2020 SGIP PROGRAM ADMINISTRATOR PERFORMANCE EVALUATION

Submitted to: Pacific Gas and Electric Company SGIP Working Group

Prepared by: Verdant Associate<u>s, LLC</u>

Verdant Associates, LLC Berkeley, CA 94707 www.verdantassoc.com

May 20, 2021

VERDANT

TABLE OF CONTENTS

1	EXECU	TIVE SUMMARY	1					
	1.1	SGIP PARTICIPATION						
	1.2	EVALUATION FINDINGS						
		1.2.1 Overall Applicant and Host Customer Satisfaction						
		1.2.2 Applicant Satisfaction with PA Timeliness, Helpfulness, and Accessibility						
	1.3	RECOMMENDATIONS						
		1.3.1 Timeliness						
		1.3.2 Accessibility						
		1.3.3 Helpfulness	7					
2	INTRO	DUCTION	9					
	2.1	PROGRAM OVERVIEW	9					
	2.1	2.1.1 Program Changes in 2020						
		2.1.2 Budget						
	2.2	PROGRAM PARTICIPATION DURING 2020						
	L.L	2.2.1 Study Population						
	2.3	EVALUATION GOALS						
	2.4	REPORT CONTENTS						
3	DATA	AND METHODS	17					
	3.1	PROGRAM ADMINISTRATOR IN-DEPTH INTERVIEWS	. 17					
	3.2	APPLICANT SURVEY	. 18					
		3.2.1 Sample Design	. 18					
	3.3	HOST CUSTOMER SURVEY						
		3.3.1 Sample Design	. 23					
4	EVALU	ATION RESULTS	97					
4	EVALU	ATION RESULTS	21					
	4.1		07					
	4.1	2020 PROGRAM CHANGES						
		4.1.1 Staffing Changes 4.1.2 Program Communications						
		4.1.2 Program Communications 4.1.3 COVID-19 Effects						
		4.1.3 COVID-19 Checks						
	4.2	PARTICIPANT EXPERIENCE						
	4.2	4.2.1 Program and Communication Clarity						
		4.2.1 Program and common claimy						
		4.2.2 Interactions with roog and Administrators						
	4.3	OVERALL PARTICIPANT SATISFACTION						
	7.J	4.3.1 Satisfaction with Program Administrator						
		4.3.1 Sufficient with Program Application Steps						
_								
5	STUDY	FINDINGS AND RECOMMENDATIONS	68					
	5.1	STUDY FINDINGS	. 68					
		5.1 STUDY FINDINGS						

5.2	521	ENDATIONS FOR PROGRAM IMPROVEMENT	69 .69
	5.2.2 5.2.3	Accessibility Helpfulness	. /0 . 70
APPENDIX	A	SURVEY INSTRUMENTS	72
A.1		IP PA IN-DEPTH INTERVIEW GUIDE	73
A.2 A.3		NT SURVEY INSTRUMENT	75 90

LIST OF TABLES

Table 1-1: Applications Submitted in 2020 by Program Administrator and Budget Category	2
Table 1-2: Applicant and Host Customer Overall Satisfaction with Program Administrator	4
Table 2-1: Statewide SGIP Budget and Program Administrator Allocations	11
Table 2-2: SGIP 2020-2024 Incentive Allocation	13
Table 2-3: SGIP Application, Applicant, and Host Customer Count by Program Administrator	14
Table 2-4: Count of Applicants and Host Customers with Applications in Multiple PA Territories	15
Table 2-5: Applications Submitted in 2020 and 2019 by PA	15
Table 3-1: Target and Achieved Applicant Sample by Program Administrator	18
Table 3-2: Prolific Applicant Population and Number of Completes by Program Administrator	19
Table 3-3: PG&E Applicant Survey Strata Quota	21
Table 3-4: SCE Applicant Survey Strata Quota	
Table 3-5: SCG Applicant Survey Strata Quota	
Table 3-6: CSE Applicant Survey Strata Quota	
Table 3-7: Target Host Customer Sample Size by Program Administrator	
Table 3-8: PG&E Host Customer Strata Quota	
Table 3-9: SCE Host Customer Strata Quota	
Table 3-10: SCG Host Customer Strata Quota	

Table 3-11: CSE Host Customer Strata Quota	26
Table 4-1: Host Customer Clarity with Program Aspects	35
Table 4-2: Common Reasons for Lack of Host Customer Clarity by Program Aspect (Rating 1 or 2)	36
Table 4-3: Host Customer Satisfaction with Program Communication	39
Table 4-4: Common Reasons for Host Customer Communication Dissatisfaction with the PA and Applicant (Rating 1 or 2)	40
Table 4-5: Host Customer Rating of Their Understanding Of The Impact Of The TOU Rate Requirement on Utility Bills	42
Table 4-6: Applicant Reported Change in Timeliness, Helpfulness, and Accessibility Satisfaction Levels in 2020 Versus Prior Years	44
Table 4-7: Applicant Satisfaction with Program Administrator Timeliness by Evaluation Year	46
Table 4-8: Reasons Provided for Dissatisfaction with the PAs' Timeliness (Rating 1 or 2)	47
Table 4-9: Applicant Reported Average Time for Initial Reply to Inquiry Longer than 10 Days or One Week by Program Administrator and Evaluation Year	48
Table 4-10: Applicant Reported Longest Time for Initial Reply to Inquiry Longer than One Month by Program Administrator and Evaluation Year	50
Table 4-11: Applicant Reported Longest Time For Issue Resolution Longer than One Month by Program Administrator and Evaluation Year	51
Table 4-12: Applicant Satisfaction with Program Administrator Helpfulness by Evaluation Year	52
Table 4-13: Reasons Provided for Dissatisfaction with the PAs' Helpfulness (Rating 1 or 2)	53
Table 4-14: Applicant Satisfaction with Program Administrator Involvement in Resolved Suspended Projects	54
Table 4-15: Applicant Satisfaction with Program Administrator Accessibility by Evaluation Year	56
Table 4-16: Reasons Provided for Dissatisfaction with PAs' Accessibility (Rating 1 or 2)	57
Table 4-17: Reasons for Dissatisfaction with SGIP Websites (Rating 1 or 2)	59
Table 4-18: Applicant Overall Satisfaction with Program Administrator	61
Table 4-19: Reasons for Dissatisfaction with the Program Administrator (Rating 1 or 2)	62
Table 4-20: Host Customer Overall Satisfaction with Program Administrator	63
Table 4-21: Applicant Satisfaction with Application Submission process	63

Table 4-22: Reasons for Dissatisfaction with the Application Submittal Process (Rating 1 or 2)	64
Table 4-23: Applicant Satisfaction with Paperwork Requirements for PPM	65
Table 4-24: Applicant Satisfaction with Paperwork for Incentive Claim Stage	65
Table 4-25: Applicant Satisfaction with Inspection Scheduling	66
Table 4-26: Host Customer Satisfaction with Inspection Scheduling	66
Table 4-27: Applicant Satisfaction with Time to Receive Incentive	66
Table 4-28: Host Customer Satisfaction with Time to Receive Incentive	67

LIST OF FIGURES

Figure 1-1: Applications in 2019 and 2020 by Program Administrator	3
Figure 1-2: Applicant Satisfaction with Accessibility, Helpfulness, and Timeliness by Program Administrator	5
Figure 4-1: SGIP 2020 Application Process	30
Figure 4-2: Budget Category Mix of Projects in 2018, 2019, and 2020	31
Figure 4-3: Applicant's Typical Number of Clarifying Questions for the Program Administrator	32
Figure 4-4: Comparison of Clarifying Questions in 2020 to Previous Years	33
Figure 4-5: Types of Questions Applicants Asked Program Adminstrators	33
Figure 4-6: Host Customer Clarity with Program Aspects by their Applicant's Prolific Status	37
Figure 4-7: Host Customer Clarity with Program Aspects by Budget Group — Part 1	38
Figure 4-8: Host Customer Clarity with Program Aspects by Budget Group — Part 2	38
Figure 4-9: Host Customer Satisfaction with Provided Information and Overall by Prolific Status	41
Figure 4-10: Host Customer Satisfaction with Information Provided by the Program Administrator and Applicant by Budget Group	41
Figure 4-11: Applicant Satisfaction with Accessibility, Helpfulness, and Timeliness by Program Administrator	43
Figure 4-12: Applications in 2020 and 2019 by Program Administrator	44

Figure 4-13: Applicant Satisfaction with Program Administrator Timeliness, Helpfulness, Accessibility, and Overall by Prolific Status
Figure 4-14: Applicant Satisfaction with Program Administrator Timeliness, Helpfulness, Accessibility, and Overall by Budget Group
Figure 4-15: Applicant Reported Average Time for Initial Reply to Inquiry by Program Administrator
Figure 4-16: Applicant Reported Longest Time for Initial Reply to Inquiry by Program Administrator
Figure 4-17: Applicant Reported Longest Time to Resolve Issue by Program Administrator
Figure 4-18: Host Customer Reported Time to Resolve Issues by Program Administrator
Figure 4-19: Host Customer Recollection of Problems, Issues, or Delays by Program Administrator
Figure 4-20: Resolution of Host Customer Issues, Problems, or Delays by Program Administrator
Figure 4-21: Applicant and Host Customer Ratings of Website Usefulness
Figure 4-22: Applicant Participation at Quarterly Workshops in 202060

1 EXECUTIVE SUMMARY

California's Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed generation and energy storage technologies that meet all or a portion of a customer's electricity needs. The SGIP is funded by California's ratepayers and managed by Program Administrators (PAs) representing California's major investor-owned utilities (IOUs). The PAs are Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG), and the Center for Sustainable Energy (CSE), which implements the program for customers of San Diego Gas & Electric (SDG&E). The California Public Utilities Commission (CPUC) provides oversight and guidance on the SGIP.

The CPUC measurement and evaluation plan calls for "an annual review of the administrative performance of each PA.¹ The reports are to include, at minimum, a survey of program participants regarding the PAs' clarity and timeliness of oral and written communications, their accessibility, their helpfulness to applicants submitting and processing applications, and the clarity and helpfulness of their websites." This report is an assessment of PA performance during 2020.

Key findings of this evaluation were informed by data collected through interviews and surveys with representative samples of SGIP applicants, host customers, the CPUC Energy Division, and PA staff.

1.1 SGIP PARTICIPATION

Evaluation findings should be considered within the context of the size of each PA's service territory and volume of applications. Table 1-1 summarizes the volume of applications received by each PA and budget category during 2020.² During 2020, the PAs received a total of 23,019 individual applications. PG&E received the highest volume of Program Year (PY) 2020 applications (12,960), followed by SCE (5,816), and CSE (3,540). SCG received the smallest number of applications in 2020 (703). Most applications were for projects in either the Small Residential Storage budget category (46%) or the Equity Resiliency budget category (44%). Smaller application volumes came in for Large-Scale Storage (6%), Non-Residential Storage Equity (1%) budget categories. Less than 1% of applications

¹ The CPUC measurement and evaluation plan was included as Appendix A of an email from CPUC Energy Division to the SGIP PAs on January 13, 2017.

² A snapshot of the program tracking data was taken on January 15, 2021.

submitted during 2020 were for projects in the Generation or San Joaquin Valley Residential budget categories.

PA	Equity Resiliency	Large- Scale Storage	Non- Residential Storage Equity	Residential Storage Equity	Small Residential Storage	Generation	San Joaquin Valley Residential	Total	% of Total
PG&E	6,760	908	145	186	4,950	4	7	12,960	56%
SCE	1,657	296	196	91	3,572	3	1	5,816	25%
SCG	173	71	31	9	419	0	0	703	3%
CSE	1,620	144	43	25	1,708	0	0	3,540	15%
Total	10,210	1,419	415	311	10,649	7	8	23,019	

TABLE 1-1: APPLICATIONS SUBMITTED IN 2020 BY PROGRAM ADMINISTRATOR AND BUDGET CATEGORY

It is important to note the significant increase in application volume from 2019 to 2020 when considering each PA's ability to maintain accessibility, helpfulness, and timeliness. As shown in Figure 1-1, PG&E received an increase of more than 10,000 new applications in 2020 and SCE received an increase of more than 4,000 new applications compared to previous application volumes, both of which roughly represent a four-and-a-half and three-and-a-half fold increase from 2019 respectively. CSE experienced the greatest growth rate, increasing six-fold (from 581 applications to more than 3,540 applications). SCG experienced roughly the same number of applications in 2020 as in 2019.

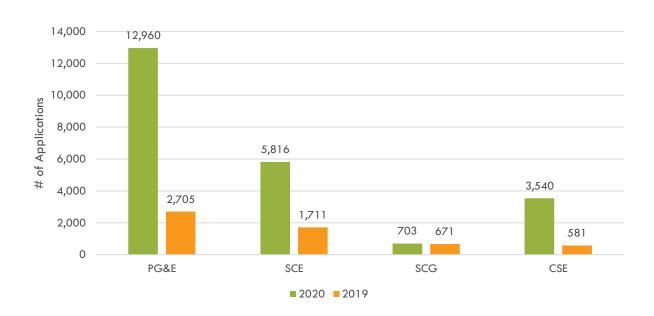


FIGURE 1-1: APPLICATIONS IN 2019 AND 2020 BY PROGRAM ADMINISTRATOR

1.2 EVALUATION FINDINGS

The following subsections present findings related to overall SGIP participant satisfaction and applicant satisfaction of PA timeliness, accessibility, and helpfulness during the application process.

1.2.1 Overall Applicant and Host Customer Satisfaction

Applicants and host customers were asked to rate their satisfaction, on a scale of 1 to 5, for each PA to whom they had submitted an SGIP application in 2020. As shown in Table 1-2 below, applicants and host customers reported mixed changes in satisfaction during 2020 in comparison to prior years. Applicants reported, on average, a moderately low satisfaction level with PG&E (average score = 2.3), moderate satisfaction with SCE and CSE (3.2 and 3.3), and moderately high satisfaction levels with SCG (4.2). Host customers reported moderate levels of satisfaction with PG&E and SCE (2.9 and 3.3), and moderately high levels of satisfaction with CSE and SCG (3.7 and 3.9).

PA	Applicant PA	Satisfaction	Host Customer PA Satisfaction		
	Average Rating 2020	Average Rating 2019	Average Rating 2020	Average Rating 2018	
PG&E	2.3	2.1	2.9	3.4	
SCE	3.2	3.3	3.3	3.8	
SCG	4.2	3.3	3.9	3.8	
CSE	3.3	4.2	3.7	3.7	

TABLE 1-2: APPLICANT AND HOST CUSTOMER OVERALL SATISFACTION WITH PROGRAM ADMINISTRATOR

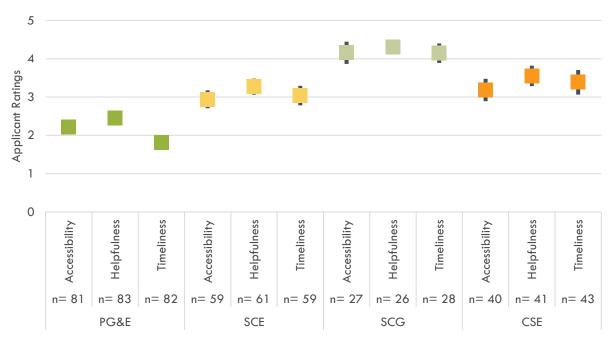
Many of the participants surveyed expressed concerns about various program elements. Areas of concern generally focused on being able to reach a live person on the phone to discuss program questions, having their questions answered by an individual who had adequate SGIP program knowledge, new and confusing application and documentation requirements, and delays in application processing. Applicants reported moderately high levels of satisfaction with the statewide SGIP website (3.9 on a 5-point scale) and moderately high levels of satisfaction with the quarterly workshops hosted by the PAs (3.5 on a 5-point scale).

Host customers expressed dissatisfaction with a lack of communication or confusing technical information. Others expressed frustrations over the changes in documentation and eligibility requirements necessary to receive SGIP Equity Resiliency funds and how those changes were communicated to them. Despite these challenges host customers appear to have a better understanding, than reported in 2018, of what is required from them throughout the SGIP incentive process. Although the cause for this increase in host customer understanding cannot be directly determined from the host customers survey, it is likely that trainings hosted by the PAs targeting applicants and applicants' increased experience with the SGIP has made applicants a more well-informed resource for host customers.

1.2.2 Applicant Satisfaction with PA Timeliness, Helpfulness, and Accessibility

Applicants were also asked to rate their experience with PA timeliness, helpfulness, and accessibility. As shown in Figure 1-2 below, across all types of interactions, applicants reported moderate dissatisfaction with PG&E as a PA, slightly more satisfaction with SCE and CSE, and high levels of satisfaction with SCG. For all PAs, applicants reported higher satisfaction levels with the helpfulness of their interactions with the PAs than with the PAs' accessibility or timeliness.





