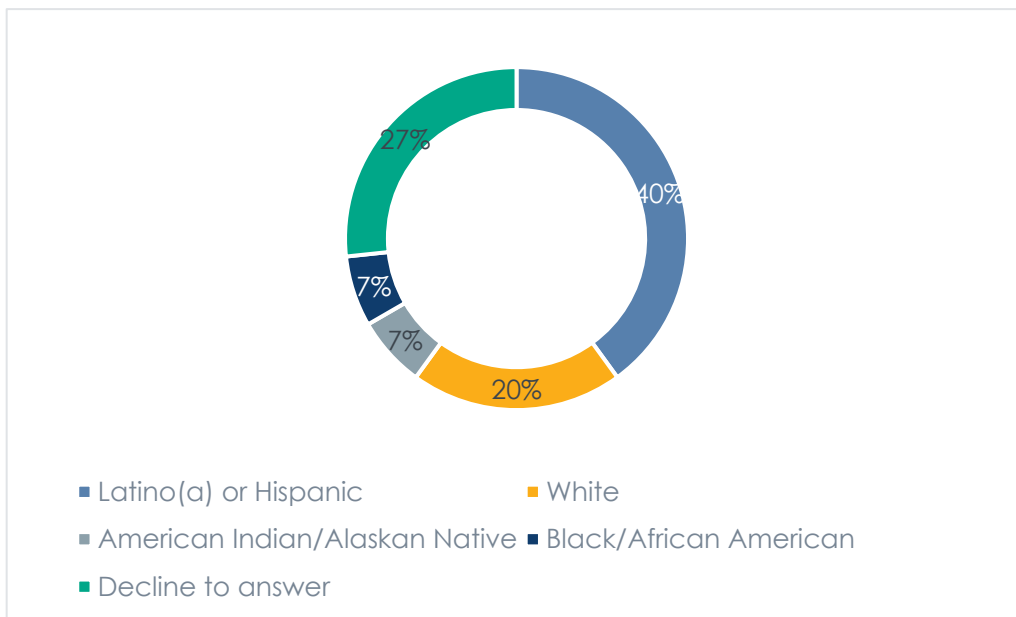


N = 15

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[15] For the purposes of SOMAH projects, a local hire is defined as an individual who is domiciled within the county in which the SOMAH project is taking place.

[16] A targeted hire may or may not live within the county in which the SOMAH project is taking place. Individuals meeting the targeted hire goal can include residents of disadvantaged communities (per CalEnviroScreen 3.0), affordable housing residents, women, people of color and other individuals who have faced or who have overcome at least one of the following barriers to employment: being homeless, being a custodial single parent, receiving public assistance, lacking a GED or high school diploma, participating in a vocational English as a second language program or having a criminal record or other involvement with the criminal justice system

