

















# 2017 SGIP PROGRAM **ADMINISTRATOR** PERFORMANCE EVALUATION



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# **TABLE OF CONTENTS**

1	EXEC	UTIVE SUMM	ARY	1-1
	1.1	SGIP PARTICI	IPATION	1-1
	1.2		FINDINGS	
			sfaction by Technology Group	
	1.3		ATIONS	
		1.3.1 Time	eliness	1-5
			essibility	
		1.3.3 Help	pfulness	1-6
2	INTR	ODUCTION		2-1
	2.1	PROGRAM OV	VERVIEW	2-1
		2.1.1 Prog	gram Changes in 2017	2-1
			get	
	2.2		ARTICIPATION DURING 2017	
			dy Population	
	2.3	EVALUATION	GOALS	2-5
	2.4	REPORT CONT	TENTS	2-6
3	DATA	AND METHO	DD\$	3-1
	3.1	PROGRAM AD	DMINISTRATOR IN-DEPTH INTERVIEWS	3-1
	3.2		SURVEY	
			ıple Design	
	3.3		MER SURVEY	
			ıple Design	
	3.4	BENCHMARKI	ING	3-10
4	PAR1	ICIPANT EXP	ERIENCE	4-1
	4.1	PROGRAM CL	ARITY	4-1
	•••		licant Findings	
			t Customer Findings	
	4.2	INTERACTION	NS WITH PROGRAM ADMINISTRATORS	4-8
	4.3	RESOLVING P	PROBLEMS, ISSUES, OR DELAYS	4-11
		4.3.1 Appl	licant Findings	4-11
			t Customer Findings	
	4.4		DGRAM ELEMENTS	
			ery	
			osite	
			rkshops	
_			sfaction with Other Program Elements	
5				
	5.1		TISFACTION AND EXPERIENCE	
			erience by Applicant Prolific Status	
	5.2	•	erience by Technology Group	
	J.Z		N TO PREVIOUS YEARSect Comparison	
			eliness	



	5.2.3	Helpfulness and Accessibility	5-11		
	5.2.4	Host Customer Clarity and Satisfaction			
	5.2.5	Overall Satisfaction			
5.3	BENCH/	MARKING	5-14		
5.4	RECOM	MENDATIONS FOR PROGRAM IMPROVEMENT	5-18		
	5.4.1	Timeliness	5-18		
	5.4.2	Accessibility			
	5.4.3	Helpfulness	5-19		
APPENDI	X A	SURVEY INSTRUMENTS	A-1		
A.1	SGIP P	A IN-DEPTH INTERVIEW GUIDE	A-2		
A.2	PROGRAM APPLICANT SURVEY INSTRUMENT		A-4		
	A.2.1	Introduction	A-4		
	A.2.2	Screening Questions			
	A.2.3	Process			
	A.2.4	Communication			
	A.2.5	Workshops			
	A.2.6 A.2.7	PA Helpfulness			
	A.2.7 A.2.8	Attribution			
	A.2.6 A.2.9	Satisfaction			
A.3		RVEY FOR HOST CUSTOMERS			
A.5	A.3.1	Background			
	A.3.2	Communication			
	A.3.3	Website			
	A.3.4	Satisfaction	A-30		
	A.3.5	Process	A-31		
	A.3.6	Compare to Prior Years			
	A.3.7	Attribution			
	A.3.8	Closing	A-35		
APPENDI	X B	( B APPLICANT SURVEY RESPONSE FREQUENCIES			
APPENDI	хс	HOST CUSTOMER SURVEY RESPONSE FREQUENCIES	C-1		
LIST OF	FIGUR	ES			
Figure 1-1:	: Non-Can	elled Applications in 2016 and 2017 by PA and budget Category	1-2		
Figure 1-2:	: Applican	t and Host Customer Overall Satisfaction by PA	1-3		
•	• • •	t Satisfaction with Timeliness, Helpfulness, Accessibility, and Overall by Technology Group			
•	• • •	gy Mix of Non-Cancelled Projects in 2016 and 2017			
-	• •	t's Typical Number of Clarifying Questions for the Program Administrator			
=		Questions Applicants Asked of PAs			
		t Satisfaction with Accessibility, Helpfulness, and Timeliness by PA			
_		elled Applications in 2016 and 2017 by PA and Budget Category			
Figure 4-6:	: Average	Time for Initial Reply to Inquiry by PA	4-10		



Figure 4-8: Longest Time to Resolve Issue by PA	Figure 4-7: Longest Time for Initial Reply to Inquiry by PA	4-10
Figure 4-10: Resolution of Host Customer Issues, Problems, or Delays by PA	Figure 4-8: Longest Time to Resolve Issue by PA	4-11
Figure 4-11: Host Customer Reported Time to Resolve Issues by PA	Figure 4-9: Host Customer Recollection of Problems, Issues, or Delays by PA	4-12
Figure 4-12: Applicant and Host Customer Ratings of Website Usefulness	Figure 4-10: Resolution of Host Customer Issues, Problems, or Delays by PA	4-13
Figure 4-13: Applicant Participation at Quarterly Workshops in 2017	Figure 4-11: Host Customer Reported Time to Resolve Issues by PA	4-14
Figure 4-14: Applicant Satisfaction with the Application Submission Process	Figure 4-12: Applicant and Host Customer Ratings of Website Usefulness	4-16
Figure 4-15: Applicant Satisfaction with Various Program Elements	Figure 4-13: Applicant Participation at Quarterly Workshops in 2017	4-17
Figure 4-16: Host Customer Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Prolific Status  Figure 5-1: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Prolific Status  Figure 5-3: Host Customer Clarity with Program Aspects by their Applicant's Prolific Status  Figure 5-3: Host Customer Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Technology Group  Figure 5-5: Host Customer Clarity with Program Aspects by Technology Group  Figure 5-6: Host Customer Satisfaction with Provided Information and Overall by Technology Group  LIST OF TABLES  Table 1-1: Applications Submitted in 2017 by PA and Technology group  Table 2-1: Program Year Comparison of Technology Incentive Budget Allocation  Table 2-2: Statewide SGIP Budget and Program Administrator Allocations  Table 2-3: SGIP Applicant, Applicant, and Host Customer Count by Program Administrator  Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: SGE Applicant Survey Strata Quota  Table 3-4: SCE Applicant Survey Strata Quota  Table 3-5: SGG Applicant Survey Strata Quota  Table 3-6: CSE Applicant Survey Strata Quota  Table 3-7: Target Host Customer Sample Size by PA.	Figure 4-14: Applicant Satisfaction with the Application Submission Process	4-18
Figure 5-1: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Prolific Status	Figure 4-15: Applicant Satisfaction with Various Program Elements	4-19
Figure 5-2: Host Customer Clarity with Program Aspects by their Applicant's Prolific Status  Figure 5-3: Host Customer Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Technology Group.  Figure 5-5: Host Customer Clarity with Program Aspects by Technology Group  Figure 5-6: Host Customer Satisfaction with Provided Information and Overall by Technology Group.  LIST OF TABLES  Table 1-1: Applications Submitted in 2017 by PA and Technology group.  Table 2-1: Program Year Comparison of Technology Incentive Budget Allocation.  Table 2-2: Statewide SGIP Budget and Program Administrator Allocations.  Table 2-3: SGIP Application, Applicant, and Host Customer Count by Program Administrator  Table 2-4: Count of Applicants and Host Customers with Applications in Multiple PA Territories.  Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Survey Strata Quota.  Table 3-3: PG&E Applicant Survey Strata Quota.  Table 3-4: SCE Applicant Survey Strata Quota.  Table 3-6: CSE Applicant Survey Strata Quota.  Table 3-7: Target Host Customer Sample Size by PA.	Figure 4-16: Host Customer Satisfaction with Inspection Scheduling, Time to Receive Upfront Payment, and PBI Payment Process	4-20
Figure 5-3: Host Customer Satisfaction with Provided Information and Overall by Prolific Status  Figure 5-4: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Technology Group  Figure 5-5: Host Customer Clarity with Program Aspects by Technology Group  Figure 5-6: Host Customer Satisfaction with Provided Information and Overall by Technology Group  LIST OF TABLES  Table 1-1: Applications Submitted in 2017 by PA and Technology group  Table 2-1: Program Year Comparison of Technology Incentive Budget Allocation  Table 2-2: Statewide SGIP Budget and Program Administrator Allocations  Table 2-3: SGIP Application, Applicant, and Host Customer Count by Program Administrator  Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: PG&E Applicant Survey Strata Quota  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 PA.	Figure 5-1: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Prolific Status	5-2
Figure 5-4: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Technology Group	Figure 5-2: Host Customer Clarity with Program Aspects by their Applicant's Prolific Status	5-3
Figure 5-5: Host Customer Clarity with Program Aspects by Technology Group  LIST OF TABLES  Table 1-1: Applications Submitted in 2017 by PA and Technology group	Figure 5-3: Host Customer Satisfaction with Provided Information and Overall by Prolific Status	5-4
Figure 5-6: Host Customer Satisfaction with Provided Information and Overall by Technology Group	Figure 5-4: Applicant Satisfaction with PA Timeliness, Helpfulness, Accessibility, and Overall by Technology Group	5-5
LIST OF TABLES  Table 1-1: Applications Submitted in 2017 by PA and Technology group	Figure 5-5: Host Customer Clarity with Program Aspects by Technology Group	5-6
Table 1-1: Applications Submitted in 2017 by PA and Technology group	Figure 5-6: Host Customer Satisfaction with Provided Information and Overall by Technology Group	5-7
Table 2-1: Program Year Comparison of Technology Incentive Budget Allocation		1.2
Table 2-2: Statewide SGIP Budget and Program Administrator Allocations	**	
Table 2-3: SGIP Application, Applicant, and Host Customer Count by Program Administrator  Table 2-4: Count of Applicants and Host Customers with Applications in Multiple PA Territories  Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: PG&E Applicant Survey Strata Quota  Table 3-4: SCE Applicant Survey Strata Quota  Table 3-6: CSE Applicant Survey Strata Quota  Table 3-7: Target Host Customer Sample Size by PA		
Table 2-4: Count of Applicants and Host Customers with Applications in Multiple PA Territories  Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: PG&E Applicant Survey Strata Quota  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 PA		
Table 3-1: Target and Achieved Applicant Sample by Program Administrator  Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: PG&E Applicant Survey Strata Quota  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 PA		
Table 3-2: Prolific Applicant Population and Number of Completes by PA  Table 3-3: PG&E Applicant Survey Strata Quota  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 PA		
Table 3-3: PG&E Applicant Survey Strata Quota		
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 PA		
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 PA	,	
Table 3-6: Pu&E nost customer strata vuota	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		



Table 4-1: PG&E Host Customer Clarity with Program Aspects	4-5
Table 4-2: SCE Host Customer Clarity with Program Aspects	4-6
Table 4-3: SCG Host Customer Clarity with Program ASpects	4-6
Table 4-4: CSE Host Customer Clarity with Program Aspects	4-7
Table 4-5: Applicant Satisfied with PA Involvement in Resolved Suspended Projects	4-12
Table 4-6: Applicant Satisfaction with Lottery Process by PA	4-15
Table 5-1: Applicant Overall Satisfaction With PA	5-1
Table 5-2: Host Customer Overall Satisfaction With PA	5-1
Table 5-3: Applicant Reported Change in Satisfaction Levels in 2017 vs Prior Years	5-8
Table 5-4: Applicant Reported Average Time for Initial Reply to Inquiry Longer than One Week by PA and Evaluation Year	5-9
Table 5-5: Applicant Reported Longest Time for Initial Reply to Inquiry Longer than One Month by PA and Evaluation Year	5-9
Table 5-6: Applicant Reported Longest Time For Issue Resolution Longer than One Month by PA and Evaluation Year	5-10
Table 5-7: Applicant Satisfaction with PA Timeliness by Evaluation Year	5-10
Table 5-8: Applicant Satisfaction with PA Helpfulness and Accessibility by Evaluation Year	5-11
Table 5-9: PG&E Host Customer Clarity with Program Aspects by Evaluation Year	5-12
Table 5-10: SCE Host Customer Clarity with Program Aspects by Evaluation Year	5-12
Table 5-11: SCG Host Customer Clarity with Program Aspects by Evaluation Year	5-12
Table 5-12: CSE Host Customer Clarity with Program Aspects by Evaluation Year	5-13
Table 5-13: Applicant and Host Customer Reported Overall Satisfaction in 2016 and 2017	5-13
Table 5-14: Participation Process Identified Best Practices and Scoring	5-15
Table 5-15: Marketing and Outreach Identified Best Practices and Scoring	5-16
Table 5-16: Benchmarking of SGIP With Identified Best Practices	5-17



# **1** EXECUTIVE SUMMARY

California's Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed generation and advanced energy storage (AES) 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 Program Administrators are Pacific Gas & 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.<sup>1</sup> 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 2017.

Key findings of this evaluation were informed by data collected through interviews with representative samples of SGIP applicants, host customers, 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 technology group (generation, large-scale storage, and small residential storage) during Program Year (PY) 2017.<sup>2</sup> During 2017 the program administrators received a total of 3,663 individual applications. PG&E received the highest volume of PY 2017 applications (1,402), followed by SCE (1,209), and CSE (737). SCG received the smallest amount of applications in 2017 (315). Most applications (75%) were for small residential storage projects, followed by large-scale storage projects (24.6%). Less than one-percent of applications submitted in PY 2017 were for generation projects.<sup>3</sup>

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

<sup>&</sup>lt;sup>2</sup> A snapshot of the program tracking data was taken on November 1, 2017.

<sup>&</sup>lt;sup>3</sup> Applications for generation projects in 2017 included the following technologies: wind turbine, internal combustion, gas turbine, microturbine, and pressure reduction turbine.



TABLE 1-1: APPLICATIONS SUBMITTED IN 2017 BY PA AND TECHNOLOGY GROUP

PA	Generation	Large-Scale Storage	Small Residential Storage	Total	% of Total
PG&E	8	313	1,081	1,402	38%
SCE	4	338	867	1,209	33%
SCG	1	65	249	315	9%
CSE	1	185	551	737	20%
Total	14	901	2,748	3,663	

It's also important to note the total number of applications as well as the significant increase in application volume from PY 2016 when considering each PA's ability to maintain accessibility, helpfulness, and timeliness. As shown in Figure 1-1, PG&E and SCE received over 1,000 non-cancelled applications in 2017, constituting a near 30x increase for PG&E and a 25x increase for SCE from 2016. SCG experienced a 35x increase in non-cancelled applicants in 2017 and CSE had a 24x increase.

1,600
1,400
1,200
1,000
800
600
400
200

**CSE** 

PG&E

SCE

■ Small Residential Storage

2017

SCG

FIGURE 1-1: NON-CANCELLED APPLICATIONS IN 2016 AND 2017 BY PA AND BUDGET CATEGORY

#### 1.2 EVALUATION FINDINGS

PG&E

SCE

Generation

2016

SCG

■ Large Scale Storage

0

Applicants and host customers were asked to rate their satisfaction with each PA in relation to SGIP in 2017 on a five-point scale, where 1 is not satisfied and 5 is extremely satisfied. Figure 1-2 shows the weighted-average and 90% confidence interval for the applicant and host customer satisfaction scores reported within each PA territory. Participants in PG&E and SCE service territories were moderately

**CSE** 



satisfied with the PAs with average satisfaction scores ranging from 2.8 to 3.2. Participants in SCG and CSE territories reported higher levels of satisfaction with the PAs, receiving average satisfaction scores ranging from 3.4 to 4.1. Host customer were less satisfied than the applicants in SCG and CSE territories. A significant proportion of applicant respondents in SCG and CSE territories, 31% and 52% respectively, reported extreme satisfaction with PAs (score = 5).



FIGURE 1-2: APPLICANT AND HOST CUSTOMER OVERALL SATISFACTION BY PA

At a broad level, many participants reported moderate- to high satisfaction with the program while simultaneously expressing concerns about various program elements. Despite their areas of concern, participants often noted that they appreciate the availability of incentives for the emerging technologies targeted by SGIP. Applicants also reported high levels of satisfaction with the statewide SGIP website and the quarterly workshops hosted by the PAs.

Applicants noted dissatisfaction with the project timelines and documentation requirements. Due to the drastic increase in application volume in 2017, PAs experienced a back-log in application reviews. Many applicants expressed frustrations with program delays, some noting "a really long timeline just for initial project confirmations (10 months to a year)." Project timelines were also a source of dissatisfaction and confusion for host customers.

There was a general lack of clarity among applicants regarding the documentation requirements. Typical applicant responses were similar to the following comment: "Over the past six months [we] have been struggling to simply fill out the paperwork for our SGIP applications, ICFs and Net Metering. There is virtually no guidance or training on how we fill out these forms — or what the correct responses should

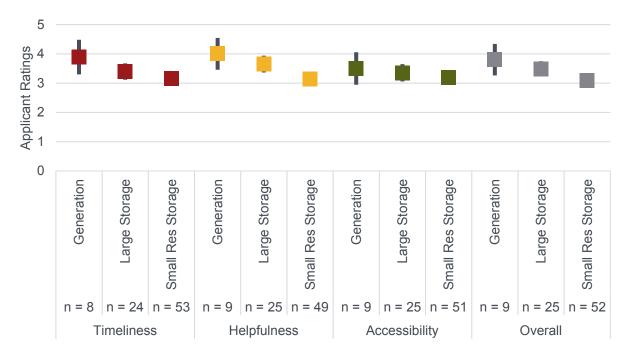


be. [...] staff at the various entities responsible for parts of this process either do not know the answers themselves or simply do not respond to our questions." Applicants expressed a desire for PAs to reduce the frequency of applications sent back to the applicant for corrections. Suggestions to reduce application issues included more tutorials on the SGIP process and increased alignment across PAs with program requirements.

### 1.2.1 Satisfaction by Technology Group

Applicants were asked to rate their satisfaction with PA timeliness, the level of PA helpfulness, the level of PA accessibility, and their overall satisfaction with the PA. Applicant responses can be grouped based on the typical project type they handled: generation, large-scale storage, or small residential storage. Figure 1-3 shows the average ratings reported by applicants for each PA by technology group. Applicants with generation projects were highly satisfied with each topic, with average scores ranging from 3.5 to 4.0. Applicants with large-scale storage projects were also highly satisfied with each topic (scores ranging from 3.4 to 3.6), but to a lesser degree than those with generation projects. Applicants with small residential projects were the least satisfied with PAs, reporting moderate satisfaction levels across all topics (scores ranging from 3.1 to 3.2).

FIGURE 1-3: APPLICANT SATISFACTION WITH TIMELINESS, HELPFULNESS, ACCESSIBILITY, AND OVERALL BY TECHNOLOGY GROUP





Applicants with generation projects are more satisfied with the timeliness, helpfulness, accessibility, and overall, than those with large storage projects. Applicants with small residential projects are the least satisfied. Concerns mentioned by small residential storage project applicants included burdensome documentation requirements, such as requiring signatures from the host customer when minor changes to the application were made. Some applicants also expressed the desire for a more simplified application process for the small storage projects; applicants cited the process used in the California Solar Initiative (CSI) general market program as an example of a similar rebate program with a more streamlined application procedure. Host customers with small residential storage projects were also less satisfied and had less clarity with the program than those with large-scale storage projects.

#### 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

Lower the threshold for host customer signatures when changes are made to the application. Many surveyed applicants noted that certain signature requirements for changes made to an application were unnecessary and slowed down the application process. Applicants commented that "if there's a small clerical issue," such as a new email address or other minor application detail, customers should not need to sign-off. By lowering the threshold for required signatures, repeated back-and-forth communications between the applicant and host customer can be reduced and the overall application timeline shortened.

**Prioritize web-enabled processes where possible.** Some program administrators require wet signatures from host customers and do not allow the use of DocuSign (a cloud-based e-signature platform). If a customer doesn't have a printer and scanner the applicant must physically meet with the customer every time a signature is needed. This process limitation adds to the application timeline.

Consider simplifying steps and requirements for small residential storage projects. Applicants and host customers expressed the desire for a more simplified application process for small residential storage projects. It's commonly felt that the application process for small storage projects is "way too much work for a \$5K rebate." Participants cited the process used in the California Solar Initiative (CSI) general market program as an example of a similar rebate program with a more streamlined application procedure. The CPUC and the SGIP working group should consider whether the inherent differences in approaches and challenges between the residential and nonresidential sector warrant the creation of two separately designed incentive programs.



When there are long gaps between incentive step openings, anticipate increased demand and staff accordingly. There was a significant break between the last day the SGIP accepted applications in 2016 and the program opening in 2017. This gap, along with changes in program rules and structure, led to increased demand at the beginning of PY 2017. Application review delays might have been mitigated if PAs had increased staff levels in anticipation of increased demand. As one applicant mentioned, "any time a new incentive comes out they've got to know there will be huge demand for it."

### 1.3.2 Accessibility

Create a customer-facing section of the SGIP portal that shows project status and includes simplified information regarding project procedures and timelines. Host customers reported low levels of clarity with program timelines. They expressed dissatisfaction with the application processing time and little understanding of their application status. A few host customers and applicants suggested creating more transparency for the host customer by "show[ing] end customers the SGIP process flow and a dashboard of where they stand in the process." A dedicated space within the SGIP application portal for customers would allow each customer to check on the status of their application directly, without having to rely on their applicant for that information. The customer-facing portal could also contain a simplified diagram of the SGIP process that is customized for their specific project type (e.g., by budget category and two-step vs. three-step). This customization would minimize confusion for the customer by providing direct access and simpler information.

Communicate expected timelines and important program information directly to host customers at the outset of each application. When an application is submitted, initial email communications with host customers should include specific and simplified information regarding SGIP. Program steps and procedures should be clearly laid out. The expected timeline should be communicated directly to the host customer including an estimate of when the host customer would receive the upfront incentive and, if applicable, begin PBI payments. This initial email should also include instructions on how to check application status. Communicating this information directly to the host customer at the outset of the application ensures customers understand the program process and helps maintain reasonable expectations of program timelines.

# 1.3.3 Helpfulness

Use a ticket system to track and manage issues and resolutions. Applicants have commented that questions or issues are sometimes passed from person to person, at times getting handed off to someone without the necessary expertise or historical knowledge. In other cases, applicants reported problems that were never addressed or remain unresolved. A ticket system that tracks each issue individually (along with the name of the PA personnel and the proposed solution) would help PAs improve issue tracking.



Tickets could be managed in a searchable environment and PAs could search by issue type to see common solutions to similar issues, or track solutions already provided to a particular participant.

Require developers to complete training materials on SGIP processes and requirements as a prerequisite for addition to the approved developer list. The SGIP developer list is currently used to track the developer cap on incentives. However, it could also be used to help ensure high quality installations and application processing for the customer. An approved developer could be required to complete training and/or have managed a minimum number of applications in the prior program year. Applications would then be required to use an approved developer unless the homeowner is also the applicant and is planning to act as his/her own developer for the project.

As stated in the 2016 evaluation, continue to provide more examples, videos, and other training to clarify documentation expectations associated with application and document submittal on the statewide portal. Applicants consistently noted that it can be difficult to know precisely how project documentation is to be filled out and most applicants had at least one application flagged by the PA for missing information. For these reasons, we recommend the PAs continue to develop new guidance and training materials. Applicants requested "more training focused on the actual application process and what to expect during that process." Training materials should be kept current by making edits to or removing existing materials, as appropriate. The FAQs on the statewide portal should be updated on a regular basis with newly identified questions. Full recordings of the quarterly workshops should be recorded and posted online alongside the presentation slides (which are already posted). PAs should continue to identify opportunities for documentation templates to provide to applicants, such as the preliminary monitoring plan (PMP) template that was developed and posted in 2017.

# 2 INTRODUCTION

California's Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed generation and advanced energy storage (AES) 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 Program Administrators are Pacific Gas & 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.

#### 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, and application process. The 2017 Self-Generation Incentive Program Handbook<sup>1</sup> describes the application process, technology eligibility requirements, and incentive levels applicable to Program Year (PY) 2017.

# 2.1.1 Program Changes in 2017

Several changes were made to the SGIP rules and requirements in 2017. Among those were revisions to its technology incentive budget allocations and to the application reservation process.

On July 1, 2016 the CPUC issued Decision 16-06-055 revising the SGIP pursuant to Senate Bill 861, Assembly Bill 1478, and implementing other changes.<sup>2</sup> The Decision made several changes to the SGIP, including administering funds continuously rather than incrementally each year, and allocating 75% of program funds to energy storage. In 2016, the SGIP administrators allocated 75% of the annual incentive budget to renewable and emerging technology projects and 25% to non-renewable fueled conventional combined heat and power (CHP) projects. In 2017, 80% of the incentive budget was allocated to storage technologies and 20% to generation. The full list of project types by incentive budget categorization in PY 2016 and PY 2017 is found in Table 2-1 below.

<sup>&</sup>lt;sup>1</sup> 2017 SGIP Handbook: https://www.selfgenca.com/documents/handbook/2017

<sup>&</sup>lt;sup>2</sup> http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M163/K928/163928075.PDF



TABLE 2-1: PROGRAM YEAR COMPARISON OF TECHNOLOGY INCENTIVE BUDGET ALLOCATION

	PY 2	2016	PY 2017		
Project Type	Renewable & Emerging Tech	Nonrenewable Fueled CHP	Storage	Generation	
Advanced Energy Storage	Х		Х		
Fuel Cell	Х			Х	
Biogas Adder	Х			Х	
Wind Turbine	Х			Х	
Waste Heat to Power	Х			Х	
Pressure Reduction Turbine	Х			Х	
Internal Combustion Engine		X		Х	
Microturbine		X		Х	
Gas Turbine		Х		Х	
Steam Turbine		Х		Х	
Budget Allocation	75%	25%	80%	20%	

Another key change in 2017 was the creation of a lottery system as part of the program's reservation request stage. Applications are selected on a first-come basis, however if application submissions on a single day exceed available funding in a PA's territory for a given budget and incentive step, a lottery is triggered. The lottery system is meant to prevent any single entity from flooding the application system at the moment of program opening in an attempt to receive funding for an outsize number of projects.

### 2.1.2 Budget

The 2017 program year began on May 1, 2017. Authorized incentive collections through the end of 2019 total \$501,735,000.<sup>3</sup> Allocations for each PA are summarized in Table 2-2. The SGIP budget is further split by technology, with 80% allocated to energy storage technologies and 20% for generation technologies. Within the energy storage budget, 13% of funds are allocated to small residential projects less than or equal to 10 kW (10.4% of overall SGIP budget).

Each PA's incentive budget is divided into three or five steps, depending on the budget category (small residential storage, large-scale storage, and generation).<sup>4</sup> The incentive steps allow the PAs to ensure distribution of incentive monies across participating entities while decreasing the available incentive amounts over time. During 2017, incentives were not dispensed beyond step 2 of any PA's budget category.

Available authorized incentives include 50% of 2016 collections plus authorized incentive collections for 2017, 2018 and 2019.

<sup>&</sup>lt;sup>4</sup> See SGIP 2017 V5 Handbook: Section 3.1 (Incentive Rates) for further detail on the incentive steps and associated incentive rates.