Applicants who were dissatisfied with the accessibility, helpfulness, and/or timeliness of their interactions with the PAs often cited not being able to contact a live person during the application process, long gaps in communication from the PA, and confusion with application documentation requirements as their primary reason for their dissatisfaction.

1.3 **RECOMMENDATIONS**

The evaluation team identified a series of recommendations based on key observations from this study. The recommendations are grouped below by whether they relate to PA timeliness, accessibility, or helpfulness.

1.3.1 Timeliness

Track and reduce the number of touches on a single application. Applicants' average timeliness satisfaction scores decreased in 2020 for all PAs except SCG. More than one-third (38%) of applicants that participating in SGIP prior to 2020 reported decreased satisfaction with PA timeliness. While the increased application volume in 2020 certainly had an impact on PAs' ability to respond to issues and inquires in a timely manner, many applicants mentioned multiple rounds of follow-ups with long lag times between PA responses as an additional cause of longer application timelines. As one applicant described their

frustration: "[There were] long delays after submittal to request for more information/correction followed by another submittal only to receive a different request for more information/correction; why weren't they both present in the first round?" Reducing the number of distinct responses and requests for missing information on a single application also decreases the application's overall processing timeline. When communicating about a specific application, PAs should spend the time to review the entire application for any other issues. It is likely that an application with at least one question or issue will have others as well. Though it will take the PA more time and effort to review the entire application during the first interaction, the PA's overall effort will decrease as the total number of application questions and issues would be reduced along with the processing timeline.

Identify and proactively reach out to applicants with high levels of suspensions to discuss common issues and answer applicant questions. During 2020 SCE began an effort to identify applicants with high application suspension rates. They identified common issues in the applications and met with the applicant to discuss those issues along with any other SGIP questions from the applicant. Applicants that participated in these types of meetings were highly satisfied with their interactions with the PA. This effort helped to reduce the number of issues these applicants experienced (thus accelerating their application timelines) along with freeing up SCE's time to help others. Verdant recommends that each of the four PAs implements a similar proactive campaign to help applicants with high suspension rates and ultimately reduce timelines across the program.

1.3.2 Accessibility

Set up regular open office hours to allow applicants to call and speak with someone regarding questions they have with the SGIP application process. Applicants continue to be dissatisfied with PA accessibility during 2020. Applicants complained that it is difficult to get a hold of PA staff as the phone is not answered and phone calls are often not returned. In 2020, PG&E implemented regular office hours where applicants could speak directly to program administrators and receive timely information regarding applications. Applicants that attended office hours were very satisfied with the experience, as one applicant noted, *"The office hours weekly meeting is extremely helpful in resolving questions and issues."* This type of direct oral communication is very important for a program such as SGIP that has a highly involved application process. Verdant recommends that all four PAs establish a similar office hour program to offer increased accessibility to applicants. Some topics may not be suited for public discussion; therefore some portion of the allocated office hour time could be set aside for private one-on-one meetings between applicants and the PA.

Ensure PA staff fielding applicant inquiries are fully trained and authorized to make decisions. Again in 2020, applicants expressed frustration not only with the difficulty they had communicating directly with the PAs regarding their application questions or issues, but also the inconsistent or unhelpful responses

they received from those they were able to communicate with. This experience added to the frustration and dissatisfaction felt by the applicants. As one applicant stated, *"I think that they have been helpful in some of the easier situations. But the harder projects were pushed to the side without resolution."* Program staff should be fully trained about all aspects of SGIP that they may encounter in their role.

1.3.3 Helpfulness

Regularly update video resources on SGIP websites including tutorials on the application submission process, review of the statewide portal, and recordings of quarterly workshops. Applicants continue to report confusion with documentation requirements, technical requirements, and the application process. During 2020, applicants experienced significant issues understanding the new equity and resiliency requirements. Applicants with prior experience of the SGIP program had more questions in 2020 due to confusion regarding changes to SGIP program rules. As the program continues to change and evolve, applicants need up-to-date resources and tutorials to help participants understand the program rules and processes. The statewide portal currently maintains two video tutorials on its FAQ section, one created in 2016 (SGIP Applicant Interface Tutorial) and the other created in 2018 (SGIP Database Walkthrough). Given the pace of changes to the program, these video tutorials should be updated and regularly refreshed at least every two years to maintain relevance. Video recordings of the quarterly workshops should also be made available on SGIP websites. Additionally, any workshops or tutorials that take place throughout the year should be made available online (one PA mentioned they held a workshop covering an end-toend walk through of SGIP at the beginning of 2020, however a recording of the workshop was not made available online). Online videos may make it easier for some participants to understand the specific requirements needed for the SGIP application, thus minimizing the number of issues that need to be corrected downstream.

Enhance clarity and consistency in communication with applicants and host customers regarding their applications. Again in 2020, applicants and host customers reported that they were often confused with information they received from their PA. One applicant stated, *"There are industry terms that I am sure the [PA] is familiar with, but the layman is not. I need some help and clarification."* Others reported information was inconsistent depending on the staff person they interacted with. Host customers were also confused with some of the written communication received and were unclear whether any actions were required on their part. PAs should take time to clearly understand applicants' issues and assign them to a consistent staff member to help them through the application process. Specialized industry terms and program jargon should be clearly explained or eliminated from communications if possible. This can help alleviate confusion and provide some consistency to the application process. When communicating with host customers, PAs should clearly delineate what action (if any) needs to be taken on the part of the host customer.



Reinforce to applicants the importance for effective communication with host customers about their role in the SGIP application process and available resources. Host customer clarity on eligibility and documentation requirements, as well as the division of labor between the applicant and the host customer improved in 2020 from ratings provided in 2018. The PAs should foster this growth by clearly communicating the importance of the role applicants play in the host customer's SGIP experience during SGIP workshops and in working group sessions. Host customers also expressed lower clarity, on average, on their application status, while less than 12% of host customers reported using the "Check My Application Status" feature on the statewide SGIP portal. The PAs should remind the applicants and host customers that the "Check My Application Status" can be the first stop in looking for updates on SGIP application status.

2 INTRODUCTION

California's Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed generation and energy storage technologies that meet all or a portion of a customer's electricity needs. The SGIP is funded by California's ratepayers and managed by Program Administrators (PAs) representing California's major investor-owned utilities (IOUs). The PAs are Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG), and the Center for Sustainable Energy (CSE), which implements the program for customers of San Diego Gas and Electric (SDG&E). The California Public Utilities Commission (CPUC) provides oversight and guidance on the SGIP.

2.1 **PROGRAM OVERVIEW**

The SGIP was originally designed in 2001 in response to the California electricity crisis. Since then, the SGIP has undergone numerous revisions to its incentive levels, eligibility rules, application process, and technology offerings. The 2020 Self-Generation Incentive Program Handbook³ describes the application process, technology eligibility requirements, and incentive levels applicable to Program Year (PY) 2020.

2.1.1 Program Changes in 2020

Several changes were made to the SGIP budget, rules, and requirements in 2020. Among those was the creation of an additional budget category set aside for equity resiliency, new greenhouse gas (GHG) reporting rules, and the requirement for residential SGIP participants to switch to time-of-use (TOU) rates. Additionally, several approved program changes outlined in Advice Letter 3966-E remain pending into 2021 (described below).

Equity Resiliency Budget Category

PY 2020 represented a significant shift in the types of customers eligible for certain SGIP budget categories. In previous program years the residential storage budget category, which was open to any residential IOU customer, represented 91% of all SGIP applications. Starting in PY 2020, the program shifted focus towards equity projects, primarily in the equity resiliency budget category. Sixty-three percent of the SGIP budget is now reserved for equity resiliency projects. This shift has fundamentally affected how the program is administered, increasing the amount of evidence required to demonstrate program eligibility and reducing the population of customers eligible for the program's largest incentives.

³ 2020 SGIP Handbook: https://www.selfgenca.com/documents/handbook/2020

This shift in focus towards hard-to-reach customer segments has increased the need to market the program for some PAs.

Participation Requirements

In 2020 the SGIP saw two significant changes to program participation requirements. The first requires all new residential energy storage customers to enroll in a SGIP-eligible TOU rate. This new program requirement may affect both the applicant and host customer participation experience, as there may be confusion regarding this requirement and the impact it will have on host customer bills. Second, new GHG reporting requirements were developed for SGIP projects. These may have an impact on the SGIP and PA satisfaction if the changes in the reporting requirements and reporting longevity are not fully understood by applicants and prospective SGIP host customers.

Pending Advice Letter Changes

In August of 2019, Advice Letter 3966-E was approved by the CPUC. This advice letter laid out several changes to be made to the SGIP going forward. While some changes were implemented in 2019 and therefore observable in this evaluation, several changes to the program presented in Advice Letter 3966-E were implemented early in 2020 or will be implemented in 2021. The Advice Letter 3966-E SGIP changes that were implemented in 2020 include:

- Creation of an SGIP Qualified Verified equipment list, and
- Modification of the Energy Storage Component Specification requirement

The pending Advice Letter 3966-E SGIP changes include the ability for residential customers to opt-out of non-critical email communications and the inclusion of a Project Cost Affidavit and Project Cost Breakdown in the Incentive Claim Form.

2.1.2 Budget

The authorized incentive collections through the end of 2024 total \$813,400,000.⁴ The largest shares of incentive funds are allocated to PG&E and SCE. Combined, PG&E and SCE are allocated 78 percent of incentive funds. The allocation for each PA is summarized in Table 2-1.

⁴ SGIP 2020 Handbook v9 Section 1.1

Program Administrator	Authorized Incentive Collections	% of Total Authorized Incentive Collections*	
PG&E	\$360,000,000	44%	
SCE	\$280,000,000	34%	
SCG	\$74,400,000	9%	
CSE	\$99,000,000	12%	

TABLE 2-1: STATEWIDE SGIP BUDGET AND PROGRAM ADMINISTRATOR ALLOCATIONS

*Percentages do not sum to 100 due to rounding.

PY 2020 was the first year in a new SGIP budgeting cycle which covers 2020 through 2024. As in previous years, the SGIP budget in 2020 continues to heavily emphasize storage technologies and the overall share of the SGIP budget reserved for storage technologies increased from 80% in 2019 to 88% in 2020. The share reserved for renewable generation was reduced from 20% to 12%.

The energy storage budget is broken out into seven budget categories: Large-Scale, Small Residential, Residential Equity, Non-Residential Equity, Equity Resiliency, San Joaquin Valley Pilot, and Heat Pump Water Heaters. Most of the energy storage budget (63% of the overall 2020-2024 budget) is allocated to the newly created Equity Resiliency budget category. Brief descriptions of the eight budget categories, including the generation budget, are presented below:

Large-Scale Storage: Projects qualifying for the large-scale storage budget must be non-residential projects or residential projects greater than 10 kW. This budget category has existed since June 2016.⁵

Small Residential Storage: Projects qualifying for the small residential storage budget must be residential projects less than or equal to 10 kW. This budget category has existed since June 2016.⁶

Residential Equity: Residential host customers qualifying for the equity budget must be single-family lowincome housing or multi-family low-income housing, regardless of project size. The equity budget category was originally created in October 2017.⁷ The stated objective of the equity budget is to: 1) bring positive economic and workforce development opportunities to disadvantaged communities, 2) reduce the need to operate conventional gas facilities in these communities due to poor air quality, and 3) to ensure disadvantaged customers have access to energy storage resources incentivized through SGIP.

Non-Residential Equity: Non-residential host customers qualifying for the equity budget must be a local, state, or tribal government agency, educational institution, non-profit organization, or small business.

⁵ CPUC D.16-06-055: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M163/K928/163928075.PDF

⁶ CPUC D.16-06-055: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M163/K928/163928075.PDF

⁷ CPUC D.17-10-004: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M197/K215/197215993.PDF

Additionally, the project site must either be located in or provide service to a disadvantaged community. The non-residential equity budget category was originally created in October 2017⁸ alongside the residential equity budget. In September 2019, \$10 million of SCE and PG&E's unused non-residential equity funds were transferred to create the San Joaquin Valley budget.⁹ Subsequently, the 2020-2024 budget released in January 2020¹⁰ allocated zero additional funds to the non-residential equity budget. In October 2020, \$100 million in funds was transferred from the large-scale storage budget to the non-residential equity budget.

Equity Resiliency: In order to help deal with critical needs resulting from wildfire risks in the state, the equity resiliency budget was established in September 2019¹¹ with a \$100 million budget. The equity resiliency budget is intended for vulnerable households located in Tier 2 and Tier 3 High Fire Threat Districts (HFTDs) or customers who have been subjected to two or more Public Safety Power Shutoff (PSPS) events, critical services facilities serving those districts, and customers located in those districts that participate in low-income programs.

San Joaquin Valley Pilot: In September 2019¹², \$10 million was reallocated from SCE and PG&E's unspent non-residential equity budget to residential and non-residential storage projects located in eleven San Joaquin Valley disadvantaged communities. The San Joaquin Valley assigned commissioner's ruling reasoned that a dedicated SGIP budget for the pilot communities would improve the reliability of electric service and would strengthen community resiliency in the face of extended electric outages.

Heat Pump Water Heaters: To stimulate growth in the California heat pump water heater market, CPUC Decision 19-09-027, in September 2019, directed the transfer of \$4 million in accumulated unused incentive funds into a set-aside for heat pump water heaters for equity budget customers. Following this decision, the 2020-2024 budget defined in D.20-01-021 (issued January 2020) allocated 5% of the overall 2020-2024 budget to heat pump water heaters. As of December 2020, this budget category has not opened. Funds for this category are on hold pending a CPUC decision on how to structure the incentives.¹³ As a result, no heat pump water heaters have received SGIP incentives.

⁸ CPUC D.17-10-004: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M197/K215/197215993.PDF

⁹ CPUC D.19-09-027: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF

¹⁰ CPUC D.20-01-021: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M325/K979/325979689.PDF

¹¹ CPUC D. 19-09-027: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF

¹² CPUC D. 19-09-027: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF .

¹³ For more information see the SGIP HPWH Staff Proposal (April 19, 2021): https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442468802

Generation: This category offers incentives for generation technologies which include wind turbines, pressure reduction turbines, waste heat to power, combined heat and power, and fuel cell projects. All new generation projects must be 100 percent fueled with renewable biogas.

Incentive allocations by budget category for the 2020-2024 SGIP budget cycle are shown in Table 2-2 below (as outlined in SGIP 2020 Handbook v9).

Budget Category	Budget Grouping	Share of Allocated Budget	Share of Allocated Budget Sub Grouping
Large Scale Storage			10%
Small Residential Storage			7%
Residential equity			3%
Non-residential equity	Energy Storage	88%	0% ¹⁴
Equity resiliency			63%
San Joaquin Valley Pilot			0% ¹⁵
Heat Pump Water Heater			5%
Generation	Generation	12%	12%

TABLE 2-2: SGIP 2020-2024 INCENTIVE ALLOCATION

2.2 PROGRAM PARTICIPATION DURING 2020

Two types of program participants were surveyed in this evaluation: host customers and applicants.

Host Customer

Any retail electric or gas distribution customer (industrial, agricultural, commercial, or residential) of PG&E, SCE, SCG, or SDG&E is eligible to be the host customer and receive incentives from the SGIP. The host customer is the exclusive incentive reservation holder who is party to the SGIP contract. The host customer has the authority to designate the applicant, system owner (if not host customer, e.g., a leased system), energy service provider, and/or developer.¹⁶

¹⁴ From SGIP 2020 V9 Handbook: 2020-2024 authorized collections suspend further collections for non-residential equity storage once existing carryover is exhausted.

¹⁵ From SGIP 2020 V9 Handbook: Pursuant to D.19-09-027, San Joaquin Valley Pilot Program has a \$10 million setaside funded from SCE and PG&E's unused non-residential equity budget.

¹⁶ SGIP 2020 V9 Handbook: Section 4.1.1

Applicant

An applicant is the person or entity that is responsible for completing and submitting the SGIP application and serves as the main point of contact for the SGIP PA throughout the application process. Host customers may act as the applicant, or they may designate a third party to act as the applicant on their behalf.¹⁷ In 2020 less than one percent of host customers acted as their own applicant. The applicant is often also the project developer (the entity that holds the contract for purchase and installation of the system and/or alternative system ownership agreement with the host customer and handles the project's development activities).

2.2.1 Study Population

1

A copy of the SGIP statewide project list was downloaded from www.selfgenca.com on January 15, 2021. All applications submitted during calendar year 2020 are included in this evaluation as well as applications submitted prior to 2020 that progressed through the application process during 2020 (for example, moving from the reservation request phase to the proof of project milestone phase). During PY 2020, a total of 23,019 new applications were submitted across all PA service territories. Nearly all of these PY 2020 applications (22,993) were for energy storage technologies. Additionally, 5,207 applications submitted prior to 2020 are included in the study population. The breakout of applications, applicants, and host customers included in this evaluation, by PA, is shown in Table 2-3 below.