**Figure 36 – Job Trainee Gender Breakdown**
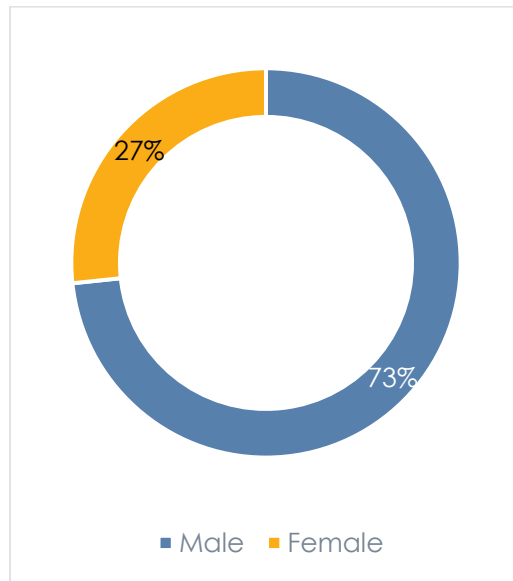


N = 15

**Figure 37 – Highest Level of Job Trainee Education**
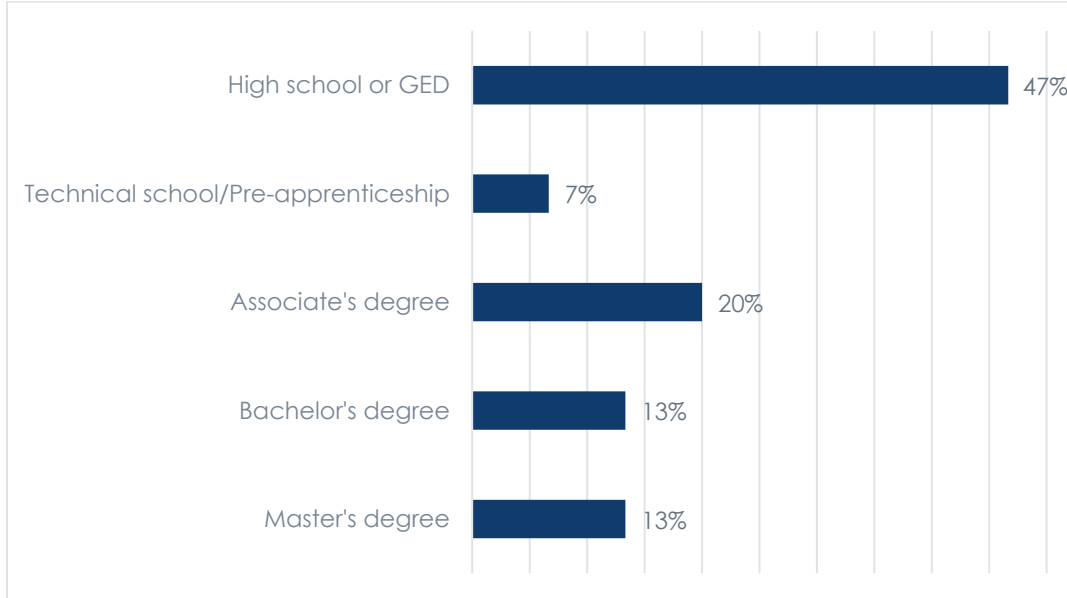


N = 15

Types of job training tasks

- 43 job training positions focused on direct photovoltaic installation
- 4 job training positions focused on post-installation operations and maintenance
- 71.06 hours - average number of hours worked per job trainee, per project

Wages & Employment

- $20.58 per hour - average job trainee wages
- 42 job training positions were temporary positions
- 4 job training positions were permanent positions

The SOMAH PA acknowledges that this preliminary data is limited and may not accurately represent all job trainees that have participated in SOMAH projects to date. The SOMAH PA expects to receive more Job Training Affidavits over the next few months and will provide updated, cumulative job training data in the next SAPR.

## 3.4 Technical Assistance

The SOMAH Program offers two technical assistance (TA) options: upfront TA and standard TA. Installing solar 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. To help level the playing field and overcome these barriers, the SOMAH Program offers two TA options to provide personalized technical assistance to bridge these knowledge gaps and to help facilitate solutions to common issues faced along the way.

### 3.4.1 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 installation. Offering upfront TA services not only sets the SOMAH Program apart from similar previous programs but provides property owners who are less familiar with solar with equal access to program benefits.

Property owners enter Track A with varying levels of solar knowledge. Through guidance from a designated 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, and evaluating the costs and benefits of moving forward with a solar project.

Tenant benefits continue to be a central pillar of the SOMAH Program as well as a focus within Track A. To date, there have been six Track A projects that have received upfront TA services, and as a result, over 550 low-income households are projected to receive direct benefits from solar credits. For the six Track A projects that have received upfront TA services, 81% of the clean energy produced is expected to benefit tenants via VNEM bill credits. The energy produced by these proposed systems is expected to offset approximately 71% of the tenants' historic annual electrical consumption. The average estimated system size for the six projects is 161 CEC-AC kW with an average expected aggregate annual output of 273,060 kWh.