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

Program Administrator	Authorized Incentive Collections	% of Total Authorized Incentive Collections
PG&E	\$217,620,000	43%
SCE	\$169,260,000	34%
SCG	\$48,360,000	10%
CSE	\$66,495,000	13%

#### 2.2 PROGRAM PARTICIPATION DURING 2017

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

#### **Host Customer**

Any retail electric or gas distribution class of customer (e.g., 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, energy service provider, and/ or developer.<sup>5</sup>

#### **Applicant**

The 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.<sup>6</sup> The applicant is usually 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).<sup>7</sup> During 2017, the applicant and developer were the same entity for 93% of applications submitted.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> SGIP 2017 V5 Handbook: Section 4.1.1

<sup>&</sup>lt;sup>6</sup> SGIP 2017 V5 Handbook: Section 4.1.3

<sup>&</sup>lt;sup>7</sup> SGIP 2017 V5 Handbook: Section 4.1.5: Developer definition for applications received in incentive steps 1 and 2.

<sup>&</sup>lt;sup>8</sup> The two most common situations where the applicant was not also the developer are as follows: 1) The applicant was a home owner (host customer) that acted as their own applicant. 2) The applicant was a solar company and the developer was a storage company.



### 2.2.1 Study Population

A copy of the SGIP statewide project list was downloaded from www.selfgenca.com on November 1, 2017. All applications submitted in program year 2017 up to November 1, 2017 are included in this evaluation. Additionally, the evaluation included applications submitted prior to 2017 that changed their stage since the 2016 evaluation (for purposes of this evaluation, stages include: reservation request form, proof of project milestone, incentive claim form, and payment). Since participants with applications submitted prior to 2017 that didn't change stages in 2017 likely did not have much interaction with PAs, they would likely not be able to contribute much insight to this study and those applications were not included in the population.

During PY 2017, a total of 3,663 new applications were submitted across all PA service territories. Of these, 3,649 applications were for AES technologies. There were an additional 246 applications that changed their stage since the 2016 evaluation and will be included in this evaluation. The breakout of applications, applicants, and host customers included in this evaluation, by PA, is shown in Table 2-3 below.

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

PA	# Applications	# Applicants <sup>10</sup>	# Host Customers <sup>11</sup>
PG&E	1,460	120	1,252
SCE	1,316	95	1,001
SCG	334	40	289
CSE	799	68	665
SGIP Total	3,909	232	3,164

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, or four territories. A significant proportion of applicants (23%) and a tiny proportion of host customers (1%) had applications in multiple territories.

<sup>&</sup>lt;sup>9</sup> Three hundred and sixty-six additional Program Year 2017 applications were submitted after November 1, 2017. These additional 2017 applications were not included in the evaluation population due to reporting deadlines.

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> A single host customer could have applications in multiple PAs (e.g., In 2017 a national home improvement retailer submitted applications for projects at locations in PG&E, SCE, SCG, and CSE service territories). Therefore, the SGIP host customer total does not equal the sum of each PA's host customer subtotal.



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

	1 PA	2 PAs	3 PAs	4 PAs	Total
# Applicants	179	29	10	14	232
# Host Customers	3,129	29	4	2	3,164

#### 2.3 EVALUATION GOALS

The CPUC measurement and evaluation plan calls for "an annual review of the administrative performance of each PA.<sup>12</sup> 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 will be an assessment of PA performance during 2017. All interview guides and survey questions were designed to address participants' experience during 2017. Where possible, comparison was made to results from the 2016 SGIP PA performance evaluation.<sup>13</sup>

#### **Research Questions**

The following research questions are addressed by this evaluation.

- What are the perceived strengths and weaknesses of PA program communication processes?
- How clear and timely are the oral and written communications from the PAs?
- How accessible are the PAs?
- How helpful are the PAs to applicants submitting and processing applications?
- How clear and helpful are the PA websites?
- How did the participant experience change from 2016 to 2017?
- What are participants' perceptions of changes to program rules and procedures in 2017?

<sup>&</sup>lt;sup>12</sup> The CPUC measurement and evaluation plan was included as Appendix A of an email from CPUC Energy Division to the SGIP Program Administrators on January 13, 2017.

<sup>13 2016</sup> SGIP Program Administrator Performance Evaluation: http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442454963



#### 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 program administrators, resolution of problems, issues, or delays, and satisfaction with specific program elements
- Section 5 discusses the overall findings of this evaluation, including the results of the program benchmarking and key recommendations
- Appendix A presents the survey instruments used for the PA in-depth-interview, the applicant telephone interview, and the host customer web survey
- 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 Database<sup>1</sup> managed by the PAs
- Site inspection and verification reports completed by the PAs or their consultants

#### Data from research activities:

- In-depth interviews (IDIs) conducted with PAs by Itron professional evaluation staff (Section 3.1)
- Phone interviews conducted with SGIP applicants by Itron professional evaluation staff (Section
   3.2 )
- Web surveys completed by SGIP host customers (Section 3.3)

The fourth research activity completed as part of this study was benchmarking of SGIP to identified best practices (Section 3.4).

The four research activities outlined above enabled the evaluation team to study participant's experience with and perceptions of the program. In particular, the PA IDIs gave context to the evaluation team regarding administrative practices. The phone and web surveys with applicants and host customers were the vehicles through which direct feedback was collected from participants. Finally, the benchmarking exercise allowed the evaluation team to place SGIP practices within a broader context of identified successful administrative practices.

#### 3.1 PROGRAM ADMINISTRATOR IN-DEPTH INTERVIEWS

Itron conducted in-depth interviews with each of the four program administrators (PG&E, SCE, SCG, and CSE). The purpose of the PA in-depth interviews was to learn directly from the PA about the administration of the program. PAs were interviewed on various topics relating to program operations and management including staffing structure, program design, and communications approaches. Special focus was given to

<sup>&</sup>lt;sup>1</sup> Accessed November 1, 2017



understanding changes to program rules and procedures in PY 2017. Appendix A.1 presents the list of questions used to guide the PA interviews.

#### 3.2 APPLICANT SURVEY

Applicants were interviewed through a telephone survey conducted by professional interviewers at Itron. Interview questions covered topics relating to the applicant's experience and satisfaction with application stages, PA communications, and program websites.<sup>2</sup> 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 2016 PA Performance Evaluation,<sup>3</sup> 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.

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

Program Administrator	Applicant Population <sup>4</sup>	Applicant 90/10 Target Sample	n Completes	Achieved RP <sup>5</sup>
PG&E	120	41	46	8.4%
SCE	95	38	39	9.5%
SCG	40	25	18	10.1%
CSE	68	33	27	7.0%
Total	232		87	

<sup>&</sup>lt;sup>2</sup> Additional questions relating to the applicant's promotion of paired solar and storage systems were included in the survey. The results of these questions will be reported more fully in a later impact report.

Results from the PY 2016 applicant survey question: How satisfied are you with the SGIP overall (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)?

<sup>&</sup>lt;sup>4</sup> Recall: 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.

Achieved relative precision was calculated from results of the applicant survey question: How would you rate your experience with [PA's] overall, in relation to their role as an SGIP administrator in 2017 (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)?



When applicants were surveyed they were asked about each PA they interacted with. Therefore, we completed 87 total interviews to reach the total completes by PA shown above. We met the PG&E and SCE sample target numbers, and the target RP for CSE. Though the Itron survey team contacted each applicant in the population at least once by email or phone, not enough applicants agreed to complete an interview. One factor that hindered the completion rate is that the sample target was a much higher proportion of the population for SCE (40%), SCG (63%), and CSE (49%) than it was for PG&E (34%).

Response frequency tables for each closed-ended question in the applicant survey are included in Appendix B.

#### **Prolific Applicants**

Applicants with 80 or more projects in the population were classified as "prolific" applicants. There are 11 applicants that meet this criterion, accounting for 72% of the 3,909 applications. 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 Itron survey team completed eight of the 11 targeted prolific surveys. Two prolific applicants refused to complete the survey and a third was only able to complete a small number of survey questions regarding their promotion of paired solar and storage systems.

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

Program Administrator	Applicant Population <sup>6</sup>	Applicant 90/10 Target Sample	Prolific Applicants	n Prolific Completes
PG&E	120	41	8	5
SCE	95	38	11	8
SCG	40	25	9	6
CSE	68	33	10	8
Total	232		11	8

#### Strata Quota

Further strata were developed within each PA where applicants were separated by application year and budget category. This was done to ensure representation within the sample of different application types and applicant experiences. Targeting these sub-populations enable program-wide results to be reported at the budget category level with a higher degree of accuracy.

<sup>&</sup>lt;sup>6</sup> Recall: 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 grouped by application year based on whether they submitted applications in 2017 only, prior to 2017 only, or in 2017 and prior years. An application's budget category was defined for 2017 as either small residential storage, large-scale storage, or generation. For sampling purposes each applicant was assigned to a single budget category based on application count.

To derive strata quota, each PA's target sample (41 PG&E, 38 SCE, 25 SCG, and 33 CSE) was distributed across the identified strata proportional to applicant population. Strata quota were then increased to account for the prolific applicant census, and increased to a minimum of three sample points or to a census of the total population of applicants if a given stratum had fewer than three points. 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 SCE (40 instead of 38) and SCG (27 instead of 25). 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 below. The Itron survey team completed at least one interview in each identified stratum. 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.

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

Application Year	Budget Category	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
2017 and	Large-Scale Storage	16	13%	5	6	13%
Prior	Small Res Storage	12	10%	4	5	11%
2017 Only	Large-Scale Storage	18	15%	6	6	13%
2017 Only	Small Res Storage	54	45%	18	22	48%
	Generation	5	4%	3	3	7%
Pre-2017 only		15	13%	5	4	9%
Grand Total		120	100%	41	46	100%



TABLE 3-4: SCE Applicant Survey Strata Quota

Application Year	Budget Category	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
2017 and Prior	Large-Scale Storage	17	18%	7	7	18%
	Small Res Storage	11	12%	4	8	21%
	Large-Scale Storage	15	16%	6	6	15%
2017 Only	Small Res Storage	42	44%	17	15	38%
	Generation	3	3%	3	1	3%
Pre-2017 only		7	7%	3	2	5%
Grand Total		95	100%	40	39	100%

TABLE 3-5: SCG APPLICANT SURVEY STRATA QUOTA

Application Year	Budget Category	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
2017   Doi:	Large-Scale Storage	8	20%	5	4	22%
2017 and Prior	Small Res Storage	4	10%	3	3	17%
	Large-Scale Storage	4	10%	3	2	11%
2017 Only	Small Res Storage	17	43%	11	7	39%
	Generation	1	3%	1	1	6%
Pre-2017 only		6	15%	4	1	6%
Grand Total		40	100%	27	18	100%

TABLE 3-6: CSE APPLICANT SURVEY STRATA QUOTA

Application Year	Budget Category	Applicant Population	Population Distribution	Strata Quota	n Completes	Achieved Sample Distribution
2017 and Drian	Large-Scale Storage	19	28%	9	7	26%
2017 and Prior	Small Res Storage	7	10%	3	5	19%
2017.0.1	Large-Scale Storage	12	18%	6	3	11%
2017 Only	Small Res Storage	23	34%	11	10	37%
	Generation	1	1%	1	1	4%
Pre-2017 only		6	9%	3	1	4%
Grand Total		68	100%	33	27	100%



#### 3.3 HOST CUSTOMER SURVEY

Host customers were contacted through a web survey. Survey questions covered topics relating to host customer's 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 all host customers in the participant population. Following the initial round of completed surveys a reminder email was sent to all host customers that had not yet responded. Subsequently, Itron staff were guided by the sample plan to directly email host customers who did not complete the online survey. Itron staff repeated the request to complete the web survey with personal email communications. 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 CV from the PY 2016 PA Performance Evaluation,<sup>7</sup> 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.<sup>8</sup> Table 3-7 summarizes the target host customer sample sizes for each PA.

TABLE 3-7: TARGET HOST CUSTOMER SAMPLE SIZE BY PA

Program Administrator	Host Customer Population	Host Customer 90/10 Target Sample	n Completes	Achieved RP <sup>9</sup>
PG&E	1,252	49	177	5.0%
SCE	1,001	48	103	5.2%
SCG	289	44	43	6.5%
CSE	665	47	104	4.6%

Results from the PY 2016 host customer survey question: How satisfied are you with your experience with [PAs] on the SGIP overall (Please rate your satisfaction on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied)?

<sup>&</sup>lt;sup>8</sup> For example, applications across all locations of large retailers were aggregated to a single host customer.

<sup>&</sup>lt;sup>9</sup> Achieved relative precision was calculated from results of the host customer survey question: How satisfied are you with your experience with [PAs] on the SGIP overall (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 PG&E, SCE, and CSE. Though the number of completes for SCG was just one sample point shy of the target, the achieved RP was well below the 10% target (i.e., better levels of RP). 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, application year, and applicant prolific status. These strata ensure representation within the sample of different application types and host customer experiences. 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 application count. Host customers were grouped by application year based on whether they submitted applications in 2017 only, prior to 2017 only, or in 2017 and prior years.

Host customers were also categorized by applicant prolific status. This indicates if the applicant that submitted the host customer's applications was a prolific applicant (>80 applications) or not. The host customer's experience with SGIP can depend on their applicant's familiarity with the program.

To derive strata quota each PA's target sample (49 PG&E, 48 SCE, 44 SCG, and 47 CSE) was distributed across the identified strata proportional to host customer population. Strata quota were then increased to a minimum of two sample points or to a census of the total population of host customers if a given stratum had fewer than two points. Strata quota for PG&E, SCE, SCG, and CSE are shown below 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 (56 PG&E, 55 SCE, 49 SCG, and 55 CSE) resulting in 215 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 below. 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.



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

Application Year	Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Prolific Applicant	Large-Scale Storage	46	4%	2	3	2%
2017 Only		Small Res Storage	848	68%	33	127	72%
2017 Only	Nonprolific	Large-Scale Storage	62	5%	2	3	2%
	Applicant	Small Res Storage	188	15%	7	28	16%
	Prolific Applicant	Large-Scale Storage	35	3%	2	6	3%
2017 and		Small Res Storage	5	0%	2	0	0%
Prior	Nonprolific	Large-Scale Storage	19	2%	2	1	1%
	Applicant	Small Res Storage	17	1%	2	6	3%
		Generation	7	1%	2	1	1%
Pre-2017 Only			25	2%	2	2	1%
	Grand	Total	1,252	100%	56	177	100%

TABLE 3-9: SCE HOST CUSTOMER STRATA QUOTA

Application Year	Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Prolific Applicant	Large-Scale Storage	46	5%	2	4	4%
2017 Only		Small Res Storage	687	69%	33	74	72%
2017 Only	Nonprolific	Large-Scale Storage	39	4%	2	4	4%
	Applicant	Small Res Storage	132	13%	6	16	16%
	Prolific	Large-Scale Storage	28	3%	2	1	1%
2017 and	Applicant	Small Res Storage	18	2%	2	0	0%
Prior	Nonprolific	Large-Scale Storage	9	1%	2	1	1%
	Applicant	Small Res Storage	7	1%	2	1	1%
		Generation	3	0%	2	0	0%
Pre-2017 Only			32	3%	2	2	2%
	Grand T	otal	1,001	100%	55	103	100%



TABLE 3-10: SCG HOST CUSTOMER STRATA QUOTA

Application Year	Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
2017.0	Prolific Applicant	Large-Scale Storage	18	6%	3	2	5%
		Small Res Storage	172	60%	26	24	56%
2017 Only	Nonprolific Applicant	Large-Scale Storage	10	3%	2	2	5%
		Small Res Storage	62	21%	9	13	30%
	Prolific	Large-Scale Storage	5	2%	2	0	0%
2017 and	Applicant	Small Res Storage	7	2%	2	1	2%
Prior	Nonprolific	Large-Scale Storage	2	1%	2	0	0%
	Applicant	Small Res Storage	0	0%	0	0	0%
		Generation	1	0%	1	0	0%
Pre-2017 Only			12	4%	2	1	2%
	Grand T	otal	289	100%	49	43	100%

**TABLE 3-11: CSE HOST CUSTOMER STRATA QUOTA** 

Application Year	Applicant Prolificity	Budget Category	Host Customer Population	% of Host Customer Population	Strata Quota	n Completes	Achieved Sample Distribution
	Prolific Applicant	Large-Scale Storage	24	4%	2	2	2%
2017 Only		Small Res Storage	392	59%	28	64	62%
2017 Only	Nonprolific Applicant	Large-Scale Storage	37	6%	3	3	3%
		Small Res Storage	149	22%	11	28	27%
	Prolific	Large-Scale Storage	17	3%	2	1	1%
2017 and	Applicant	Small Res Storage	3	0%	2	2	2%
Prior	Nonprolific	Large-Scale Storage	17	3%	2	1	1%
	Applicant	Small Res Storage	3	0%	2	2	2%
		Generation	1	0%	1	0	0%
Pre-2017 Only			22	3%	2	1	1%
	Grand 1	Total	665	100%	55	104	100%



#### 3.4 BENCHMARKING

SGIP administration practices were compared to identified best practices using the results of the National Energy Efficiency Best Practices Study. <sup>10</sup> The evaluation team used the self-benchmarking tool developed for this study which allows practitioners to evaluate and score their own programs against identified best practices. Benchmarking of SGIP practices enables PAs to identify strengths, areas needing improvement, and strategies for improving them.

<sup>&</sup>lt;sup>10</sup> The project website includes all the reports and tools developed throughout the project and is located here: <a href="https://www.eebestpractices.com">www.eebestpractices.com</a>.

# 4 PARTICIPANT EXPERIENCE

In this section we present findings from the data collection activities of this evaluation. Results are organized thematically by program clarity, interactions with program administrators, resolution of problems, issues, or delays, and specific program elements. Data and analysis from the PA IDIs, applicant surveys, and host customer surveys are presented as they pertain to each section.

#### 4.1 PROGRAM CLARITY

An SGIP project application requires a variety of technical information to help establish the specifics of the technology to be incentivized, its location, 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 capacity of the equipment and whether it qualifies for PBI payments.

All applications begin with the submission of a reservation request form (RRF) along with all required attachments. Upon RRF approval, the PA issues a reservation letter. Projects in the two-step process receive a confirmed reservation letter, and are given 12 months to complete the project and submit incentive claim form (ICF) documentation. Projects in the three-step process receive a conditional reservation letter. Non-public entities are given a 90-day window to submit PPM documents from the date of the conditional reservation letter. Public entities must submit a copy of an issued request for proposal (RFP) or equivalent within 90 days, but are allowed 240 days to submit full PPM documentation. Upon approval of the PPM documentation, projects in the three-step process receive a confirmed reservation letter and are given 18 months to submit ICF documentation. Projects in the three-step process must be installed, interconnected, and operational prior to ICF submission. The ICF is reviewed (two-step and three-step projects) and a site inspection is scheduled to verify system eligibility. Upon approval, the upfront incentive is issued. For projects 30 kW or greater, 50% of the overall incentive is paid through the upfront incentive and the remainder is paid through the performance-based incentive (PBI) process.

The technology mix in 2017 changed significantly from previous years (see Figure 4-1). Small residential storage projects went from constituting less than 1% of non-cancelled applications in 2016 to more than 75% of non-cancelled applications in 2017. The total volume of non-cancelled applications increased 27x from 124 applications in 2016 to 3,499 applications in 2017. The large increase in application volume and

<sup>&</sup>lt;sup>1</sup> Cancelled projects are excluded from the application counts in this comparison because an outsize proportion of applications submitted in 2016 were cancelled, primarily due to complications during the 2016 program opening. Of the 946 applications submitted in 2016, 822 (87%) were cancelled. By comparison, only 4% of projects (164 of 3,663) were cancelled in 2017.



sharp change in technology mix created new challenges for PAs and applicants with new technical requirements, new documentation, and overall increased volume. This change in the program structure emphasizes the need for PAs to provide clear guidance regarding the SGIP incentive application process.

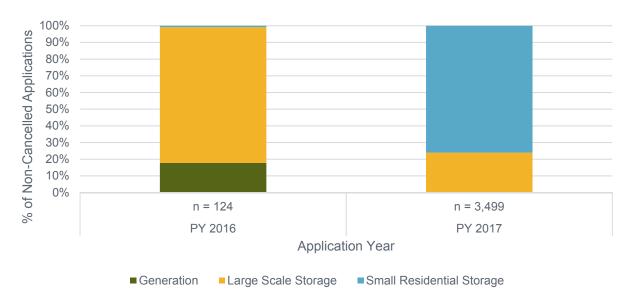


FIGURE 4-1: TECHNOLOGY MIX OF NON-CANCELLED PROJECTS IN 2016 AND 2017

A central way in which program administrators can influence participants' experience of the program is through the clarity of their communication. Through communication from program administrators, SGIP applicants and host customers may learn of details associated with their application, relevant deadlines pertaining to program milestones, and a host of other details and specifications. Applicants reported primarily learning about program updates from emails (64%) and website updates (52%). Nearly all host customers heard about their project status by email (99% of responses). Therefore, being clear in written communications with participants presents an opportunity to help participants feel well-informed and serves as a public face of the program.

To help gauge the effectiveness of PA communication, applicants and host customers were asked to rate the clarity of various aspects of the program in terms of communication and requirements.



## 4.1.1 Applicant Findings

Applicants were asked a series of questions regarding their communications with the PA. These questions focused on the frequency and content of communications with the PA.

As shown in Figure 4-2 below, most applicants reported an average of one to five clarifying questions for the PA per application (ranging from 51% to 67% by PA). A smaller percentage of applicants (ranging from 9% to 28% by PA) did not have any questions for the PAs on a typical project. This suggests that most applicants needed help from the PAs during the application process.

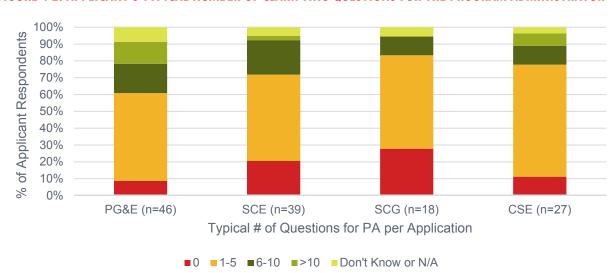


FIGURE 4-2: APPLICANT'S TYPICAL NUMBER OF CLARIFYING QUESTIONS FOR THE PROGRAM ADMINISTRATOR

Applicants were also asked about the types of questions they had during these inquiries (Figure 4-3). The majority of questions were about the documentation requirements (61%), the technical requirements (54%), and the application process (39%). Secondarily, applicants had questions concerning the program structure, the payment process, and program timelines.



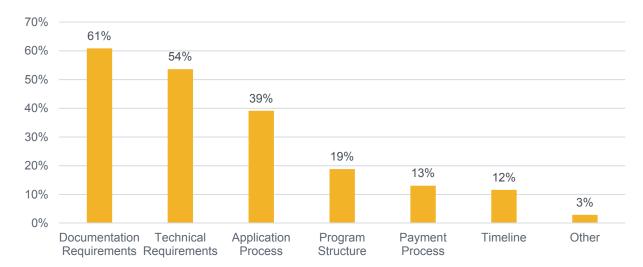


FIGURE 4-3: TYPES OF QUESTIONS APPLICANTS ASKED OF PAS

Many applicants expressed frustration over a lack of clarity regarding the documentation requirements. Typical applicant responses were similar to the following comment: "Over the past six months [we] have been struggling to simply fill out the paperwork for our SGIP applications, ICFs and Net Metering. There is virtually no guidance or training on how we fill out these forms — or what the correct responses should be. [...] staff at the various entities responsible for parts of this process either do not know the answers themselves or simply do not respond to our questions."

## 4.1.2 Host Customer Findings

A host customer's experience with the program is primarily mediated through their applicant (unless he or she is 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 is actual customer of each PA's associated utility. For these reasons it's important to understand their experience with the program, even though they might not directly interact with the PAs throughout the application process.

Host customers were asked to rate on a scale of one-to-five the clarity of various program aspects including the program technical requirements, the project documentation requirements, the program timelines, their application status, and the division of responsibility between host customer and applicant. Host customers were also asked to rate on a scale of one-to-five their satisfaction with the information provided in the written communications from the PAs and the information provided by the applicants. Table 4-1, Table 4-2, Table 4-3, and Table 4-4 show the weighted-average and relative precision (at 90% confidence) of the ratings reported by host customers in PG&E, SCE, SCG, and CSE territories respectively.



These tables also include the number of respondents that gave a one-to-five rating for each question, and the percentage of respondents that gave the highest rating (5) and lowest rating (1).

Generally, host customers in PG&E reported moderate clarity with most program aspects, as shown in Table 4-1 below. The program technical requirements, the documentation requirements, the application status, and the division of responsibility between applicants and host customers each received average clarity ratings ranging from 2.6 to 3.1. Additionally, the information in written communications from the PA and the information provided by the applicant each received average satisfaction ratings of 2.9 and 3.4, respectively.

Host customers in PG&E territory did, however, report low levels of clarity with the program timelines (average rating of 2.3). In fact, 44% of respondents reported that the program timelines were not at all clear (rating =1). Additionally, a significant proportion of respondents (31%) reported that their application status was not at all clear (rating =1).

TABLE 4-1: PG&E HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS

	Program Aspect	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
	Technical requirements	2.9	4.6%	169	14%	20%
Clarity	Documentation requirements	2.9	4.9%	163	16%	24%
	Program timelines	2.3	6.0%	166	7%	44%
	Application status	2.6	5.0%	173	10%	31%
	Division of responsibility	3.1	4.8%	163	20%	25%
Satisfaction	Info in written communications from PA	2.9	4.3%	162	8%	16%
Satisfa	Info provided by applicant	3.4	4.1%	168	26%	15%

As shown in Table 4-2 below, host customers in SCE territory reported moderate clarity with the program. The program technical requirements, the documentation requirements, the program timelines, the application status, and the division of responsibility between applicant and host customer each received average clarity ratings ranging from 2.7 to 3.4. Additionally, the information in written communications from the PA and the information provided by the applicant each received an average satisfaction rating of 3.2 and 3.4, respectively.



**TABLE 4-2: SCE HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS** 

	Program Aspect	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
Clarity	Technical requirements	3.1	5.9%	95	20%	20%
	Documentation requirements	2.9	6.4%	94	18%	20%
	Program timelines	2.7	6.4%	98	13%	25%
	Application status	3.1	5.4%	100	21%	13%
	Division of responsibility	3.4	5.6%	96	29%	15%
Satisfaction	Info in written communications from PA	3.2	4.9%	94	15%	10%
	Info provided by applicant	3.4	4.4%	90	13%	8%

Generally, host customers in SCG territory reported moderate clarity with the program, as shown in Table 4-3 below. The program technical requirements, the documentation requirements, the program timelines, application status, and the division of responsibility between applicant and host customer each received average clarity ratings ranging from 2.6 to 3.1. Additionally, the information in written communications from the PA and the information provided by the applicant each received an average satisfaction rating of 3.2 and 3.4, respectively.