Program Administrator	# Applications	# Applicants ¹⁸	# Host Customers ¹⁹
PG&E	15,166	307	13,784
SCE	7,446	223	6,736
SCG	1,201	76	1,142
CSE	4,413	123	4,127
SGIP Total	28,226	531	25,683

11

TABLE 2-3: SGIP APPLICATION, APPLICANT, AND HOST CUSTOMER COUNT BY PROGRAM ADMINISTRATOR

Т

Some applicants and host customers have applications in multiple PA territories. Table 2-4 below shows the breakdown of applicants and host customers with applications in a single PA territory, or two, three,

¹⁷ SGIP 2020 V9 Handbook: Section 4.1.3

¹⁸ A single applicant could have applications in multiple PAs. Therefore, the SGIP applicant total does not equal the sum of each PA's applicant subtotal.

¹⁹ A single host customer could have applications in multiple PAs. Therefore, the SGIP host customer total does not equal the sum of each PA's host customer subtotal.

or four territories. A significant proportion of applicants (23%) and a very small proportion of host customers (0.4%) had applications in multiple territories.

	1 PA	2 PAs	3 PAs	4 PAs	Total
# Applicants	407	71	32	21	531
# Host Customers	25,588	85	9	1	25,683

TABLE 2-4: COUNT OF APPLICANTS AND HOST CUSTOMERS WITH APPLICATIONS IN MULTIPLE PA TERRITORIES

The application volume in PY 2020 represents a significant increase (306%) over 2019, during which 5,668 new applications were submitted to the program. Table 2-5 below shows the year over year increase in applications broken out by program administrator. CSE, PG&E, and SCE each experienced very large increases in application volume in 2020 (240%-509%).

Program Administrator	# Applications 2020	# Applications 2019	YoY % Increase
PG&E	12,960	2,705	379%
SCE	5,816	1,711	240%
SCG	703	671	5%
CSE	3,540	581	509%
SGIP Total	23,019	5,668	306%

TABLE 2-5: APPLICATIONS SUBMITTED IN 2020 AND 2019 BY PA

2.3 EVALUATION GOALS

The CPUC measurement and evaluation plan calls for "an annual review of the administrative performance of each PA. The reports are to include, at minimum, a survey of program participants regarding the PAs' clarity and timeliness of oral and written communications, their accessibility, their helpfulness to applicants submitting and processing applications, and the clarity and helpfulness of their websites." This evaluation is an assessment of PA performance for customers who submitted applications during 2020 or who submitted applications prior to 2020 that made progress through the SGIP in 2020. Additionally, the evaluation assesses the effectiveness of SGIP marketing efforts and the level of program activity in hard-to-reach (HTR) customer segments including Equity Storage, Equity Resiliency, and San Joaquin Valley Pilot projects.

Research Questions

The following research questions are addressed by this evaluation.



PA Timeliness, Accessibility and Helpfulness

- What are the strengths and weaknesses of the PA communication processes as perceived by SGIP participants?
- How clear and timely are the communications from the PAs to SGIP participants?
- How accessible are the PAs to SGIP participants during the application process?
- How helpful are the PAs to applicants submitting and processing applications?
- How has the participant experience and satisfaction with the PA helpfulness, accessibility, and timeliness changed from previous program years?
- What improvements can be made to the administration of the SGIP with respect to PA timeliness, accessibility, and helpfulness?

Websites, Workshops and Marketing

- How do participants hear about the SGIP?
- Do SGIP participants understand changes to the program eligibility?
- How clear and helpful are the SGIP and PA websites and how often are they used?
- How clear and helpful are quarterly workshops hosted by the PAs?

2.4 **REPORT CONTENTS**

The remainder of this report includes the following:

- Section 3 describes the research methods and data sources used in this study.
- Section 4 presents the findings from this evaluation regarding program clarity; interactions with PAs; resolution of problems, issues, or delays; and satisfaction with specific program elements.
- Section 5 discusses the overall findings of this evaluation, including key recommendations.
- Appendix A presents the survey instruments used for the PA in-depth-interviews, the applicant mixed-mode surveys, and the host customer web surveys.
- **Appendix B** presents the applicant survey response frequencies.
- **Appendix C** presents the host customer survey response frequencies.

3 DATA AND METHODS

This section summarizes the research activities and sources of data used in this study. The primary data sources used in this evaluation include:

Pre-existing data sources:

• The SGIP Statewide Project Database²⁰ managed by the PAs.

Data from research activities:

- In-depth interviews (IDIs) conducted with PAs by Verdant evaluation staff (Section 3.1)
- Multi-mode web/phone surveys conducted with SGIP applicants (Section 3.2)
- Web surveys completed by SGIP host customers (Section 3.3)

The three research activities outlined above enabled the evaluation team to study participants' experience and perceptions of the program. In particular, the PA IDIs gave context to the evaluation team regarding administrative practices and changes to the program since 2019. The phone and web surveys with applicants and host customers were the vehicles through which direct feedback was collected from program participants.

3.1 **PROGRAM ADMINISTRATOR IN-DEPTH INTERVIEWS**

Verdant conducted in-depth interviews with each of the four PAs (PG&E, SCE, SCG, and CSE). The purpose of the PA in-depth interviews was to learn directly from each of the PAs about their administration of the program in 2020. PAs were interviewed on various topics relating to program operations and management including staffing structure, program design, communications approaches, program challenges, and changes made to SGIP administration during 2020. Special focus was given to understanding recent changes to SGIP administration, staffing, and marketing, education, and outreach (ME&O) efforts. In addition to PA in-depth interviews, the CPUC was also interviewed to gain a deeper understanding of program wide changes and challenges. Appendix A.1 presents the list of questions used to guide the PA interviews.

²⁰ Accessed January 15, 2021.

3.2 APPLICANT SURVEY

Applicants were interviewed through a mixed-mode web and telephone survey. The prolific applicants (applicants with more than 100 applications) were interviewed by phone and non-prolific applicants were contacted by email to participate in the web portion of the survey. Interview questions covered topics relating to the applicants' experience and satisfaction with application stages, PA communications, and program websites. The applicant survey involved a mixture of quantitative questions with open-ended follow-up questions. Appendix A.2 presents the full survey instrument used for the applicant phone survey.

3.2.1 Sample Design

The sample for the applicant survey was designed so that results could be reported with high confidence for each individual PA. Based on the observed coefficient of variation (COV) from the PY 2019 PA Performance Evaluation,²¹ sample sizes were estimated for each PA to enable reporting on 1-5 scalar satisfaction questions at a relative precision (RP) of 10% or better, measured at the 90% confidence interval (90/10). Table 3-1 summarizes the applicant population, target sample, and achieved sample for each PA.

PA	Applicant Population ²²	Applicant 90/10 Target Sample	n Phone Completes	n Web Completes	n Total Completes	Achieved RP ²³
PG&E	307	73	25	62	87	7.1%
SCE	223	44	24	40	64	7.0%
SCG	76	28	15	14	29	5.7%
CSE	123	27	17	26	43	8.4%
Total	531	-	32	105	137	-

TABLE 3-1: TARGET AND ACHIEVED APPLICANT SAMPLE BY PROGRAM ADMINISTRATOR

When applicants were surveyed, they were asked about each PA they interacted with. Therefore, we completed 137 total interviews to reach the total completes by PA shown above. The desired sample

²¹ Results from the PY 2019 applicant survey question: How would you rate your experience with [PA] overall, in relation to their role as an SGIP administrator in 2019 (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)

²² A single applicant could have applications in multiple PAs, over multiple years, or for multiple technology types. Therefore, the applicant total does not equal the sum of each PA's applicant subtotal.

²³ Achieved relative precision was calculated from results of the applicant survey question: How would you rate your experience with [PA] overall, in relation to their role as an SGIP administrator in 2020 (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)?

targets were exceeded for each PA. Additionally, the targeted relative precision of 10% was also surpassed. Response frequency tables for each closed-ended question in the applicant survey are included in Appendix B.

Prolific Applicants

Applicants with 100 or more projects in the population were classified as "prolific" applicants. There are 43 applicants that meet this criterion and they submitted 87% of the 28,226 applications in scope for this evaluation.²⁴ We attempted a census with this group for the applicant survey. Table 3-2 shows the number of prolific applicants with applications in each PA territory and the number that completed surveys. The Verdant survey team completed 32 of the 43 targeted prolific surveys (72%). One prolific applicant had gone out of business and one prolific applicant refused to complete the survey. Six prolific applicants were contacted but did not respond to multiple interview requests, while three prolific applicants were unreachable by multiple attempts through email and phone.

PA	Applicant Population ²⁵	Applicant 90/10 Target Sample	Prolific Applicants	n Prolific Completes
PG&E	307	73	33	25
SCE	223	44	35	24
SCG	76	28	22	15
CSE	123	27	27	17
Total	531		43	32

TABLE 3-2: PROLIFIC APPLICANT POPULATION AND NUMBER OF COMPLETES BY PROGRAM ADMINISTRATOR

Strata Quota

Further strata were developed within each PA to separate applicants by application year and budget category. These strata ensure representation within the sample of different application types and applicant experiences. Targeting these sub-populations enabled program-wide results to be reported at the application year and budget category levels, respectively, with a higher degree of accuracy.

Applicants were grouped by application year based on whether they submitted applications only in 2020 or if the applicant submitted applications in 2020 and prior years (i.e., the applicant has previous experience with the program).

²⁴ By comparison, the 2019 SGIP evaluation had 19 prolific applicants defined by 100 projects or more.

²⁵ A single applicant could have applications in multiple PAs, over multiple years, or for multiple technology types. Therefore, the applicant total does not equal the sum of each PA's applicant subtotal.

Applicants were also stratified by budget category. An applicant's budget category, for purposes of stratification, was defined as the budget category for which the majority of applications were submitted by that applicant. Budget categories provide a useful separation of applications by size, sector, technology, and eligibility requirements. Each budget sub-category can trigger differences in application requirements, forms, stages, and payment structures. For sampling purposes each applicant was assigned to a single budget category based on application count, where the assigned budget category is the category to which the applicant submitted the most applications.

To derive strata quota each PA's target sample (73 PG&E, 44 SCE, 28 SCG, and 23 CSE) was distributed across the identified strata proportional to applicant population. Strata quota were increased to account for the prolific applicant census and to ensure a minimum of three sample points (or a census if the total population was fewer than three). Strata quota for PG&E, SCE, SCG, and CSE are shown below in Table 3-3, Table 3-4, Table 3-5, and Table 3-6 respectively. This method resulted in increased PA totals for all PAs (77 instead of 73 for PG&E, 50 instead of 44 for SCE, 31 instead of 28 for SCG, and 30 instead of 23 for CSE). Strata quotas were developed as a guide to completing the necessary sample, they were not developed as hard targets.

The total number of completed surveys by strata and the distribution of completes by strata is also shown in Table 3-3, Table 3-4, Table 3-5, and Table 3-6. Note the comparison of achieved sample distribution by stratum to the population distribution. For any 1-5 scalar question reported as an average by PA throughout this report, the reported score is weighted by the applicant population distribution. All other reported applicant responses throughout the report are unweighted.

Budget Category	Application Year	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
Small Residential	2020 and Prior	60	20%	16	22	25%
Storage	2020 Only	49	17%	14	10	11%
Larga Caala Staraga	2020 and Prior	14	5%	4	6	7%
Large-Scale Storage	2020 Only	15	5%	5	4	5%
Equity Resiliency		97	29%	26	27	31%
Residential Storage Equity		1	0%	1	1	1%
Non-Residential Storage Equity	All	13	4%	4	5	6%
San Joaquin Valley Residential		1	0%	1	1	1%
Generation	1	11	4%	3	2	2%
Small Res. and Large- Scale Storage	Prior to 2020 Only	46	16%	3	9	10%
	PG&E Total	307	100%	77	87	100%

TABLE 3-3: PG&E APPLICANT SURVEY STRATA QUOTA

TABLE 3-4: SCE APPLICANT SURVEY STRATA QUOTA

Budget Category	Application Year	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
Small Residential	2020 and Prior	65	30%	13	21	33%
Storage	2020 Only	32	14%	7	4	6%
Lawaa Caala Stawaaa	2020 and Prior	11	5%	3	5	8%
Large-Scale Storage	2020 Only	8	3%	3	1	2%
Equity Resiliency		55	25%	12	24	38%
Residential Storage Equity		2	1%	2	1	2%
Non-Residential Storage Equity	All	16	7%	4	4	6%
San Joaquin Valley Residential		0	0%	NA	NA	NA
Generation	1	7	3%	3	1	2%
Small Res. and Large- Scale Storage	Prior to 2020 Only	27	13%	3	3	5%
	SCE Total	223	100%	50	64	100%

Budget Category	Application Year	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
Small Residential	2020 and Prior	32	42%	8	14	48%
Storage	2020 Only	7	9%	3	1	3%
Larga Caala Staraga	2020 and Prior	3	4%	3	2	7%
Large-Scale Storage	2020 Only	0	0%	NA	NA	NA
Equity Resiliency		15	20%	7	7	24%
Residential Storage Equity		1	1%	1	1	3%
Non-Residential Storage Equity	All	5	7%	3	1	3%
San Joaquin Valley Residential		0	0%	NA	NA	NA
Generation	1	4	5%	3	2	7%
Small Res. and Large- Scale Storage	Prior to 2020 Only	9	12%	3	1	3%
	SCG Total	76	100%	31	29	100%

TABLE 3-5: SCG APPLICANT SURVEY STRATA QUOTA

TABLE 3-6: CSE APPLICANT SURVEY STRATA QUOTA

Budget Category	Application Year	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
Small Residential	2020 and Prior	40	33%	5	16	37%
Storage	2020 Only	11	9%	5	5	12%
Lawaa Caala Chavaaa	2020 and Prior	6	5%	3	3	7%
Large-Scale Storage	2020 Only	2	2%	2	1	2%
Equity Resiliency		29	24%	7	10	23%
Residential Storage Equity		1	1%	1	1	2%
Non-Residential Storage Equity	All	6	4%	3	3	7%
San Joaquin Valley Residential		0	0%	NA	NA	NA
Generation	1	1	1%	1	1	2%
Small Res. and Large- Scale Storage	Prior to 2020 Only	27	22%	3	3	7%
	CSE Total	123	100%	30	43	100%

3.3 HOST CUSTOMER SURVEY

Host customers were contacted through a web survey. Survey questions covered topics relating to host customers' experience and satisfaction with application stages, PA communications, and program websites. The host customer survey focused primarily on quantitative, scalar questions, with some selected follow-up open-ended questions. A survey invitation with a web link was emailed to a stratified random sample of 3,054 host customers in the participant population. Following the initial round of completed surveys, a reminder email was sent to all host customers who had not yet responded. Appendix A.3 presents the full survey instrument used for the host customer web survey.

3.3.1 Sample Design

Like the applicant survey, the sample design for the host customer survey was designed so that results can be reported with high confidence for each individual PA. Based on the observed COV from the PY 2018 PA Performance Evaluation,²⁶ sample sizes were estimated for each PA to enable reporting of 1-5 scalar satisfaction questions at 90/10. For sampling purposes, host customers were aggregated based on customer name, contact information, and location.²⁷ Table 3-7 summarizes the target host customer sample sizes for each PA.

ΡΑ	Host Customer Population	Host Customer 90/10 Target Sample	n Completes	Achieved RP ²⁸
PG&E	13,784	42	181	5.7%
SCE	6,736	30	106	8.9%
SCG	1,142	41	96	4.3%
CSE	4,127	35	155	4.8%
Total	25,683		528	

TABLE 3-7: TARGET HOST CUSTOMER SAMPLE SIZE BY PROGRAM ADMINISTRATOR

²⁶ Results from the PY 2018 host customer survey question: How satisfied are you with your experience with [PAs] in relation to the SGIP (in 2018) (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)? No Host Customer Surveys were completed as part of the PY 2019 PA Performance Evaluation.

²⁷ For example, applications across all locations of large retailers were aggregated to a single host customer.

²⁸ Achieved relative precision was calculated from results of the host customer survey question: How satisfied are you with your experience with [PAs] in relation to the SGIP (in 2020) (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)?

The sample targets were exceeded by a large margin for all program administrators. Response frequency tables for each closed-ended question in the host customer survey are included in Appendix C.

Strata Quota

Further strata were developed within each PA to separate host customers by budget category and applicant prolific status. These strata ensure representation within the sample of different application types and host customers with applicants with various amounts of experience. Targeting these sub-populations enables program-wide results to be reported at the budget category and applicant prolificity levels, respectively, with a higher degree of accuracy.

For sampling purposes, each host customer was assigned to a single budget category based on the category with the highest application count for a given host customer. Budget category provides a useful separation of applications by size, sector, and technology. Each budget sub-category can trigger differences in application requirements, forms, stages, and payment structures.

Host customers were also categorized by applicant prolific status. This indicates if the applicant that submitted the host customer's application is a prolific applicant (100 or more applications) or not. The host customer's experience with the SGIP can depend on their applicant's familiarity with the program.