Figure 38 outlines additional system statistics across the IOU territories for the six Track A projects that have been approved for and received upfront TA services.

**Figure 38 – Track A Reservation Summary**

| IOU | Number of Track A Projects Approved for Upfront TA | Estimated SOMAH Incentive | Estimated System Size (CEC-AC kW) | Expected Aggregated Annual Output (kWh) |
|---|---|---|---|---|
| PG&E | 3 | $1,119,963 | 337 | 522,521 |
| SCE | 3 | $1,453,651 | 630 | 1,115,837 |
| SDG&E | 0 | $0 | 0 | 0 |
| Liberty Utilities | 0 | $0 | 0 | 0 |
| PacifiCorp | 0 | $0 | 0 | 0 |
| Total | 6 | $2,573,614 | 967 | 1,638,358 |

Tenants will receive added benefits from the Track A projects that have decided to pursue deep energy retrofit scopes in conjunction with solar. Three out of the five projects were either referred to SOMAH from a comprehensive energy efficiency program they are currently enrolled in or used upfront TA services to receive a referral to, and enroll in, a comprehensive energy efficiency program.

## 3.4.2 Standard TA

Standard TA services are available to both Track A and B projects and can be requested by property owners or their contractors at any time during their enrollment in SOMAH. Challenges and questions can arise at any point during a solar project, and standard TA services are designed to aid property owners and contractors when needed.

