

# 2016 SGIP PROGRAM ADMINISTRATOR PERFORMANCE EVALUATION



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August 10, 2017



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# 1 EXECUTIVE SUMMARY

California's Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed energy resources (DERs) such as combined heat and power (CHP), fuel cells, wind, advanced energy storage (AES), and other distributed generation (DG) technologies. The SGIP is funded by California's ratepayers and administered by Pacific Gas & Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG), and the Center for Sustainable Energy (CSE). The California Public Utilities Commission (CPUC) provides oversight and guidance on the SGIP.

## 1.1 PURPOSE AND SCOPE OF REPORT

The CPUC Measurement and Evaluation (M&E) plan calls for an annual review of the performance of each PA. These reviews should include at a minimum a survey of program participants' feedback regarding the Program Administrators' (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 2016. To the extent possible, all interview guides and survey questions were designed to address PA performance during 2016, however this evaluation was performed in 2017 and respondents may express opinions based on experiences outside the evaluation period. We attempt to limit the influence of these responses in the overall findings.

## 1.2 PA EVALUATION FINDINGS

Interviews with representative samples of SGIP program applicants and host customers, as well as with program administrator staff, formed the backbone of the 2016 PA performance evaluation. Across these data sources, a variety of consistent findings emerged from the analysis.

### 1.2.1 Program Implementation Across Service Territories

PA evaluation findings should be considered within the context of the size of each PA's program service territory and volume of applications. Table 1-1 summarizes the volume of applications received by each PA during Program Year (PY) 2016 as well as previous years.<sup>1</sup>

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<sup>1</sup> A snapshot of the program tracking data was taken on February 17, 2017



**TABLE 1-1: PY 2016 APPLICATIONS AND PRE-PY 2016 PROCESSED APPLICATIONS BY PA**

Program Administrator	Applied PY 2016			Applied Prior to PY 2016	% of Total Paid/In-Progress
	Cancelled	Paid/In-Progress	% of Total Applied PY 2016	Paid/In-Progress	
PG&E	277	44	34%	186	30%
SCE	303	44	37%	265	41%
CSE	197	28	24%	151	24%
SCG	45	8	6%	53	5%
<b>Total</b>	<b>822</b>	<b>124</b>	<b>--</b>	<b>634</b>	<b>--</b>

During PY 2016 the program administrators received a total of 946 individual applications. SCE received the highest volume of PY 2016 applications (347), followed by PG&E (321). Eighty-seven percent of all PY 2016 applications were either cancelled due to lack of funding or withdrawn by applicants. Subsequent sections of this report discuss applicant perspectives on cancelled projects. A total of 124 PY 2016 projects were either paid upfront incentives or remained “in the queue” (i.e. not yet paid but not cancelled). In addition to PY 2016 projects, 634 pre-PY 2016 projects were either paid incentives or remained in the queue during 2016. These pre-PY 2016 applications also contribute to PA workload during 2016.

Interviews were conducted with PA staff to understand how program staffing and overall management varies across service territories. Responses are summarized in Table 1-2.

**TABLE 1-2: PROGRAM STAFFING AND IMPLEMENTATION BY PROGRAM ADMINISTRATOR**

Program Administrator	Self-Reported Target Time to Respond to Inquiries	Self-Reported Target Time to Issue Incentive Payments	SGIP Staff Count (Full or Part Time, Excluding M&E)	Uses Cross-Cutting Application Support Staff?	Expecting Future Staff Increases?
PG&E	1-2 days	Within 30 days	2	Yes	No
SCE	2 business days		2	Yes	Maybe
CSE	1 day		3	No	Yes
SCG	Few hours to 1 day		4	No	Yes

PAs are generally consistent in their self-reported target times for responding to inquiries and issuing incentive payments. Across the board, PAs attempt to respond to inquiries within two days (at most) and consistently indicate a target time of 30 days to issue incentive payments. Staffing levels vary slightly across PAs both in terms of total staff levels and the number of full time vs. part time staff dedicated to the program. Staffing levels generally range from 2-4 persons per PA, excluding staff dedicated to M&E or those providing legal/regulatory support. PG&E and SCE rely on cross-cutting application support staff