While the clarity of program timelines for SCG customers received an average rating of 2.6, a significant proportion of respondents (37%) reported that the program timelines were not at all clear (rating =1).

TABLE 4-3: SCG HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS

	Program Aspect	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
	Technical requirements	3.1	9.3%	37	22%	16%
Clarity	Documentation requirements	3.0	9.9%	37	19%	19%
	Program timelines	2.6	11.4%	41	15%	37%
	Application status	3.0	10.0%	42	24%	26%
	Division of responsibility	3.0	9.7%	40	15%	23%
Satisfaction	Info in written communications from PA	3.2	6.9%	37	11%	8%
Satisfa	Info provided by applicant	3.4	5.9%	41	17%	2%



Generally, host customers in CSE reported moderate clarity with most program aspects, as shown in Table 4-4 below. The program technical requirements, the documentation requirements, the program timelines, and the application status each received average clarity ratings ranging from 2.5 to 3.2. Additionally, the information in written communications from the PA received a moderate level of satisfaction with an average rating of 3.4.

Host customers in CSE did, however, report moderately high levels of clarity with the division of responsibility between applicants and host customer (average rating of 3.6) and the information provided by the applicant (average rating of 3.8). In fact, a significant proportion of respondents reported high levels of clarity and satisfaction (rating = 5) with the division of responsibility (30%) and information provided by applicants (32%).

**TABLE 4-4: CSE HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS** 

	Program Aspect	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
	Technical requirements	3.2	5.3%	93	17%	14%
Clarity	Documentation requirements	3.1	5.5%	90	14%	18%
	Program timelines	2.5	6.3%	95	7%	25%
	Application status	3.0	5.3%	100	12%	18%
	Division of responsibility	3.6	4.8%	97	30%	10%
action	Info in written communications from PA	3.4	4.4%	90	13%	8%
Satisfaction	Info provided by applicant	3.8	4.0%	100	32%	6%

Overall, host customers across all PAs were the least satisfied with the information provided to them regarding program timelines. One host customer noted "it would be nice to get letters or at least emails informing us of where the application process is at the moment. We haven't heard anything from [Applicant] or [PA] in the last 6 months regarding the SGIP."



#### 4.2 INTERACTIONS WITH PROGRAM ADMINISTRATORS

Applicants were asked to rate their experience with PA timeliness, helpfulness, and accessibility. As shown in Figure 4-4 below, applicants were moderately satisfied with PG&E and SCE, highly satisfied with SCG and extremely satisfied with CSE. A significant proportion of respondents (38% to 68%) reported extremely high levels of satisfaction with SCG and CSE, given the highest rating of five. Additionally, not a single applicant reported extremely low levels of satisfaction (score=1) with CSE's timeliness, helpfulness, or accessibility.

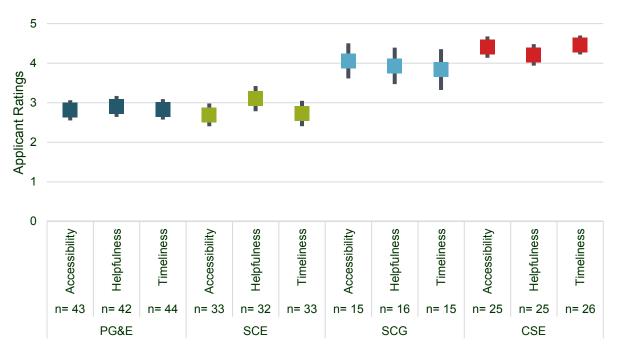


FIGURE 4-4: APPLICANT SATISFACTION WITH ACCESSIBILITY, HELPFULNESS, AND TIMELINESS BY PA

It's important to note the significant increase in application volume, and overall high application numbers, when considering each PA's ability to maintain accessibility, helpfulness, and timeliness. As shown in Figure 4-5, PG&E and SCE received over one thousand non-cancelled applications in 2017, constituting a near 30x increase for PG&E and a 25x increase for SCE from 2016. SCG experienced a 35x increase in non-cancelled applicants in 2017 and CSE had a 24x increase. Due to this increase in application volume, PAs experienced a back-log in their application reviews. Many applicants expressed frustrations with program delays, some noting "a really long timeline just for initial project confirmations (10 months to a year)."



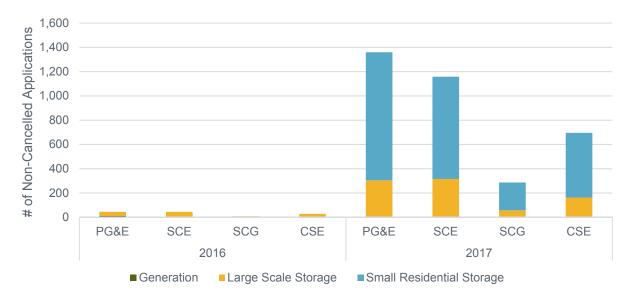


FIGURE 4-5: NON-CANCELLED APPLICATIONS IN 2016 AND 2017 BY PA AND BUDGET CATEGORY

#### **Average Time to Initial Response**

Figure 4-6 below shows the distribution of the applicant reported average time it took for each PA to initially reply to clarifying questions and inquiries. It is a best practice for program staff to provide feedback to applicants within five business days (as identified in the best practices benchmarking exercise, see section 5.3). Generally, each PA complies with this best practice, with most applicants reporting that initial responses were received within one week.

The proportion of SCE respondents that indicated PA initial responses took more than one week decreased from 50% in 2016 to 43% in 2017. The proportion of PG&E respondents reporting initial responses longer than one week stayed relatively constant (30% in 2016 and 32% in 2017). In 2016 zero respondents of SCG or CSE reported average initial responses of longer than one week, whereas in 2017, a small percentage report longer average initial response times (20% and 15% respectively).



CSE n = 20SCG n = 10SCE n = 23n = 3740% 0% 10% 20% 30% 50% 60% 70% 80% 90% 100% % of Applicant Respondents Within one day Within one week ■ More than one week

FIGURE 4-6: AVERAGE TIME FOR INITIAL REPLY TO INQUIRY BY PA

### **Longest Time to Initial Response**

Applicants were also asked about the longest amount of time it took to receive an initial response from their PA. As shown in Figure 4-7 below, the majority of applicants in CSE (80%) and SCG (80%) reported that the longest initial reply was received within one week. However, in PG&E and SCE most respondents reported that initial replies had at times taken more than one week (57% and 68% respectively).

The proportion of SCE respondents reporting initial replies received after one month decreased from almost half in 2016 to 32% in 2017. In PG&E, around one quarter of respondents reported initial replies longer than one month in both 2016 and 2017.

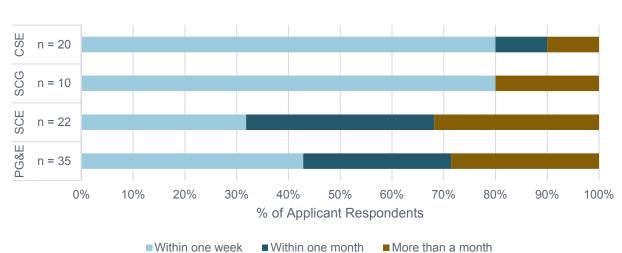


FIGURE 4-7: LONGEST TIME FOR INITIAL REPLY TO INQUIRY BY PA



#### **Longest Time to Resolve Issue**

Applicants were also asked about the longest time taken, from start to finish, for issues to be resolved. Figure 4-8 below shows that around half of respondents in SCG and CSE reported that issues never took longer than one week to resolve. In contrast, most respondents in PG&E and SCE reported issue resolution times longer than one week (80% and 76% respectively). Over two-thirds of respondents also noted that issues in CSE (76%) and SCG (67%) took no more than one interaction to resolve, whereas roughly half of respondents in PG&E (47%) and SCE (51%) said the same. Finally, a significant proportion of respondents across all PAs reported issue resolution times longer than three months (ranging from 23% to 33% by PA).

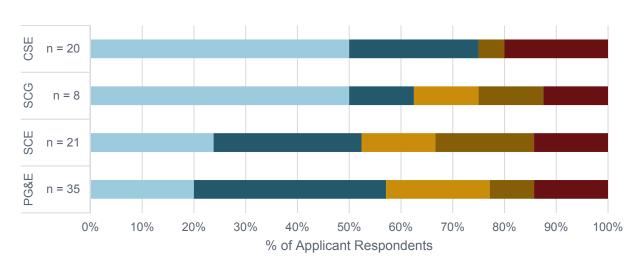


FIGURE 4-8: LONGEST TIME TO RESOLVE ISSUE BY PA

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

### 4.3 RESOLVING PROBLEMS, ISSUES, OR 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 resolving any problem, issue, or delay.

### 4.3.1 Applicant Findings

Almost every applicant reported having been informed by the PA that at least one of their applications was missing information of documentation (85% in CSE, 92% in SCE and 100% in PG&E and SCG). Most applicants also reported that at least one of their applications was suspended (75% in SCG, 81% in PGE, 81% in CSE, and 86% in SCE). The most commonly cited application issues included missing signatures, warranty clarifications, and corrections to the preliminary monitoring plan (PMP).



As shown in Table 4-5 below, applicants in PG&E and SCE were moderately satisfied and applicants in SCG and CSE were highly satisfied with the PA's involvement in resolving suspended projects. A significant proportion of applicants in CSE (63%), SCG (50%), and SCE (36%) stated that they were extremely satisfied (score=5) with the PA's involvement. These findings indicate that, though each PA did a reasonable job addressing applicant's problems, issues, or delays, almost every applicant experienced issues with their applications in 2017. Applicants expressed a desire for PAs to reduce the frequency of project suspensions. Suggestions to reduce application issues included more tutorials on the SGIP process and increased alignment across PAs with program requirements.

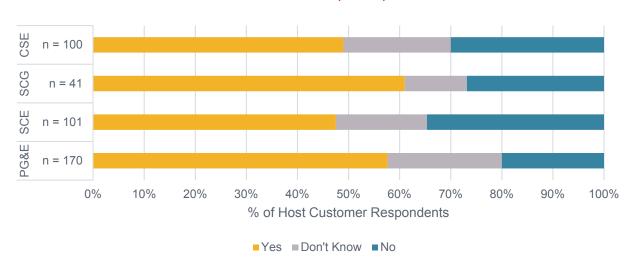
TABLE 4-5: APPLICANT SATISFIED WITH PA INVOLVEMENT IN RESOLVED SUSPENDED PROJECTS

PA	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
PG&E	3.1	14.0%	22	18%	27%
SCE	3.2	13.7%	25	36%	20%
SCG	3.6	25.8%	8	50%	25%
CSE	4.4	8.1%	16	63%	6%

### 4.3.2 Host Customer Findings

Host customers were asked if they experienced any problems, issues, or delays with their project(s), and if so, they were then asked follow-up questions regarding whether and how these were resolved. As shown in Figure 4-9, a significant proportion of respondents (48% to 61% depending on PA) recalled experiencing some kind of problem, issue, or delay.

FIGURE 4-9: HOST CUSTOMER RECOLLECTION OF PROBLEMS, ISSUES, OR DELAYS BY PA





Host customers who noted having experienced an issue of some kind were then prompted in an openended way to describe the problem. Responses varied across a range of issues, but clustered around a few common themes. They noted long periods in which they did not hear from anyone (neither their applicant nor the PA) whether their project was approved and would receive incentive funding. They noted that SGIP staff, or staff from third party organizations providing engineering support or other services, were sometimes unfamiliar with details of the incentivized technologies. Host customers perceived this as resulting in excessive, unnecessary iterations of data collection, review, or other studies as staff familiarized themselves with the specifics of individual technologies and projects. In turn, this could cause unforeseen delays that challenged the ability of individual projects to meet deadlines imposed by the SGIP for successive phases in the project timeline.

Host customers who said they experienced a problem of some kind were asked who, if anyone, helped them resolve the issue. A clear majority of respondents reported that their applicant helped them resolve the issue, problem, or delay (77% to 94%, depending on the PA). These findings are consistent with program design, where applicants are designed to be the primary contact for host customers.

Host customers who noted having experienced an issue, problem, or delay reported a mixed experience with respect to the resolution of those issues (see Figure 4-10). While 28% to 42% of host customers said that all of their issues were fully resolved, another 23% to 41% said that none of their issues, problems, or delays were ever addressed.

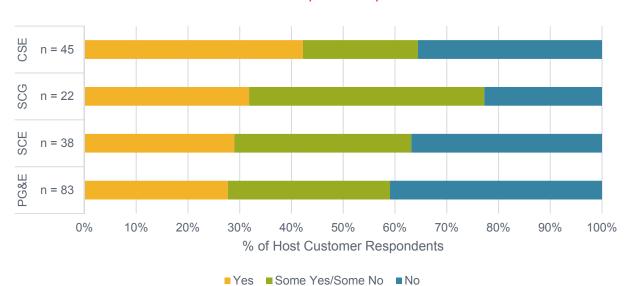


FIGURE 4-10: RESOLUTION OF HOST CUSTOMER ISSUES, PROBLEMS, OR DELAYS BY PA



Host customers reported long wait times for their issue, problem, or delay to be resolved (see Figure 4-11). Only 7% to 32% reported waiting no more than one week for resolution. Most customers in PG&E (67%) and SCG (56%) and a signification proportion in SCE (44%) and CSE (50%) said that it took more than one month for their issues, problems, or delays to be resolved.

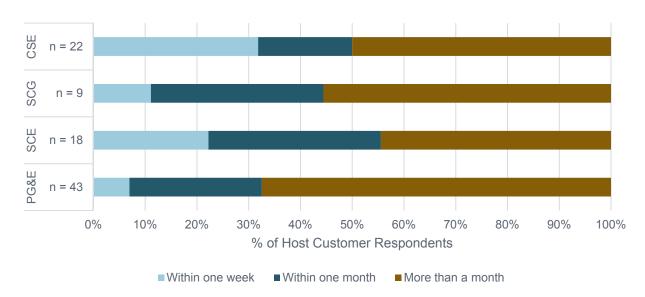


FIGURE 4-11: HOST CUSTOMER REPORTED TIME TO RESOLVE ISSUES BY PA

#### 4.4 SPECIFIC PROGRAM ELEMENTS

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

### 4.4.1 Lottery

One key change to SGIP in 2017 was the creation of a lottery system as part of the program's reservation request stage. If application submissions on a single day exceeded available funding in a PA's territory for a given budget and incentive step, a lottery was triggered. The lottery system is meant to prevent any single entity from flooding the application system at the moment of program opening in an attempt to receive funding for an outsize number of projects.

Once a lottery is triggered, applicants are notified by the PA whether their application was accepted, not accepted, or a straddling application. When an application is identified as straddling, it means that some, but not all, of the eligible incentive amount is within the available funds. Applicants are given the option



to accept the partial incentive amount, or delay participation until the next incentive step. Most applicants (87% to 94% depending on the PA) reported that they were informed of the lottery results within 5 business days.

Applicants were asked to rate, on a one-to-five scale, their satisfaction with the lottery process. Table 4-6 below shows the weighted-average and relative precision (at 90% confidence) of the ratings reported by applicants in PG&E, SCE, SCG, and CSE territories. This table also includes the number of respondents that gave a one-to-five rating for each question, and the percentage of respondents that gave the highest rating (5) and lowest rating (1). Applicants in PG&E, SCG, and CSE territories were highly satisfied with the lottery process with average scores ranging from 4.0 to 4.3. A significant proportion of respondents in SCG (75%) and CSE (38%) were extremely satisfied (score = 5). Applicants in SCE's territory were moderately satisfied, with an average score of 3.4.

TABLE 4-6: APPLICANT SATISFACTION WITH LOTTERY PROCESS BY PA

PA	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
PG&E	4.0	5.1%	14	14%	0%
SCE	3.4	21.0%	9	22%	22%
SCG	4.3	33.1%	4	75%	25%
CSE	4.0	11.3%	13	38%	8%

Aside from successfully preventing a single entity to receive the bulk of incentive funds, applicant feedback shows that the lottery was smoothly implemented, with quick notification times and high satisfaction ratings.

#### 4.4.2 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 2017 included posted slides from each quarterly workshop and a training on the portal that was recorded from a recent workshop. Both the SCG and SCE websites were updated in 2017 to include newer program information and communications. The PG&E SGIP website was updated in 2017 with an eye towards increasing usability and aesthetics. The CSE website was revamped in 2017 with key changes to their document library to improve utility. All applicants are required to use the statewide portal to submit applications and check on their status. Most applicants

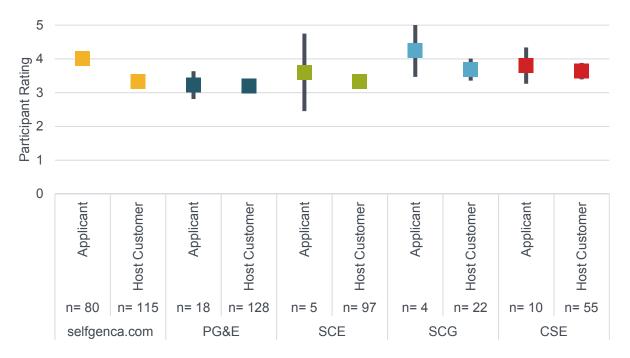


said their use of the statewide portal was heavy when their applications were active, and light at other times. In addition, each PA operates their own website. Use of the PA's website is optional, although most applicants indicated they had visited it sometime during 2017. Typical use of the PA websites by applicants is infrequent, with most applicants (73% to 100% ranging by PA) reporting visit frequencies between once a month and once a year. Aside from submitting project application forms, the most common reasons to visit the statewide portal as stated by applicants were to learn more about the program structure (53%) and to check on their project status (51%). The most common reason for applicants to visit the PA websites was to learn more about the program structure (38%) and to find the SGIP handbook (14%).

A small proportion of host customers (26%) reported visiting the statewide portal at any time in 2017. Usage of the PA websites by host customers is more common. More than half of host customers in CSE and SCG territories (54% and 58% respectively) and the majority of host customers in PG&E and SCE territories (73% and 94% respectively) visited the associated PA SGIP website at least once in 2017.

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 one-to-five scale. Overall, host customer ratings were moderate for the statewide portal and the PG&E and SCE websites and high for the SCG and CSE websites. Applicant ratings were high for all websites except for PG&E. Applicant website usefulness ratings are consistently higher than host customer ratings suggesting that host customer needs are not being met by the current websites.

FIGURE 4-12: APPLICANT AND HOST CUSTOMER RATINGS OF WEBSITE USEFULNESS



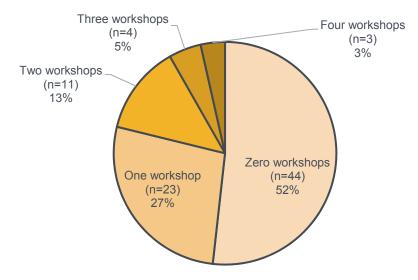


### 4.4.3 Workshops

Quarterly workshops are one resource made available to SGIP participants to educate them about program rules and procedures, updated incentive levels and structures, eligible measures, and related topics. They also provide an opportunity for networking with staff from other firms. These workshops can be attended either in person or online. The first quarterly workshop took place in November of 2016 and four more workshops took place during 2017. Presentation slides from each workshop are posted to the CPUC SGIP website.

Applicants were asked about their frequency of workshop attendance in 2017. As shown in Figure 4-13, nearly half of surveyed applicants reported having attended, either in-person or online, at least one quarterly workshop in 2017. Applicants that attended at least one workshop reported an average satisfaction score of 3.6 on a five-point scale, indicating high levels of satisfaction with the workshop. Attendees noted that workshops were a good way to network and give participants the opportunity to ask questions directly of program administrators. One applicant mentioned "it would be nice if there were more options for program workshops in Southern California or [if] workshops were recorded and put online."







### 4.4.4 Satisfaction with Other Program Elements

### **Applicant Findings**

Applicants were asked a series of questions regarding their satisfaction with specific program elements and procedures. Findings are summarized below.

**Satisfaction with the Application Submission Process**. In general, applicants are moderately satisfied with this process. Across all PA territories, applicants reported average satisfaction scores ranging from 2.8 to 3.1 (Figure 4-14). Findings are differentiated by PA based on applicant participation. Some applicants suggested that the documentation required was too cumbersome, especially for small residential storage projects.

FIGURE 4-14: APPLICANT SATISFACTION WITH THE APPLICATION SUBMISSION PROCESS





Due to low response levels, the remaining program elements are reported at the overall level (not by PA). See Figure 4-15 for summary of responses.

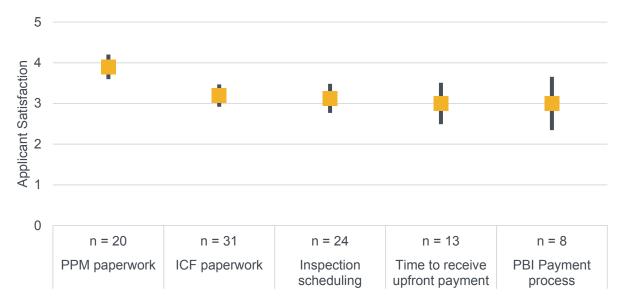


FIGURE 4-15: APPLICANT SATISFACTION WITH VARIOUS PROGRAM ELEMENTS

Satisfaction with paperwork for the proof of project milestone (PPM) stage. Applicants were highly satisfied with this element. Overall satisfaction with paperwork for the proof of project milestones averaged 3.9.

Satisfaction with the paperwork for the incentive claim stage (ICF). Findings for this element were somewhat less favorable, with an overall satisfaction score averaging 3.2. Some applicants felt that documentation requirements by this stage were redundant or unnecessary. In particular, multiple applicants called out the energy efficiency measure affidavit as burdensome and potentially asks for information already provided in other parts of the application process.

**Satisfaction with the inspection process.** Applicants were also asked about their level of satisfaction with the inspection process. The overall average rating of 3.1 revealed moderate satisfaction with this element. Some applicants noted difficulty with the scheduling process, citing project delays due to delayed inspection scheduling. Applicants also expressed frustration with inconsistent requirements across the PAs regarding the inspection scheduling process and the required data.

**Satisfaction with the time it takes to receive the upfront incentive.** Applicants expressed moderate satisfaction with the payment interval for the upfront incentive component, with an average score of 3.0.



**Satisfaction with PBI Payment process.** Applicants also provided quantitative feedback on their satisfaction with the PBI payment process. The average score of 3.0 revealed moderate satisfaction with this element.

#### **Host Customer Findings**

Similarly, host customers were queried regarding their satisfaction with specific program elements and procedures. Findings are summarized below in Figure 4-16. Note that there were five or less host customer responses on these topics; therefore, associated findings should be considered anecdotal.

FIGURE 4-16: HOST CUSTOMER SATISFACTION WITH INSPECTION SCHEDULING, TIME TO RECEIVE UPFRONT PAYMENT, AND PBI PAYMENT PROCESS



**Satisfaction with inspection scheduling process.** Host customers were moderately satisfied with the inspection scheduling process. The average satisfaction rating was 3.4 on a 5-point scale.

**Satisfaction with time it took to receive incentive.** Respondents expressed moderate satisfaction with the time it takes to receive their SGIP incentive. Overall, the average satisfaction rating was 3.0. One customer noted that though it was "supposed to take 30 days from claim submissions, [payment] took over 120 days."

**Satisfaction with PBI payment process.** Host customers were also moderately satisfied with the PBI payment process based on an overall average rating of 3.3.

# 5 FINDINGS

In this section we present a broad overview of the SGIP participant experience and perceptions in 2017. We begin with overall applicant and host customer satisfaction, along with an exploration of program perceptions by applicant prolific status and technology group. Next, we review perceived changes in the participant experience in 2017 versus prior years. The program benchmarking exercise follows, which compares SGIP administration practices with identified best practices. And finally, we present the key recommendations that emerged throughout this report.

#### 5.1 OVERALL SATISFACTION AND EXPERIENCE

Applicants and host customers were asked to rate their satisfaction with each PA in relation to SGIP in 2017. As shown in Table 5-1 below, applicants in PG&E and SCE service territories were moderately satisfied with the PAs with average satisfaction scores of 2.9 each. Applicants in SCG and CSE reported higher levels of satisfaction with the PA, with average satisfaction scores of 3.9 and 4.1 respectively. SCG and CSE also had a significant proportion of applicant respondents, 31% and 52% respectively, report extreme satisfaction (score = 5).

TABLE 5-1: APPLICANT OVERALL SATISFACTION WITH PA

PA	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
PG&E	2.9	8.4%	43	7%	16%
SCE	2.9	9.5%	34	12%	15%
SCG	3.9	10.1%	16	31%	6%
CSE	4.1	7.0%	25	52%	0%

Host customers were moderately satisfied with each PA, with average satisfaction scores ranging from 2.8 for PG&E to 3.5 for CSE, as shown in Table 5-2 below. Further in this section we will discuss the influence applicants can have on the satisfaction of host customers with their PA.

**TABLE 5-2: HOST CUSTOMER OVERALL SATISFACTION WITH PA** 

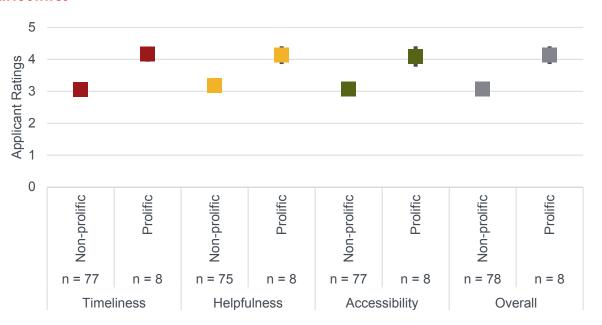
PA	Average Rating	Relative Precision 90% Confidence	Number of Respondents	% Respondents Rate 5	% Respondents Rate 1
PG&E	2.8	5.0%	165	10%	28%
SCE	3.2	5.2%	99	19%	14%
SCG	3.4	6.5%	40	18%	8%
CSE	3.5	4.6%	96	23%	10%



### 5.1.1 Experience by Applicant Prolific Status

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, the level of PA helpfulness, the level of PA accessibility, and overall satisfaction with the PA. Figure 5-1 shows the average ratings reported by applicants for each PA by their prolific status. In each topic prolific applicants were highly satisfied with average scores around 4.0. Non-prolific applicants were less satisfied across all topics, with average scores around 3.0.