**Figure 39 – Standard TA Services Requested**
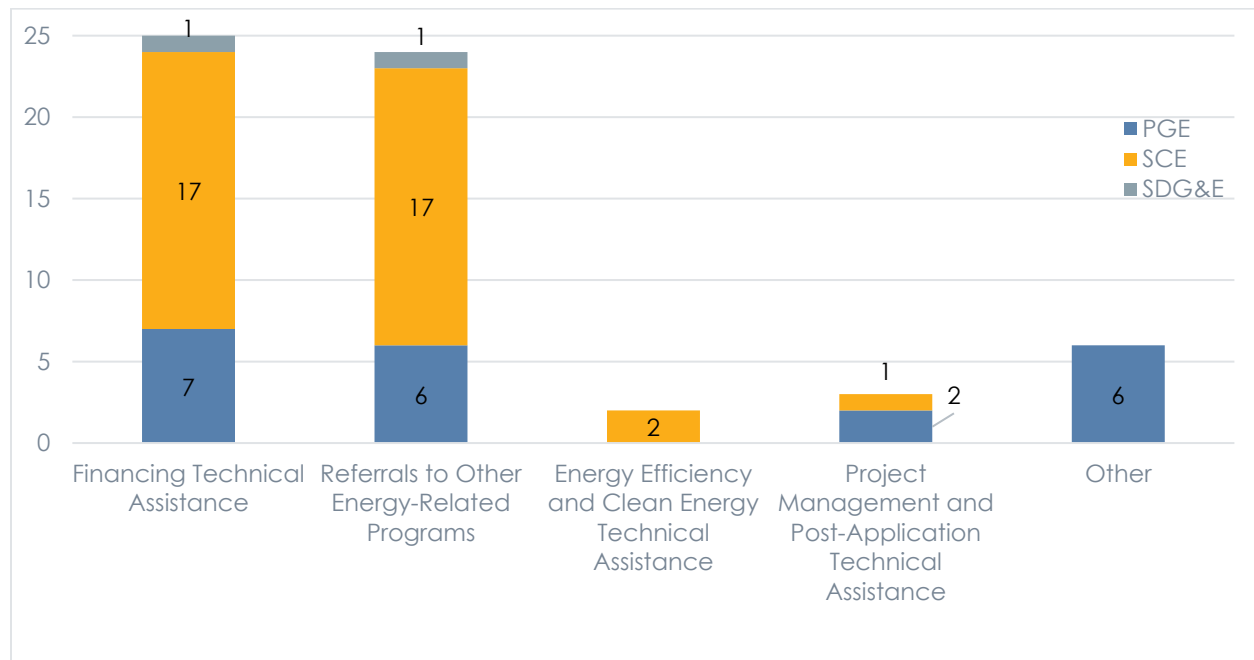


Most of the standard TA services provided to date have been financial assistance and referrals to other energy-related programs for projects looking to leverage SOMAH with other similar programs. Standard TA services were provided to two projects to identify pathways to consider electrification and for assistance sizing their SOMAH PV system to account for energy efficiency upgrades. Other standard TA services that were provided include assistance with the Solar Sizing Tool, general SOMAH Program support, preparing solar feasibility assessments, and generating historic energy consumption analyses. To date, 32 projects have made a total of 60 standard TA requests. Figure 39 shows the breakdown of standard TA services provided across the IOU territories.

# 4. Program Planning and Development

The SOMAH PA takes an adaptive approach to ensure that feedback is regularly solicited from program participants and stakeholders and that the SOMAH PA is making decisions about the program with transparency. It works in close partnership with the program's advisory bodies and CBO partners, along with input from other stakeholders, to ensure the program remains accountable to the communities it was 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 following information outlines these reports and their location.

- SOMAH Incentive Budget Report and Working Data Set (updated weekly)
- Semiannual Progress Reports
- Semiannual Expense Reports
- Annual marketing, education and outreach (ME&O) plans

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/General.aspx?id=6442454736

During this reporting period, the SOMAH PA highlights: 1) an update on activities related to reporting, feedback and accountability; and 2) proposed handbook updates, including setting targets for DAC participation in the program.

# 4.1   Reporting, Feedback and Accountability Mechanisms

The SOMAH Program has several accountability and feedback mechanisms to ensure that 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 quarterly events that 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 experience with the program — challenges, barriers, and areas for improvement. The SOMAH PA held two public forums during this reporting period. Both public forums included an update on key program statistics and activities across SOMAH's different program areas.

In addition to the general program update on key stats and announcements, the Q3 2021 Public Forum included a session reviewing SOMAH's suite of no-cost technical assistance services, from financial TA and tenant education services to job training requirement support, a TA case study walk-through and a session previewing SOMAH's upcoming program changes via the program handbook (see Section 4.2.1 for more details on upcoming proposed handbook changes).

The Q4 2021 Public Forum expanded its regularly occurring program update session to include highlights of SOMAH's accomplishments in 2021 and provide an overview of the SOMAH PA's goals and priorities for 2022. It also included a session highlighting SOMAH's tenant education and job training services, with a special guest presentation from a property manager who spoke about her positive experience using SOMAH's tenant education services with a series of workshops at her property in Stockton, CA.

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.

Q3 2021 Public Forum place of record:

- SOMAH Public Forum Q3 2021 Presentation
- SOMAH Public Forum Q3 2021 Notes

Q4 2021 Public Forum place of record:

- SOMAH Public Forum Q4 2021 Presentation
- SOMAH Public Forum Q4 2021 Notes

## 4.1.2 IOU Working Group

During the reporting period, the SOMAH PA held four IOU Working Group meetings (August, September, October, and combined for November–December). The Q3 and Q4 working groups focused on: 1) the third-party Phase II evaluation; 2) Single Point of Contact opportunities to refer leads between ESA and SOMAH; and 3) the incentive step-down. 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 is staying accountable to the communities that it was intended to serve.

**Advisory Council**

The purpose of the SOMAH Advisory Council (SOMAH AC) is to ensure that the voices and interests of equity-focused community advocates and key stakeholders remain at the center of the SOMAH Program and that SOMAH maximizes benefits to low-income tenants and DACs by advising the SOMAH PA on program development and implementation. Since the last reporting period, the SOMAH PA welcomed a new cohort of SOMAH AC members, which were selected through an independent selection committee and process. There are 11 members in this cohort — 6 new members and 5 returning members — 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 quarterly and virtually.