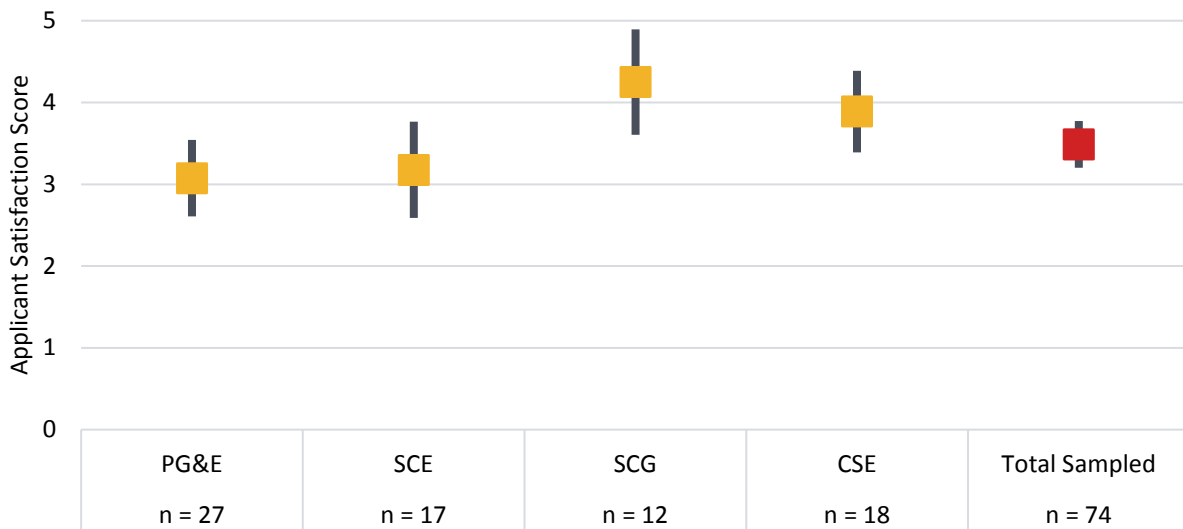


that are also involved in other programs, whereas CSE and SCG do not. When asked about plans to expand staffing levels, CSE and SCG indicated firm plans to bring on additional staff due to expected increases in the volume of applications.

### 1.2.2 Overall Satisfaction with PA Performance

On an overall basis, participants were moderately satisfied with PA performance in the 2016 SGIP program, giving an overall average satisfaction rating of 3.5 on a 5-point scale. The figure below shows the average and 95% confidence interval of satisfaction with PA performance. For smaller territories, participants were most satisfied with the performance of SCG (4.3), followed by CSE (3.9). For the larger territories, participants rated SCE at 3.2 and PG&E at 3.1. A variety of more narrowly defined considerations inform overall participant satisfaction with PA performance, and these are explored throughout this report.

**FIGURE 1-1: APPLICANT SATISFACTION WITH PA EXPERIENCE**



Complications regarding the program opening on February 23, 2016, which resulted in a significant portion of program funds being allocated within a very short period, had an important influence on many participants' perceptions of SGIP and associated PA performance for 2016. A significant number of SGIP applications were delayed, rejected, or withdrawn due to this issue. Careful consideration was given in survey instrument design to isolate and separate the influence of this event when discussing PA performance. Many respondents indicated that the events of February 23 reflected issues with program design rather than PA performance and scored their PAs accordingly. At the same time, project applicants





noted that PA communications were often insufficient during the period following the program opening. One participant remarked:

*"We had no notification of the cancellation. We found out from a press release, public sources. Our customers were very angry. When we found out the project was cancelled, we found out from third party press. Our people sent an email to the administrator to ask about it but were never notified."*

When asked to rate their satisfaction with SGIP overall (as opposed to rating the PA performance), overall satisfaction with the SGIP program drops from 3.5 to 3.0. 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 note that they appreciate the availability of incentives and technical support for the emerging technologies targeted by the SGIP. Participants are also generally highly satisfied (4.0) with the quarterly workshops<sup>2</sup> hosted by the PAs, which provide program updates and other clarifying information.

*"The quarterly workshops give voice and representation to small residential and other lower power groups."*

The PAs' performance ratings relative to one another are generally quite consistent across various sub-elements of overall PA performance as well as across the applicant and host customer surveys. Throughout this evaluation, CSE and SCG are typically rated with satisfaction scores near 4.0 on a 5-point scale across many elements of the program. PG&E and SCE are typically rated with satisfaction scores near 3.0 across many elements of the program. While there are naturally a variety of cases where this general observation does not hold precisely, the observation is noticeable for its consistency. It's important to keep in mind that PG&E and SCE received over two-thirds of the budget allocations and project applications in program year 2016, while CSE and SCG received relatively smaller amounts of budget allocations and project applications. Program-wide, average satisfaction ratings for most major sub-elements of PA performance also fall in the range of 3.0-4.0 on a 5-point scale.