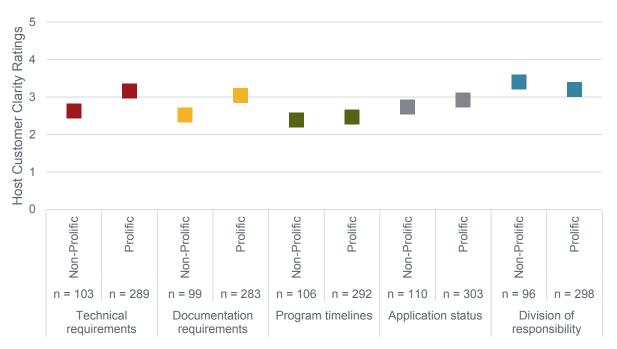
FIGURE 5-1: APPLICANT SATISFACTION WITH PA TIMELINESS, HELPFULNESS, ACCESSIBILITY, AND OVERALL BY PROLIFIC STATUS



Host customers were asked to rate their level of clarity with the program technical requirements, the documentation requirements, the program timelines, their application status and the division of responsibility between the applicants and host customer. Figure 5-2 shows the average ratings reported by host customers by the prolific status of their applicant. Host customers of both prolific and non-prolific applicants reported low levels of clarity with the program timelines and moderate levels of clarity with all other program aspects. Host customers of prolific applicants reported slightly higher levels of clarity on the program technical requirements, documentation requirements, timelines, and application status. However, they reported lower levels of clarity on the division of responsibility between the host customer and the applicant.



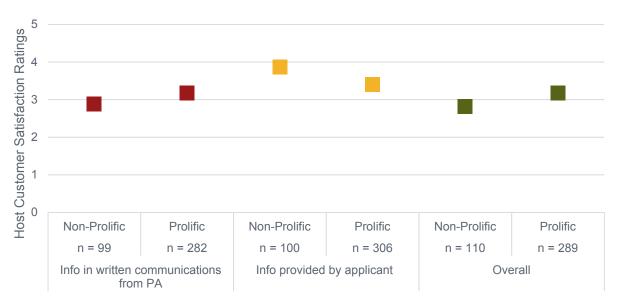




Host customers were also asked to rate their satisfaction with the information provided in written communications from the PA, the information provided by applicants, and overall satisfaction with the PA. Figure 5-3 shows the average satisfaction reported by host customers by the prolific status of their applicant. Host customers of both prolific and non-prolific applicants reported high satisfaction with the information provided by applicants and moderate levels of satisfaction with the information provided by the PAs and overall. Host customers of prolific applicants reported slightly higher satisfaction with the information provided by the PAs and overall. However, they reported lower satisfaction with the information provided by the applicants.



FIGURE 5-3: HOST CUSTOMER SATISFACTION WITH PROVIDED INFORMATION AND OVERALL BY PROLIFIC STATUS



### **Takeaways**

Prolific applicants are more satisfied than non-prolific applicants with the timeliness, helpfulness, accessibility, and overall experience with PAs. Some prolific applicants mentioned working directly with PAs to address common issues with their applications. A few prolific applicants mentioned a learning curve with their first few projects, after which their interactions with the program became smoother. The focused attention that prolific applicants receive from PAs and the increased experience of prolific applicants likely contributes to their higher levels of satisfaction, in comparison to the non-prolific applicants.

Host customers of prolific applicants were also more satisfied and had more clarity with the program than customers of non-prolific applicants. The prolific applicants may be able to provide more clarity with regards to program details, due to their greater experience with the program.

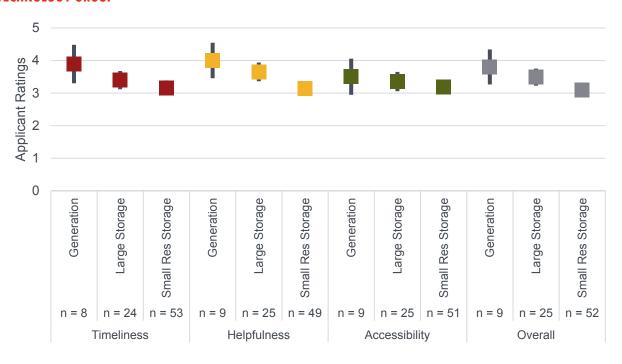
Interestingly, host customers of non-prolific applicants reported higher clarity and satisfaction when asked directly about their experience with applicants (division of responsibility and information provided by applicant). Non-prolific applicants may be giving host customers more focused attention, due to their smaller volume of applications.



### 5.1.2 Experience by Technology Group

Applicants were grouped based on the typical project type they handled, generation, large-scale storage, or small residential storage. Applicants were asked to rate their satisfaction with PA timeliness, the level of PA helpfulness, the level of PA accessibility, and overall satisfaction with the PA. Figure 5-4 shows the average ratings reported by applicants for each PA by technology group. Applicants with generation projects were highly satisfied with each topic, with average scores ranging from 3.5 to 4.0. Applicants with large-scale storage projects were also highly satisfied with each topic (scores ranging from 3.4 to 3.6), but to a lesser degree than those with generation projects. Applicants with small residential projects were the least satisfied with PAs, reporting moderate satisfaction levels across all topics (scores ranging from 3.1 to 3.2).

FIGURE 5-4: APPLICANT SATISFACTION WITH PA TIMELINESS, HELPFULNESS, ACCESSIBILITY, AND OVERALL BY TECHNOLOGY GROUP





Host customers were asked to rate their level of clarity with the program technical requirements, the documentation requirements, the program timelines, their application status, and the division of responsibility between the applicants and host customer. Figure 5-5 shows the average ratings reported by host customers with large-scale storage projects and small residential storage projects.<sup>1</sup> Host customers reported moderate levels of clarity with almost all program aspects. With regards to program timelines, host customers with small residential storage projects reported low levels of clarity. Additionally, customers with large-scale storage projects reported slightly higher levels of clarity than those with small residential storage projects across all program aspects.

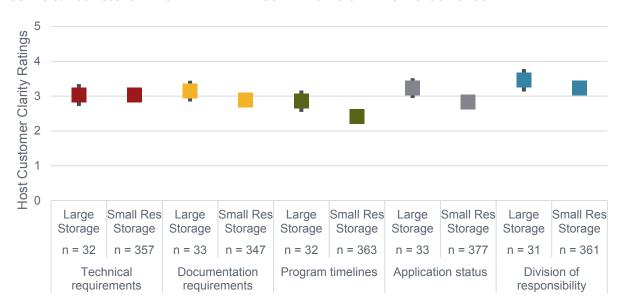


FIGURE 5-5: HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY TECHNOLOGY GROUP

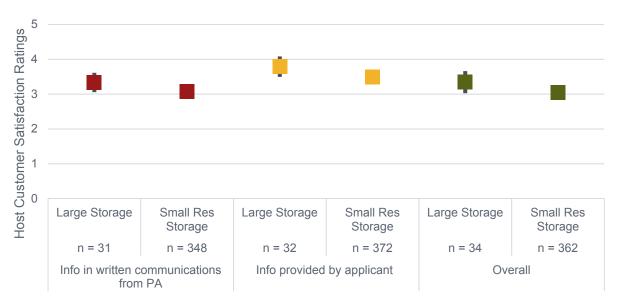
Host customers were also asked to rate their satisfaction with the information provided in written communications from the PA, the information provided by applicants, and overall satisfaction with the PA. Figure 5-6 shows the average satisfaction reported by host customers with large-scale storage projects and small residential storage projects.<sup>2</sup> Host customers reported high satisfaction with the information provided by applicants and moderate levels of satisfaction with the information provided by the PAs and overall. Host customers with large-scale storage projects reported slightly higher satisfaction than those with small residential storage projects in all topics.

<sup>&</sup>lt;sup>1</sup> Host customers with generation projects are not included in Figure 5-5 due to low sample counts; Three host customers responded to the relevant questions.

<sup>&</sup>lt;sup>2</sup> Host customers with generation projects are not included in Figure 5-6 due to low sample counts; Three host customers responded to the relevant questions.



FIGURE 5-6: HOST CUSTOMER SATISFACTION WITH PROVIDED INFORMATION AND OVERALL BY TECHNOLOGY GROUP



### **Takeaways**

Applicants with generation projects are more satisfied with the timeliness, helpfulness, accessibility, and overall, than those with large storage projects. Applicants with small residential projects are the least satisfied. Concerns mentioned by small residential storage projects included burdensome documentation requirements, such as requiring signatures from the host customer when minor changes to the application were made. Some applicants also expressed the desire for a more simplified application process for the small storage projects; applicants cited the process used in the California Solar Initiative (CSI) general market program as an example of a similar rebate program with a more streamlined application procedure. Host customers with small residential storage projects were also less satisfied and had less clarity than those with large-scale storage projects.

#### 5.2 COMPARISON TO PREVIOUS YEARS

### **5.2.1 Direct Comparison**

Some applicants and host customers that participated in SGIP in 2017 also participated in prior years and are able to make direct comparisons on the program administration over time. Five percent of host customers (172 of 3,164) and 22% of applicants (52 of 232) participated in 2017 and prior years. Applicants that participated in SGIP in 2017 and prior years were asked whether their satisfaction with each PA's timeliness, helpfulness, accessibility, and overall experience changed in 2017 in comparison to



prior years. Host customers that participated in multiple years were also asked about their satisfaction with their experience with SGIP in 2017 in comparison to prior years. Table 5-3 below shows the breakdown of responses from the 10 applicant respondents and 20 host customer respondents. Most participants reported no change in 2017 with regard to PA's helpfulness, accessibility, and overall experience (ranging from 55% to 70%). However, 50% of applicants did report more satisfaction with PA timeliness in 2017.

TABLE 5-3: APPLICANT REPORTED CHANGE IN SATISFACTION LEVELS IN 2017 VS PRIOR YEARS

		More Satisfied in 2017	Less Satisfied in 2017	No Change
Applicant Satisfaction (n=10)	Timeliness	50%	20%	30%
	Helpfulness	30%	10%	60%
vppl itisfa (n=	Accessibility	22%	22%	56%
Sa	PA overall	10%	20%	70%
Host Customer SGIP Satisfaction (n=20)		30%	15%	55%

Of those applicants that were more satisfied in 2017, multiple applicants noted that application requirements are clearer than in previous years. Applicants noted that PAs are more involved, in sync, and proactive regarding resolution of issues en masse. There was also a particular note of improvement by CSE with regard to increased communications, that was also more timely and more informative. Applicants that were less satisfied in 2017 mentioned long PA response times, with special note regarding a longer turnaround time from PG&E.

Most host customers that were more satisfied in 2017 felt that way because their application in 2016 for a storage system was cancelled. Of the host customers that were less satisfied in 2017, the majority were comparing to their experience many years ago with the solar incentive provided through SGIP.

### 5.2.2 Timeliness

Applicants were asked in 2016 and 2017 about the average time it took for each PA to initially reply to clarifying questions and inquiries. Table 5-4 below shows the percentage of respondents in each evaluation year that indicated the PA's initial reply took longer than one week. Responses for SCG and CSE worsened from 2016, where no respondents indicated average initial response times longer than one week. In 2017, 15% in CSE and 20% in SCG indicated longer response times. Responses about PG&E's initial response time remained steady across evaluation years, with 30% to 32% of respondents indicating longer response times. SCE's respondents indicated an improvement in initial response times, with 50% reporting longer response times in 2016 and 43% in 2017.



TABLE 5-4: APPLICANT REPORTED AVERAGE TIME FOR INITIAL REPLY TO INQUIRY LONGER THAN ONE WEEK BY PA AND EVALUATION YEAR

	Eval	uation Year 2016	Evaluation Year 2017		
PA	N Respondents	% Avg initial reply from PA longer than one week	N Respondents	% Avg initial reply from PA longer than one week	
PG&E	23	30%	37	32%	
SCE	12	50%	23	43%	
SCG	4	0%	10	20%	
CSE	9	0%	20	15%	

Applicants were also asked in 2016 and 2017 about the longest time it took for each PA to initially reply to clarifying questions and inquiries. Table 5-5 below shows the percentage of respondents in each evaluation year that indicated the longest PA initial reply took longer than one month. Responses for SCG and CSE worsened from 2016, where no respondents indicated any initial response times longer than one month; In 2017, 10% in CSE and 20% in SCG indicated longer response times. Responses about PG&E's longest initial response time remained steady across evaluation years, with 27% to 29% of respondents indicating longer initial replies. SCE's respondents indicated an improvement in the longest initial response times, with 44% reporting longer response times in 2016 and 32% in 2017.

TABLE 5-5: APPLICANT REPORTED LONGEST TIME FOR INITIAL REPLY TO INQUIRY LONGER THAN ONE MONTH BY PA AND EVALUATION YEAR

	Evo	Iluation Year 2016	Evaluation Year 2017		
PA	N Respondents	% longest initial reply from PA longer than one month	N Respondents	% longest initial reply from PA longer than one month	
PG&E	22	27%	35	29%	
SCE	9	44%	22	32%	
SCG	3	0%	10	20%	
CSE	8	0%	20	10%	



Applicants in 2016 and 2017 also reported the longest time it took for any issue to be resolved by the PA. Table 5-6 below shows the percentage of respondents in each evaluation year that indicated the longest time for issues to be resolved by the PA was more than one month. Resolution times worsened for PG&E and CSE, with an increased proportion of respondents indicating issue resolution times longer than one month (32% to 43% for PG&E and 13% to 25% for CSE). Issue resolution times remained relatively steady for SCE and SCG from the 2016 evaluation year to 2017.

TABLE 5-6: APPLICANT REPORTED LONGEST TIME FOR ISSUE RESOLUTION LONGER THAN ONE MONTH BY PA AND EVALUATION YEAR

	Evo	Iluation Year 2016	Evaluation Year 2017		
PA	N Respondents	% PA longest to resolve issue more than one month	N Respondents	% PA longest to resolve issue more than one month	
PG&E	22	32%	35	43%	
SCE	8	50%	21	48%	
SCG	3	33%	8	38%	
CSE	8	13%	20	25%	

Applicants were asked to rate their satisfaction with the timeliness of PA communications in 2016 and 2017. Table 5-7 below shows the average score reported by applicants in each evaluation year. In 2016 applicants were asked to rate their satisfaction with the timeliness of PA written and oral communications separately. Respondent count and average satisfaction score are reported for both questions in the table below (i.e., written score/oral score). Overall, applicants did not report significant changes in their satisfaction levels with PA timeliness. Applicants in PG&E and SCE were moderately satisfied with PA timeliness in 2016 and 2017, while applicants in SCG and CSE were highly satisfied in both years.

TABLE 5-7: APPLICANT SATISFACTION WITH PA TIMELINESS BY EVALUATION YEAR

PA	Evaluatio	n Year 2016	Evaluation	Year 2017
	N	Score	N	Score
PG&E	27/24	3.0/2.9	44	2.8
SCE	13/14	2.6/2.9	33	2.7
SCG	11/9	3.8/4.3	15	3.8
CSE	15/15	4.4/4.3	26	4.5



### 5.2.3 Helpfulness and Accessibility

Applicants in 2016 and 2017 were also asked to rate their satisfaction with PA helpfulness and accessibility. Table 5-8 below shows the average score reported by applicants in each evaluation year. Overall, there was no significant change in reported applicant satisfaction with helpfulness or accessibility from 2016 to 2017. Applicants in PG&E and SCE territories were moderately satisfied and applicants in SCG and CSE were highly satisfied with PA helpfulness and accessibility in 2016 and 2017.

TABLE 5-8: APPLICANT SATISFACTION WITH PA HELPFULNESS AND ACCESSIBILITY BY EVALUATION YEAR

	Helpfulness			Accessibility				
PA	2016		2017		2016		2017	
	N	Score	N	Score	N	Score	N	Score
PG&E	26	3.3	42	2.9	27	3.1	43	2.8
SCE	16	3.3	32	3.1	17	2.7	33	2.7
SCG	12	3.7	16	3.9	12	4	15	4.1
CSE	17	4.1	25	4.2	18	4.3	25	4.4

### 5.2.4 Host Customer Clarity and Satisfaction

Host customers were asked in 2016 and 2017 to rate on a scale of one-to-five the clarity of various program aspects including the program technical requirements, the project documentation requirements, the program timelines, their application status, and the division of responsibility between host customer and applicant. Host customers were also asked to rate on a scale of one-to-five their satisfaction with the information provided in the written communications from the PAs and the information provided by the applicants. Table 5-9, Table 5-10, Table 5-11, and Table 5-12 below show the number of respondents and average rating reported by host customers in 2016 and 2017 in PG&E, SCE, SCG, and CSE respectively. There was a very small sample size of host customers from SCG in the 2016 evaluation, which indicates a high degree of uncertainty in those results. For this reason, no further comparison will be made for the SCG host customer results.

From 2016 to 2017, ratings for clarity with program timelines decreased significantly in PG&E (2.8 to 2.3), SCE (3.2 to 2.7) and CSE (3.1 to 2.5) territories. Ratings for clarity with documentation requirements also decreased significantly from 2016 to 2017 in PG&E (3.6 to 2.9) and CSE (3.7 to 3.1) territories. Additionally, ratings for clarity with application status decreased significantly from 2016 to 2017 in PG&E (3.2 to 2.6) and CSE (3.6 to 3.0) territories. There were no significant increases in host customer clarity or satisfaction in any PA territory across the evaluation years.



TABLE 5-9: PG&E HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY EVALUATION YEAR

D		20	16	2017	
	Program Aspect	N	Score	N	Score
	Technical requirements	51	3.2	169	2.9
ity	Documentation requirements	48	3.6	163	2.9
Clarity	Program timelines	49	2.8	166	2.3
	Application status	52	3.2	173	2.6
	Division of responsibility	46	3.5	163	3.1
Satisfaction	Info in written communications from PA	46	3	162	2.9
Satis	Info provided by applicant	47	3.6	168	3.4

TABLE 5-10: SCE HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY EVALUATION YEAR

D		20	16	2017	
	Program Aspect	N	Score	N	Score
	Technical requirements	51	3.4	95	3.1
ity	Documentation requirements	52	3.2	94	2.9
Clarity	Program timelines	51	3.2	98	2.7
	Application status	52	3.1	100	3.1
	Division of responsibility	48	3.4	96	3.4
action	Info in written communications from PA	44	3.3	94	3.2
Satisfaction	Info provided by applicant	48	3.6	90	3.4

TABLE 5-11: SCG HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY EVALUATION YEAR

Program Aspect		2016		2017	
		N	Score	N	Score
Clarity	Technical requirements	9	4.2	37	3.1
	Documentation requirements	9	4.2	37	3.0
	Program timelines	10	3.9	41	2.6
	Application status	10	4.3	42	3.0
	Division of responsibility	8	4.5	40	3.0
Satisfaction	Info in written communications from PA	7	4.3	37	3.2
	Info provided by applicant	7	4.3	41	3.4



TABLE 5-12: CSE HOST CUSTOMER CLARITY WITH PROGRAM ASPECTS BY EVALUATION YEAR

Program Aspect		20	16	2017		
		N	Score	N	Score	
Clarity	Technical requirements	45	3.4	93	3.2	
	Documentation requirements	48	3.7	90	3.1	
	Program timelines	48	3.1	95	2.5	
	Application status	48	3.6	100	3.0	
	Division of responsibility	53	3.7	97	3.6	
Satisfaction	Info in written communications from PA	35	3.3	90	3.4	
	Info provided by applicant	50	3.8	100	3.8	

### 5.2.5 Overall Satisfaction

Satisfaction levels reported in 2016 are compared to the 2017 results in Table 5-13 below. Applicant reported satisfaction increased for all PAs from 2016, though PG&E and SCE scores are still moderate. Reported satisfaction with CSE improved significantly from 2.6 in 2016 to 4.1 in 2017. Host customer satisfaction for PG&E and SCE remained moderate and satisfaction for SCG remained high. The host customer satisfaction with SCG decreased from 3.9 in 2016 to 3.4 in 2017.

TABLE 5-13: APPLICANT AND HOST CUSTOMER REPORTED OVERALL SATISFACTION IN 2016 AND 2017

	Applicant			Host Customer				
PA	2016		2017		2016		2017	
	N	Score	N	Score	N	Score	N	Score
PG&E	30	2.7	43	2.9	51	2.9	165	2.8
SCE	18	2.7	34	2.9	50	3.0	99	3.2
SCG	12	3.5	16	3.9	8	3.9	40	3.4
CSE	17	2.6	25	4.1	45	3.6	96	3.5



#### 5.3 BENCHMARKING

The evaluation team conducted a best practice benchmarking effort on the SGIP based on the Best Practices Self-Benchmarking Tool (tool) developed by Itron under management by PG&E, in association with the California Energy Commission, SDG&E, SCE, and SCG and under the auspices of the CPUC.<sup>3</sup> The tool presents a list of best practices by program sector (Residential, Non-Residential, and Cross-Cutting), area (e.g., lighting, HVAC, comprehensive), and topic (e.g., program theory and design, participation process, reporting and tracking).

The tool offers a scoring system, where each topic is assigned a score of either zero, one, or two depending on the program's adherence to best practices for the given topic. Descriptions for what constitutes a zero, one, or two are provided for each topic. Users of the tool assign scores to the program for each relevant topic and calculate an overall best practice score which takes the ratio of the sum of the assigned scores to the total possible score. The tool provides the following guidance for score ranges: If the score is less than 70% the program is "Poor – needs significant improvement." If the score is at least 70% but less than 90% the program is "Fair – some improvement needed." If the score is 90% or higher, the program is "Excellent."

The evaluation team selected topics from the cross-program best practices, single family comprehensive program best practices, and nonresidential large comprehensive program best practices program areas. Twelve items were selected from the program implementation and marketing and outreach topics. Table 5-14 and Table 5-15 below show the selected benchmarking items along with their defined scoring system. Table 5-16 shows the benchmarking assessment and assigned scoring for each item.

<sup>3</sup> http://eebestpractices.com/index.asp



TABLE 5-14: PARTICIPATION PROCESS IDENTIFIED BEST PRACTICES AND SCORING

Deat Desertion	Scoring					
Best Practice	0	2				
Cross-Program						
Provide quick, timely feedback to applicants	Feedback is provided very slowly to applicants, typically more than 20 business days after the application is submitted.	Feedback is provided somewhat slowly to applicants, typically taking between 6 and 20 business days after the application is submitted.	Applicants are provided prompt feedback, usually within 5 business days.			
Use internet/electronic means to facilitate participation. Include procedures to report installation details	Program applications are reviewed and processed manually.	The program uses a combination of electronic and manual processing steps to process program applications.	Program applications are fully reviewed and processed electronically.			
Offer a single point of contact for customers	Participants are required to work through multiple contact points, which are designated without regard to areas of specialization).	Participants are assigned more than one program contact (based on specialty area).	Participants are provided with a single point of contact for all program transactions.			
Single-Family						
Develop a network of local installers who are committed to high-quality standards	The program does not provide a list of qualified installers.	The program has a list of contractors, but no training or screening is required to be on the list.	The program prescreens installers to ensure they are committed to high quality installations and has developed a cadre of them to support the program. Participants can access the list of screened contractors if needed.			
Establish systems that fund loans and issue rebates in shortest possible time	Applications for loan funding or rebates are often delayed. Payments can take more than 60 days.	The program has a stated commitment to expedite processing but no timetable.	The program has a system in place to expedite loan and rebate processing, and commits to a specific timetable (e.g., loan decision within 2-5 business days).			
Nonresidential Large						
Keep the application process and forms from being overly complex and costly to navigate while at the same time not being over-simplified	The program uses unnecessarily complex, lengthy and detailed application forms, and/or requires extensive project documentation.	Participation procedures are a mixture of simple and complex procedures (one example would be complex application forms coupled with simplified documentation requirements).	Participation procedures are streamlined, documentation requirements are reasonable, and forms are understandable.			
Provide technical assistance to help applicants through the process	The program does not provide any technical assistance to help applicants through the participation process.	The program offers some technical assistance to participants to help them with the participation process; however, it is limited.	The program provides technical assistance to guide participants through the participation process.			
Develop a cadre of trade allies who can then assist customers through the process	The program does not have a strong trade ally infrastructure.	The program has a strong trade ally infrastructure. But it does not use trade allies to assist customers with participation requirements.	The program uses trade allies to assist customers with participation requirements.			



TABLE 5-15: MARKETING AND OUTREACH IDENTIFIED BEST PRACTICES AND SCORING

Doot Dunation	Scoring				
Best Practice	0	1	2		
Cross-Program					
Provide trade allies with training & resources to enhance marketing	The program does not provide either training or marketing collateral to trade allies. Only basic information on program processes, and application forms is made available to them.	Trade ally training is offered infrequently. The program offers a limited set marketing resources, such as a basic brochure, but does not provide other helpful types of collateral.	The program provides training to trade allies to educate them about the program. The training requirement is a condition of their participating in the program.		
Nonresidential Large					
Use the program's website to broadly inform the market and attract participation	The program's or utility's website is not used to inform the market about the program.	Some program information is provided on the program's or utility's website, but the program does not make the fullest use of the website for program marketing.	The program makes effective use of the program's or utility's website to inform the market about the program and to attract potential participants.		
Leverage the extensive marketing efforts of the private sector	The program's marketing/outreach approach does not involve the private sector	The program's marketing/outreach approach leverages a portion of the private sector firms that are active in customer projects but excludes others.	The program's marketing efforts work through the private sector to promote the program's features and benefits to their customers.		
Keep technology providers well informed about program features and changes through seminars, training sessions, trade shows, and annual meetings of key groups	Program representatives do not make presentations at trade shows and seminars to inform technology providers about the program.	Program representatives make presentations occasionally at trade shows and seminars, not regularly, to inform technology providers about the program.	The program staff make presentations regularly at trade shows, seminars, etc. to inform technology providers about the program.		



TABLE 5-16: BENCHMARKING OF SGIP WITH IDENTIFIED BEST PRACTICES

Best Practice	Comments	Score	
Participation Process			
Cross-Program			
Provide quick, timely feedback to applicants	The majority of applicants reported receiving initial responses to inquiries from each PA within one week. However, a significant proportion (23% to 33% depending on PA) also reported that issues had taken more than three months to resolve.	1	
Use internet/electronic means to facilitate participation. Include procedures to report installation details.	Nearly all application documentation and processing are completed electronically. However, there are some instances where manual processes are required. For example, some PAs do not accept host customer signatures through Docusign. This required applicants to physically receive wet signatures from host customers when changes are made.	1	
Offer a single point of contact for customers	In some cases, applicants reported that issues were passed from person-to-person with PA staff not necessarily tracking what had been previously discussed in the interaction.	1	
Single-Family			
Develop a network of local installers who are committed to high-quality standards	The program does have a list of qualified developers. However, there is no required training and very limited screening. The list of developers is primarily used to track the developer cap, not to ensure high quality installations for the customer. Perhaps SGIP could develop a residential-approved developer list that does require training & higher standards. Residential applications would then be required to use a residential-approved developer unless they are the homeowner and are planning to act as their own developer for the project.	1	
Establish systems that fund loans and issue rebates in shortest possible time	Each PA has stated commitments of issuing the up-front payment at least no more than 30 days. PAs have reviewed their own payment systems and expedited where possible.	2	
Nonresidential Large			
Keep the application process and forms from being overly complex and costly to navigate while at the same time not being over-simplified	A large majority of applicants (72% to 91% depending on PA) reported typically having at least one clarifying question on each application. Many applicants reported that the required documentation was too complex, especially for smaller sized projects.	1	
Provide technical assistance to help applicants through the process	The PAs provide a great deal of technical assistance to applicants throughout the application process.	2	
Develop a cadre of trade allies who can then assist customers through the process	SGIP relies heavily on trade allies to assist customers with participation requirements. In fact, 79% of applications were completed by only 11 applicant entities.	2	
Marketing and Outreach			
Cross-Program			
Provide trade allies with training & resources to enhance marketing	Training to applicants/developers is offered primary at the quarterly workshops.  Trade allies are not provided with much materials for their marketing/messages to host customers. For this reason, host customers (and sometimes applicants themselves) may not fully understand the expected timelines and processes of the program.	1	
Nonresidential Large			
Use the program's website to broadly inform the market and attract participation	SGIP PAs maintain the statewide selfgenca.com website that is used for application submissions and hosts supportive material and information. Each PA also maintains their own SGIP website. Applicants reported, on average, that selfgenca.com was highly useful (4.0 on 5-point scale) and nearly half cited updates to the websites as a main channel through with they learn about changes to the program.	2	
Leverage the extensive marketing efforts of the private sector	SGIP is marketed almost exclusively through the efforts of private sector firms directly to customers.	2	
Keep technology providers well informed about program features and changes through seminars, training sessions, trade shows, and annual meetings of key groups	Program staff make presentations at quarterly SGIP workshops to inform technology providers about the program.	2	

Total Score: 18/24 (75%) Fair – some improvement needed



SGIP received a benchmarking score of 75%, indicating the program is "Fair - some improvement needed." Identified areas of improvement include: timely feedback to applicants, full incorporation of electronic processes, providing single point of contact to applicants, creating a list of trained or screened developers, avoiding overly complex and costly documentation, and providing applicants and/or developers training related to SGIP marketing.