To derive strata quota, each PA's target sample (42 PG&E, 30 SCE, 41 SCG, and 35 CSE) was distributed across the identified strata proportional to host customer population. Strata quota were then increased to a minimum of eight sample points or to a census of the total population of host customers if a given stratum contained fewer than eight host customers. Strata quota for PG&E, SCE, SCG, and CSE are shown in Table 3-8, Table 3-9, Table 3-10, and Table 3-11, respectively. This method resulted in increased PA totals for each PA (109 PG&E, 92 SCE, 83 SCG, and 79 CSE), resulting in 363 total surveys. Strata quotas were developed as a guide to completing the necessary sample; they were not developed as hard targets.

The total number of completed surveys by strata and the distribution of completes by strata is also shown in Table 3-8, Table 3-9, Table 3-10, and Table 3-11. Note the comparison of achieved sample distribution by stratum to the population distribution. For any 1-5 scalar question reported as an average by PA throughout this report, the reported score is weighted by the host customer population distribution. All other reported host customer responses throughout the report are unweighted.

Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Large-Scale Storage	792	6%	8	17	9%
	Small Residential Storage	5,786	42%	15	41	23%
Prolific	Equity Resiliency	5,768	42%	20	63	35%
Applicant	Residential Storage Equity	16	0%	8	1	1%
	Non-Residential Storage Equity	8	0%	8	1	1%
	Large-Scale Storage	132	1%	8	10	6%
	Small Residential Storage	732	5%	8	17	9%
Nonprolific	Equity Resiliency	487	4%	8	22	12%
Applicant	Residential Storage Equity	4	0%	4	1	1%
	Non-Residential Storage Equity	35	0%	8	4	2%
All	San Joaquin Valley Residential	6	0%	6	2	1%
	Generation	18	0%	8	2	1%
	PG&E Total	13,784	100%	109	181	100%

TABLE 3-8: PG&E HOST CUSTOMER STRATA QUOTA

TABLE 3-9: SCE HOST CUSTOMER STRATA QUOTA

Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Large-Scale Storage	191	3%	8	13	12%
	Small Residential Storage	4,292	64%	17	27	25%
Prolific	Equity Resiliency	1,294	19%	8	21	20%
Applicant	Residential Storage Equity	15	0%	8	1	1%
	Non-Residential Storage Equity	21	0%	8	4	4%
	Large-Scale Storage	97	1%	8	13	12%
	Small Residential Storage	543	8%	8	9	8%
Nonprolific	Equity Resiliency	234	3%	8	9	8%
Applicant	Residential Storage Equity	3	0%	3	1	1%
	Non-Residential Storage Equity	29	0%	8	8	8%
All	San Joaquin Valley Residential	0	0%	NA	NA	NA
	Generation	17	0%	8	0	0%
	SCE Total	6,736	100%	92	106	100%

Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Large-Scale Storage	74	6%	8	8	8%
	Small Residential Storage	700	61%	18	47	49%
Prolific	Equity Resiliency	153	13%	9	17	18%
Applicant	Residential Storage Equity	4	0%	4	1	1%
	Non-Residential Storage Equity	7	1%	7	2	2%
	Large-Scale Storage	22	2%	8	3	3%
	Small Residential Storage	151	13%	8	13	14%
Nonprolific	Equity Resiliency	18	2%	8	3	3%
Applicant	Residential Storage Equity	0	0%	NA	NA	NA
	Non-Residential Storage Equity	6	1%	6	2	2%
All	San Joaquin Valley Residential	0	0%	0	NA	NA
	Generation	7	1%	7	0	0%
	SCG Total	1,142	100%	83	96	100%

TABLE 3-10: SCG HOST CUSTOMER STRATA QUOTA

TABLE 3-11: CSE HOST CUSTOMER STRATA QUOTA

Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Complete s	Achieved Sample Distribution
Prolific Applicant	Large-Scale Storage	102	2%	8	16	10%
	Small Residential Storage	2,273	55%	16	44	28%
	Equity Resiliency	1,295	31%	12	43	28%
	Residential Storage Equity	8	0%	8	1	1%
	Non-Residential Storage Equity	3	0%	3	1	1%
Nonprolific Applicant	Large-Scale Storage	43	1%	8	10	6%
	Small Residential Storage	197	5%	8	22	14%
	Equity Resiliency	198	5%	8	17	11%
	Residential Storage Equity	0	0%	NA	NA	NA
	Non-Residential Storage Equity	6	0%	6	1	1%
All	San Joaquin Valley Residential	0	0%	NA	NA	NA
	Generation	2	0%	2	0	0%
	CSE Total	4,127	100%	79	155	100%

4 EVALUATION RESULTS

In this section we present findings resulting from the three primary data collection activities completed as part of the 2020 PA evaluation (PA interviews, applicant mixed-mode surveys, and host customer web surveys). This section is organized thematically by the primary topical areas explored surrounding program changes, participant experience, and satisfaction with the program.

4.1 2020 PROGRAM CHANGES

Significant changes to the SGIP focus, rules, and requirements took place in 2020. These included the implementation of the newly established equity resiliency budget and the San Joaquin Valley budget, in addition to a significant increase in residential and non-residential equity budget participation. During 2020, SGIP also saw the introduction of new greenhouse gas (GHG) reporting rules for storage projects and the requirement for residential participants to switch to time-of-use (TOU) rates.

The introduction of the equity resiliency budget increased the amount of evidence required to demonstrate program eligibility. For example, residential equity resiliency participants must provide evidence of location in a Tier 2 or Tier 3 High Fire Threat District (HFTD) or they must have experienced at least two Public Safety Power Shutoff (PSPS) events prior to application submission. Residential equity resiliency participants must also provide evidence of eligibility through either: 1) low household income or residence in a qualifying multi-family building, 2) eligibility for the medical baseline program, 3) having a serious illness or condition that could become life-threatening if electricity is disconnected, 4) receiving SASH, DAC-SASH, MASH, or SOMAH incentive reservations, or 5) their (primary) household relying on electric well pumps for water supply (subject to income restrictions).

Initially, the eligibility pathway for equity resiliency through electric well pumps did not include income restrictions or require the household to be the host customer's primary residence. As applications were received, it was discovered that many host customers qualifying through this pathway were high income customers applying for systems on secondary homes. As this was not the intended demographic for this eligibility pathway, changes were made to the eligibility requirements to add the income and primary residence requirements. These changes were made while the budget was already open and accepting applications. This caused some application cancellations and required PAs to understand and communicate these new changes and cancellations to applicants and host customers.

PAs also mentioned that some of the new eligibility requirements led to the need for more hands-on help. PAs specifically mentioned that information regarding PSPS eligibility was not easily accessible to applicants or host customers and oftentimes required intervention from program administrators. Many

of these program changes happened very close to step openings. PAs noted that they were still in the process of understanding new rules while application submissions began. PAs expressed that the program has become very complex, making it difficult to communicate effectively with participants. Additionally, some new eligibility requirements were not standardized at the outset, so PAs spent significant time developing structure for the new requirements which may have caused delays in application processing.

4.1.1 Staffing Changes

In 2020, all four SGIP PAs reported increasing their staffing levels to deal with the influx of program applications and to keep up with the increased volume of regulatory changes in 2020. PAs reported they had hired additional full-time staff to help address the significant growth in applications. One PA mentioned that significant onboarding time is required as new staff learn about the SGIP program, especially as the program becomes more complex. This extra time is necessary to maintain quality control, though it does affect the PA's ability to ramp up staff quickly in response to increased application volume. The PAs' implementation consultant, Alternative Energy Systems Consulting (AESC), was also mentioned as a resource that the PAs turned to for assistance conducting technical engineering reviews, consulting, general support, and site visits.

4.1.2 **Program Communications**

In 2020, all the PAs stressed the importance they placed on timely and effective communications with SGIP host customers and applicants. A few PAs stated they had established internal communications goals related to their customer response time. Additionally, CPUC Decision 20-10-021 issued in 2020 established new requirements for application processing times (10 days from application submission to technical review assignment). The significant increase in application volume along with the large number of regulatory changes that took place in 2020 caused significant challenges for the PAs with respect to timeliness.

The SGIP PAs also reported they had taken several steps to enhance their written and verbal program communications. PAs initiated mass emails that informed customers of important changes to program rules. One PA established regular office hours where applicants could attend and speak directly to PA staff with their questions. Another PA proactively identified applicants with high suspension rates and met with them individually to review common issues with the applicants and address their concerns. Another PA held a webinar at the beginning of the year which covered the end-to-end application process and helped explain the specific documentation required.

4.1.3 COVID-19 Effects

The SGIP program was impacted several ways by the COVID-19 pandemic in 2020. As stay-at-home orders were mandated and social distancing protocols took shape, changes were made to SGIP processes. Initially in-person inspections were put on hold, which caused delayed payments for some customers. In response the PAs expedited their virtual inspection protocol, which offered residential customers an alternative to on-site inspections. Additionally, e-signatures became accepted by all four PAs, which had previously only been implemented by a portion of the PAs. PAs converted the SGIP quarterly workshops to an online-only format starting in Q2 of 2020. One PA also mentioned that newly established safety protocols lengthened the time required to process and issue incentive checks.

Some SGIP applicants experienced financial impacts due to the pandemic. In cases where an applicant went out of business, PAs helped impacted host customers move their applications forward with other companies. Other applicants experienced significant layoffs during this time. Oftentimes, the remaining staff was less familiar with SGIP and required help from PAs to relearn aspects of the program.

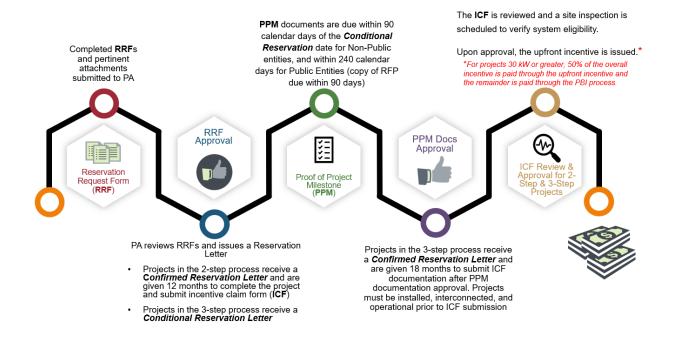
4.1.4 Streamlining Technical Working Group in 2020

The CPUC Scoping Memo issued August 17, 2020 called for the formation of a technical working group to identify process streamlining opportunities. The technical working group was split into three parts: residential, non-residential, and multi-family. The PAs met with developers and program stakeholders through 2020 and into 2021 to gather ideas and suggestions for process improvements. The result of this technical working group will be an advice letter filed with the CPUC.

4.2 PARTICIPANT EXPERIENCE

An SGIP project application requires a variety of technical information to help establish the specifics of the technology to be incentivized, its location, host customer eligibility, and its anticipated or demonstrated performance in line with the goals of the SGIP program. Applicants submit this information through the online application portal via a series of required program documents that vary depending on the size of the equipment and whether it qualifies for performance-based incentives (PBI) payments. The overall 2020 SGIP application process is summarized in Figure 4-1.

FIGURE 4-1: SGIP 2020 APPLICATION PROCESS



In 2020, SGIP projects continued to be primarily storage as opposed to generation. However, as shown in Table 4-6, a significant share of program applications has shifted to the newly created Equity Resiliency budget in 2020. Small Residential storage projects constituted 97% of non-cancelled applications in 2018; in 2020, they made up just 46% with another 44% of projects from the Equity Resiliency budget. Overall, the total volume of applications increased significantly in 2020; from five to six thousand a year in 2018 and 2019 to over 23,000 in 2020. The four-fold increase in application volume along with the creation of several new budget categories each with unique eligibility requirements challenged the PAs to maintain and improve processing pace and experience in 2020. In 2020, the PAs put significant effort into identifying challenges that applicants encountered during the SGIP application process and ensuring that educational efforts via one-on-one meetings with developers and quarterly workshops were effectively addressing these challenges. The PAs also increased their SGIP staffing to deal with the increased application volume and complexity.

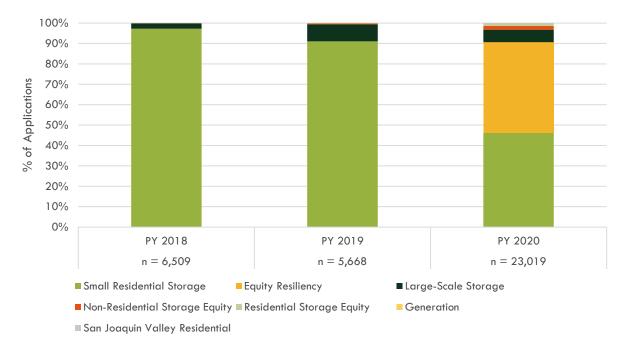


FIGURE 4-2: BUDGET CATEGORY MIX OF PROJECTS IN 2018, 2019, AND 2020

The number of program applicants that submitted applications (by organization/firm) also increased in 2020 when compared to prior years. In 2018 there were 200 distinct applicants and in 2019 there were 209; In 2020, the number of program applicants more than doubled to 531. With this large influx of new applicants to SGIP, the proportion of applicants with prior SGIP experience and knowledge decreased, and it is likely that program confusion and application errors increased, which in turn could increase the time and effort required to move an application through the entire SGIP process.

4.2.1 Program and Communication Clarity

PAs can influence participants' experience of the program through the clarity of their communications. This is the main way in which SGIP applicants and host customers learn of details associated with their application, relevant deadlines pertaining to program milestones, and changes being made to program incentives or eligibility requirements. In 2020, applicants reported receiving program updates from a variety of sources, most notably through email (47%), update notifications in the application portal (33%), updates to websites (31%), and the SGIP handbook (26%).²⁹ Nearly all host customers reported receiving program updates by email (89%). This large dependence on email, program websites, and documentation

²⁹ Applicants also noted receiving program updates from webinars (18%), other organizations (14%), quarterly workshops (12%), and mail notifications (10%).

illustrates the importance of clarity in written communication to ensure participants are well-informed about the program.

To gauge the effectiveness of PA communications, applicants were asked a series of questions that focused on the frequency and content of their communications with the PA. As shown in Figure 4-3 below, most applicants reported asking their PA between one and five clarifying questions per application. CSE had the highest percentage of applicants who reported they had no questions for the PAs. As this figure shows, most applicants needed at least some help from the PAs during the application process.

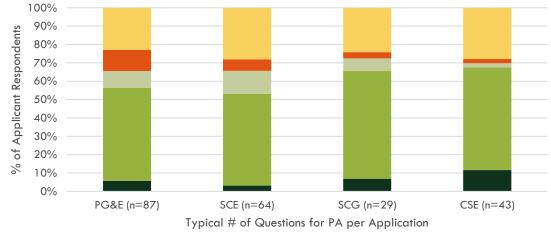
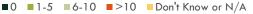
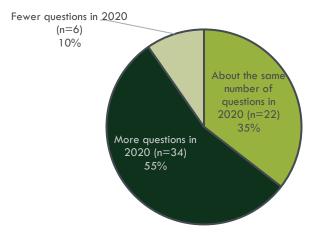


FIGURE 4-3: APPLICANT'S TYPICAL NUMBER OF CLARIFYING QUESTIONS FOR THE PROGRAM ADMINISTRATOR



Roughly 35% of SGIP applicants in 2020 participated in the program in prior years. Experienced applicants were asked whether the number of clarifying questions in 2020 had changed from previous years. As shown in Figure 4-4, most respondents stated that they had more (55%) or roughly the same number of questions (35%) in 2020. Respondents who had more questions cited unclear changes to SGIP program rules as the most frequent reason for the increase in questions. Many applicants specifically cited issues with the equity resiliency budget as the cause for more questions. For the few applicants that had less questions in 2020, they cited their increased experience with SGIP and a better understanding of program rules as their reasoning for fewer questions.

FIGURE 4-4: COMPARISON OF CLARIFYING QUESTIONS IN 2020 TO PREVIOUS YEARS



Applicants were also asked about the types of questions they had for the PAs (Figure 4-5). Like 2019, the majority of 2020 questions concerned the documentation requirements (81%), the technical requirements (65%), or the application process (62%). The proportion of respondents that reported program eligibility questions increased from 10% in 2019 to 41% in 2020. Of the 41% of respondents that reported questions about program eligibility, 81% reported they had questions about resiliency eligibility and 59% report they had questions about equity eligibility.

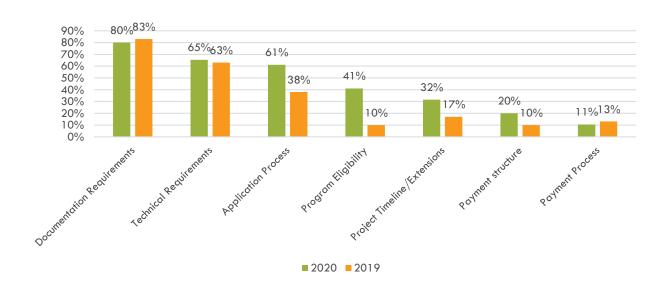


FIGURE 4-5: TYPES OF QUESTIONS APPLICANTS ASKED PROGRAM ADMINSTRATORS

A host customer's experience with the program is primarily mediated through their applicant (unless they are also the applicant). The applicant is responsible for assembling and submitting program documentation and application forms and the host customer may help provide some of this information. Nevertheless, host customers are ultimately the entity that benefits from the incentivized technology and are an actual customer of each PA's associated utility. For these reasons, it is important to understand the clarity of their experience with the program, even though they might not directly interact with the PAs throughout the application process.