Q3 2021 was the first meeting with the new SOMAH AC cohort. Topics and discussions included:

- A space for introductions and building connections between AC members.
- A reorientation to the SOMAH Program and SOMAH AC, reviewing program requirements and areas of focus, program updates, the role and purpose of the SOMAH AC, and AC governance documents.
- AC members discussed a collective vision for SOMAH's future and identified areas of interest and how they see themselves supporting this vision and the work of the council.

Q4 2021 was the annual AC & JTO Task Force Crossover meeting. Topics and discussions included:

- SOMAH AC and JTO Task Force members became familiar with each other and the work that both groups have performed over the last year.
- A program update on SOMAH's successes and accomplishments for 2021, and a review of the SOMAH PA's 2022 goals and priorities.
- In breakout groups, members discussed topics related to SOMAH's job training opportunities staying relevant and meeting demand in an ever-evolving industry and increasing the participation of underserved communities, beyond DACs (tribal communities, rural communities and re-entry/justice system-impacted individuals).

**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. The JTO Task Force 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 job offers in the solar industry and, over time, career advancement and wage growth. The JTO Task Force is composed of nine regionally diverse representatives from JTOs, including California Community Colleges, career technical education programs, community nonprofits, and private job training centers. Similar to the SOMAH AC, the JTO Task Force meets quarterly.

In Q4 2021, the SOMAH PA began the process of recruiting for the next JTO Task Force cohort since current members reached the end of their two-year terms in December 2021. In November, the SOMAH PA released a Request for Applications for new JTO Task Force members. The application period closes on January 14, 2022. Applicants will be reviewed, and finalists will be chosen by a selection committee headed by Rising Sun Center for Opportunity in February 2022.

Since the last reporting period, the JTO Task Force has held two quarterly meetings and three working group meetings.

 Q3 2021 topics and discussions included:

- Responses and status updates on recommendations submitted by the JTO Task Force
- JTO Task Force focus area work groups report
- Review and report of completed and planned workshops and programming, including SOMAH's first tenant education workshop series, a Know Your Employment Rights workshop for job trainees, and a Fair Chance Hiring webinar for contractors
- A review and discussion of the CSLB ruling regarding C-46 licensing restrictions, potential workforce impacts, and how SOMAH PA can leverage opportunities and mitigate negative impacts
- An update and input on the JTO Task Force Term 2 selection process.

Q4 2021 was the annual AC & JTO Task Force Crossover meeting. See Advisory Council subsection for topics and discussion areas.

## 4.1.4 Third-Party Program Evaluation

During Q3 2021, the SOMAH PA continued working closely with the program's third-party evaluator. In September 2021, the first draft of the Phase II evaluation was

released, and in October it was finalized.[17] The SOMAH PA worked throughout Q4 to complete the CPUC Response to Recommendation process. During this process, the PA formally indicated how it would respond to or implement the recommendations from the evaluation report. The SOMAH PA continues to work closely with the Energy Division to identify opportunities to incorporate key recommendations into the program's overall priorities and ME&O efforts for 2022 and beyond. These opportunities for updates have been incorporated into the 2022 strategic planning efforts, along with the 2022 ME&O Plan. Some key recommendations include: 1) streamlining and expanding SOMAH's technical assistance services; 2) co-marketing with trusted entities such as IOUs and local/regional government offices and program administrators; and 3) increasing participant diversity and participation by underserved communities.

The SOMAH PA will continue to reference, incorporate and address key findings and recommendations from the Phase II evaluation into future internal evaluation efforts. 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 and provides related updates on regulatory issues.

### 4.2.1 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.

**Fifth Handbook Edition Development: Status & Key Changes to be Proposed**

With last period's approval of CSE Advice Letter 114-E, the current edition of the SOMAH Program Handbook is version 4.0. Figure 40 provides a non-exhaustive overview by version of the program handbook's updates since the inaugural edition.