#### 5.4 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.

#### 5.4.1 Timeliness

Lower the threshold for host customer signatures when changes are made to the application. Many surveyed applicants noted that certain signature requirements for changes made to an application were unnecessary and slowed down the application process. Applicants commented that "if there's a small clerical issue," such as a new email address or other minor application detail, customers should not need to sign-off. By lowering the threshold for required signatures, repeated back-and-forth communications between the applicant and host customer can be reduced and the overall application timeline shortened.

**Prioritize web-enabled processes where possible.** Some program administrators require wet signatures from host customers and do not allow the use of DocuSign (a cloud-based e-signature platform). If a customer doesn't have a printer and scanner the applicant must physically meet with the customer every time a signature is needed. This process limitation adds to the application timeline.

Consider simplifying steps and requirements for small residential storage projects. Applicants and host customers expressed the desire for a more simplified application process for small residential storage projects. It's commonly felt that the application process for small storage projects is "way too much work for a \$5K rebate." Participants cited the process used in the California Solar Initiative (CSI) general market program as an example of a similar rebate program with a more streamlined application procedure. The CPUC and the SGIP working group should consider whether the inherent differences in approaches and challenges between the residential and nonresidential sector warrant the creation of two separately designed incentive programs.

When there are long gaps between incentive step openings, anticipate increased demand and staff accordingly. There was a significant break between the last day the SGIP accepted applications in 2016 and the program opening in 2017. This gap, along with changes in program rules and structure, led to



increased demand at the beginning of PY 2017. Application review delays might have been mitigated if PAs had increased staff levels in anticipation of increased demand. As one applicant mentioned, "any time a new incentive comes out they've got to know there will be huge demand for it."

### 5.4.2 Accessibility

Create a customer-facing section of the SGIP portal that shows project status and includes simplified information regarding project procedures and timelines. Host customers reported low levels of clarity with program timelines. They expressed dissatisfaction with the application processing time and little understanding of their application status. A few host customers and applicants suggested creating more transparency for the host customer by "show[ing] end customers the SGIP process flow and a dashboard of where they stand in the process." A dedicated space within the SGIP application portal for customers would allow each customer to check on the status of their application directly, without having to rely on their applicant for that information. The customer-facing portal could also contain a simplified diagram of the SGIP process that is customized for their specific project type (e.g., by budget category and two-step vs. three-step). This customization would minimize confusion for the customer by providing direct access and simpler information.

Communicate expected timelines and important program information directly to host customers at the outset of each application. When an application is submitted, initial email communications with host customers should include specific and simplified information regarding SGIP. Program steps and procedures should be clearly laid out. The expected timeline should be communicated directly to the host customer including an estimate of when the host customer would receive the upfront incentive and, if applicable, begin PBI payments. This initial email should also include instructions on how to check application status. Communicating this information directly to the host customer at the outset of the application ensures customers understand the program process and helps maintain reasonable expectations of program timelines.

### 5.4.3 Helpfulness

Use a ticket system to track and manage issues and resolutions. Applicants have commented that questions or issues are sometimes passed from person to person, at times getting handed off to someone without the necessary expertise or historical knowledge. In other cases, applicants reported problems that were never addressed or remain unresolved. A ticket system that tracks each issue individually (along with the name of the PA personnel and the proposed solution) would help PAs improve issue tracking. Tickets could be managed in a searchable environment and PAs could search by issue type to see common solutions to similar issues, or track solutions already provided to a particular participant.



Require developers to complete training materials on SGIP processes and requirements as a prerequisite for addition to the approved developer list. The SGIP developer list is currently used to track the developer cap on incentives. However, it could also be used to help ensure high quality installations and application processing for the customer. An approved developer could be required to complete training and/or have managed a minimum number of applications in the prior program year. Applications would then be required to use an approved developer unless the homeowner is also the applicant and is planning to act as his/her own developer for the project.

As stated in the 2016 evaluation, continue to provide more examples, videos, and other training to clarify documentation expectations associated with application and document submittal on the statewide portal. Applicants consistently noted that it can be difficult to know precisely how project documentation is to be filled out and most applicants had at least one application flagged by the PA for missing information. For these reasons, we recommend the PAs continue to develop new guidance and training materials. Applicants requested "more training focused on the actual application process and what to expect during that process." Training materials should be kept current by making edits to or removing existing materials, as appropriate. The FAQs on the statewide portal should be updated on a regular basis with newly identified questions. Full recordings of the quarterly workshops should be recorded and posted online alongside the presentation slides (which are already posted). PAs should continue to identify opportunities for documentation templates to provide to applicants, such as the preliminary monitoring plan (PMP) template that was developed and posted in 2017.

## **APPENDIX A SURVEY INSTRUMENTS**

This section contains the following survey instruments:

- A.1 SGIP PA In-Depth Interview Guide
- A.2 Program Applicant Survey Instrument
- A.3 Web Survey for Host Customer



#### A.1 SGIP PA IN-DEPTH INTERVIEW GUIDE

- 1. For each person participating in the interview: What is your title and role? How long have you been on the SGIP team for [PA]?
- 2. (If not covered previously) Since PY 2016, did you make any changes to SGIP staffing levels, organization structure, or group responsibilities?
- 3. What changes were made to the SGIP program design in 2017 (e.g., Rules, procedures, budgets, incentive structures, etc.) ? (Provide summary of known changes)
  - (As appropriate) In your view, what are the strengths and weaknesses of these changes?
  - What changes (if any) were made at your PA to accommodate these changes (e.g., Staffing/management, marketing, communications protocols, other general approach)?
- 4. In 2017, was the lottery ever triggered in your service territory? If yes, tell us about the circumstances...
  - When the lottery was triggered did you notify all applicants of their acceptance status?
    - If yes, how?
    - What was the timing involved?
  - In your view, what are the strengths and weaknesses of the lottery system
- 5. (If not covered previously) Since PY 2016, did you make any changes to your communications protocols (e.g., communications channels [email/phone/in-person/online/webinar/print], who receives communications [applicant/host customer], inquiry response time)?
- 6. In your opinion, how well is [PA] doing in terms of timeliness & effectiveness of communications with applicants & host customers? What challenges do you face?
- 7. **(If not covered previously)** Since PY 2016, did you make any changes affecting the average time for payment processing once the applicant has submitted all required paperwork?
- 8. In your opinion, what areas of the application steps & project processing could potentially be the most confusing for applicants/host customers? What do you get the most questions about?
  - Is there anything you think could be improved, to make things less confusing?



- 9. Do you market the program directly to applicants? To host customers? How?
  - [Don't ask CSE] What role do account reps play, if any, in relation to host customer recruitment and participation experience?
  - What are your selling points in your marketing materials? Do you mention anything about pairing with PV?
  - Do you have any marketing materials you can share with us (other than the [PA name]
     SGIP website)?
- 10. (If not covered previously) Since PY 2016, did you make any changes to the PA website?
- 11. We understand that the SGIP quarterly workshops are a new aspect of program communications beginning in 2017. In your opinion, what are the benefits (and to whom) of the quarterly workshops?
- 12. Are you implementing, or planning to implement any changes in response to the recommendations from the PY 2016 evaluation? [see attached list]
- 13. Are there any key applicant or host customer satisfaction questions you would like to see explored in this evaluation?

# A.2 PROGRAM APPLICANT SURVEY INSTRUMENT

This survey instrument will be used to interview the SGIP applicants for the 2017 SGIP PA Performance Evaluation.

**TABLE A-1: SURVEY INPUT VARIABLES** 

Variable	Description
Num_proj_pre2017	# of projects from the applicant company still active from program years prior to 2017
Num_proj_2017	# of projects from the applicant company in program year 2017
Measure_list_Pre_201 7	List of distinct technologies from projects of the applicant company still active from program years prior to 2017
Measure_List_2017	List of distinct technologies from applicant in program year 2017
PGE_Flag	IF applicant participated in PG&E territory
SCE_Flag	IF applicant participated in SCE territory
SCG_Flag	IF applicant participated in SCG territory
CSE_Flag	IF applicant participated in CSE (SDG&E) territory
Host_Customer_Flag	Applicant is also a host customer
HomeOnly	1 if the applicant ONLY EVER had projects where the applicant is also the homeowner
Storage_Flag	Applicant's projects included storage
3Step_flag	Applicant within the 3-step process
LastStep	The farthest step an applicant ever got to on any project in the dataset {RRF, PPM, ICF, Payment}
PBI_Flag	1 if there are projects where applicant is currently in the PBI stage
App2017_and_Prior	1 if the applicant participated in 2017 and prior years

# A.2.1 Introduction

Hello my name is <name>. I'm calling from Itron on behalf of the California Public Utilities Commission as part of an effort to evaluate the Self-Generation Incentive Program, from now on referred to as SGIP. We are interviewing individuals that submitted applications to the SGIP. The purpose of our evaluation is to assess the performance of the SGIP Program Administrators in 2017.



# A.2.2 Screening Questions

# **Confirmation of Measure Volumes**

#### [Ask If num\_proj\_2017 >0, else skip to M2]

**M1.** Our records show that in 2017, your firm submitted <num\_proj\_2017> applications consisting of <Measure\_List\_2017>. Is that your recollection (note: this includes cancelled projects)?

- 1 Yes
- 2 No, that is the wrong number of projects
- 3 No, those are the wrong technologies
- 4 That is the wrong # of projects and the wrong technologies
- 77 N/A
- 88 Refused
- 99 Don't Know

## [ASK IF M1 = 2 or 4]

xxNum\_proj\_2017. What is the correct number of projects?

- 1 RECORD NUMBER
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF M1 = 3 or 4]

xxTech1. What are the correct technologies? [DO NOT READ; SELECT MULTIPLE]

- 1 Advanced Energy Storage (AES)
- 2 Wind Turbine
- 3 Fuel Cell CHP
- 4 Fuel Cell Electric Only
- 5 Gas Turbine CHP
- 6 Internal Combustion Engine CHP
- 7 Microturbine CHP
- 8 Steam Turbine CHP
- 9 Pressure Reduction Turbine
- 10 Waste Heat to Power
- 11 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know



**xxLastStepa**. Our records show that the latest stage you reached on any project in 2017 is **<LASTSTEP>**. Is that Correct? (If Needed: This includes project applications submitted prior to 2017)

- 1 Yes
- 2 No
- 77 N/A
- 88 Refused
- 99 Don't Know

## [ASK IF xxLastStepa = No]

**xxLastStepb**. What is the latest stage you reached on any project in 2017? Was it ... [READ LIST] (If Needed: This includes project applications submitted prior to 2017)

- 1 Submission of Reservation Request Form (RRF)
- 2 Submission of Proof of Project Milestone (PPM)
- 3 Submission of Incentive Claim Form (ICF)
- 4 Received First Payment (Payment)
- 5 Receiving performance-based-incentives (Payment)
- 6 Cancelled (Cancelled)
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF num\_proj\_pre2017 <>0, Else skip to B2]

**M2.** Our records show that <num\_proj\_pre2017> projects consisting of <Measure\_list\_Pre\_2017>, **from prior years were still active** (in payment or processing) in 2017. Is that your recollection?

- 1 Yes
- 2 No, that is the wrong number of projects
- 3 No, those are the wrong technologies
- 4 That is the wrong # of projects and the wrong technologies
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF M2 = 2 or 4]

**M2a.** What is the correct number of projects?

- 1 RECORD NUMBER
- 77 N/A
- 88 Refused
- 99 Don't Know



## [ASK IF M2 = 3 or 4]

xxTech2. What are the correct technologies? [DO NOT READ; SELECT MULTIPLE]

- 1 Advanced Energy Storage (AES)
- 2 Wind Turbine
- 3 Fuel Cell CHP
- 4 Fuel Cell Electric Only
- 5 Gas Turbine CHP
- 6 Internal Combustion Engine CHP
- 7 Microturbine CHP
- 8 Steam Turbine CHP
- 9 Pressure Reduction Turbine
- 10 Waste Heat to Power
- 11 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF HomeOnly = 0]

**B2.** As an applicant, how would you describe your role with the SGIP relative to the host customer? Did your organization...[Select all that apply]

- 1 Sell (or intend to sell) the incentivized technology to the host customer
- 2 Lease (or intend to lease) the incentivized technology to the host customer
- Install (or intend to install) the incentivized technology for the host customer
- 4 Provide advice to the host customer regarding the incentivized technology
- 5 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# A.2.3 Process

READ: Throughout this survey I am going to be asking questions regarding your experience with the SGIP in 2017. Please try to keep your answers focused on your experience in 2017 only, unless otherwise noted.



# [ASK IF (Num\_proj\_2017>0 or xxNum\_proj\_2017 <> {Null, 0, 77,88,99}), ELSE SKIP TO D1]

L1. In 2017, was an application of yours ever put through the lottery process?

- 1 Yes
- 2 No
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF L1 = Yes, ELSE SKIP to P10]

**L2.** For which program administrators was the lottery triggered with your application(s): [Multi-Select]

- 1 PG&E
- 2 SCG
- 3 SCE
- 4 CSE
- 77 N/A
- 88 Refused
- 99 Don't Know

# [Show a column for each PA listed in L2 (PGE, SCG, SCE, CSE) for L3\_<PA> through L5\_<PA>]

L3\_<PA>. How were you notified that the lottery was TRIGGERED?

- 1 Email received ONE day after application was submitted
- 2 Email received MORE THAN ONE day after application was submitted
- 3 I was not notified
- 4 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

**L4\_<PA>.** From the day the lottery was triggered, how many business days did it take for the program administrator to notify you of the lottery results? [NOTE TO INTERVIEWER: If same day, enter zero]

- 1 [RECORD #]
- 77 N/A
- 88 Refused
- 99 Don't Know



**L5\_<PA>.** On a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the lottery process (if needed: for each program administrator).

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF ANY L5\_<PA> less than 3]

- L6. Why were you unsatisfied with the lottery process?
  - 1 [RECORD VERBATIM]
  - 77 N/A
  - 88 Refused
  - 99 Don't Know

**P10**. In 2017, were you ever informed by a program administrator that an application was missing information or documentation?

- 1 Yes
- 2 No
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF P10 = Yes, else skip to P11]

P10a. What information was missing?

- 1 [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

P11. In 2017, how many (if any) of your applications were suspended?

- 1 [RECORD #]
- 77 N/A
- 88 Refused
- 99 Don't Know



#### [ASK IF P11 >0, ELSE SKIP TO D1]

P11a. Of the projects that were suspended, what percentage went on to become 'active' again?

- 1 [RECORD %]
- 77 N/A
- 88 Refused
- 99 Don't Know

### [ASK IF P11a < 100%]

**P11b**. In the case(s) where a project did not become 'active' again, could you give the reason(s) why? [Multi-Select]

- 1 Project was ineligible
- 2 Couldn't obtain the necessary information
- 3 Timeline could not be met
- 4 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF P11a>0%]

**P11c**. On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the program administrator's involvement in resolving suspended projects?

- 1 [RECORD 1-5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# A.2.4 Communication

**D1**. On an average project, how many clarifying questions or other inquiries for the program administrator did your firm have in 2017 (if needed: falling outside the normal applicant procedure)?

- 1 [RECORD #]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF D1 >0, ELSE SKIP TO D4\_<PA>]



# D1a. What types of questions have you asked? [DO NOT READ; Select Multiple]

- 1 Clarifications on the APPLICATION PROCESS
- 2 Clarifications on the APPLICATION TECHNICAL REQUIREMENTS
- 3 Clarifications on the APPLICATION DOCUMENTATION REQUIREMENTS
- 4 Clarifications on the PAYMENT PROCESS
- 5 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [Column for each PA D3a\_<PA> to D4a\_<PA> for each PA {PGE, SCE, SCG, CSE} where <PA>\_Flag = 1]

**D3a\_<PA>**. On average, how much time does it take for **<PA>** to **initially reply to** clarifying questions and other inquiries?

- 1 Within one hour
- 2 Within one day
- 3 Within 2 days
- 4 Within 3 days
- 5 Within 4 days
- 6 Within one week
- 7 More than one week
- 77 N/A
- 88 Refused
- 99 Don't Know

# D3b\_<PA>. What is the longest amount of time <PA> has taken to initially reply to an inquiry?

- 1 Within one hour
- 2 Within one day
- 3 Within 2 days
- 4 Within 3 days
- 5 Within 1 WEEK
- 6 Within 2 WEEKS
- 7 Within a MONTH
- 8 More than a MONTH
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF D3b\_<PA> = $\{6,7,8\}$ ]



**D3c\_<PA>.** Could you please tell me a bit about that interaction? For example: Why did it take **<PA>** so long to <u>respond</u>? How did this timing affect the program application process?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**D3d\_<PA>**. Thinking about all of the questions you have asked **<PA>** in 2017, what percentage of your questions were answered by pointing you to information on either **<PA>** 's website or SelfGenCA.com?

- 1 [RECORD %]
- 77 N/A
- 88 Refused
- 99 Don't Know

**D3e\_<PA>**. What percentage of your questions has **<PA>** answered in one interaction? For instance, one phone call, one email exchange, or one meeting?

- 1 [RECORD %]
- 77 N/A
- 88 Refused
- 99 Don't Know

**D3f\_<PA>**. What is the longest amount of time **<PA>** has taken to **RESOLVE** an inquiry?

- 1 Within a DAY
- 2 Within a WEEK
- 3 Within 2 WEEKS
- 4 Within a MONTH
- 5 Within 3 MONTHS
- 6 More than 3 MONTHS [RECORD #]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF D3f $_<$ PA> ={3,4,5,6}]

**D3g\_<PA>**. Could you please tell me a bit about that case? For example: Why did it take **<PA>** so long to **resolve** the inquiry? How did the timing effect the program application process?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



**D4\_<PA>**. On a scale of 1 to 5, where 1 is not satisfied and 5 is extremely satisfied, how satisfied are you with the **timeliness** of **<PA>'s** communications?

- 1 [RECORD 1-5]
- 77 Not Applicable
- 88 Refused
- 99 Don't Know

## [ASK IF D4\_<PA> <3]

**D4a\_<PA>.** Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [END PA LOOP]

# A.2.5 Workshops

**D8**. How does your firm learn about changes made to the program (such as incentive amounts, eligibility requirements, timelines, and deadlines)? [**DO NOT READ: Select All that Apply**]

- 1 Mail Notifications
- 2 Updates to website
- 3 Email
- 4 Webinars
- 5 Quarterly workshops
- 6 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

READ: I will now ask you a few questions regarding the SGIP quarterly workshops hosted by the program administrators.

WK1. How many SGIP quarterly workshops have you attended (either in-person or online)?

- 1 [enter #]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF WK1 >0 else skip to C7\_<PA>]



# WK2. Why did you attend the quarterly workshop(s) [DO NOT READ; SELECT MULTIPLE]?

- 1 to ask a specific question directly to a program administrator
- 2 to learn about changes to the program
- 3 to hear questions and answers from other applicants
- 4 to build a personal relationship with the program administrator
- 5 to learn general program information
- 6 to voice a concern or issue with the program administrator
- 7 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

**WK3**. On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the quarterly workshop(s) overall (including the format, information presented, and timing)?

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF WK3<3]

WK3a. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF WK1 = 0]

**WK4.** Why did you decide not to attend any quarterly workshops? [Do not read]

- 1 I didn't know about them
- 2 I wanted to, but my schedule didn't allow
- 3 Others in my organization attended
- 4 I didn't think they were relevant to my role as an applicant
- 5 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know



# A.2.6 PA Helpfulness

[Column for each PA: C7\_<PA> to C9a\_<PA> for each PA {PGE, SCE, SCG, CSE} where <PA>\_Flag = 1]

[NOTE TO INTERVIEWER: Be sure respondent is thinking about the PA's role within SGIP, and NOT as a general utility]

READ: Next, I'm going to ask you to rate various aspects of your experience with program administrators. When answering these questions, please think specifically about the program administrator's role within SGIP.

**C7\_<PA>.** On a scale of 1 to 5, where 1 is not at all helpful and 5 is extremely helpful, how helpful was **<PA>** in 2017 in their role as SGIP administrator?

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

C7a\_<PA>. Why did you give <PA> a rating of C7\_<PA> on their helpfulness in 2017 in their role as SGIP administrator?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**C8\_<PA>.** On a scale of 1 to 5, where 1 is not at all accessible and 5 is very easily accessible, how accessible was **<PA>** in 2017 in their role as SGIP administrator?

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF C8\_<PA> = 1 or 2]

**C8a\_<PA>.** Why did you give **<PA>** a rating of **C8\_<PA>** on their accessibility in 2017 in their role as SGIP administrator?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



**C9\_<PA>**. On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how would you rate your experience with **<PA>** overall, in relation to their role as an SGIP administrator in 2017?

- 1 [ RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF C9\_<PA>=1 or 2]

**C9a\_<PA>**. Why did you rate your satisfaction with **<PA>** overall as **C9\_<PA>**, in relation to their role as an SGIP administrator in 2017?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [END PA LOOP]

#### [ASK IF App2017\_and\_Prior = 1, ELSE SKIP TO W1]

**C10**. Our records show that you submitted applications to the SGIP in 2017 and at least one prior year. How satisfied are you with the **timeliness** of the Program Administrator's communications in 2017, in comparison to prior years? Are you... [READ]

- 1 More Satisfied in 2017
- 2 Less Satisfied in 2017
- 3 No Change
- 4 I DID NOT SUBMIT PROJECTS IN 2017 AND PRIOR YEARS
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF C10 = 1 or 2]

C10a. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF C10 <> 4, ELSE SKIP TO W1]



## C11. How HELPFUL were program administrators in 2017, in comparison to prior years? ... [READ]

- 1 More Helpful in 2017
- 2 Less Helpful in 2017
- 3 No Change
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF C11 = 1 or 2]

#### C11a. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# C12. How ACCESSIBLE were program administrators in 2017, in comparison to prior years? ... [READ]

- 1 More accessible in 2017
- 2 Less accessible in 2017
- 3 No Change
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF C12 = 1 or 2]

# C12a. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# **C13**. How satisfied are you with your experience with program administrator's in relation to SGIP overall in 2017, in comparison to prior years? Are you... [READ]

- 1 More satisfied in 2017
- 2 Less satisfied in 2017
- 3 No Change
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF C13 = 1 or 2]



# C13a. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# A.2.7 Website

Next, I'd like to ask about your experiences with the SGIP websites maintained by the CPUC and the program administrators.

W1. Which of the following SGIP related websites have you visited in 2017?

- 1 The CPUC SGIP website <u>www.selfgenca.com</u>
- 2 [if PGE\_Flag = 1] PG&E's SGIP website
- 3 [if SCE\_Flag = 1] SCE's SGIP website
- 4 [if SCG\_Flag = 1] SCG's SGIP website
- 5 [if CSE\_Flag = 1] CSE's SGIP website
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [Column for each answer of W1: 1-CPUC 2-PGE 3-SCE 4-SCG 5-CSE]

W2\_[#]. Generally, why do you visit the SGIP website of... [DO NOT READ. SELECT MULTIPLE]

- 1 To submit project application forms
- 2 To check project status
- 3 To use the generation or storage calculators
- 4 To find the SGIP Handbook
- 5 To learn information about guarterly workshops schedules/location
- 6 To learn more about the program structure (through FAQs & summarized info)
- 7 Links to CPUC Rulings related to SGIP
- 8 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



W3\_<#>. How frequently do you visit the SGIP website of...?

- 1 Every day
- 2 A few times a week
- 3 Once a week
- 4 Once a month
- 5 Once a year
- 77 N/A
- 88 Refused
- 99 Don't Know

**W4\_<#>**. Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate each SGIP website in terms of its usefulness?

- 1 [RECORD 1-5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF W4\_<#> = {1,2}]

W4a\_<#>. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# A.2.8 Attribution

[ASK IF (storage\_Flag = 1 OR xxTech1 = AES OR xxTech2 = AES) AND HomeOnly = 0 AND B2 = {1,2,3}, ELSE SKIP TO K1]

**N1.** When your organization promotes advanced energy storage technology to potential customers, what types of use-cases do you typically describe? Do you describe... [Multi-select]

- 1 Backup capabilities
- 2 Paired-usage with on-site solar PV
- 3 Paired-usage with other (non-PV) on-site generation
- 4 Load Shifting
- 5 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



**N2.** Does your organization offer solar PV systems to your customers? (if needed: Does your organization sell, lease, or install PV systems?)

- 1 Yes
- 2 No
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF N2 = Yes, ELSE SKIP TO K1]

**N3.** Does your organization secure (or attempt to secure) incentives for <u>solar PV system</u> installations? This could include any incentive, rebate, or tax credit secured for your organization or for your customers.

- 1 Yes
- 2 No
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF N3 = Yes, ELSE SKIP TO N4]

**N3a.** Please list the incentives, rebates, or tax credits your organization pursues for solar PV systems... (if not immediately mentioned: Does your organization pursue the federal solar tax credit, also known as the investment tax credit or ITC?)

1 [RECORD VERBATIM]

[IF N3a was answered] READ: In a few questions from now, I am going to return to discussing these incentives, rebates, or tax credits for Solar PV systems that you just mentioned. When I do, I will call them the "Solar PV Incentives".

READ: Now, I am going to ask you a few questions about your organization's promotion of paired storage and solar PV systems.