To gauge this, host customers were asked to rate on a scale of 1 to 5 the clarity of the program eligibility requirements, the project documentation requirements, the program timelines, their application status, and the division of responsibility between host customer and applicant. Table 4-1 shows the weighted-average and relative precision (at 90% confidence) of the clarity ratings reported by host customers in PG&E, SCE, SCG, and CSE territories. This table also includes the number of respondents that provided a clarity rating for each question, the percentage of respondents that gave the highest rating (5) and lowest rating (1), and the average rating provided in 2018.³⁰

Across all PAs, the average clarity ratings reported by host customers for eligibility (formerly technical) and documentation requirements in 2020 were higher than those reported in 2018. This indicates that, overall, host customers in 2020 had a clearer idea of what information, technology and project specifications were required to receive an SGIP Incentive. Additionally, the clarity on the division of labor between the applicant and the host customer saw modest increases in clarity. While the host customer surveys did not reveal why division of labor score improved, it's likely that experienced applicants are more adept at explaining to host customers what was expected from them during the application process. To foster growth in these areas the PAs should reenforce the importance for applicants and developers to clearly define SGIP requirements to host customers during trainings and workshops.

It should also be noted that the PG&E, SCG, and SCE saw modest decreases in host customer clarity of application statuses (while CSE remained at 3.5). Additionally, less than 12% of responding host customers indicated that they learned about their application status through the *Check My Application Status* feature on the selfgenca.com website. The PAs should continue to promote the *Check My Application Status* feature as the tool for host customers to quickly find their application status and reenforce the need for applicants and developers to educate their host customers on the existence of this feature. While the *Check My Application Status* feature may not answer all questions related to application status, it is a useful first stop for program participants that may additionally help to reduce the overall inquires submitted to the PAs.

³⁰ Results from an identical question during the 2018 PA Evaluation, with the exception of an update to the language on clarity of eligibility requirements (2018 asked about clarity of project technical requirements).

TABLE 4-1: HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS

	Program Aspect	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	Average Rating 2018 ³¹
	Eligibility requirements	3.5	4.7%	154	32%	12%	3.3
ŠЕ	Documentation requirements	3.4	4.8%	149	26%	11%	3.2
PG&E	Program timelines	2.8	6.3%	154	15%	29%	2.9
	Application status	2.9	6.1%	156	19%	28%	3.2
	Division of responsibility	3.8	4.2%	152	45%	9%	3.5
	Eligibility requirements	3.8	5.9%	86	42%	14%	3.3
ш	Documentation requirements	3.3	8.3%	81	26%	20%	3.3
SCE	Program timelines	3.1	9.2%	83	22%	31%	3.3
	Application status	3.3	8.2%	87	26%	22%	3.7
	Division of responsibility	3.9	5.8%	86	44%	6%	3.5
	Eligibility requirements	4.1	3.9%	83	48%	8%	3.4
IJ	Documentation Requirements	3.9	4.8%	78	42%	10%	2.8
SCG	Program timelines	3.4	5.9%	77	31%	14%	2.9
	Application status	3.8	5.4%	83	47%	12%	3.9
	Division of responsibility	3.9	4.7%	84	48%	7%	3.4
	Eligibility requirements	4.1	3.4%	142	46%	5%	3.6
щ	Documentation requirements	3.9	4.2%	133	36%	8%	3.4
CSE	Program timelines	3.3	5.9%	138	27%	20%	2.9
	Application status	3.5	5.5%	142	35%	19%	3.5
	Division of responsibility	3.8	4.8%	141	51%	12%	3.7

³¹ The 2018 host customer survey asked about the clarity of project technical requirements, this question was updated to explicitly ask about eligibility requirements in the 2020 host customer survey.

Host customers who indicated that a program aspect was not clear (indicated by rating of 1 or 2) were asked why they felt that aspect was not clear. Common reasons for the lack of host customer clarity are presented in Table 4-2 below.

Program Aspect	Number of Host Customers Rating 1 or 2	Reason for Lack of Clarity	Number of Host Customers	
Eligibility		Unclear what was needed to satisfy the equability requirements	35	
requirements	80	The eligibility requirements were changed part way through the application	10	
Documentation		It was unclear what information was needed	40	
requirements	100	The documentation requirements kept changing based on correspondence with the PA.	42	
		There were long lapses in communication from the PA	109	
Program	245	There were long lapses in communication from the Applicant	67	
timelines		245 The host customer was not informed of a timeline to receive incentive		72
		The timeline to receive incentive kept changing	68	
		There were long periods of time with no update on the status of the application	123	
Application status	ion 160	Host Customer did not know what was preventing the application to move onto the next step	90	
		Host Customer did not know when to expect the application to move onto the next step	100	
	Host Customer did not know who was supposed to respond to certain communications from SGIP administrators		48	
Division of responsibility	77	Host Customer thought the applicant would handle MORE SGIP responsibilities	35	
		Host Customer's contact was laid off or applicant organization went bankrupt	5	

TABLE 4-2: COMMON REASONS FOR LACK OF HOST CUSTOMER CLARITY BY PROGRAM ASPECT (RATING 1 OR 2)

Experience by Applicant Prolific Status and Technology Group

Figure 4-6, Figure 4-7, and Figure 4-8 present the levels of clarity among 2020 host customers by their applicant's prolific status and by budget group.³² As these figures show, the level of clarity reported by host customers who had a prolific applicant was slightly higher for all program aspects except "division of responsibility." These findings are consistent with previous evaluations and they likely imply that prolific applicants who are more experienced with SGIP are better able to clearly communicate various program

³² Due to small sample sizes, generation and residential equity host customers were excluded from budget group breakouts.

aspects to host customers. Prolific applicants may not be as clear with host customers about the divisions of responsibility, since their familiarity with the program may lead them to assume these roles are more clearly defined than the host customer perceives.

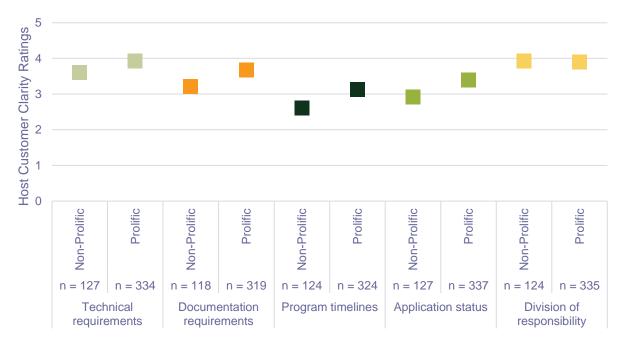


FIGURE 4-6: HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY THEIR APPLICANT'S PROLIFIC STATUS

The results by budget group indicate that program clarity is generally highest among host customers participating in the equity resiliency, small residential, and large storage budget categories. It should be noted that the equity resiliency and small residential budget categories received the majority of 2020 SGIP applications. It is likely that the PAs and applicants are the most familiar with these types of projects and are more easily able to communicate various aspects of the program to host customers with these projects. If this is true, then the PAs should make sure that applicants and developers are also educated on the SGIP requirements for projects offered through other SGIP budgets as well.



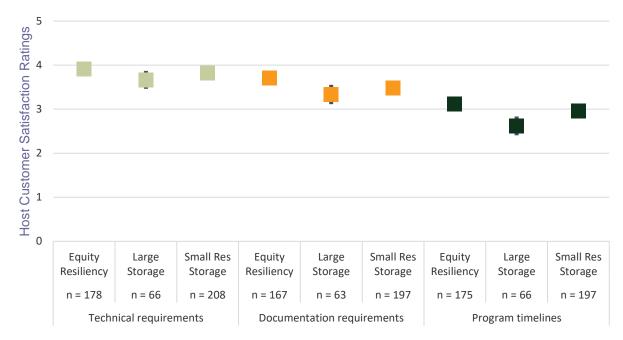
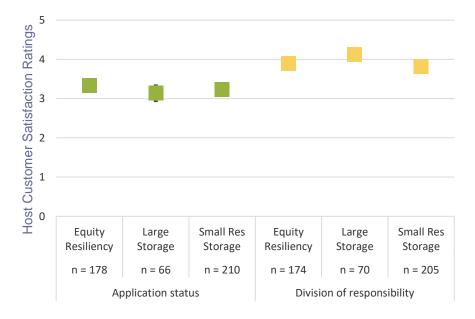


FIGURE 4-8: HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY BUDGET GROUP - PART 2



Host Customer Satisfaction with Program Administrator Communication

Host customer communications with the PAs and the applicants can affect their understanding of the status of their SGIP application and what is needed to move their project forward. Host customers were asked to rate on a scale of 1 to 5 their satisfaction with the information provided in the written communications they received from the PAs and the program information provided to them by the applicants. As seen in Table 4-3, host customers were slightly more satisfied with the information provided by their applicant than their PA. This margin is largest for PG&E. Compared to 2018, host customer satisfaction with program communications provided by PG&E and SCE decreased and remained the same on average for SCG and CSE.

	Program Aspect	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	Average Rating 2018
PG&E	Info in written communications from PA	3.0	5.7%	148	14%	18%	3.2
БЧ	Info provided by applicant	3.5	4.6%	159	33%	8%	3.5
SCE	Info in written communications from PA	3.4	8.1%	78	24%	18%	3.7
Ň	Info provided by applicant	3.6	4.6%	129	28%	10%	3.6
SCG	Info in written communications from PA	3.7	4.7%	83	35%	8%	3.7
Š	Info provided by applicant	3.8	4.6%	84	36%	5%	3.1
CSE	Info in written communications from PA	3.6	4.6%	129	28%	10%	3.6
8	Info provided by applicant	3.8	4.6%	142	42%	8%	3.7

TABLE 4-3: HOST CUSTOMER SATISFACTION WITH PROGRAM COMMUNICATION

Host customers that were not satisfied with the communication provided by either their PA or their applicant were asked the reasons for their dissatisfaction. Host customer stated several reasons for dissatisfaction with communication. Table 4-4, below provides the most common reasons for communication dissatisfaction with the PA and Applicant.

TABLE 4-4: COMMON REASONS FOR HOST CUSTOMER COMMUNICATION DISSATISFACTION WITH THE PA AND APPLICANT (RATING 1 OR 2)

Program Aspect	Number of Host Customers Rating 1 or 2	Reason for Communication Dissatisfaction	Number of Host Customers
		The PA did not provide enough information in their communications.	78
Info in written communications	117	The information provided by the PA was not clear or was confusing.	87
from PA		The communication received by the PA was too infrequent.	38
		The host customer did not know what to do upon receiving certain information.	36
		The applicant did not provide enough information in their communications.	57
Info provided by	· 88	The applicant poorly explained the role of the SGIP incentive within the host customer's contract with the applicant company.	33
applicant		The applicant poorly explained the SGIP system operation requirements prior to participation in SGIP.	34
		The applicant was not well informed about the SGIP process.	28

Experience by Applicant Prolific Status and Budget Group

Figure 4-9 and Figure 4-10 present the host customers' satisfaction with the information provided by the PA and applicants segmented by their applicant's prolific status and budget group, respectively. As a comparison, it also shows the variation in overall SGIP program satisfaction reported by host customers falling into these two groups. As seen previously, the satisfaction with communication and overall follows the same trend as host customer clarity in Figure 4-6 through Figure 4-8. This is not surprising given that the common causes for communication dissatisfaction resulted due to perceptions of poor clarity and insightfulness of the communication provided by both applicants and PAs.



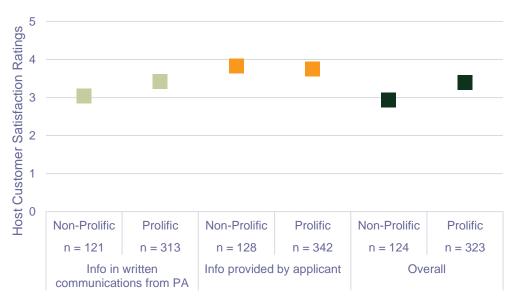
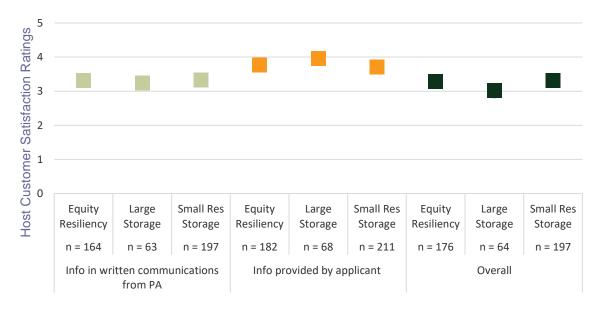


FIGURE 4-10: HOST CUSTOMER SATISFACTION WITH INFORMATION PROVIDED BY THE PROGRAM ADMINISTRATOR AND APPLICANT BY BUDGET GROUP



Host Customer Understanding of Requirement for Approved TOU Rate

Starting in April of 2020, new residential storage projects are required to switch to a SGIP approved TOU rate. Host Customers who had their application submitted after the implementation of this rule were asked about their awareness of the TOU rate requirement. Of these host customers, less than half (47%) said that they were aware of this requirement. Of those who said there were aware of the requirement, 65% said that their applicant informed them of this requirement and 35% said that their PA informed them.

Host Customers were also asked to rate their understanding of how the TOU rate requirement would impact their utility bill on a scale from 1 to 5, where 1 is a poor understanding and 5 is an excellent understanding. As seen in below Table 4-5, the majority of host customers feel that they have moderate to excellent understating of the TOU rate on their utility bills (rating of 3 or above), however, roughly 24% indicated a low level of understanding (rating of 1 or 2). Overall, the average rating reported by host customers was 3.3 out of 5.

REQUIREMENT ON UTILITY DILLS					
PA	Average Rating	# of Respondents	% Rating 3 or above	% Rating 1 or 2	
PG&E	3.1	50	72%	28%	
SCE	3.2	33	85%	15%	
SCG	3.6	19	74%	26%	
CSE	3.4	48	75%	25%	
Total	3.3	145	76%	24%	

TABLE 4-5: HOST CUSTOMER RATING OF THEIR UNDERSTANDING OF THE IMPACT OF THE TOU RATE **REQUIREMENT ON UTUITY BUILS**

4.2.2 Interactions with Program Administrators

Over the course of SGIP participation, applicants and host customers interact with PAs for a variety of reasons, including submitting documents, asking clarifying questions, and resolving application issues. As a result, the interactions that the participants have with PAs can have a significant effect on their overall outlook on SGIP and program satisfaction. This section explores applicant and host customer satisfaction with their PA interactions in terms of timeliness, helpfulness, and accessibility. These interactions are key to program participants' overall program experience.

Overall Satisfaction with Timeliness, Helpfulness and Accessibility of Program Administrators

Applicants were asked to rate their experience with PA timeliness, helpfulness, and accessibility. As shown in Figure 4-11 below, across all types of interactions, applicants reported moderate dissatisfaction with

PG&E as a PA, slightly more satisfaction with SCE and CSE, and high levels of satisfaction with SCG. More discussion on the rationale for dissatisfaction in each of these areas and how these satisfaction levels compare to prior program years is provided separately for each category in the section that follows.

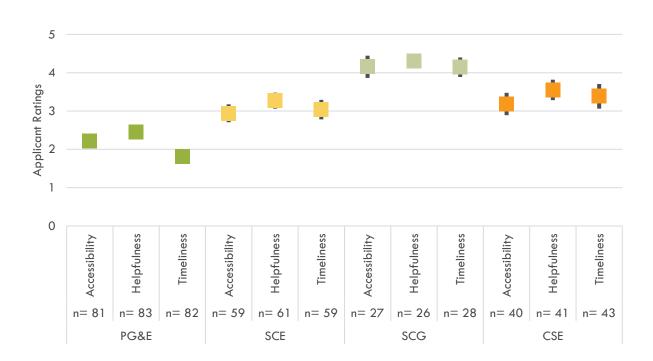


FIGURE 4-11: APPLICANT SATISFACTION WITH ACCESSIBILITY, HELPFULNESS, AND TIMELINESS BY PROGRAM ADMINISTRATOR

It is important to note the significant increase in application volume that took place in 2020, when considering each PA's ability to maintain accessibility, helpfulness, and timeliness. As shown in Figure 4-12, PG&E received more than 12,000 applications in 2020 and SCE received more than 5,800 applications, both of which were roughly three-and-a-half and four-and-a-half fold increases from 2019 respectively. CSE experienced the greatest growth, increasing six-fold (from 581 projects to more than 3,500 projects). The significant increase in application volume in 2020 led to a large backlog of applications and long delays during the application process. SCG saw 5% growth from 2019 and were able to achieve the highest levels of satisfaction with accessibility, helpfulness, and timeliness.