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[17] Final report: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/somah/somah_phaseii_draftreport_20210902.pdf

**Figure 40 – Handbook Versions**

| Version | Major Updates | Approval Date |
|---|---|---|
| Handbook 1.0 (original) | • Established original program offerings and requirements | March 2019 |
| Handbook 2.0 | • Addressed SOMAH & MASH Stacking | May 2020 |
| Handbook 3.0 | • Implemented Progress Payments | December 2020 |
| Handbook 4.0 | • Established an application pipeline management system (lottery)<br>• Set a required notification process for early job trainee termination<br>• System changes affecting incentive amounts<br>• Assorted minor updates | May 2021 |

The SOMAH PA is committed to continuous improvement in program planning and development, while balancing that commitment with the need to ensure robust stakeholder engagement in working toward any changes, and the reduction of program complexity to the maximum extent possible.

With those guiding principles, the SOMAH PA worked closely with stakeholders this period to address program gaps and ensure the program is implemented in keeping with its original intent to provide a meaningful economic benefit to participating tenants and properties, particularly in the state's environmental justice communities (formally, DACs per the program's usage of the CalEnviroScreen tool) while supporting equitable solar workforce development.

The SOMAH PA intends to file a Tier 2 Advice Letter to request approval of the following key changes, alongside several minor clarifications in Q1 2022.

- A SOMAH Code of Conduct for all participants
- An updated approach clarifying eligibility across CalEnviroScreen versions
- A formal benchmark for minimum participation by properties in DACs (as defined by CalEnviroScreen)
- A process for providing application fee waivers to priority groups.

**SOMAH Code of Conduct for all Participants**

SOMAH's Program Handbook currently includes several compliance mechanisms that empower the SOMAH PA to hand down "infractions" and "failures," clawback funds from noncompliant participants/projects, and remove participants from the program where warranted, under a very limited set of circumstances. This proposed update fills important gaps by further empowering the SOMAH PA to deploy the existing compliance mechanisms under a wider set of scenarios, and prioritizes safety, protects fairness within the program, honors its equity intent, and in general, ensures participants are acting appropriately in relation to their work on SOMAH.

The proposed code of conduct is modeled, in large part, on the participating IOUs' supplier codes of conduct and includes the following enforceable sections:

- Safety
- Employment and labor rights protections
- Ethical business conduct and communication practices (including consumer protection).

The code of conduct is proposed to be included within the handbook and would be enforced by the SOMAH PA based on objective triggers rather than merit-based determinations. It includes information for participants on how to report complaints to the PA and relevant state and federal agencies, at the discretion of the participant.[18]

The following list provides an overview of stakeholders consulted or informed of the PA's intent to establish a code of conduct:

- SOMAH Advisory Council
- SOMAH community-based organization (CBO) partners
- SOMAH Job Training Organization Task Force
- SOMAH PA legal counsel
- CPUC Energy Division.

Key stakeholders are in consensus regarding the need for a code of conduct in ensuring that all participants understand that obedience of all relevant laws and regulations are conditions for program participation and that upholding the highest

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[18] The SOMAH PA does not and will not provide legal advice.

standards of integrity, honesty, and respect in the conduct of program-related activities is required and enforceable.

## Proposal to Update Eligibility Across CalEnviroScreen Versions

The SOMAH PA will also propose a modification to its determination of property eligibility across CalEnviroScreen (CES) versions.

CalEPA's Office of Environmental Health Hazard Assessment finalized and released a new version of CES — CES 4.0 — during this reporting period. Whereas the SOMAH Program Handbook Version 4.0 provides a six-month grace period for properties that would qualify solely under CES 3.0 (and not under the program's income qualification pathway as well), the SOMAH PA posits that properties eligible under CES 3.0 should have a longer period of eligibility than six months, respecting that going solar via SOMAH is a significant decision entailing a 20-year commitment, the exchange of hundreds of thousands of dollars in some instances, and alignment with the properties' medium- and long-term plans for other site upgrades and tax-relevant processes, such as rescindication.