**N4.** On a scale of 1 to 5, where 1 is not at all likely and 5 is extremely likely, if the **SGIP incentive for storage** was not available, how likely is it that your organization would promote **paired storage and solar PV systems** to customers? **{1-5, N/A, Don't Know}** 



**N5.** On a scale of 1 to 5, where 1 is not at all likely and 5 is extremely likely, if there was no **lottery priority** for paired renewable generation-storage systems, how likely is it that your organization would **promote** paired storage and solar PV systems to customers? **{1-5, N/A, Don't Know}** 

## [ASK IF N3 = Yes]

**N6.** Recall the Solar PV incentives you mentioned a few questions ago. How would you compare the influence of the Solar PV incentives to the influence of the SGIP lottery priority on **your organization's decision to promote paired storage and solar PV systems?** Would you say...

- The lottery priority was **MORE** influential than the solar PV incentives (on the decision to promote paired storage & PV)
- The lottery priority was **LESS** influential than the solar PV incentives (on the decision to promote paired storage & PV)
- The lottery priority was **EQUALLY** as influential as the solar PV incentives (on the decision to promote paired storage & PV)
- 77 N/A
- 88 Refused
- 99 Don't Know

**N7**. <u>Before 2017</u>, in approximately what percent of sales situations did your organization recommend paired storage and solar PV systems?

- 1 [RECORD %]
- 77 N/A
- 88 Refused
- 99 Don't Know

**N8**. And <u>NOW</u>, approximately what percent of sales situations does your organization recommend paired storage and solar PV systems?

- 1 [RECORD %]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF N8>N7]

**N9**. In your own words, why did the percentage of sales situations where your organization recommended paired storage with solar PV systems **increase**?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



# A.2.9 Satisfaction

Next, I'm going to ask you a few questions regarding your level of satisfaction with various aspects of the SGIP. Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with...

#### [ASK IF (Num\_proj\_2017>0 OR xxNum\_proj\_2017 <> {Null, 0, 77,88,99})]

**K1**. ... The application submission process in 2017

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

#### [ASK IF K1 <3]

**K1a**. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF (LastStep = {PPM, ICF, Payment} OR xxLastStepb = 2,3,4,5}) AND 3Step\_flag = 1 ELSE SKIP TO K4]

K3. ... The paperwork for the proof of project milestones

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF K3 <3]

**K3a**. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't know



# [ASK IF LastStep = {ICF, Payment} OR xxLastStepb = {3,4,5}, ELSE SKIP TO K9]

K4. ... The paperwork for the incentive claim stage

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF K4 <3]

**K4a**. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**K5**. ... The inspection scheduling process (*Interviewer*: *if no inspection scheduling has occurred choose n/a*)

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF K5 <3]

**K5a**. Why do you say that?

- 1 [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

# [ASK IF LastStep = Payment OR xxLastStepb = {4,5}, ELSE SKIP TO K9]

**K6**. ... The time it takes to receive the upfront-incentive

- 1 [RECORD 1 to 5]
- 77 N/A
- 88 Refused
- 99 Don't Know

[ASK IF K6 <3]



# **K6a**. Why do you say that?

1 [RECORD VERBATIM]

77 N/A

88 Refused

99 Don't Know

# [ASK IF (PBI\_Flag = 1 OR xxLastStepb = 5), ELSE SKIP TO K9]

**K7**. ... The Performance-Based Incentive payment process

1 [RECORD 1 to 5]

77 N/A

88 Refused

99 Don't Know

#### [ASK IF K7 <3]

**K7a**. Why do you say that?

1 [RECORD VERBATIM]

77 N/A

88 Refused

99 Don't Know

**K9**. In your opinion, how can the SGIP be improved in the future?

1 [RECORD VERBATIM]

77 N/A

88 Refused

99 Don't Know

## [READ IF Host\_Customer\_Flag = 1]

**END1**. Those are all the questions I have for you today. In the next few weeks, you will be receiving an email with additional questions about the SGIP based on your experience as a host customer. Your responses will help inform a more complete understanding of this program. Thank you very much for your time today and in the future survey.

## [READ IF Host\_Customer\_Flag = 0]

**END2**. Those are all the questions I have for you today. Thank you very much for your time.

#### **END OF SURVEY**

# A.3 WEB SURVEY FOR HOST CUSTOMERS

**TABLE A-2: SURVEY INPUT VARIABLES** 

Variable	Description
HouseFlag	Flag indicates whether a host customer is a person who lives at a house (vs. an organization)
Company_Name	If Nonresidential: Name of the Host Customer's Company If Residential: N/A
Application_Yrs	App Year: {2011,2012,2013,2014,2015,2016, 2017} (Written as "y1, y2,, and yn")
numProj2017	# of projects from the host customer applied in 2017
onlyHost	1 if the host customer is EVER only the host customer
ApplicantNoSelf_and_list	Name of the Applicant Company Associated with the Host Customer, separated by "and" (excludes applicants that are the same as the host customer)
ApplicantNoSelf_or_list	Name of the Applicant Company Associated with the Host Customer, separated by "or" (excludes applicants that are the same as the host customer)
Tech_and_list	List of technologies, separated by "and"
PA_or_list	List of program administrators for the host customer, separated by "or"
PA_and_list	List of program administrators for the host customer, separated by "and"
PGE_Flag	IF host customer participated in PGE territory
CSE_Flag	IF host customer participated in CSE territory
SCG_Flag	IF host customer participated in SCG territory
SCE_Flag	IF host customer participated in SCE territory
StorageFlag	Flag indicates whether technology was AES
Gen_flag	Flag indicates whether technology was generation (i.e., all technologies that are not AES)
InspectionFlag	Indicates if Host Customer got to Inspection Step IN PROGRAM YEAR 2017
Payment_Flag	Indicates if host customer reached payment stage in 2017
PBI_Flag	Indicates if host customer reached PBI stage in 2017

Thank you for agreeing to fill out this survey. We will be asking a few questions regarding your experience with California's Self-Generation Incentive Program (SGIP).

[IF HouseFlag = 0 THEN DISPLAY: "Throughout this survey, we will be referencing < Tech\_and\_list> project(s) your organization, <Company\_Name>, applied for in <Application\_Yrs>.]

[IF HouseFlag = 1 THEN DISPLAY: "Throughout this survey, we will be referencing < Tech\_and\_list> project(s) you applied for in <Application\_Yrs> for your home.]



# A.3.1 Background

A1. Are you aware that you [IF OnlyHost = 1 THEN "or your applicant company (<ApplicantNoSelf\_or\_list >)"] applied for an incentive from California's Self-Generation Incentive Program for <Tech\_and\_list> at your [IF HouseFlag = 1 THEN "home" ELSE IF HouseFlag = 0 THEN "organization"]?

- 1 Yes
- 2 No

# [ASK IF A1 = Yes and numProj2017>0]

A3. Our records indicate that you submitted numProj2017 application(s) to the Self-Generation Incentive Program in 2017. In addition to these applications, [IF HouseFlag = 1 THEN "did you" ELSE IF HouseFlag = 0 THEN "did your organization"] ever apply for an incentive from the program PRIOR TO 2017?

- 1 Yes
- 2 No
- 99 Don't Know

#### [ASK IF HouseFlag = 1]

**A0.** Our records show that you applied for SGIP technology intended for use at your home, is this correct?

- 1 Yes, for my home(s) or the home(s) of family members
- 2 No, for the home(s) of my company/organization's customer(s)
- No, for my company/organization's location(s)— which is not a home
- 99 Don't Know

[UPDATE HouseFlag for the remainder of the survey:

```
IF A0 = 1 THEN HouseFlag = 1
IF A0 = 2 or 3 THEN HouseFlag = 0]
```

A4. How did you first learn about the Self-Generation Incentive Program?

- 1 Through < ApplicantNoSelf or list >
- 2 Online research
- 3 **[If HouseFlag = 0]** My utility account representative informed me
- 4 I was not aware of the self-generation incentive program before taking this survey
- 5 Other [**RECORD**]
- 99 Don't Know

[ASK IF Gen\_flag = 1]



**A5\_Gen.** Why did you install or plan to install the incentivized generation technology (e.g., wind turbine, fuel cell, CHP system, pressure reduction turbine, or waste heat to power system) at your [**If HouseFlag = 1 THEN "home" else "organization"**]? Select all that apply. [Multi-select]

- To save money on my [IF HouseFlag = 1 THEN "home's" ELSE IF HouseFlag = 0 THEN "organization's"] electric bill
- To become less grid-dependent for my [IF HouseFlag = 1 THEN "home's" ELSE IF HouseFlag = 0 THEN "organization's"] electricity consumption
- 3 To reduce global greenhouse gas emissions
- 4 **[IF HouseFlag = 0]** To satisfy corporate goals/initiatives regarding on-site electricity generation
- 5 To increase reliability and resiliency of electricity supply
- 77 Other [RECORD]
- 99 Don't Know

## [ASK IF StorageFlag = 1]

**A5\_Stor.** Why did you install or plan to install the incentivized storage technology? [Multi-select]

- To save money on my [IF HouseFlag = 1 THEN "home's" ELSE IF HouseFlag = 0 THEN "organization's"] electric bill
- To become less grid-dependent for my [IF HouseFlag = 1 THEN "home's" ELSE IF HouseFlag = 0 THEN "organization's"] electricity consumption
- 3 To reduce global greenhouse gas emissions
- 4 **[IF HouseFlag = 0]** To satisfy corporate goals/initiatives regarding on-site electricity storage
- To improve the functionality of an existing onsite solar PV or other renewable generation system
- 6 To justify a potential solar PV or other renewable generation system investment
- 7 To use as backup in the event of a grid outage
- 77 Other [RECORD]
- 99 Don't Know

[IF A1 = No, Skip to END]



# A.3.2 Communication

[C1\_<PA> through C3\_<PA> contains logic relating to each PA {PGE, SCE, SCG, CSE} where <PA>\_Flag = 1]

#### [ASK C1 once, and show a column to respond to C1 for each <PA>]

**C1\_<PA>**. In 2017, through what channels did you hear from **<PA\_or\_List>** regarding the status of your application(s) with the Self-Generation Incentive Program? **[MULTI-SELECT]** 

- 1 Email
- 2 Postal mail
- 3 Phone
- 4 Quarterly Workshop
- 5 In-person meeting
- 6 Other [OPEN]
- 98 n/a I never heard from <PA> regarding the program
- 99 Don't Know

# [Show a column to respond to C2a\_<PA> through C2e\_<PA> for each <PA>]

Think about your experience with the Self-Generation Incentive Program in 2017. On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the following program aspects (If an aspect does not relate to your experience with the program in 2017, choose 'N/A'):

C2a\_<PA>. The program technical requirements [1-5, N/A, Don't Know]

C2b\_<PA>. The project documentation requirements [1-5, N/A, Don't Know]

C2c\_<PA>. The program timelines [1-5, N/A, Don't Know]

C2d\_<PA>. The status of your SGIP application(s) [1-5, N/A, Don't Know]

[ASK IF OnlyHost = 1] C2e\_<PA>. The division of responsibility between you and

<ApplicantNoSelf or list > [1-5, N/A, Don't Know]

#### [ASK IF C2a $\langle PA \rangle = 1$ or 2, for ANY PA]

**C2a\_Explain.** Please comment about your experience with the **program technical requirements** in 2017. Why did you say they were unclear? **[OPEN]** 

#### [ASK IF C2b < PA > = 1 or 2, for ANY PA]

**C2b\_Explain.** Please comment about your experience with the **project documentation requirements** in 2017. Why did you say they were unclear? **[OPEN]** 

[ASK IF  $C2c_{PA} = 1$  or 2, for ANY PA]



**C2c\_Explain.** Please comment about your experience with the **program timelines** in 2017. Why did you say they were unclear? **[OPEN]** 

#### [ASK IF $C2d_{PA} = 1$ or 2, for ANY PA]

**C2d\_Explain.** Please comment about your experience with the **status of your SGIP application(s)** in 2017. Why did you say they were unclear? **[OPEN]** 

#### [ASK IF $C2e_{PA} = 1$ or 2, for ANY PA]

**C2e\_Explain.** Please comment about your experience with the **division of responsibility between you and** < **ApplicantNoSelf\_or\_list>** in 2017. Why did you say they were unclear? **[OPEN]** 

# A.3.3 Website

- E1. Please select which of the following websites you visited in 2017: [MULTI-SELECT]
  - 1 SelfGenCA.com
  - 2 PGE.com/SGIP
  - 3 EnergyCenter.org/SGIP
  - 4 SCE.com/SGIP
  - 5 SoCalGas.com/for-your-business/power-generation/self-generation-incentive
  - 6 None of the above

#### [ASK IF SELECTED AT LEAST ONE CHOICE FROM E1, ELSE SKIP TO H1]

- **E2.** Why did you visit these websites in 2017? [SELECT MULTIPLE]
  - 7 To learn more about the program structure (through FAQs & summarized info)
  - 8 Links to SGIP Handbook
  - 9 To check project status
  - 10 To submit project application forms
  - 11 To review online SGIP status reports
  - 12 Links to CPUC Rulings related to SGIP
  - To use generation or storage calculators
  - 14 To learn information about quarterly workshops schedules/location
  - 15 Other [RECORD]
  - 77 N/A
  - 99 Don't Know

#### [FOR E3 - MAKE A TABLE WITH A ROW FOR EACH WEBSITE SELECTED IN E1]



**E3.** Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate the following website(s) in terms of its usefulness?

- SelfGenCA.com [RECORD 1-5, N/A]
- PGE.com/SGIP [RECORD 1-5, N/A]
- EnergyCenter.org/program/self-generation-incentive-program [RECORD 1-5, N/A]
- SCE.com/SGIP [RECORD 1-5, N/A]
- SoCalGas.com/for-your-business/power-generation/self-generation-incentive [RECORD 1-5, N/A]

#### A.3.4 Satisfaction

[FOR H1 Through H6, show in a table which allows for selection of: {1-5, N/A, Don't Know}]
[Show columns for each PA {PGE, SCE, SCG, CSE} where <PA>\_Flag = 1 (i.e., each question H1 to H6 gets asked for each PA on a single screen)]

On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with...

[ASK IF InspectionFlag = 1] H1\_<PA>. ... the inspection scheduling process (in 2017)?

[ASK IF PAYMENT\_FLAG = 1] H2\_<PA>. ... the time it takes to receive the upfront incentive (in 2017)?

[ASK IF PBI\_FLAG = 1] H3\_<PA>. ...the performance-based-incentive payment process (in 2017)?

[ASK IF C1 <> NA] H4\_<PA>. ... the information provided in the written communications from <PA\_and\_List> regarding the Self-Generation Incentive Program (in 2017)?

[ASK IF OnlyHost = 1] H5\_<PA>. ... the information provided by < ApplicantNoSelf\_and\_list > regarding the Self-Generation Incentive Program (in 2017)?

**H6\_<PA>**. ...your experience with PA\_and\_list in relation to the Self-Generation Incentive Program (in 2017)? **[1-5, N/A, Don't Know]** 

[ASK IF  $H1_{PA} = 1$  or 2, for ANY PA]

**H1\_Explain.** Please comment on the **inspection scheduling process** in 2017. Why did you say that you were unsatisfied? **[OPEN]** 

[ASK IF  $H2_{PA} = 1$  or 2, for ANY PA]



**H2\_Explain.** Please comment on the **time it takes to receive the upfront incentive** in 2017. Why did you say that you were unsatisfied? **[OPEN]** 

#### [ASK IF $H3_{PA} = 1$ or 2, for ANY PA]

**H3\_Explain.** Please comment on the **performance based incentive payment process** in 2017. Why did you say that you were unsatisfied? **[OPEN]** 

#### [ASK IF H4 < PA > = 1 or 2, for ANY PA]

**H4\_Explain.** Please comment on the **information provided in the written communications from <PA\_and\_List> regarding SGIP** in 2017. Why did you say that you were unsatisfied? **[OPEN]** 

### [ASK IF $H5_{PA} = 1$ or 2, for ANY PA]

H5\_Explain. Please comment on the information provided by ApplicantNoSelf\_and\_list regarding SGIP in 2017. Why did you say that you were unsatisfied? [OPEN]

# [ASK IF $H6_{PA} = 1$ or 2, for ANY PA]

**H6\_Explain.** Please comment on **your experience with PA\_and\_List in relation to SGIP** in 2017. Why did you say that you were unsatisfied? **[OPEN]** 

H7. If the SGIP incentivized technology has been installed at your [IF HouseFlag = 1 THEN "home" ELSE IF HouseFlag = 0 THEN "organization"], on a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the incentivized technology? {1-5, the SGIP incentivized technology has not yet been installed, don't know}

## [ASK IF H7 = $\{1,2,3,4,5\}$ ]

H7a. Please comment on your satisfaction-level with the installed SGIP incentivized technology. [OPEN]

#### A.3.5 Process

[B1\_<PA> through B6\_<PA> contains logic relating to each PA {PGE, SCE, SCG, CSE} where <PA>\_Flag = 1]

#### [ASK B1 once, and show a column to respond to B1 for each <PA>]

**B1\_<PA>**. In 2017, did you experience any issues, problems, or delays with the self-generation incentive program process? **Yes, No, N/A, Don't Know**}



#### [IF B1\_<PA> = 'Yes' ASK B2\_<PA>, ELSE SKIP TO G1]

B2\_<PA>. In <PA>, what were the issues, problems, or delays you experienced? [OPEN END]

B3. Who helped you work through any issues, problems, or delays [MULTI-SELECT]?

- 1 [IF PGE\_Flag = 1 and B1\_PGE = 'Yes'] PG&E
- 2 [IF CSE\_Flag = 1 and B1\_CSE = 'Yes'] CSE
- 3 [IF SCG\_Flag = 1 and B1\_SCG = 'Yes'] SCG
- 4 [IF SCE\_Flag = 1 and B1\_SCE = 'Yes'] SCE
- 5 [IF OnlyHost = 1] < ApplicantNoSelf\_or\_list >
- 6 Other [OPEN]

# [ASK B5 once, and show a column to respond to B5 for each <PA> where B1\_<PA> = 'Yes']

B5\_<PA>. Were your issues, problems, or delays resolved? {Yes; No; Some Yes/Some No; N/A; Don't Know}

# [ASK IF B5\_<PA> = {'Yes', 'Some Yes/Some No'}]

**B6\_<PA>.** How quickly were your issues, problems, or delays resolved?

- 1 Within one hour
- 2 Within one day
- 3 Within 2 days
- 4 Within 3 days
- 5 Within 1 WEEK
- 6 Within 2 WEEKS
- 7 Within a MONTH
- 8 More than a MONTH
- 77 n/a
- 99 don't know

# A.3.6 Compare to Prior Years

# [ASK IF A3 = Yes]

**P1**. Earlier, you mentioned that you applied for an SGIP incentive in 2017 and at least one other prior year. How satisfied are you with your experience with SGIP in 2017, in comparison to prior years? **{More satisfied in 2017; Less Satisfied in 2017; No Change; N/A; Don't Know}** 



#### [ASK IF P1 = 'More Satisfied in 2017' or 'Less Satisfied in 2017']

P1a. Why do you say that you were [P1] with SGIP in comparison to prior years? [OPEN END]

#### A.3.7 Attribution

#### [ASK IF StorageFlag = 1, ELSE SKIP TO I1]

**G1**. Is the SGIP-incentivized storage technology combined with (or planned to be combined with) on-site solar PV [IF HouseFlag = 1 THEN "at your home" ELSE "at your organization"]? {Yes, No, Don't Know}

#### [IF G1 <> Yes, SKIP TO G10]

**G1a.** How many combined on-site storage and solar PV systems does your [IF HouseFlag = 1 THEN "home" ELSE "organization] have (or plan to have)? (Only count systems that pair with SGIP-incentivized storage technology) [Record #]

#### [ASK IF G1a =1, Else skip to G3a\_multi]

G3\_single. When was the solar PV installed...

- 1 AT THE SAME TIME (within 3 months) as the SGIP-incentivized on-site storage
- 2 BEFORE the SGIP-incentivized on-site storage
- 3 AFTER the SGIP-incentivized on-site storage
- 88 n/a
- 99 Don't know

#### [ASK IF G1a >1, else skip to G4]

In how many cases was...

**G3a\_multi**. the on-site solar PV installed AT THE SAME TIME (within 3 months) as the SGIP-incentivized on-site storage [RECORD #]

**G3b\_multi**. the on-site solar PV installed BEFORE the SGIP-incentivized on-site storage [RECORD #]

**G3c\_multi**. the on-site solar PV installed AFTER the SGIP-incentivized on-site storage [RECORD #] \*\*\*G3a\_multi +G3b\_multi +G3c\_multi MUST EQUAL G1a \*\*\*

#### [ASK IF onlyHost = 1, ELSE SKIP TO G4b]



**G4**. Did <ApplicantNoSelf\_or\_list> recommend combined on-site solar PV and storage system(s)? **Yes, No, Don't Know**}

# [ASK IF G4 = Yes]

**G4a.** On a scale of 1 to 5, where 1 is not at all influential and 5 is very influential, how influential was < ApplicantNoSelf\_or\_list>'s recommendation on your decision to install combined on-site solar PV and storage system(s)? **{1-5, don't know}** 

**G4b**. On a scale of 1 to 5, where 1 is not at all likely and 5 is extremely likely, how likely is it that you would install on-site solar PV <u>without</u> the storage system(s)? **{1-5, don't know}** 

**G7.** If the SGIP incentive had not been available would you have...

- 1 Installed on-site solar PV only (without storage)
- 2 Installed storage system(s) only (without on-site solar PV)
- 3 Installed BOTH storage and on-site solar PV
- 4 Installed NEITHER storage nor on-site solar PV
- 99 Don't know

**G8.** Did you [IF onlyHost = 0 THEN "or <ApplicantNoSelf\_or\_list>] secure or attempt to secure any additional incentives for the solar PV system(s) while making the decision to install or not to install the solar PV system(s)? (Other incentives include, but are not limited to, federal solar tax credits like the Investment Tax Credit or ITC) {Yes, No, Don't Know}

#### [ASK IF G8 = Yes]

**G9.** Which specific additional incentives did you [IF onlyHost = 0 THEN "or <ApplicantNoSelf\_or\_list>] secure or attempt to secure for the solar PV system(s)? [RECORD]

#### [Ask if G1 = No, ELSE SKIP TO I1]

G10. Do you plan to install on-site solar PV (to pair with the SGIP incentivized storage) in the near future?

- 1 Yes, within 1 year
- 2 Yes, within 2 years
- 3 Yes, within 5 years
- 4 No
- 99 Don't know



# [ASK IF G10 = $\{1,2,3\}$ ]

**G11.** Do you plan to apply for a rebate, incentive or tax credit when you install the on-site solar PV? **{Yes, No, Don't Know}** 

# A.3.8 Closing

**I1**. Do you have any suggestions on how to improve the Self-Generation Incentive Program in the future? **[OPEN]** 

**END:** Thank you for taking the time to fill out this survey.



# **Appendix B: Applicant Survey Response Frequencies**

 $Our\ records\ show\ that\ in\ 2017, your\ firm\ submitted\ applications\ consisting\ of\ {\it <Measure>}.\ Is\ that\ your\ recollection?$ 

	PG&E		SCE		SCG		CSE		Total	
M1	n	%	n	%	n	%	n	%	n	%
Yes	39	93%	36	97%	16	94%	26	100%	75	95%
No, that is the wrong number of projects	3	7%	1	3%	1	6%	0	0%	4	5%
Total	42	100%	37	100%	17	100%	26	100%	79	100%

# What is the correct number of projects?

	PG&E		S	CE	SCG		CSE		Total	
XXNUM_PROJ_2017	n	%	n	%	n	%	n	%	n	%
4	1	33%	0	0%	0	0%	0	0%	1	25%
9	1	33%	0	0%	1	100%	0	0%	1	25%
16	1	33%	0	0%	0	0%	0	0%	1	25%
19	0	0%	1	100%	0	0%	0	0%	1	25%
Total	3	100%	1	100%	1	100%	0	0%	4	100%

#### Our records show that the latest stage you reached on any project in 2017 is <LASTSTEP>. Is that Correct?

		<u>, , ,                                </u>								
	PG	PG&E		SCE		SCG		SE	Total	
XXLASTSTEPA	n	%	n	%	n	%	n	%	n	%
Yes	36	86%	31	84%	14	82%	22	85%	65	82%
No	6	14%	5	14%	1	6%	3	12%	11	14%
Don't Know	0	0%	1	3%	2	12%	1	4%	3	4%
Total	42	100%	37	100%	17	100%	26	100%	79	100%



# What is the latest stage you reached on any project in 2017?

	PG	&E	S	CE	SC	CG	CS	SE	То	tal
XXLASTSTEPB	n	%	n	%	n	%	n	%	n	%
Submission of Reservation Request Form (RRF)	0	0%	0	0%	1	100%	0	0%	1	9%
Submission of Incentive Claim Form (ICF)	5	83%	4	80%	0	0%	3	100%	9	82%
Receiving performance-based-incentives										
(Payment)	1	17%	1	20%	0	0%	0	0%	1	9%
Total	6	100%	5	100%	1	100%	3	100%	11	100%

# $Our\ records\ show\ that\ \verb|<|n|>|projects\ consisting\ of\ \verb|<|Measure||>|from\ prior\ years\ were\ still\ active\ in\ 2017.\ Is\ that\ your\ recollection?$

	PG&E		SCE		SCG		CSE		Total	
M2	n	%	n	%	n	%	n	%	n	%
Yes	10	91%	9	100%	7	100%	8	100%	17	94%
No, that is the wrong number of projects	1	9%	0	0%	0	0%	0	0%	1	6%
Total	11	100%	9	100%	7	100%	8	100%	18	100%

# What is the correct number of projects?

	PG&E		SCE		SCG		CSE		Total	
M2A	n	%	n	%	n	%	n	%	n	%
4	1	100%	0	0%	0	0%	0	0%	1	100%
Total	1	100%	0	0%	0	0%	0	0%	1	100%



#### As an applicant, how would you describe your role with the SGIP relative to the host customer?

	PG	&E	SC	CE	SC	G	C	SE	То	tal
B2	n	%	n	%	n	%	n	%	n	%
Sell (or intend to sell) the incentivized technology										
to the host customer	30	73%	28	78%	14	82%	20	80%	53	70%
Lease (or intend to lease) the incentivized										
technology to the host customer	11	27%	8	22%	7	41%	7	28%	13	17%
Install (or intend to install) the incentivized										
technology for the host customer	28	68%	25	69%	12	71%	18	72%	51	67%
Provide advice to the host customer regarding										
the incentivized technology	32	78%	30	83%	16	94%	19	76%	56	74%
Applicant is also host customer	3	7%	2	6%	1	6%	2	8%	8	11%
Power purchase agreement	4	10%	3	8%	2	12%	3	12%	5	7%
Other	1	2%	0	0%	1	6%	1	4%	2	3%
Shared savings agreement	2	5%	1	3%	1	6%	1	4%	2	3%
Total	41	100%	36	100%	17	100%	25	100%	76	100%

# In 2017, was an application of yours ever put through the lottery process?

	PG&E		SCE		SCG		CSE		Total	
L1	n	%	n	%	n	%	n	%	n	%
Yes	20	48%	21	57%	10	59%	19	73%	36	46%
No	18	43%	13	35%	6	35%	6	23%	35	44%
Don't Know	4	10%	3	8%	1	6%	1	4%	8	10%
Total	42	100%	37	100%	17	100%	26	100%	79	100%



# For which program administrators was the lottery triggered with your application(s)?

	PG	&E	SC	CE	SC	CG	CS	CSE		tal
L2	n	%	n	%	n	%	n	%	n	%
PG&E	14	70%	5	24%	2	20%	4	21%	14	39%
SCG	3	15%	4	19%	4	40%	4	21%	4	11%
SCE	4	20%	9	43%	4	40%	3	16%	9	25%
CSE	5	25%	9	43%	4	40%	13	68%	14	39%
N/A	0	0%	0	0%	1	10%	0	0%	1	3%
Don't Know	2	10%	2	10%	2	20%	2	11%	2	6%
Total	20	100%	21	100%	10	100%	19	100%	36	100%

#### How were you notified that the lottery was triggered?

	PG&E		SC	SCE		SCG		CSE		Total	
L3	n	%	n	%	n	%	n	%	n	%	
Email received ONE day after application was											
submitted	8	57%	6	67%	3	75%	7	54%	24	60%	
Email received MORE THAN ONE day after											
application was su	3	21%	3	33%	1	25%	4	31%	11	28%	
Other (please specify)	2	14%	0	0%	0	0%	1	8%	3	8%	
Don't Know	1	7%	0	0%	0	0%	1	8%	2	5%	
Total	14	100%	9	100%	4	100%	13	100%	40	100%	

# From the day the lottery was triggered, how many business days did it take for the program administrator to notify you of the lottery results?