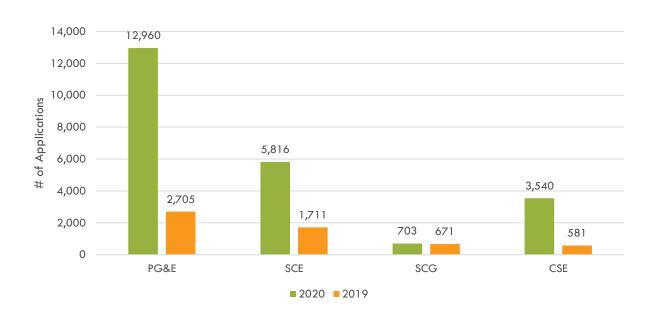


FIGURE 4-12: APPLICATIONS IN 2020 AND 2019 BY PROGRAM ADMINISTRATOR

Some applicants and host customers who participated in the SGIP during 2020 also participated during prior years and thus were able to make direct comparisons between the two years.³³ Applicants and host customers who participated in SGIP during 2020 and also during a prior year were asked whether their satisfaction with respect to the PAs' timeliness, helpfulness, and accessibility had changed in 2020 in comparison to prior years. Table 4-6 below shows the distribution of responses from the 57 applicant respondents who had participated during 2020 and a prior program year. As this table shows, a large proportion of applicants reported no change in their satisfaction levels in 2020 with regards to the PAs' timeliness (42%), helpfulness (43%), and accessibility (42%). Of applicants that reported a change in their satisfaction levels in 2020, there were more respondents who were less satisfied with timeliness (38%), helpfulness (29%), and accessibility (32%) than those who were more satisfied.

TABLE 4-6: APPLICANT REPORTED CHANGE IN TIMELINESS, HELPFULNESS, AND ACCESSIBILITY SATISFACTION LEVELS IN 2020 VERSUS PRIOR YEARS

Change in Satisfaction with	More Satisfied in 2020	Less Satisfied in 2020	No Change
Timeliness	20%	38%	42%
Helpfulness	28%	29%	43%
Accessibility	26%	32%	42%

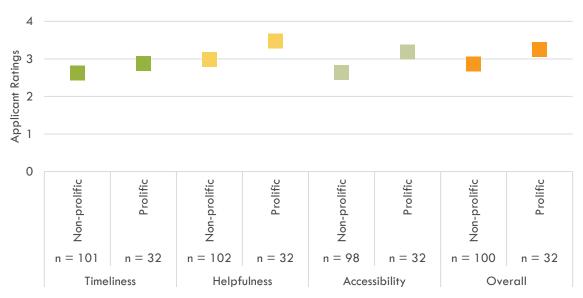
³³ Two percent of host customers (454 of 25,683) and 35% of applicants (184 of 531) participated during 2020 and during a prior program year.



Experience by Prolific Status and Budget Group

Overall, prolific applicants were more satisfied with their interactions with PAs than non-prolific applicants. Applicants were asked to rate their satisfaction with PA timeliness, helpfulness, accessibility, and with the PA overall. Figure 4-13 shows the average ratings reported by applicants for each PA by their prolific status. Prolific applicants were moderately to highly satisfied with the PAs' helpfulness, with an average score of 3.5. In timeliness, accessibility, and overall, prolific applicants were moderately satisfied, with average scores from 2.9 to 3.3. Non-prolific applicants were less satisfied across all topics, with average scores ranging from 2.6 to 3.0.

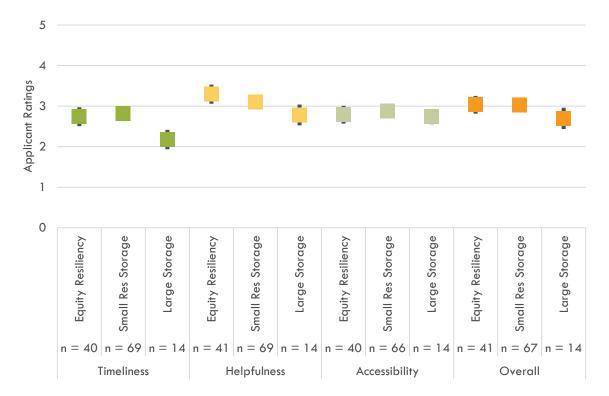




Similarly, to determine if any correlation existed between applicant satisfaction with the SGIP program and the SGIP budget group (Equity Resiliency, Large Storage, or Small Residential Storage), the evaluation team compared applicants' satisfaction by budget group.³⁴ Figure 4-14 shows the average satisfaction levels reported by applicants by budget group. As this figure shows, Large-Scale Storage applicants reported lower satisfaction levels in all the topic areas relative to Small Residential Storage and Equity Resiliency applicants.

³⁴ Due to small sample sizes, Generation, San Joaquin Valley, Residential Storage Equity, and Non-Residential Storage Equity budget category applicants were excluded from budget group breakouts.

FIGURE 4-14: APPLICANT SATISFACTION WITH PROGRAM ADMINISTRATOR TIMELINESS, HELPFULNESS, ACCESSIBILITY, AND OVERALL BY BUDGET GROUP



Timeliness of Communications

In 2020, applicants' satisfaction levels with the timeliness of PA communications was mixed. As Table 4-7 below shows, applicants reported lower levels of satisfaction with the timeliness of SCE and CSE communication in 2020, but higher satisfaction with SCG timeliness (PG&E remained at relatively the same level of satisfaction between 2020 and 2019.

		Evaluation Year 202	D	Evaluation	Year 2019
PA	N	Score	% Respondents Rating 1	N	Score
PG&E	82	1.8	49%	31	1.9
SCE	59	3.0	14%	31	3.4
SCG	28	4.1	4%	15	3.2
CSE	43	3.4	19%	12	4.2

		TAR THEFT INFAC BY EVALUATION VEAR
TABLE 4-7: APPLICANT SATISFACT	ION WITH PROGRAM ADMINISTRA	TOR TIMELINESS BY EVALUATION YEAR

When applicants were prompted for their rationale for providing low PA timeliness ratings (1 or 2 out of 5) in 2020, respondents primarily reported the PA's lack of a response (or very delayed response) and often unhelpful response when it arrives. The table below lists some of the reasons provided by applicants for giving their PA a low satisfaction rating regarding their timeliness. Most of the responses in the table below were provided by PG&E applicants as they represented 59 of the 78 applicants who reported being dissatisfied (a rating of 1 or 2 out of 5) with the PA's timeliness

Reason	Examples Provided by Respondents
	I have dozens of instances of no communication
No Response	Unresolved issues. Questions not being responded to. 4 to 6 weeks to answer our questions.
No Response	Phone calls were not returned. Email replies were not timely, and often not helpful.
	They are slow to reply, ask the same questions repeatedly, and sometimes don't reply at all.
Too much	It should be more timely overall, because the subsequent inquiries after the initial response sometimes require multiple follow-ups before an answer is provided.
back and forth	Long delays after submittal to request for more information/correction followed by another submittal only to receive a different request for more information/correction; why weren't they both present in the first round?
Unhelpful	It takes them a really long time to answer. And, they are not so clear on their answers. They take a very long time to respond and often with the same comments as before even though they were already addressed.

TABLE 4-8: REASONS PROVIDED FOR DISSATISFACTION WITH THE PAS' TIMELINESS (RATING 1 OR 2)

Average Time to Initial Response

Surveyed applicants were asked on average how long it took the PAs to initially respond to clarifying questions and other inquiries. Figure 4-15 shows the distribution of applicants' reported time for PA initial response. All PAs struggled with replying to inquires within 10 days, with 25% of SCG, 28% of CSE, 33% of SCE, and 58% of PG&E applicants reporting the initial reply took longer than 10 days. It should also be noted that PG&E receive the largest number of SGIP applications in 2020 (more applications than the other three PAs combined).

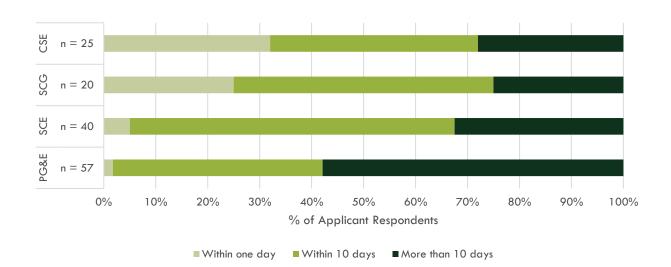


FIGURE 4-15: APPLICANT REPORTED AVERAGE TIME FOR INITIAL REPLY TO INQUIRY BY PROGRAM ADMINISTRATOR

Applicants interviewed as part of the 2019 evaluation also were asked the average time it took for their PA to initially respond to clarifying questions and inquiries. Table 4-9 compares the percentage of respondents from each evaluation year that indicated the PA's initial reply took longer than 10 days (in 2020) or one week (in 2019).³⁵ For PG&E and SCG, the 2020 responses indicate that the initial time to reply improved since 2019. However, SCE and CSE respondents indicated that the time for an initial reply worsened in 2020.

	Evaluat	ion Year 2020	Evaluat	ion Year 2019
PA	N Respondents	% Avg initial PA reply longer than 10 days	N Respondents	% Avg initial PA reply longer than one week
PG&E	57	58%	21	67%
SCE	40	33%	23	22%
SCG	20	25%	11	27%
CSE	25	28%	12	8%

TABLE 4-9: APPLICANT REPORTED AVERAGE TIME FOR INITIAL REPLY TO INQUIRY LONGER THAN 10 DAYS OR ONE WEEK BY PROGRAM ADMINISTRATOR AND EVALUATION YEAR

³⁵ Response options for this evaluation question were changed in 2020, so that applicants were asked whether the initial reply took longer than 10 days, whereas in 2019 applicants were asked whether the initial reply took longer than one week.



Longest Time to Initial Response

Applicants were asked about the longest amount of time it took to receive an initial response from their PA. As shown in Figure 4-16 below, the majority of applicants reported that the longest time it took SCG and CSE to reply to an inquiry was less than 10 days (65% and 50%, respectively). However, most applicants that had PG&E or SCE for a PA reported that they had waited more than 10 days (and in PG&E's case often more than a month) for an initial reply to an inquiry.

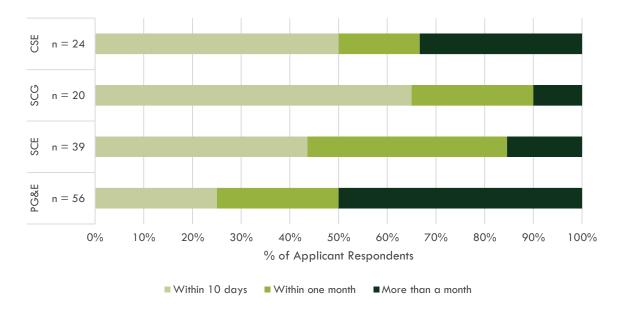


FIGURE 4-16: APPLICANT REPORTED LONGEST TIME FOR INITIAL REPLY TO INQUIRY BY PROGRAM ADMINISTRATOR

Applicants were also asked in 2019 about the longest time it took the PA to initially reply to clarifying questions and inquiries. As shown in Table 4-10 below, initial response time for CSE and PG&E reportedly worsened in 2020. There was a significant increase in CSE respondents reporting that the initial reply took longer than one month (from 9% in 2019 to 33% in 2020). Initial response times for SCE and SCG remained relatively steady across evaluation years.

TABLE 4-10: APPLICANT REPORTED LONGEST TIME FOR INITIAL REPLY TO INQUIRY LONGER THAN ONE MONTH BY PROGRAM ADMINISTRATOR AND EVALUATION YEAR

	Evalu	ation Year 2020	Evalu	ation Year 2019
PA	N Respondents	% longest initial PA reply longer than one month	N Respondents	% longest initial PA reply longer than one month
PG&E	56	50%	20	45%
SCE	39	15%	22	14%
SCG	20	10%	11	9%
CSE	24	33%	11	9%

Time to Resolve an Issue

Applicants were also asked about the longest time taken, from start to finish, for issues to be resolved. Figure 4-17 shows that more than half of respondents reported that SCE, SCG, and CSE never took longer than one month to resolve an issue. Roughly 36% of respondents reported that PG&E never took longer than one month to resolve an issue. However, approximately 22% of CSE, 13% of PG&E, and 6% of SCE applicants reported that in 2020 they had waited over six months for the PA to resolve an issue for them.

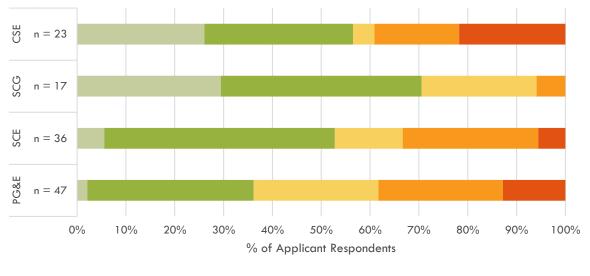


FIGURE 4-17: APPLICANT REPORTED LONGEST TIME TO RESOLVE ISSUE BY PROGRAM ADMINISTRATOR

Within one week Within one month Within three months Within six months More than six months

In general, it is likely that increased program activity and new eligibility requirements in 2020 created a larger overall pool of inquiries that PAs needed to reply to, investigate, and resolve. As a result, the time to resolve the issue from the perspective of the applicants appears delayed and stretched out. While some applicants mentioned that the delay in the SGIP application does not affect the installation of the project,

some smaller applicants stated that they do not install the battery until the project is approved by SGIP, which in turn engenders complaints and dissatisfaction for host customers. During the PA in-depthinterviews, all PAs expressed resolving issues and responding to participant inquiries as a top priority.

Table 4-11 shows the percentage of respondents reporting that they experienced it taking more than a month for issues to be resolved by the PA in 2020 versus in 2019. The share of respondents stating that they had waited more than a month for an issue to be resolved increased in 2020 for all PAs.

TABLE 4-11: APPLICANT REPORTED LONGEST TIME FOR ISSUE RESOLUTION LONGER THAN ONE MONTH BY
PROGRAM ADMINISTRATOR AND EVALUATION YEAR

	Evalu	ation Year 2020	Evaluation Year 2019		
РА	N Respondents	% longest to resolve longer than one month	N Respondents	% longest to resolve longer than one month	
PG&E	47	64%	20	55%	
SCE	36	47%	23	22%	
SCG	17	29%	11	27%	
CSE	23	43%	12	17%	

Host customers also reported long wait times to get resolution for their issues or delays (Figure 4-18). Most host customers, regardless of their PA, reported that it took more than one month to get their problem resolved. These wait times are very similar to what was reported in 2018.

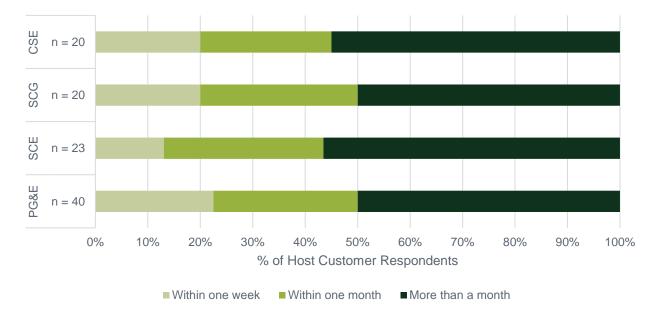


FIGURE 4-18: HOST CUSTOMER REPORTED TIME TO RESOLVE ISSUES BY PROGRAM ADMINISTRATOR

Helpfulness

In 2020, applicants reported mixed levels of satisfaction with PAs' helpfulness, as shown in Table 4-12. Comparing applicants' reported satisfaction with the PAs' helpfulness in 2019 and 2020 shows that applicants found SCG and PG&E more helpful in 2020. Whereas applicants found CSE less helpful in 2020 than 2019. No difference was found in the reported helpfulness of SCE across the two years. Though CSE's reported helpfulness declined year over year, their helpfulness was scored the second highest across the four PAs.

		Evaluation Year 2020)	Evaluation Year 2019		
PA	N	Score	% Respondents Rating 1	N	Score	
PG&E	83	2.5	27%	29	2.0	
SCE	61	3.3	7%	29	3.3	
SCG	26	4.3	0%	14	3.8	
CSE	41	3.6	10%	13	4.3	

TABLE 4-12: APPLICANT SATISFACTION WITH PROGRAM ADMINISTRATOR HELPFULNESS BY EVALUATION YEAR

When applicants were prompted for their rationale for providing low PA helpfulness ratings in 2020, respondents primarily reported that the assistance provided by the PAs was unclear, inconsistent, and not helpful. They also reported it took a long time to get any assistance and that the PAs were hard to reach. The table below lists some of the reasons provided by applicants for giving their PA a low satisfaction rating regarding their helpfulness. Most of the responses in the table below were provided by PG&E applicants as they represented 42 of the 54 applicants who reporting being dissatisfied (a rating of 1 or 2 out of 5) with the PA's helpfulness.