Given these realities and respecting that an updated version of CES does not mean that "environmental and population characteristics" for the top 25% of most pollution burdened tracts from the previous version are automatically significantly improved, the SOMAH PA will propose upholding a property's eligibility if it is located in a census tract determined to be within a DAC in either the *current* or *immediately previous* version of the CES tool. Functionally, this would mean that properties eligible under CES 3.0 would remain eligible alongside CES 4.0 properties until CES 5.0 is released. Once CES 5.0 is released, the program would then honor eligibility of CES 4.0 and 5.0 communities (but not 3.0 communities). Restated, this proposed change provides legacy treatment of eligible properties for one additional CES version period.

## Benchmark for Participation by Properties in DACs

Building on work from previous reporting periods, the SOMAH PA concluded its stakeholder engagement process, determining initial program commitments and changes as it relates to increasing participation in DACs beyond parity with their share of potentially eligible properties.

The fifth handbook edition will propose that at least 40% of participating projects be located in DACs by 2026, up from approximately 34% at the time of this report. If this goal is met, that would result in over 55,500 tenant units across over 680 properties in DACs would receive on-bill credits by the end of 2030.

Currently, SOMAH's value proposition is identical within and outside of DACs for all eligible properties, and owners and contractors have no inducement, beyond philosophical alignment, to prioritize participation by properties in DACs. This commitment therefore currently places the onus on the PA and partners to skew participation toward DACs, and further program changes may be necessary to meet or exceed this benchmark.

**Application Deposit Waiver for Priority Groups**

To ensure only serious projects submit applications, and to mitigate cancellations to the extent possible, SOMAH applicants applying for systems 10 kW or larger are currently required to submit an application deposit, with amounts ranging from $1,250–$20,000 depending on the system size. The application deposit can be paid by the property owner or a third party on the property owners' behalf. To address these initial financial barriers to participation, the SOMAH PA will propose to be granted discretion to waive application deposits for "priority groups" in its forthcoming Advice Letter. This would allow the SOMAH PA to grant properties in DACs initial "priority status" and may rotate or add additional groups based on ME&O goals or stakeholder feedback. Other potential priority groups include, but are not limited to, properties serving tribal communities, farmworkers, formerly homeless Californians, or other underserved populations. While cancellations are a normal part of program administration, this discretion also helps monitor application quality for those applications not requiring deposits and allows the PA to reinstate a deposit requirement if data shows that resources are being disproportionately expended on unsuccessful applications.

# 5. Conclusions

Despite continued impacts, including a variety of delays and unforeseen challenges, the SOMAH PA is encouraged by the 14 completed and paid projects in this reporting period (and enjoyed celebrating two of these achievements with ribbon-cutting ceremonies). Through the PA's research, program evaluation efforts, and cultivated relationships with program participants, the PA's commitment to reducing barriers to participate in SOMAH is interwoven in all aspects of program implementation to ensure a robust and successful SOMAH Program. While the public health crisis continues to impact project completion, the resilience of industry and participants to move forward with these important projects continues to allow the tenants and residents to receive program benefits where it's needed the most. The pattern of slowing new application submissions rebounded with an influx of projects submitted in October at the incentive step-down, and the SOMAH PA expects a large influx of Incentive Claim Milestone

submissions in the first half 2022 and throughout the year. The program has seen success with increasing the percentage of DAC participation in 2021 and has additional efforts to support and increase DAC projects with the submission of the next version of the handbook. ME&O efforts continue to focus and prioritize building general program awareness, outreach to property owners, diversifying contractor participation, and establishing co-marketing partnerships with trusted entities like IOUs and related energy programs. The SOMAH PA is also working with Energy Division to address SOMAH's third-party evaluation recommendations by identifying actionable next steps and deploying efforts throughout 2022.

# 6. Appendix A

As referenced in Section 3.1.1, Application and Incentive Statistics, below 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.
- 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.

- 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 on-site PV system inspection and an on-site 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 statues*

- 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.