	, , ,				30 0 7 0					
	PG&E		SCE		SCG		CSE		Total	
L4	n	%	n	%	n	%	n	%	n	%
Less than 5 business days	39	85%	34	87%	16	89%	23	85%	112	86%
5 to 10 business days	4	9%	2	5%	1	6%	2	7%	9	7%
More than 10 business days	2	4%	2	5%	0	0%	0	0%	4	3%
Don't Know	1	2%	1	3%	1	6%	2	7%	5	4%
Total	46	100%	39	100%	18	100%	27	100%	130	100%



#### On a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the lottery process?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
L5	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	0	0%	2	22%	1	25%	1	8%	4	10%
2	0	0%	0	0%	0	0%	1	8%	1	3%
3	2	14%	1	11%	0	0%	2	15%	5	13%
4	10	71%	4	44%	0	0%	4	31%	18	45%
5, extremely satisfied	2	14%	2	22%	3	75%	5	38%	12	30%
Total	14	100%	9	100%	4	100%	13	100%	40	100%

#### In 2017, were you ever informed by a program administrator that an application was missing information or documentation?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
P10	n	%	n	%	n	%	n	%	n	%
Yes	42	100%	34	92%	17	100%	22	85%	72	91%
No	0	0%	3	8%	0	0%	4	15%	7	9%
Total	42	100%	37	100%	17	100%	26	100%	79	100%

#### In 2017, how many (if any) of your applications were suspended?

	PG	&E	S	CE	SC	CG	CS	SE	То	tal
P11	n	%	n	%	n	%	n	%	n	%
0, no applications were suspended	7	17%	5	14%	4	24%	5	19%	18	23%
One	10	24%	8	22%	2	12%	3	12%	19	24%
Two	4	10%	3	8%	0	0%	2	8%	7	9%
3 to 5	4	10%	4	11%	1	6%	5	19%	10	13%
6 to 10	3	7%	1	3%	1	6%	1	4%	3	4%
11 to 20	3	7%	6	16%	2	12%	2	8%	6	8%
21 to 50	2	5%	5	14%	3	18%	5	19%	5	6%
More than 50	3	7%	3	8%	3	18%	3	12%	3	4%
N/A	1	2%	1	3%	1	6%	0	0%	2	3%
Don't Know	5	12%	1	3%	0	0%	0	0%	6	8%
Total	42	100%	37	100%	17	100%	26	100%	79	100%



## Of the projects that were suspended, what percentage went on to become 'active' again?

	PG&E		SC	SCE		SCG		CSE		Total	
P11A	n	%	n	%	n	%	n	%	n	%	
0	4	15%	2	7%	1	11%	2	11%	7	14%	
25% to 50%	0	0%	1	4%	0	0%	0	0%	1	2%	
50% to 75%	1	4%	2	7%	1	11%	0	0%	2	4%	
75% to 100%	1	4%	1	4%	0	0%	0	0%	1	2%	
1	20	77%	21	78%	7	78%	16	89%	39	78%	
Total	26	100%	27	100%	9	100%	18	100%	50	100%	

#### In the case(s) where a project did not become 'active' again, could you give the reason(s) why?

	PG	&E	S	CE	SC	CG	CS	SE .	То	tal
P11B	n	%	n	%	n	%	n	%	n	%
Project was ineligible	1	17%	2	33%	2	100%	1	50%	5	45%
Couldn't obtain the necessary information	2	33%	1	17%	0	0%	0	0%	2	18%
Timeline could not be met	1	17%	0	0%	0	0%	0	0%	1	9%
Host customer backed out	2	33%	3	50%	0	0%	1	50%	3	27%
Total	6	100%	6	100%	2	100%	2	100%	11	100%

#### On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the program administrator's involvement in resolving suspended projects?

	PG	PG&E		CE	SC	SCG		CSE		Total	
P11C	n	%	n	%	n	%	n	%	n	%	
1, not at all satisfied	6	27%	5	20%	2	25%	1	6%	9	21%	
2	2	9%	5	20%	0	0%	0	0%	6	14%	
3	3	14%	3	12%	1	13%	1	6%	5	12%	
4	7	32%	3	12%	1	13%	4	25%	10	23%	
5, extremely satisfied	4	18%	9	36%	4	50%	10	63%	13	30%	
Total	22	100%	25	100%	8	100%	16	100%	43	100%	



## On an average project, how many clarifying questions or other inquiries for the program administrator did your firm have in 2017?

	PG	PG&E		Œ	SCG		CSE		Total	
D1	n	%	n	%	n	%	n	%	n	%
0, no questions	4	9%	8	21%	5	28%	3	11%	11	13%
1 to 5	24	52%	20	51%	10	56%	18	67%	44	51%
6 to 10	8	17%	8	21%	2	11%	3	11%	16	18%
More than 10	6	13%	1	3%	0	0%	2	7%	9	10%
N/A	1	2%	0	0%	0	0%	0	0%	1	1%
Refused	0	0%	1	3%	0	0%	0	0%	1	1%
Don't Know	3	7%	1	3%	1	6%	1	4%	5	6%
Total	46	100%	39	100%	18	100%	27	100%	87	100%

#### What types of questions have you asked?

	PG	&E	S	CE	SC	CG	C	SE	То	tal
D1A	n	%	n	%	n	%	n	%	n	%
Clarifications on the APPLICATION PROCESS	13	34%	12	41%	6	50%	7	30%	27	39%
Clarifications on the APPLICATION TECHNICAL										
REQUIREMENTS	21	55%	19	66%	5	42%	14	61%	37	54%
Clarifications on the APPLICATION										
DOCUMENTATION REQUIREMENTS	23	61%	21	72%	9	75%	15	65%	42	61%
Clarifications on the PAYMENT PROCESS	5	13%	2	7%	5	42%	2	9%	9	13%
Other	1	3%	2	7%	0	0%	0	0%	2	3%
Requests for extensions/ inquiries about										
timelines	3	8%	3	10%	2	17%	3	13%	8	12%
Clarifications on program										
eligibility/qualifications/structure	7	18%	4	14%	1	8%	6	26%	13	19%
Don't Know	1	3%	0	0%	0	0%	0	0%	1	1%
Total	38	100%	29	100%	12	100%	23	100%	69	100%



#### On average, how much time does it take for your PA to initially reply to clarifying questions and other inquiries?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
D3A	n	%	n	%	n	%	n	%	n	%
Within one hour	2	5%	0	0%	2	17%	2	9%	6	6%
Within one day	2	5%	4	14%	0	0%	9	39%	15	15%
Within 2 days	6	16%	3	10%	3	25%	4	17%	16	16%
Within 3 days	5	13%	2	7%	1	8%	1	4%	9	9%
Within 4 days	3	8%	0	0%	1	8%	0	0%	4	4%
Within one week	7	18%	4	14%	1	8%	1	4%	13	13%
More than one week	12	32%	10	34%	2	17%	3	13%	27	26%
N/A	1	3%	6	21%	2	17%	3	13%	12	12%
Total	38	100%	29	100%	12	100%	23	100%	102	100%

#### What is the longest amount of time your PA has taken to initially reply to an inquiry?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
D3B	n	%	n	%	n	%	n	%	n	%
Within one hour	1	3%	0	0%	1	8%	0	0%	2	2%
Within one day	3	8%	1	3%	1	8%	4	17%	9	9%
Within 2 days	3	8%	2	7%	1	8%	5	22%	11	11%
Within 3 days	4	11%	0	0%	1	8%	0	0%	5	5%
Within 1 WEEK	4	11%	4	14%	4	33%	7	30%	19	19%
Within 2 WEEKS	6	16%	7	24%	0	0%	1	4%	14	14%
Within a MONTH	4	11%	1	3%	0	0%	1	4%	6	6%
More than a MONTH	10	26%	7	24%	2	17%	2	9%	21	21%
N/A	1	3%	6	21%	2	17%	2	9%	11	11%
Don't Know	2	5%	1	3%	0	0%	1	4%	4	4%
Total	38	100%	29	100%	12	100%	23	100%	102	100%



#### Thinking about all of the questions you have asked your PA in 2017, what percentage of your questions were answered by pointing you to information on either your PA's website or SelfGenCA.com?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
D3D	n	%	n	%	n	%	n	%	n	%
0	17	45%	7	24%	4	33%	9	39%	37	36%
0% to 25%	4	11%	6	21%	3	25%	2	9%	15	15%
25% to 50%	3	8%	8	28%	1	8%	4	17%	16	16%
50% to 75%	5	13%	1	3%	1	8%	1	4%	8	8%
75% to 100%	3	8%	0	0%	1	8%	1	4%	5	5%
1	5	13%	1	3%	0	0%	3	13%	9	9%
N/A	1	3%	5	17%	1	8%	3	13%	10	10%
Don't Know	0	0%	1	3%	1	8%	0	0%	2	2%
Total	38	100%	29	100%	12	100%	23	100%	102	100%

#### What percentage of your questions has your PA answered in one interaction? For instance, one phone call, one email exchange, or one meeting?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
D3E	n	%	n	%	n	%	n	%	n	%
0	5	13%	5	17%	1	8%	1	4%	12	12%
0% to 25%	6	16%	3	10%	1	8%	1	4%	11	11%
25% to 50%	10	26%	4	14%	1	8%	2	9%	17	17%
50% to 75%	7	18%	2	7%	1	8%	2	9%	12	12%
75% to 100%	5	13%	5	17%	2	17%	9	39%	21	21%
1	2	5%	4	14%	3	25%	5	22%	14	14%
N/A	2	5%	5	17%	1	8%	3	13%	11	11%
Don't Know	1	3%	1	3%	2	17%	0	0%	4	4%
Total	38	100%	29	100%	12	100%	23	100%	102	100%



#### What is the longest amount of time your PA has taken to RESOLVE an inquiry?

D3F	PG	&E	SC	CE	SC	CG	CS	SE	To	tal
	n	%	n	%	n	%	n	%	n	%
Within a DAY	4	11%	0	0%	2	17%	3	13%	9	9%
Within a WEEK	3	8%	5	17%	2	17%	7	30%	17	17%
Within 2 WEEKS	7	18%	1	3%	1	8%	3	13%	12	12%
Within a MONTH	6	16%	5	17%	0	0%	2	9%	13	13%
Within 3 MONTHS	7	18%	3	10%	1	8%	0	0%	11	11%
3 to 6 MONTHS	3	8%	4	14%	1	8%	1	4%	9	9%
6 to 12 MONTHS	3	8%	3	10%	1	8%	4	17%	11	11%
More than a year	2	5%	0	0%	0	0%	0	0%	2	2%
N/A	1	3%	6	21%	2	17%	2	9%	11	11%
Don't Know	2	5%	2	7%	2	17%	1	4%	7	7%
Total	38	100%	29	100%	12	100%	23	100%	102	100%

## On a scale of 1 to 5, where 1 is not satisfied and 5 is extremely satisfied, how satisfied are you with the timeliness of your PA's communications?

	PG	&E	S	CE	SC	G	CS	SE	To	tal
D4	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	8	17%	9	23%	2	11%	0	0%	19	15%
2	13	28%	5	13%	1	6%	2	7%	21	16%
3	7	15%	7	18%	1	6%	1	4%	16	12%
4	12	26%	8	21%	5	28%	6	22%	31	24%
5, extremely satisfied	4	9%	4	10%	6	33%	17	63%	31	24%
N/A	2	4%	6	15%	1	6%	1	4%	10	8%
Don't Know	0	0%	0	0%	2	11%	0	0%	2	2%
Total	46	100%	39	100%	18	100%	27	100%	130	100%



## How does your firm learn about changes made to the program?

	PG	&E	SC	CE	SC	CG	C	SE	То	tal
D8	n	%	n	%	n	%	n	%	n	%
Mail Notifications	2	4%	2	5%	2	11%	1	4%	3	3%
Updates to website	25	54%	21	54%	10	56%	13	48%	45	52%
Email	27	59%	26	67%	12	67%	21	78%	56	64%
Webinars	4	9%	4	10%	3	17%	2	7%	5	6%
Quarterly workshops	3	7%	4	10%	3	17%	4	15%	6	7%
Other	25	54%	19	49%	9	50%	13	48%	44	51%
SGIP handbook	6	13%	3	8%	2	11%	3	11%	9	10%
Updates from other organizations	3	7%	2	5%	1	6%	0	0%	5	6%
N/A	1	2%	0	0%	0	0%	0	0%	1	1%
Total	46	100%	39	100%	18	100%	27	100%	87	100%

#### How many SGIP quarterly workshops have you attended (either in-person or online)?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
WK1	n	%	n	%	n	%	n	%	n	%
0, never attended any	17	37%	17	44%	6	33%	12	44%	44	51%
One	15	33%	8	21%	4	22%	5	19%	23	26%
Two	7	15%	8	21%	4	22%	5	19%	11	13%
Three	3	7%	3	8%	2	11%	2	7%	4	5%
More than three	3	7%	2	5%	2	11%	2	7%	3	3%
Don't Know	1	2%	1	3%	0	0%	1	4%	2	2%
Total	46	100%	39	100%	18	100%	27	100%	87	100%



#### Why did you attend the quarterly workshop(s)?

	PG	&E	SC	CE	SC	G	CS	SE	То	tal
WK2	n	%	n	%	n	%	n	%	n	%
to ask a specific question directly to a program administrator	3	11%	4	19%	2	17%	4	29%	6	15%
to learn about changes to the program	13	46%	11	52%	7	58%	9	64%	18	44%
to hear questions and answers from other applicants	2	7%	2	10%	2	17%	2	14%	2	5%
to build a personal relationship with the program administrator	6	21%	5	24%	4	33%	4	29%	9	22%
to learn general program information	14	50%	13	62%	7	58%	8	57%	25	61%
to voice a concern or issue with the program administrator	2	7%	1	5%	0	0%	0	0%	2	5%
Other	2	7%	0	0%	1	8%	0	0%	2	5%
Total	28	100%	21	100%	12	100%	14	100%	41	100%

#### On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the quarterly workshop(s) overall?

			, ,				-			
	PG	&E	S	CE	SC	CG	CS	SE	То	tal
WK3	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	2	7%	2	10%	1	8%	2	14%	4	10%
2	2	7%	1	5%	0	0%	1	7%	3	7%
3	4	14%	4	19%	1	8%	1	7%	6	15%
4	12	43%	10	48%	8	67%	7	50%	18	44%
5, extremely satisfied	6	21%	4	19%	2	17%	3	21%	8	20%
Don't Know	2	7%	0	0%	0	0%	0	0%	2	5%
Total	28	100%	21	100%	12	100%	14	100%	41	100%



#### Why did you decide not to attend any quarterly workshops?

	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
WK4	n	%	n	%	n	%	n	%	n	%
I didn't know about them	6	35%	5	29%	0	0%	0	0%	11	25%
I wanted to, but my schedule didn't allow	5	29%	6	35%	3	50%	6	50%	15	34%
I didn't think they were relevant to my role as an applicant	1	6%	1	6%	0	0%	1	8%	3	7%
Other	2	12%	0	0%	1	17%	2	17%	5	11%
Prefer to do self research	1	6%	5	29%	2	33%	1	8%	7	16%
Too time consuming or inconvenient to attend	2	12%	0	0%	0	0%	2	17%	3	7%
Total	17	100%	17	100%	6	100%	12	100%	44	100%

## On a scale of 1 to 5, where 1 is not at all helpful and 5 is extremely helpful, how helpful was your PA in 2017 in their role as SGIP administrator?

	PG	&E	SC	CE	SC	G	CS	SE .	То	tal
C7	n	%	n	%	n	%	n	%	n	%
1, not at all helpful	8	17%	5	13%	2	11%	0	0%	15	12%
2	10	22%	5	13%	0	0%	3	11%	18	14%
3	8	17%	7	18%	2	11%	2	7%	19	15%
4	12	26%	10	26%	6	33%	7	26%	35	27%
5, extremely helpful	4	9%	5	13%	6	33%	13	48%	28	22%
N/A	1	2%	6	15%	2	11%	1	4%	10	8%
Don't Know	3	7%	1	3%	0	0%	1	4%	5	4%
Total	46	100%	39	100%	18	100%	27	100%	130	100%



#### On a scale of 1 to 5, where 1 is not at all accessible and 5 is very easily accessible, how accessible was your PA in 2017 in their role as SGIP administrator?

	PG	&E	SC	CE	SC	G	CS	SE	То	tal
C8	n	%	n	%	n	%	n	%	n	%
1, not at all accessible	6	13%	6	15%	1	6%	0	0%	13	10%
2	15	33%	7	18%	1	6%	2	7%	25	19%
3	13	28%	13	33%	3	17%	3	11%	32	25%
4	2	4%	4	10%	1	6%	3	11%	10	8%
5, very easy accessible	7	15%	3	8%	9	50%	17	63%	36	28%
N/A	2	4%	5	13%	2	11%	1	4%	10	8%
Don't Know	1	2%	1	3%	1	6%	1	4%	4	3%
Total	46	100%	39	100%	18	100%	27	100%	130	100%

#### On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how would you rate your experience with your PA overall, in relation to their role as an SGIP administrator in 2017?

	PG	&E	S	CE	SC	CG	CS	SE	То	tal
C9	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	7	15%	5	13%	1	6%	0	0%	13	10%
2	10	22%	6	15%	0	0%	3	11%	19	15%
3	13	28%	12	31%	5	28%	4	15%	34	26%
4	10	22%	7	18%	5	28%	5	19%	27	21%
5, extremely satisfied	3	7%	4	10%	5	28%	13	48%	25	19%
N/A	1	2%	5	13%	2	11%	1	4%	9	7%
Don't Know	2	4%	0	0%	0	0%	1	4%	3	2%
Total	46	100%	39	100%	18	100%	27	100%	130	100%

#### Our records show that you submitted applications to the SGIP in 2017 and at least one prior year. How satisfied are you with the timeliness of the Program Administrator's communications in 2017, in comparison to prior years?

	, <u>F</u>	F - J -								
	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
C10	n	%	n	%	n	%	n	%	n	%
More Satisfied in 2017	2	29%	2	29%	2	33%	3	43%	5	50%
Less Satisfied in 2017	2	29%	2	29%	1	17%	1	14%	2	20%
No Change	3	43%	3	43%	3	50%	3	43%	3	30%
Total	7	100%	7	100%	6	100%	7	100%	10	100%



#### How HELPFUL were program administrators in 2017, in comparison to prior years?

1 0	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
C11	n	%	n	%	n	%	n	%	n	%
More Helpful in 2017	1	14%	1	14%	1	17%	3	43%	3	30%
Less Helpful in 2017	1	14%	1	14%	0	0%	0	0%	1	10%
No Change	5	71%	5	71%	5	83%	4	57%	6	60%
Total	7	100%	7	100%	6	100%	7	100%	10	100%

## $How\ ACCESSIBLE\ were\ program\ administrators\ in\ 2017, in\ comparison\ to\ prior\ years?$

	PG	&E	SC	CE	SC	CG	CS	SE .	To	tal
C12	n	%	n	%	n	%	n	%	n	%
More accessible in 2017	0	0%	0	0%	0	0%	2	29%	2	20%
Less accessible in 2017	2	29%	2	29%	1	17%	1	14%	2	20%
No Change	4	57%	4	57%	4	67%	3	43%	5	50%
N/A	1	14%	1	14%	1	17%	1	14%	1	10%
Total	7	100%	7	100%	6	100%	7	100%	10	100%

#### How satisfied are you with your experience with program administrator's in relation to SGIP overall in 2017, in comparison to prior years?

	PG	&E	S	CE	SC	CG	CS	SE	To	tal
C13	n	%	n	%	n	%	n	%	n	%
More satisfied in 2017	0	0%	0	0%	0	0%	1	14%	1	10%
Less satisfied in 2017	2	29%	2	29%	1	17%	1	14%	2	20%
No Change	5	71%	5	71%	5	83%	5	71%	7	70%
Total	7	100%	7	100%	6	100%	7	100%	10	100%



## Which of the following SGIP related websites have you visited in 2017?

W1	n Total	% Total
The CPUC SGIP website www.selfgenca.com	80	92%
PG&E's SGIP website	20	23%
SCE's SGIP website	11	13%
SCG's SGIP website	7	8%
CSE's SGIP website	12	14%
N/A	4	5%
Don't Know	1	1%
Total	87	100%

## Generally, why do you visit the SGIP website?

	СР	UC	PG	&E	S	CE	SC	CG	CS	SE	То	tal
W2	n	%	n	%	n	%	n	%	n	%	n	%
To submit project application forms	56	70%	3	15%	1	14%	3	27%	1	8%	64	49%
To check project status	40	50%	3	15%	0	0%	1	9%	1	8%	45	35%
To use the generation or storage calculators	2	3%	2	10%	0	0%	0	0%	0	0%	4	3%
To find the SGIP Handbook	19	24%	3	15%	1	14%	2	18%	3	25%	28	22%
To learn information about quarterly workshops schedules/location	3	4%	1	5%	0	0%	0	0%	0	0%	4	3%
To learn more about the program structure (through FAQs & summarized info)	41	51%	12	60%	1	14%	3	27%	8	67%	65	50%
Links to CPUC Rulings related to SGIP	2	3%	2	10%	0	0%	0	0%	0	0%	4	3%
Other	2	3%	5	25%	3	43%	6	55%	3	25%	19	15%
N/A	0	0%	0	0%	1	14%	0	0%	1	8%	2	2%
Total	80	100%	20	100%	7	100%	11	100%	12	100%	130	100%



#### How frequently do you visit the SGIP website?

	СР	UC	PG	&E	SC	E	SC	G	CS	SE	To	tal
W3	n	%	n	%	n	%	n	%	n	%	n	%
Every day	17	21%	0	0%	0	0%	0	0%	1	8%	18	14%
A few times a week	26	33%	1	5%	0	0%	1	9%	1	8%	29	22%
Once a week	16	20%	2	10%	0	0%	2	18%	0	0%	20	15%
Once a month	19	24%	8	40%	2	29%	2	18%	6	50%	37	28%
Once a year	1	1%	6	30%	5	71%	6	55%	4	33%	22	17%
N/A	0	0%	1	5%	0	0%	0	0%	0	0%	1	1%
Don't Know	1	1%	2	10%	0	0%	0	0%	0	0%	3	2%
Total	80	100%	20	100%	7	100%	11	100%	12	100%	130	100%

Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate each SGIP website in terms of its usefulness?

	СР	UC	PG	&E	SC	CE	SC	CG	CS	SE	То	tal
W4	n	%	n	%	n	%	n	%	n	%	n	%
1, not at all useful	1	1%	3	15%	1	14%	1	9%	1	8%	7	5%
2	5	6%	2	10%	0	0%	0	0%	0	0%	7	5%
3	15	19%	3	15%	1	14%	3	27%	2	17%	24	18%
4	30	38%	8	40%	1	14%	2	18%	4	33%	45	35%
5, extremely useful	29	36%	2	10%	3	43%	3	27%	3	25%	40	31%
N/A	0	0%	2	10%	1	14%	2	18%	1	8%	6	5%
Don't Know	0	0%	0	0%	0	0%	0	0%	1	8%	1	1%
Total	80	100%	20	100%	7	100%	11	100%	12	100%	130	100%



#### When your organization promotes advanced energy storage technology to potential customers, what types of use-cases do you typically describe?

N1	n Total	% Total
Backup capabilities	40	68%
Paired-usage with on-site solar PV	49	83%
Paired-usage with other (non-PV) on-site		
generation	9	15%
Load Shifting	44	75%
Rate arbitrage	4	7%
Self consumption	3	5%
Other	3	5%
N/A	2	3%
Don't Know	2	3%
Total	59	100%

#### Does your organization offer solar PV systems to your customers?

N2	n Total	% Total
Yes	52	88%
No	6	10%
Don't Know	1	2%
Total	59	100%

#### Does your organization secure (or attempt to secure) incentives for solar PV system installations?

N3	n Total	% Total
Yes	39	75%
No	12	23%
Don't Know	1	2%
Total	52	100%



On a scale of 1 to 5, where 1 is not at all likely and 5 is extremely likely, if the SGIP incentive for storage was not available, how likely would your organization promote paired storage and solar PV systems to customers?

N4	n Total	% Total
1, not at all likely	10	19%
2	10	19%
3	4	8%
4	4	8%
5, extremely likelyl	22	42%
N/A	1	2%
Don't Know	1	2%
Total	52	100%

If there was no lottery priority for paired renewable generationstorage systems, how likely would your organization promote paired storage and solar PV systems to customers?

N5	n Total	% Total
1, not at all likely	4	8%
2	2	4%
3	5	10%
4	5	10%
5, extremely likelyl	26	50%
N/A	4	8%
Refused	1	2%
Don't Know	5	10%
Total	52	100%



How would you compare the influence of the Solar PV incentives to the influence of the SGIP lottery priority on your organization's decision to promote paired storage and solar PV systems?

N6	n Total	% Total
The lottery priority was MORE influential than		
the	2	5%
The lottery priority was LESS influential than		
the	17	44%
The lottery priority was EQUALLY as influential		
as	8	21%
N/A	3	8%
Refused	1	3%
Don't Know	8	21%
Total	39	100%

Before 2017, in approximately what percent of sales situations did your organization recommend paired storage and solar PVsystems?

N7	n Total	% Total
0	12	23%
0% to 25%	17	33%
25% to 50%	8	15%
50% to 75%	3	6%
1	7	13%
N/A	2	4%
Refused	1	2%
Don't Know	2	4%
Total	52	100%



And NOW, approximately what percent of sales situations does your organization recommend paired storage and solar PVsystems?