TABLE 4-13: REASONS PROVIDED FOR DISSATISFACTION WITH THE PAS' HELPFULNESS (RATING 1 OR 2)

Reason	Examples Provided by Respondents
	A lot of times the application would be rejected needing changes to documents but provide little guidance on what to change other than canned responses for page numbers in the handbook to reference which were outdated.
	I tried to get a clarification on what was needed and got back the same form without any clarification.
Unclear, Inconsistent, or	I never felt that I was actually getting any useful help. The whole process is joke! I think that it was designed to be so complicated that no individual resident would be able to successfully complete the process and receive the incentive payment.
Unhelpful Support	<pa> was completely unhelpful. They could not answer my questions and they could not tell me where to go to get answers to my questions.</pa>
	Very robotic responses, it was hard to get clarification on questions in real terms that made sense.
	I think that they have been helpful in some of the easier situations. But the harder projects were pushed to the side without resolution.
	They didn't usually have a good understanding of the SGIP Handbook, slow to respond.
Slow Response	It takes weeks for a response, that is vague, and my email was answered by two separate persons with completely opposite responses.
Time	Poor response times to inquiries and information provided was often insufficient.
Hard to Reach	They do not respond to phone calls, e-mails

Resolution to Application Inquiries, Issues, and Delays

Over the course of any application, issues may arise that delay its progress through the application process. Both applicants and host customers were asked about their experience working with the PA to resolve issues or delays encountered. Most applicants surveyed reported having been informed by the PA that at least one of their applications was missing information or documentation (ranging from 91% for CSE applicants to 99% for PG&E applicants). The most commonly cited missing information was equipment specifications, warranty specifications, and monitoring plans. A small proportion of applicants (18%) noted that program administrators met with them to discuss common application issues. Applicants that reported meeting with program administrators rated the helpfulness of that meeting moderately high (average score of 4.1).

More than half of applicants also reported that one or more of their applications were suspended (ranging from 60% for CSE to 76% for SCG). Notably, 84% of applicants reported that they understood the reason their application was suspended. In past evaluations, applicants mentioned a significant gap in understanding why applications were suspended. In 2020, applicants reported a marked improvement with regard to understanding suspensions.



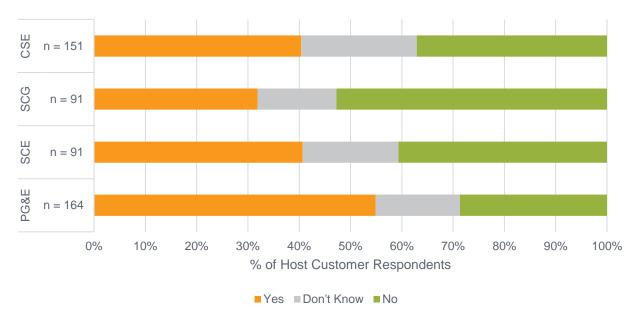
A majority of respondents (62%) reported that the PAs helped them resolve suspended projects, while 18% of respondents said they did not receive help from PAs though they needed it. Table 4-14 shows that CSE and SCG applicants were moderately satisfied and SCE and PG&E applicants were less satisfied with PA's involvement in resolving suspended projects. Though PG&E's applicants reported the lowest satisfaction with PA's involvement, this score has increased for PG&E since 2019. Satisfaction with PAs involvement decreased for SCE and SCG in 2020.

TABLE 4-14: APPLICANT SATISFACTION WITH PROGRAM ADMINISTRATOR INVOLVEMENT IN RESO	LVED
SUSPENDED PROJECTS	

PA	Average Rating 2020	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1	Average Rating 2019
PG&E	2.5	8.5%	47	4%	23%	2.3
SCE	2.9	7.1%	39	3%	8%	3.4
SCG	3.1	10.0%	21	5%	5%	3.4
CSE	3.2	12.1%	23	4%	4%	3.2

Host customers were asked if they experienced any problems, issues, or delays with their project(s), and if so, whether and how they were resolved. As shown in Figure 4-19, 32% to 54% of host customers (rate varies by PA) recalled experiencing a problem or delay with their project. This is an increase from 2018 for all PAs, where between 21% to 46% experienced some sort of issue.





Host customers who noted having experienced an issue or delay most commonly cited a delay in receiving the SGIP rebate (53%) or a problem with their SGIP application (48%). A clear majority of host customers reported that their applicant helped them resolve the issue, problem, or delay (78% to 87%, depending on the PA). The majority of host customers who noted experiencing a problem or delay reported that at least some of their issues had been resolved (Figure 4-20); however, a number of host customers stated that their issue was never resolved. The share that have outstanding issues or delays is highest for CSE.

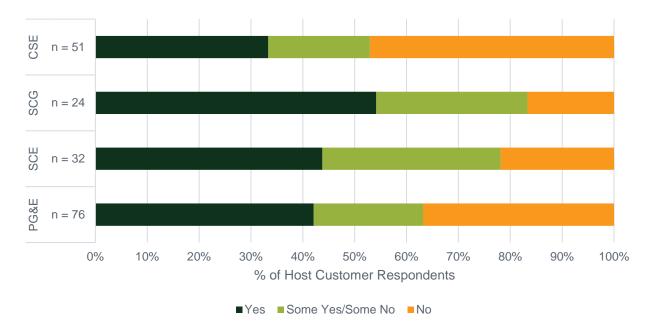


FIGURE 4-20: RESOLUTION OF HOST CUSTOMER ISSUES, PROBLEMS, OR DELAYS BY PROGRAM ADMINISTRATOR

Accessibility

The most common method for Applicants to contact PAs regarding clarifying questions or inquiries was by email (93%), followed by phone (45%). This aligns with Applicant's self-reported preferred way to contact PAs (55% by email and 32% by phone). Comparing applicants' reported satisfaction with PAs' accessibility in 2019 and 2020 (Table 4-15) shows that SCG and PG&E were found to be more accessible in 2020. CSE and SCE were reported to be less accessible in 2020 than 2019. Though CSE's reported accessibility decreased in 2020, their score was the second highest across the four PAs.

		Evaluation Year 2020)	Evaluation Year 2019		
PA	N	Score	% Respondents Rating 1	N	Score	
PG&E	83	2.2	26%	27	2.0	
SCE	60	2.9	12%	30	3.4	
SCG	28	4.2	7%	14	3.7	
CSE	40	3.2	18%	13	4.2	

TABLE 4-15: APPLICANT SATISFACTION WITH PROGRAM ADMINISTRATOR ACCESSIBILITY BY EVALUATION YEAR

When prompted for their rationale for providing low rankings to accessibility, respondents primarily sited their frustration at the difficulty of reaching anyone who can help them resolve their issues. The table

below lists a number of the open-ended responses provided by applicants regarding the low satisfaction rating they provided for the PAs' accessibility. Most of the responses in the table below were provided by PG&E applicants as they represented 50 of the 73 applicants who reporting being dissatisfied (a rating of 1 or 2 out of 5) with the PA's accessibility.

TABLE 4-16: REASONS PROVIDED FOR DISSATISFACTION WITH PAS' ACCESSIBILITY (RATING 1 OR 2)

Examples of Applicant Reported PA Accessibility Concerns

I would call the [SGIP] phone number and never successfully reached anyone. Emails were not responded. The only feedback I received was when my application was rejected requiring updated documentation.

I cross my fingers someone will reply

Not sure who to contact for what and response to help and questions took forever.

As note[d] there is only an answering service, never a live person answering and NEVER in 8 months a return call.

Just not replying to emails like they used to do. In 2018 and even 2019 they were great. I think they either got swamped with all the residential applications or they lost staffing.

You can't just call them and get an answer. By the time your email gets responded to you have forgotten who you are.

They were impossible to contact, did not reply meaningfully to emails, and literally do not even answer their phone!

It's just really hard to get ahold of them.

4.2.3 Specific Program Elements

Applicants and host customers were asked about their perceptions and experience with several specific program elements, including SGIP websites, quarterly workshops, and individual steps of the program application and incentive process.

Website

The website operated by the SGIP program (www.selfgenCA.com, also known as the statewide portal) and the PA-specific websites are important tools for applicants to obtain program documents, upload applications, check application status, learn about program updates, and access calculation tools. Applicants were asked a series of questions regarding their use and satisfaction with these websites.

The statewide portal and PA websites are frequently updated with new program information and materials. Additions to the statewide portal website in 2020 included extensive updates to the FAQ section. Pop-up alerts that show up when an applicant logs into the statewide portal notify participants of important program changes and information. Significant changes were also made to the PA websites to cover topics related to eligibility criteria for the equity resiliency budget. SCE reported that they

revamped their SGIP website in 2020, including the addition of a "battery marketplace" where host customers can go to find SGIP-approved developers and get project cost estimates.

Use of the PA's website is optional, and varying proportions of applicants reported visiting the PA website at least once in 2020 (21% SCG, 26% CSE, 37% SCE, 54% PG&E). Typical use of the PA websites by applicants who stated that they had visited the PA websites was mixed, with about half of applicants from SCE, SCG, and PG&E (47% to 51%) reporting visit frequencies between once a month and once a year. The other half of applicants from SCE, SCG, and PG&E reported visit frequencies between daily and once a week. In contrast, visits to CSE's websites were reported to be less frequent, with 70% reporting visit frequencies between once a month and once a year.

Aside from submitting project application forms, applicants stated that the most common reasons to visit the statewide portal were to check on project status (64%) and to find the SGIP handbook (51%). The most common reason for applicants to visit the PA websites was to learn more about the program structure. All applicants are required to use the statewide portal to submit applications and check on their status.

A small proportion of host customers (19%) reported visiting the statewide portal at least once during 2020. Across all host customers, 27% visited the PG&E SGIP website, 20% visited SCE's, 10% visited CSE's and 7% visited SCG's SGIP website. However, 42% of host customers reported never visiting the statewide portal or the PA websites. The most commonly reported reasons for visiting SGIP websites include learning more about the program structure (72%) and checking application status (42%).

Applicants and host customers were asked to rate the usefulness of the statewide portal (www.selfgenca.com) and of the PAs' SGIP websites, using a 1 to 5 scale. Figure 4-21 shows that applicant and host customer ratings were moderate to high for the statewide portal and the PA websites. The below table presents some of the reasons applicants gave for low levels of satisfaction (1 or 2 out of 5) with the PA websites.



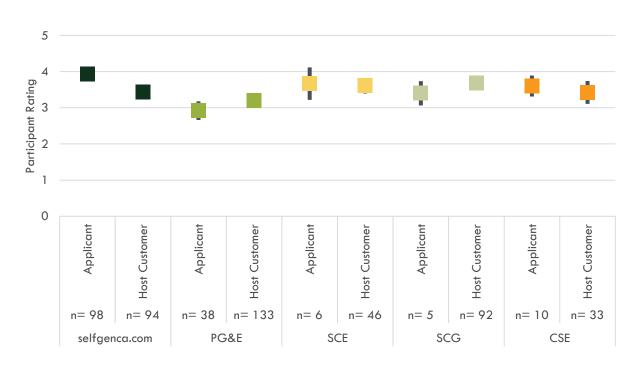


TABLE 4-17: REASONS FOR DISSATISFACTION WITH SGIP WEBSITES (RATING 1 OR 2)

Website	Reason Provided by Applicant for Dissatisfaction
	Not user friendly nor an abundance of info.
	The website is extremely difficult to navigate through and glitches frequently.
PA Websites	Seemed redundant with the CPUC website. Deadlines for applications and incentive programs weren't updated frequently (example Equity resiliency application timelines)
	It's missing specifics about the program. It can make customers think they are eligible when they are not.

Workshops

Quarterly workshops are a resource made available to SGIP participants to educate them about program rules and procedures, updated incentive levels and structures, eligible measures, and related topics. Inperson attendance can also provide an opportunity for networking with the PAs and staff from other firms. In response to the COVID-19 pandemic, workshops after Q1 of 2020 were held exclusively online. Slides from past quarterly workshops are posted on the statewide portal.

Applicants were asked about the frequency of their workshop attendance in 2020. As shown in Figure 4-22, 58% of surveyed applicants reported having attended at least one quarterly workshop in 2020. Of those that attended at least one workshop, 88% reported attending the fully online format that began in Q2 of 2020. Most applicants that attended the fully online format reported they were equally satisfied (63%) or more satisfied (30%) with the fully online workshop format. Applicants that attended at least one workshop reported an average satisfaction score of 3.5 on a 5-point scale, indicating moderately high levels of satisfaction with the quarterly workshops.

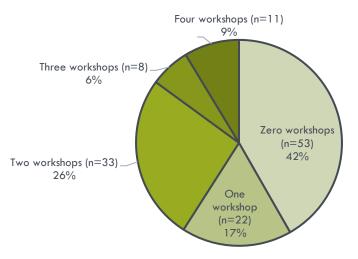


FIGURE 4-22: APPLICANT PARTICIPATION AT QUARTERLY WORKSHOPS IN 2020

The most common reasons that applicants reported attending the workshop include learning about program changes (73%), general program information (65%), to hear questions and answers from other applicants (43%), and to ask specific questions to program administrators (35%). For those applicants that didn't attend any workshops, the most common reason cited was that they didn't know about the workshops (42%) or that their schedule didn't allow it (28%).

4.3 OVERALL PARTICIPANT SATISFACTION

4.3.1 Satisfaction with Program Administrator

Applicants and host customers were asked to rate their satisfaction, on a scale of 1 to 5, for each PA with whom they had submitted an SGIP application in 2020. As shown in Table 4-18, applicants in 2020 reported on average a moderately low satisfaction level with PG&E (average score = 2.3), moderate satisfaction with SCE (3.2) and CSE (3.3) and moderately high satisfaction SCG (4.2). It is interesting to note that no PG&E respondents reported being extremely satisfied (score=5) in 2020. Applicants' reported

satisfaction in 2020 increased over 2019 for SCG and PG&E, but decreased for CSE and slightly decreased for SCE (decline of 0.1).

Applicants who participated in 2020 and in prior years were asked if there was a change in their PA satisfaction levels in 2020 compared to prior years. The most common response for PG&E and CSE applicants was that they were less satisfied in 2020 than prior years (37% PG&E and 46% CSE). While the most common response for SCE and SCG applicants was that there was no change (44% SCE and 50% SCG).

PA	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Respondents Rate 5	% Respondents Rate 1	Average Rating 2019
PG&E	2.3	7.1%	83	0%	29%	2.1
SCE	3.2	7.0%	60	13%	7%	3.3
SCG	4.2	5.7%	28	32%	4%	3.3
CSE	3.3	8.4%	40	13%	13%	4.2

 TABLE 4-18: APPLICANT OVERALL SATISFACTION WITH PROGRAM ADMINISTRATOR

Applicants who provided low satisfaction rankings (1 or 2) had a lot to say regarding why they were dissatisfied with their PA. Primary reasons were poor communication, an inefficient application process, and lack of support. Examples of the reasons they provided are presented in Table 4-19 below.

TABLE 4-19: REASONS FOR DISSATISFACTION WITH THE PROGRAM ADMINISTRATOR (RATING 1 OR 2)

Reason	Examples Provided by Respondents
	Slow response times, Impossible to reach someone for questions. Submitted documents would take weeks or months to be reviewed.
	It's hard to get any response if there is an issue.
	No communication.
Poor	Too many missing information requests. I feel like a lot of their reviewers are new or less knowledgably. And, they are difficult to communicate with over e-mail.
Communication	The information on where or who to go to for assistance is not easily accessible.
	They have the same requests repeatedly. And, long communication delays.
	I just am not getting the responsiveness that I came to expect with <pa> based on their prior good track record. They either need more staff or a better system for follow-up on overdue projects and payments.</pa>
	I lost out on the SGIP rebate after spending hours trying to read and learn how to process the paperwork for the program and I just feel like I kept getting passed off.
	This process takes too long and changes frequently that my customers get frustrated at us for that battery rebate experience.
Poor Application	I've been navigating this process for 2 years and it is the most confusing and frustrating I have ever encountered in my 21 years working in the solar industry.
Process	As a whole it's been a difficult and time-consuming process.
	The whole program is needlessly complicated.
	There are industry terms that I am sure the Administrator is familiar with, but the layman is not. I need some help and clarification.
	They review the applications super slowly.
	I received inaccurate information about qualifications for residential equity resiliency qualifications. Very frustrating!
	Staff that seem to not to know what is going on. Response times. Turnaround times.
Not Helpful	The ability to get the answers I need in a reasonable response time. And, the lack of clarity in their answers.
	Does not follow through on agreed actions.
	If this were a private enterprise and not a public utility with a monopoly, they'd never survive with this kind of customer service.