N8	n Tota	% Total
0	5	10%
0% to 25%	g	17%
25% to 50%	11	. 21%
50% to 75%	4	8%
75% to 100%	6	12%
1	12	23%
N/A	2	4%
Refused	1	. 2%
Don't Know	2	4%
Total	52	100%

Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the application submission process in 2017

	PG	&E	SCE		SC	SCG		SE	Total	
K1	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	8	19%	8	22%	3	18%	6	23%	16	20%
2	5	12%	9	24%	5	29%	6	23%	13	16%
3	13	31%	7	19%	2	12%	1	4%	19	24%
4	9	21%	7	19%	4	24%	6	23%	18	23%
5, extremely satisfied	6	14%	6	16%	3	18%	7	27%	12	15%
N/A	1	2%	0	0%	0	0%	0	0%	1	1%
Total	42	100%	37	100%	17	100%	26	100%	79	100%



Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the paperwork for the proof of project milestones

	PG	&E	S	SCE		SCG		SE	Total		
К3	n	%	n	%	n	%	n	%	n	%	
1, not at all satisfied	1	7%	1	8%	0	0%	0	0%	1	4%	
3	4	29%	4	33%	3	38%	3	30%	5	21%	
4	2	14%	3	25%	2	25%	3	30%	8	33%	
5, extremely satisfied	4	29%	3	25%	3	38%	3	30%	6	25%	
N/A	3	21%	1	8%	0	0%	1	10%	4	17%	
Total	14	100%	12	100%	8	100%	10	100%	24	100%	

Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the paperwork for the incentive claim stage

	PG	&E	S	SCE		SCG		SE .	Total		
K4	n	%	n	%	n	%	n	%	n	%	
1, not at all satisfied	2	11%	1	6%	0	0%	1	7%	3	9%	
2	4	21%	4	25%	3	38%	3	20%	5	15%	
3	7	37%	5	31%	1	13%	3	20%	10	29%	
4	4	21%	1	6%	2	25%	5	33%	9	26%	
5, extremely satisfied	0	0%	3	19%	2	25%	2	13%	4	12%	
N/A	2	11%	2	13%	0	0%	1	7%	3	9%	
Total	19	100%	16	100%	8	100%	15	100%	34	100%	

Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the inspection scheduling process

	PG	&E	SC	CE	SC	CG	CS	SE	To	tal
K5	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	2	11%	3	19%	1	13%	1	7%	4	12%
2	2	11%	2	13%	1	13%	2	13%	3	9%
3	5	26%	3	19%	1	13%	2	13%	7	21%
4	5	26%	2	13%	2	25%	3	20%	6	18%
5, extremely satisfied	2	11%	0	0%	2	25%	0	0%	4	12%
N/A	2	11%	3	19%	0	0%	5	33%	7	21%
Don't Know	1	5%	3	19%	1	13%	2	13%	3	9%
Total	19	100%	16	100%	8	100%	15	100%	34	100%



Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the time it takes to receive the upfront-incentive

	PG	&E	SCE		SCG		CS	SE	Total		
K6	n	%	n	%	n	%	n	%	n	%	
1, not at all satisfied	2	20%	0	0%	0	0%	0	0%	2	14%	
2	2	20%	2	29%	1	20%	2	33%	3	21%	
3	2	20%	1	14%	0	0%	1	17%	3	21%	
4	3	30%	3	43%	3	60%	3	50%	3	21%	
5, extremely satisfied	1	10%	0	0%	1	20%	0	0%	2	14%	
N/A	0	0%	1	14%	0	0%	0	0%	1	7%	
Total	10	100%	7	100%	5	100%	6	100%	14	100%	

Please rate your satisfaction with each aspect on a 1 to 5 scale, where 1 is not at all satisfied and 5 is extremely satisfied. How satisfied you are with the Performance-Based Incentive payment process

	PG	&E	S	CE	SC	CG	CS	SE .	То	tal
K7	n	%	n	%	n	%	n	%	n	%
1, not at all satisfied	1	13%	0	0%	0	0%	0	0%	1	10%
2	1	13%	2	33%	1	20%	1	25%	2	20%
3	2	25%	2	33%	1	20%	1	25%	2	20%
4	1	13%	1	17%	2	40%	1	25%	2	20%
5, extremely satisfied	1	13%	0	0%	0	0%	0	0%	1	10%
Don't Know	2	25%	1	17%	1	20%	1	25%	2	20%
Total	8	100%	6	100%	5	100%	4	100%	10	100%



## **Appendix C: Host Customer Survey Response Frequencies**

Are you aware that you or your applicant company applied for an incentive from California's Self-Generation Incentive Program?

	PG&E		SCE		SCG		CSE		То	tal
A1	n	%	n	%	n	%	n	%	n	%
Yes	176	99%	102	99%	43	100%	103	99%	421	99%
No	1	1%	1	1%	0	0%	1	1%	3	1%
Total	177	100%	103	100%	43	100%	104	100%	424	100%

Our records indicate that you submitted application(s) to the Self-Generation Incentive Program in 2017. In addition to these applications, did you or your organization ever apply for an incentive from the program PRIOR TO 2017?

	PG&E		SCE		SCG		CSE		Total	
A3	n	%	n	%	n	%	n	%	n	%
Yes	12	7%	3	3%	3	7%	5	5%	23	5%
No	151	85%	92	90%	32	74%	88	85%	362	86%
Don't Know	14	8%	7	7%	8	19%	10	10%	37	9%
Total	177	100%	102	100%	43	100%	103	100%	422	100%

Our records show that you applied for SGIP technology intended for use at your home, is this correct?

	PG&E		SCE		SCG		CSE		Total	
A0	n	%	n	%	n	%	n	%	n	%
Yes, for my home(s) or the home(s) of family members	163	99%	93	99%	42	100%	98	100%	395	99%
No, for the home(s) of my company/organization's customer(s)	2	1%	0	0%	0	0%	0	0%	2	1%
Don't Know	0	0%	1	1%	0	0%	0	0%	1	0%
Total	165	100%	94	100%	42	100%	98	100%	398	100%



## How did you first learn about the Self-Generation Incentive Program?

	PG&E		S	CE	SCG		CSE		То	tal
A4	n	%	n	%	n	%	n	%	n	%
Through ANSWERFROM(APPLICANTNOSELF_OR_LIST)	110	62%	64	62%	32	74%	82	79%	285	67%
Online research	44	25%	23	22%	5	12%	12	12%	84	20%
My utility account representative informed me	3	2%	2	2%	0	0%	0	0%	5	1%
I was not aware of the self-generation incentive program	4	2%	1	1%	0	0%	0	0%	5	1%
Other (please specify)	14	8%	12	12%	6	14%	10	10%	42	10%
Don't Know	2	1%	1	1%	0	0%	0	0%	3	1%
Total	177	100%	103	100%	43	100%	104	100%	424	100%

## Why did you install or plan to install the incentivized generation technology at your home or organization?

	PG	&E	SC	CE	SC	G	CS	SE	То	tal
A5_GEN	n	%	n	%	n	%	n	%	n	%
To save money on my electric bill	2	100%	1	100%	1	100%	1	100%	4	100%
To become less grid-dependent for my electricity consumption	0	0%	1	100%	0	0%	0	0%	1	25%
To reduce global greenhouse gas emissions	0	0%	0	0%	1	100%	0	0%	1	25%
To satisfy corporate goals/initiatives regarding on-site electricity generation	0	0%	1	100%	0	0%	0	0%	1	25%
To increase reliability and resiliency of electricity supply	0	0%	1	100%	0	0%	0	0%	1	25%
Other	0	0%	1	100%	0	0%	0	0%	1	25%
Total	2	100%	1	100%	1	100%	1	100%	4	100%



## Why did you install or plan to install the incentivized storage technology?

	PG	&E	S	CE	SC	G	C	SE	To	tal
A5_STOR	n	%	n	%	n	%	n	%	n	%
To save money on my electric bill	120	68%	58	57%	24	57%	62	60%	262	62%
To become less grid-dependent for my electricity consumption	115	65%	69	68%	35	83%	80	77%	298	71%
To reduce global greenhouse gas emissions	96	55%	55	54%	28	67%	50	48%	227	54%
To satisfy corporate goals/initiatives regarding on-site electricity generation	4	2%	1	1%	0	0%	1	1%	5	1%
To improve the functionality of an existing onsite solar PV or other renewable										
generation system	71	40%	44	43%	21	50%	45	43%	180	43%
To justify a potential solar PV or other renewable generation system investment	23	13%	12	12%	3	7%	13	13%	51	12%
To use as backup in the event of a grid outage	135	77%	87	85%	36	86%	70	67%	327	78%
For the rebates	0	0%	1	1%	0	0%	1	1%	2	0%
To enjoy new technology	2	1%	0	0%	0	0%	0	0%	2	0%
To help for EV charging	3	2%	0	0%	0	0%	1	1%	4	1%
Other	10	6%	1	1%	0	0%	4	4%	15	4%
Total	176	100%	102	100%	42	100%	104	100%	421	100%

## In 2017, through what channels did you hear from your PA regarding the status of your application(s) with the Self-Generation Incentive Program?

	PG	&E	SC	CE	sc	:G	CS	SE	To	tal
C1	n	%	n	%	n	%	n	%	n	%
Email	164	93%	96	94%	41	95%	93	90%	394	93%
Postal mail	17	10%	7	7%	2	5%	1	1%	27	6%
Phone	17	10%	2	2%	7	16%	4	4%	30	7%
Quarterly Workshop	2	1%	1	1%	0	0%	1	1%	4	1%
In-person Meeting	2	1%	1	1%	1	2%	1	1%	5	1%
Other	3	2%	2	2%	3	7%	6	6%	14	3%
n/a – I never heard from PA regarding the program	9	5%	3	3%	1	2%	6	6%	19	4%
Don't Know	2	1%	3	3%	0	0%	1	1%	6	1%
Total	176	100%	102	100%	43	100%	103	100%	424	100%



#### On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the program technical requirements?

	PG	&E	SC	Œ	SC	G	CS	SE	To	tal
C2A	n	%	n	%	n	%	n	%	n	%
1 - not at all clear	34	19%	19	19%	6	14%	13	13%	72	17%
2	30	17%	14	14%	6	14%	12	12%	62	15%
3	47	27%	27	26%	12	28%	25	24%	111	26%
4	34	19%	16	16%	5	12%	27	26%	82	19%
5 - extremely clear	24	14%	19	19%	8	19%	16	16%	67	16%
N/A	1	1%	2	2%	5	12%	5	5%	13	3%
Don't Know	6	3%	5	5%	1	2%	5	5%	17	4%
Total	176	100%	102	100%	43	100%	103	100%	424	100%

## On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the project documentation requirements?

	PG	&E	SC	Œ	sc	G	C	SE	To	tal
C2B	n	%	n	%	n	%	n	%	n	%
1 - not at all clear	40	23%	19	19%	7	16%	16	16%	82	19%
2	33	19%	24	24%	8	19%	9	9%	74	17%
3	38	22%	13	13%	9	21%	29	28%	89	21%
4	26	15%	21	21%	6	14%	23	22%	76	18%
5 - extremely clear	26	15%	17	17%	7	16%	13	13%	63	15%
N/A	5	3%	4	4%	4	9%	5	5%	18	4%
Don't Know	8	5%	4	4%	2	5%	8	8%	22	5%
Total	176	100%	102	100%	43	100%	103	100%	424	100%



## On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the program timelines?

	PG	&E	SC	Œ	SC	G	CS	SE .	To	tal
C2C	n	%	n	%	n	%	n	%	n	%
1 - not at all clear	74	42%	25	25%	15	35%	24	23%	138	33%
2	30	17%	18	18%	6	14%	24	23%	78	18%
3	24	14%	29	28%	9	21%	25	24%	87	21%
4	27	15%	13	13%	5	12%	15	15%	60	14%
5 - extremely clear	11	6%	13	13%	6	14%	7	7%	37	9%
N/A	3	2%	1	1%	2	5%	2	2%	8	2%
Don't Know	7	4%	3	3%	0	0%	6	6%	16	4%
Total	176	100%	102	100%	43	100%	103	100%	424	100%

## On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the status of your SGIP application(s)?

	PG	&E	S	CE	SC	G	CS	SE	То	tal
C2D	n	%	n	%	n	%	n	%	n	%
1 - not at all clear	54	31%	13	13%	11	26%	18	17%	96	23%
2	27	15%	21	21%	6	14%	14	14%	68	16%
3	46	26%	27	26%	9	21%	27	26%	109	26%
4	28	16%	18	18%	6	14%	29	28%	81	19%
5 - extremely clear	18	10%	21	21%	10	23%	12	12%	61	14%
N/A	1	1%	1	1%	1	2%	1	1%	4	1%
Don't Know	2	1%	1	1%	0	0%	2	2%	5	1%
Total	176	100%	102	100%	43	100%	103	100%	424	100%



## On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the division of responsibility between you and the applicant?

	PG	&E	SC	E	SC	G	CS	SE .	To	tal
C2E	n	%	n	%	n	%	n	%	n	%
1 - not at all clear	42	25%	15	15%	9	21%	10	10%	76	18%
2	16	9%	15	15%	6	14%	11	11%	48	12%
3	32	19%	16	16%	9	21%	14	14%	71	17%
4	39	23%	21	21%	10	23%	32	32%	102	25%
5 - extremely clear	34	20%	29	29%	6	14%	30	30%	99	24%
N/A	2	1%	0	0%	2	5%	0	0%	4	1%
Don't Know	5	3%	4	4%	1	2%	4	4%	14	3%
Total	170	100%	100	100%	43	100%	101	100%	414	100%

## Please select which of the following websites you visited in 2017

E1	n Total	% Total
SelfGenCA.com	118	28%
PG&E.com/SGIP	136	32%
EnergyCenter.org/SGIP	60	14%
SCE.com/SGIP	102	24%
SoCalGas.com/for-your-business/power-generation/self-generation-incentive	26	6%
None of the above	142	34%
Total	421	100%



## Why did you visit these websites in 2017?

E2	n Total	% Total
To learn more about the program structure (through FAQs & summarized info)	202	72%
Links to SGIP Handbook	104	37%
To check project status	105	38%
To submit project application forms	46	16%
To review online SGIP status reports	64	23%
Links to CPUC Rulings related to SGIP	27	10%
To use generation or storage calculators	21	8%
To learn information about quarterly workshops schedules/location	10	4%
Other	8	3%
N/A	9	3%
Don't Know	11	4%
Total	279	100%

Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate SelfGenCA.com in terms of its usefulness?

E3A	n Total	% Total
1 Not at all Useful	8	7%
2	16	14%
3	40	34%
4	32	27%
5 Extremely Useful	19	16%
N/A	3	3%
Total	118	100%



Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate PG&E.com/SGIP in terms of its usefulness?

E3B	n Total	% Total
1 Not at all Useful	13	10%
2	15	11%
3	51	38%
4	33	24%
5 Extremely Useful	16	12%
N/A	7	5%
Total	135	100%

Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how  $would \ you\ rate\ Energy Center. or g/program/self-generation-incentive-program\ in\ terms$ of its usefulness?

E3C	n Total	% Total
1 Not at all Useful	4	7%
2	2	3%
3	15	25%
4	23	39%
5 Extremely Useful	11	19%
N/A	4	7%
Total	59	100%



Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate SCE.com/SGIP in terms of its usefulness?

E3D	n Total	% Total
1 Not at all Useful	8	8%
2	9	9%
3	35	35%
4	33	33%
5 Extremely Useful	12	12%
N/A	4	4%
Total	101	100%

Using a 1-to-5 scale, where 1 means Not at all Useful, and 5 means Extremely Useful, how would you rate SoCalGas.com/for-your-business/power-generation/self-generationincentive in terms of its usefulness?

E3E	n Total	% Total
2	3	12%
3	4	15%
4	12	46%
5 Extremely Useful	3	12%
N/A	4	15%
Total	26	100%



## On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the inspection scheduling process (in 2017)?

	PG&E		SCE		SC	G	G CS		Tot	Total	
H1	n	%	n	%	n	%	n	%	n	%	
1 - not at all satisfied	1	50%	0	0%	0	0%	0	0%	1	17%	
4	1	50%	1	100%	0	0%	2	100%	4	67%	
Don't Know	0	0%	0	0%	1	100%	0	0%	1	17%	
Total	2	100%	1	100%	1	100%	2	100%	6	100%	

#### On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the time it takes to receive the upfront incentive (in 2017)?

	PG&E		SCE		SCG		CSE		Total	
H2	n	%	n	%	n	%	n	%	n	%
1 - not at all satisfied	1	33%	0	0%	0	0%	0	0%	1	14%
3	0	0%	1	100%	1	100%	0	0%	2	29%
4	1	33%	0	0%	0	0%	1	50%	2	29%
N/A	1	33%	0	0%	0	0%	1	50%	2	29%
Total	3	100%	1	100%	1	100%	2	100%	7	100%

#### On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the performance-based-incentive payment process (in 201

	PG	PG&E		G&E SCE		SCG		CSE		Total	
H3	n	%	n	%	n	%	n	%	n	%	
3	1	50%	0	0%	1	100%	0	0%	2	40%	
4	0	0%	0	0%	0	0%	1	50%	1	20%	
N/A	1	50%	0	0%	0	0%	1	50%	2	40%	
Total	2	100%	0	0%	1	100%	2	100%	5	100%	



On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the information provided in the written communications from your PA regarding the Self-Generation Incentive Program (in 2017)?

	PG&E SCE		SCG		CSE		Tot	al		
H4	n	%	n	%	n	%	n	%	n	%
1 - not at all satisfied	27	16%	10	10%	3	7%	8	8%	48	12%
2	33	20%	13	13%	4	10%	8	8%	58	14%
3	51	31%	34	34%	16	38%	30	31%	131	32%
4	37	22%	22	22%	10	24%	31	32%	100	25%
5 - extremely satisfied	14	8%	15	15%	4	10%	13	13%	46	11%
N/A	4	2%	4	4%	2	5%	3	3%	13	3%
Don't Know	1	1%	1	1%	3	7%	4	4%	9	2%
Total	167	100%	99	100%	42	100%	97	100%	405	100%

On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the information provided by the Applicant regarding the Self-Generation Incentive Program (in 2017)?

	PG&E		E SCE		CE SO		CSE		То	tal
H5	n	%	n	%	n	%	n	%	n	%
1 - not at all satisfied	27	16%	7	7%	1	2%	6	6%	41	10%
2	22	13%	8	8%	5	12%	9	9%	44	11%
3	40	24%	27	27%	16	37%	19	19%	102	25%
4	34	20%	26	26%	12	28%	33	33%	105	25%
5 - extremely satisfied	45	26%	30	30%	7	16%	33	33%	115	28%
N/A	1	1%	0	0%	1	2%	0	0%	2	0%
Don't Know	1	1%	2	2%	1	2%	1	1%	5	1%
Total	170	100%	100	100%	43	100%	101	100%	414	100%



On a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with your experience with your PA in relation to the Self-Generation Incentive Program (in 2017)?

	PG&E		SCE		SCO		CSE		Total	
H6	n	%	n	%	n	%	n	%	n	%
1 - not at all satisfied	47	27%	14	14%	3	7%	10	10%	74	17%
2	21	12%	13	13%	4	9%	10	10%	48	11%
3	51	29%	28	27%	14	33%	24	23%	117	28%
4	29	16%	25	25%	12	28%	30	29%	96	23%
5 - extremely satisfied	17	10%	19	19%	7	16%	22	21%	65	15%
N/A	7	4%	1	1%	1	2%	5	5%	14	3%
Don't Know	4	2%	2	2%	2	5%	2	2%	10	2%
Total	176	100%	102	100%	43	100%	103	100%	424	100%

If the SGIP incentivized technology has been installed at your home/organization, on a scale of 1 to 5, where 1 is not at all satisfied and 5 is extremely satisfied, how satisfied are you with the incentivized technology?

	PG	PG&E		SCE SCC		CG	CSE		Tot	al
H7	n	%	n	%	n	%	n	%	n	%
1 - not at all satisfied	5	3%	2	2%	0	0%	1	1%	8	2%
2	5	3%	4	4%	0	0%	0	0%	9	2%
3	10	6%	8	8%	1	2%	3	3%	22	5%
4	29	16%	15	15%	7	16%	23	22%	72	17%
5 - extremely satisfied	92	52%	48	47%	9	21%	46	45%	194	46%
The SGIP incentivized technology has not yet been installed	19	11%	20	20%	25	58%	24	23%	88	21%
Don't know	16	9%	5	5%	1	2%	6	6%	28	7%
Total	176	100%	102	100%	43	100%	103	100%	421	100%



## In 2017, did you experience any issues, problems, or delays with the self-generation incentive program process?

	PG&E		SCE		SCG		CSE		To	tal
B1	n	%	n	%	n	%	n	%	n	%
Yes	98	56%	48	47%	25	58%	49	48%	220	52%
No	34	19%	35	34%	11	26%	30	29%	110	26%
N/A	6	3%	1	1%	2	5%	3	3%	12	3%
Don't Know	38	22%	18	18%	5	12%	21	20%	82	19%
Total	176	100%	102	100%	43	100%	103	100%	424	100%

## Who helped you work through any issues, problems, or delays?

	PG	&E SCE		SCE		SCE SCG		CSE		Total	
B3	n	%	n	%	n	%	n	%	n	%	
PG&E	15	15%	0	0%	0	0%	0	0%	15	7%	
CSE	0	0%	0	0%	0	0%	6	12%	6	3%	
SCG	0	0%	0	0%	4	15%	0	0%	4	2%	
SCE	0	0%	9	19%	0	0%	0	0%	9	4%	
Applicant	78	80%	37	77%	21	81%	46	94%	181	82%	
Other	23	23%	8	17%	5	19%	4	8%	40	18%	
Total	98	100%	48	100%	26	100%	49	100%	220	100%	



## Were your issues, problems, or delays resolved?

	PG	&E	SC	Œ	SC	G	C	SE	То	tal
B5	n	%	n	%	n	%	n	%	n	%
Yes	23	24%	11	23%	7	28%	19	39%	60	27%
No	34	35%	14	29%	5	20%	16	33%	69	32%
Some Yes/Some No	26	27%	13	27%	10	40%	10	20%	59	27%
N/A	3	3%	0	0%	0	0%	0	0%	3	1%
Don't Know	11	11%	10	21%	3	12%	4	8%	28	13%
Total	97	100%	48	100%	25	100%	49	100%	219	100%

## How quickly were your issues, problems, or delays resolved?

	Pe	3&E	S	CE	SC	CG	C	SE	To	tal
B6	1	າ %	n	%	n	%	n	%	n	%
Within one day	1	0%	1	4%	1	6%	3	10%	5	4%
Within 2 days		0%	1	4%	0	0%	2	7%	3	3%
Within 1 WEEK		3 6%	2	8%	0	0%	2	7%	7	6%
Within 2 WEEKS		4 8%	1	4%	2	12%	2	7%	9	8%
Within a MONTH		7 14%	5	21%	1	6%	2	7%	15	13%
More than a MONTH	2	59%	8	33%	5	29%	11	38%	53	45%
n/a		6%	2	8%	3	18%	4	14%	12	10%
Don't Know		6%	4	17%	5	29%	3	10%	15	13%
Total	4:	100%	24	100%	17	100%	29	100%	119	100%



Earlier, you mentioned that you applied for an SGIP incentive in 2017 and at least one other prior year. How satisfied are you with your experience with SGIP in 2017, in comparison to prior years?

	PG	&E	SC	Œ	SC	G	CS	SE	To	tal
P1	n	%	n	%	n	%	n	%	n	%
More satisfied in 2017	4	36%	1	33%	0	0%	1	20%	6	27%
Less Satisfied in 2017	2	18%	0	0%	0	0%	1	20%	3	14%
No change	5	45%	2	67%	1	33%	3	60%	11	50%
N/A	0	0%	0	0%	2	67%	0	0%	2	9%
Total	11	100%	3	100%	3	100%	5	100%	22	100%

Is the SGIP-incentivized storage technology combined with (or planned to be combined with) on-site solar PV?

G1	n Total	% Total
Yes	380	90%
No	22	5%
Don't Know	19	5%
Total	421	100%

Is the SGIP-incentivized storage technology combined with (or planned to be combined with) on-site solar PV?

G1A	n Total	% Total
1	323	85%
2 to 5	44	12%
6 to 15	5	1%
More than 15	8	2%
Total	380	100%



#### When was the solar PV installed?

G3_SINGLE	n Total	% Total
AT THE SAME TIME (within 3 months) as the advanced energy storage	89	28%
BEFORE the advanced energy storage	215	67%
AFTER the advanced energy storage	9	3%
n/a	5	2%
Don't know	5	2%
Total	323	100%

#### When was the solar PV installed?

G3A_ORG	n Total	% Total
0	32	56%
1 to 3	20	35%
More than 3	5	9%
Total	57	100%

#### When was the solar PV installed?

G3B_ORG	n Total	% Total
0	16	28%
1 to 3	32	56%
More than 3	9	16%
Total	57	100%



#### When was the solar PV installed?

		o/ <b>-</b> / I
G3C_ORG	n I otal	% Total
0	50	88%
1 to 3	6	11%
More than 3	1	2%
Total	57	100%

#### Did the applicant recommend combined on-site solar PV and storage system(s)?

G4	n Total	% Total
Yes	209	56%
No	131	35%
Don't Know	32	9%
Total	372	100%

# On a scale of 1 to 5, where 1 is not at all influential and 5 is very influential, how influential was the applicant's recommendation on your decision to install combined onsite solar PV and storage system(s)?

G4A	n Tota	% Total
1 - not at all influential	30	14%
2	12	6%
3	33	16%
4	50	24%
5 - very influential	84	40%
Total	209	100%



On a scale of 1 to 5, where 1 is not at all likely and 5 is extremely likely, how likely is it that you would install on-site solar PV without the storage system(s)?

G4B	n Total	% Total
1 - not at all likely	94	25%
2	42	11%
3	42	11%
4	54	14%
5 - extremely likely	134	35%
Don't know	14	4%
Total	380	100%

#### If the SGIP incentive had not been available would you have

G7	n Total	% Total
Installed on-site solar PV only (without storage)	177	47%
Installed storage system(s) only (without on-site solar PV )	3	1%
Installed BOTH storage and on-site solar PV	127	33%
Installed NEITHER storage nor on-site solar PV	32	8%
Don't know	41	11%
Total	380	100%

Did you or the applicant secure or attempt to secure any additional incentives for the solar PV system(s) while making the decision to install or not to install the solar PVsystem(s)?

G8	n Total	% Total
Yes	214	56%
No	120	32%
Don't Know	46	12%
Total	380	100%



Do you plan to install on-site solar PV (to pair with the SGIP incentivized storage) in the near future?

G10	n Total	% Total
Yes, within 1 year	4	18%
Yes, within 2 years	1	5%
Yes, within 5 years	1	5%
No	9	41%
Don't Know	7	32%
Total	22	100%

Do you plan to apply for a rebate, incentive or tax credit when you install the on-site solar PV?

G11	n Total	% Total
Yes	6	100%
Total	6	100%