As shown in Table 4-20 below, across the board, host customers reported moderate levels of satisfaction with the PAs in 2020. However, host customer satisfaction levels for PG&E and SCE decreased from satisfaction levels reported in 2018, whereas SCG had a modest increase and CSE had remained the consistent. While many host customers were satisfied with their experience with the PAs, several grievances were common among those who were dissatisfied. These included lack of communication or miscommunication regarding rule changes or application issues. One host customer noted "*It appears that twice my application has stalled because of lack of information, yet I was never notified…*" and another stated "*I was not well informed. I don't understand most of the few documents I have received.*"

Many respondents indicated that they felt the process took too long to receive their rebate or get approved for SGIP incentives.

ΡΑ	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Respondents Rate 5	% Respondents Rate 1	Average Rating 2018
PG&E	2.9	5.7%	156	14%	25%	3.4
SCE	3.3	8.9%	81	28%	23%	3.8
SCG	3.9	4.3%	82	43%	6%	3.8
CSE	3.7	4.8%	132	33%	14%	3.7

TABLE 4-20: HOST CUSTOMER OVERALL SATISFACTION WITH PROGRAM ADMINISTRATOR

4.3.2 Satisfaction with Program Application Steps

Applicants and host customers were asked a series of questions regarding their satisfaction with specific program application steps and procedures. The findings are summarized in the following section.

Application Submission Process

Applicants were asked to report their satisfaction with the application submission process. Table 4-21 shows that applicants in CSE reported moderately high satisfaction in 2020 (3.8), which was an increase from 2019. PG&E applicants reported moderately low levels of satisfaction in 2020 (2.6), which was the same as reported in 2019. SCE and SCG applicants both reported moderate satisfaction levels (3.4 and 3.5, respectively). SCG's satisfaction level represents a decrease from 2019 reported levels.

Program Administrator	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	Average Rating 2019
PG&E	2.6	8.9%	75	12%	33%	2.6
SCE	3.4	6.8%	57	19%	9%	3.5
SCG	3.5	8.6%	25	20%	8%	3.9
CSE	3.8	5.7%	39	28%	5%	3.3

TABLE 4-21: APPLICANT SATISFACTION WITH APPLICATION SUBMISSION PROCESS

Applications who provided low satisfaction rankings (1 or 2) had a lot to say regarding why they were dissatisfied with application submission process. Primary reasons were that it was too cumbersome, too confusing (without adequate support), and slow. Examples of the reasons they provided are presented in

Table 4-22 below.

TABLE 4-22: REASONS FOR DISSATISFACTION WITH THE APPLICATION SUBMITTAL PROCESS (RATING 1 OR 2)

Reason	Examples Provided by Respondents
	The online application is very difficult to navigate. There are sections, which are required to be completed even though they do not apply to the current application, there are certain sections of the application that (even when completed) the application doesn't recognize it as completed and therefore the application is on hold, etc. It does not allow for us to make changes requested by <pa>, which causes further delays in the application process. It has gotten slightly better in the past few months.</pa>
	Program [is] much too complicated and time intensive.
	The reviewers appear to have put additional unnecessary requirements into the process, slowing things down and adding work to everyone, including themselves.
C	The process is very long and difficult and requires a lot of documents that are redundant and unnecessary.
Cumbersome	It's a royal drag to fill out this application and gather all the paperwork and forms and formulas needed. It takes way too long to figure out what is wanted, where/who to go to for the information, the program doesn't always give you an example of what is needed, no one to go to ask what is needed/wanted if you don't understand, SO [] much information is needed, and to have to get the customers signature every time the application has to be resubmitted is all too time consuming. I never really want to see or have to work on an SGIP Application again, but since it's my job, I have to work with this system. If I didn't work in the solar business, I'd never know how to fill out this application or even begin to know what is needed or who to go to, to get the information. The contractor is forced to do this for the customer because the customer would never be able to work on this system unless they have a much higher level of understanding/education of the technical aspects and have the patience of Job.
	Did not really make any sense, and no direct directions or examples on what was needed.
	Too complicated, not clear enough on requirements, difficult to understand what is required.
	Not a transparent process and almost impossible to find help.
Confusing	I had to pay a third-party company to help complete the applications because it's too confusing.
	It is difficult, I am an engineer by education, it is difficult.
	It's very complex and convoluted and it's not clear. And, everyone tells you to just refer to the handbook.
	And, there is no training on the whole process beginning to end.
Claw	Timelines are way too long of a wait and the customers get upset that I don't know when or if they will receive the rebate after months of waiting.
Slow	I abandoned my project as the communication was too slow and not specific enough. Too many hurdles for me as a homeowner, I spent months trying to get a solar battery and traded emails, but finally gave up.

Paperwork Requirements for Proof of Project Milestone

Applicants were asked to report their satisfaction levels with the paperwork requirements for the proof of project milestone (PPM) stage. As shown in Table 4-23, applicants were moderately satisfied with the paperwork requirements for PPM (ratings ranging from 2.7 to 3.0).

Program Administrator	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	
PG&E	2.8	17.6%	13	8%	23%	
SCE	3.0	11.2%	12	8%	17%	
SCG	2.7	40.7%	5	20%	40%	
CSE	3.0	20.5%	10	10%	20%	

TABLE 4-23: APPLICANT SATISFACTION WITH PAPERWORK REQUIREMENTS FOR PPM

Paperwork Requirements for Incentive Claim Stage

As shown in Table 4-24, applicants were asked to report their satisfaction levels with the paperwork requirements for the incentive claim stage. PG&E and SCG applicants reported moderate levels of satisfaction with this stage, while SCE and CSE applicants reported slightly higher satisfaction levels. Many applicants reported that the documentation requirements for the ICF stage were redundant or unnecessary.

Program Administrator	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1
PG&E	2.7	10.3%	48	13%	25%
SCE	3.4	9.7%	38	26%	13%
SCG	3.1	10.8%	24	21%	17%
CSE	3.4	11.0%	26	35%	8%

TABLE 4-24: APPLICANT SATISFACTION WITH PAPERWORK FOR INCENTIVE CLAIM STAGE

Inspection Process

As shown in Table 4-25, applicants in SCE, SCG, and CSE reported moderately high levels of satisfaction with the inspection scheduling process (ratings range from 3.3 to 3.9). However, PG&E applicants reported lower satisfaction levels with an average of 3.3. Many applicants mentioned long wait times until the inspection was scheduled. Some applicants noted that customers completed a video for inspection, but the review of the online inspection was held up for months.

Program Administrator	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	
PG&E	3.3	8.4%	41	20%	12%	
SCE	3.9	8.1%	33	33%	9%	
SCG	3.8	12.6%	18	28%	11%	
CSE	3.7	10.9%	22	23%	5%	

TABLE 4-25: APPLICANT SATISFACTION WITH INSPECTION SCHEDULING

In 2020, the host customers who had made it to the inspection scheduling process reported being fairly satisfied with it. Yet the average satisfaction rating was decreased from 4.8 (in 2018) to 3.7 in 2020. It should be noted, however, that only five host customers responded to this question in 2018. Compared to 2017, the host customers satisfaction with the inspection scheduling process modestly increased from 3.4 to 3.7.

TABLE 4-26: HOST CUSTOMER SATISFACTION WITH INSPECTION SCHEDULING

Program Aspect	Average	Rel. Prec.	# of	% Rating	% Rating	Average
	Rating 2020	90% Conf	Respondents	5	1	Rating 2018
Inspection scheduling	3.7	6.9%	46	39%	9%	4.8

Incentive Timeline

Applicants were asked to report their satisfaction with the time it takes to receive the upfront incentive. Table 4-27 shows that applicants in SCE and SCG reported moderately high satisfaction levels with the timeline (3.7 each), while applicants in CSE and PG&E were less satisfied (3.2 and 2.7, respectively). Some applicants who were dissatisfied with the time to receive the incentive mentioned that customers would complain directly to the applicants regarding the incentive timeline.

Program Administrator	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	
PG&E	2.7	11.4%	34	15%	24%	
SCE	3.7	9.2%	28	32%	11%	
SCG	3.7	12.4%	15	40%	7%	
CSE	3.2	11.0%	21	24%	10%	

TABLE 4-27: APPLICANT SATISFACTION WITH TIME TO RECEIVE INCENTIVE

Host customers expressed moderate satisfaction with the time it takes to receive the upfront incentive (3.4), similar to what was reported in 2018 (3.3)

Program Aspect	Average Rating 2020	Rel. Prec. 90% Conf	# of Respondents	% Rating 5	% Rating 1	Average Rating 2018
Time to receive upfront payment	3.4	4.6%	114	24%	13%	3.3

TABLE 4-28: HOST CUSTOMER SATISFACTION WITH TIME TO RECEIVE INCENTIVE

PBI Payment Process

Only three applicant respondents and one host customer respondent were eligible to rate their satisfaction with the Performance Based Incentive (PBI) payment process; giving an average rating of 3.7 from applicants and 5.0 from the host customer. These responses should be considered anecdotal.

5 STUDY FINDINGS AND RECOMMENDATIONS

In this section we present a summary of the 2020 PA evaluation key findings from the surveys conducted with program applicants, host customers, and administrators. Findings presented in this section identify areas of the SGIP that are working and that have positive participant satisfaction, as well as areas of the SGIP where participants are dissatisfied and where improvements are needed moving forward.

5.1 STUDY FINDINGS

In 2020, applicant satisfaction levels with the PAs overall, as well as applicants' perceptions of their timeliness, accessibility, and helpfulness were moderately low for PG&E, moderate for SCE and CSE, and moderately high for SCG. Notably, SCG's applicant satisfaction with the three categories of timeliness, accessibility, and helpfulness improved in comparison to 2019. Overall, applicant satisfaction primarily seemed to suffer due to difficulty getting timely, consistent, and helpful assistance from their PA when navigating the complex SGIP application process and new program requirements. The issues experienced by applicants resulted in long waiting periods to get questions answered, application issues resolved, and paperwork processed.

Most host customers rely heavily on their applicant for support in submitting their SGIP documents and when navigating the overall process. However, host customer's do interact with the PAs, largely through email communications. Overall host customer satisfaction with their PA was slightly lower in 2020 for PG&E and SCE compared to their 2018 reported levels of satisfaction, while the average satisfaction rating for SCG improved by 0.1 and CSE remained consistent with their 2018 host customer level of satisfaction. Host customers who were dissatisfied largely cited a lack of communication or confusing technical information that they didn't know what to do with. Others expressed frustrations over the changes in documentation and eligibility requirements necessary to receive SGIP Equity Resiliency funds and how those changes were communicated to them. Despite these challenges host customers appear to have a better understanding of what is required from them throughout the SGIP incentive process. Although the cause for this cannot be directly determined from the host customers survey, it is likely that trainings hosted by the PAs targeting applicants and applicant's increased experience with the SGIP has made applicants a more well-informed resource for host customers.

All four SGIP PAs reported that in 2020 they had increased staffing levels to deal with the influx of program applications. They also reported placing importance on timely and effective communications with SGIP host customers and applicants. However, the unprecedented application volume along with the numerous complex program changes in 2020 created a challenging environment for PAs to maintain, let alone improve, levels of communication and timeliness in comparison to previous years. Though

applicants complained of long lag times and difficulty reaching program staff, they also reported higher levels of understanding when asked about the reasons for application suspensions. In open-ended responses, many applicants also expressed an understanding of the unprecedented nature of the application volume in 2020 and appreciated the efforts PAs were making given the circumstances.

5.2 RECOMMENDATIONS FOR PROGRAM IMPROVEMENT

The evaluation team identified a series of recommendations based on key observations from this study. The recommendations are grouped below by whether they relate to PA timeliness, accessibility, or helpfulness.

5.2.1 Timeliness

Track and reduce the number of touches on a single application. Applicants' average timeliness satisfaction scores decreased in 2020 for all PAs except SCG. More than one-third (38%) of applicants that participating in SGIP prior to 2020 reported decreased satisfaction with PA timeliness. While the increased application volume in 2020 certainly had an impact on PAs' ability to respond to issues and inquires in a timely manner, many applicants mentioned multiple rounds of follow-ups with long lag times between PA responses as an additional cause of longer application timelines. As one applicant described their frustration: "[*There were*] *long delays after submittal to request for more information/correction followed by another submittal only to receive a different request for more information/correction; why weren't they both present in the first round?*" Reducing the number of distinct responses and requests for missing information on a single application, PAs should spend the time to review the entire application for any other issues. It's likely that an application with at least one question or issue will have others as well. Though it will take the administrator more time and effort to review the entire application during the first interaction, the administrator's overall effort will decrease as the total number of application questions and issues would be reduced along with the processing timeline.

Identify and proactively reach out to applicants with high levels of suspensions to discuss common issues and answer applicant questions. In 2020 SCE began an effort to identify key applicants with high application suspension rates. They identified common issues in the applications and met with the applicant to discuss those issues along with any other SGIP questions from the applicant. Applicants that participated in these types of meetings were highly satisfied with their interactions with the PA. This effort helped to reduce the number of issues these applicants experienced (thus accelerating their application timelines) along with freeing up the administrator's time to help others. The evaluation team recommends that each of the four PAs implements a similar proactive campaign to help applicants with high suspension rates and ultimately reduce timelines across the program.

5.2.2 Accessibility

Set up regular open office hours to allow applicants to call and speak with someone regarding questions they have with the SGIP application process. Applicants continue to be dissatisfied with PA accessibility in 2020. Applicants complained that it is difficult to get a hold of PA staff as the phone is not answered and phone calls are often not returned. In 2020, PG&E implemented regular office hours where applicants could speak directly to program administrators and receive timely information regarding applications. Applicants that attended office hours were very satisfied with the experience, as one applicant noted, *"The office hours weekly meeting is extremely helpful in resolving questions and issues."* This type of direct oral communication is very important for a program such as SGIP that has a highly involved application process. The evaluation team recommends that all four PAs establish a similar office hour program to offer increased availability to applicants. Some topics may not be suited for public discussion; therefore some portion of the allocated office hour time could be set aside for private one-on-one meetings between applicants and the PA.

Ensure PA staff fielding applicant inquiries are fully trained and authorized to make decisions. Again in 2020, applicants expressed frustration not only with the difficulty they had communicating directly with the PAs regarding their application questions or issues, but also the inconsistent or unhelpful responses they received from those they were able to communicate with. This experience added to the frustration and dissatisfaction felt by the applicants. As one applicant stated, *"I think that they have been helpful in some of the easier situations. But the harder projects were pushed to the side without resolution."* Program staff should be fully trained about all aspects of SGIP that they may encounter in their role.

5.2.3 Helpfulness

Regularly update video resources on SGIP websites including tutorials on the application submission process, review of the statewide portal, and recordings of quarterly workshops. Applicants continue to report confusion with documentation requires, technical requirements, and the application process. In 2020, applicants experienced significant issues understanding the new equity and resiliency requirements for new budget categories. Applicants with prior experience of the SGIP program had more questions in 2020 due to unclear changes to SGIP program rules. As the program continues to change and evolve, applicants need up-to-date resources and tutorials to help participants understand the program rules and processes. The statewide portal currently maintains two video tutorials on its FAQ section, one created in 2016 (SGIP Applicant Interface Tutorial) and the other created in 2018 (SGIP Database Walkthrough). Given the pace of changes to the program, these video tutorials should be updated and regularly refreshed every two years to maintain relevance. Video recordings of the quarterly workshops should also be made available on SGIP websites. Additionally, any workshops or tutorials that take place throughout the year should be made available online (one PA mentioned they held a workshop covering an end-to-end walk through of SGIP at the beginning of 2020, however a recording of the workshop was not made available

online). Online videos may make it easier for some participants to understand the specific requirements needed for the SGIP application, thus minimizing the number of issues that need to be corrected downstream.

Enhance clarity and consistency in communication with applicants and host customers regarding their applications. Again in 2020, applicants and host customers reported that they were often confused with information they received from their PA. One applicant stated, *"There are industry terms that I am sure the administrator is familiar with, but the layman is not. I need some help and clarification."* Others reported information was inconsistent depending on the staff person they interacted with. Host customers were also confused with some of the written communication received and were unclear whether any actions were required on their part. PAs should take time to clearly understand applicants' issues and assign them to a consistent staff member to help them through the application process. Specialized industry terms and program jargon should be clearly explained, if used in communications. This can help alleviate confusion and provide some consistency to the application process. When communicating with host customers, administrators should clearly delineate what action (if any) needs to be taken on the part of the host customer.

Reinforce to applicants the importance for effective communication with host customers about their role in the SGIP application process and available resources. Host Customer clarity on eligibility and documentation requirements, as well as the division of labor between the applicant and the host customer improved in 2020 from ratings provided in 2018. The PAs should foster this growth by clearly communicating the importance of the role applicant plays in the host customer's SGIP experience during SGIP workshops and in working group sessions. Host customers also expressed lower clarity, on average, on their application status, while less than 12% of host customers reported using the "*Check My Application Status*" feature on the statewide SGIP portal. The PAs should remind the applicants and host customers that the "*Check My Application Status*" can be the first stop in looking for updates on SGIP application status.