### **1.2.3 Clarity and Timeliness of Written and Oral Communications**

The clarity and timeliness of written and oral communications from PAs is a good example of the broad observation noted above. Applicants in SCG and CSE service territories are generally satisfied with the timeliness of written and oral communications. Applicants in PG&E and SCE service territories are

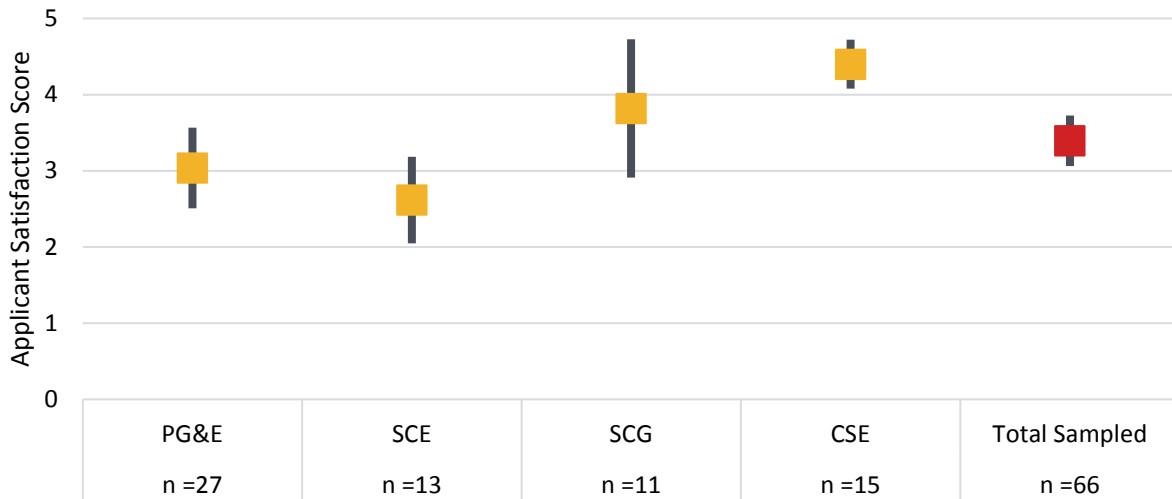
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<sup>2</sup> The first quarterly workshop took place in November of 2016 with additional workshops occurring during 2017. Though this report focuses on 2016, respondents were asked about their experience with all workshops regardless of calendar year.

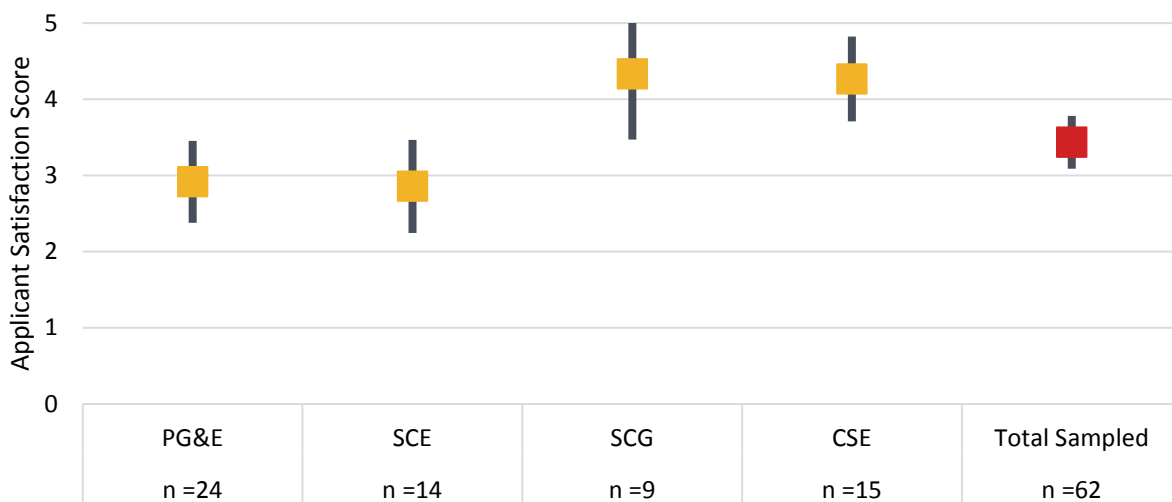


generally only moderately satisfied with the timeliness of written and oral communications. When asked to explain reasons for their satisfaction level, SGIP participants in SCG and CSE service territory were outspoken in a positive way about the personal connection, service, accountability, and responsiveness of SGIP staff.

**FIGURE 1-2: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA WRITTEN COMMUNICATIONS**



**FIGURE 1-3: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA ORAL COMMUNICATIONS**





Protocols used by the various PAs to communicate with applicants varied widely. Some PAs used a call center approach to communicate with project applicants and host customers. Others used a more personal approach, by relying on account representatives or assigning each project representative their own personal contact. Applicants' perceptions of communication quality and timeliness varied significantly, and feedback was largely a function of the communication protocols used. Feedback from project applicants and host customers on the call center approach was mostly negative, while that for the personalized approach was extremely positive.

Applicants under the call center approach reported long call-back and wait times, and the need for many call-backs to resolve an issue. In contrast, applicants that were assigned a specific representative routinely praised their PA for providing personalized, prompt responses and resolution of their issues. One respondent offered:

*"[They are] more on top of everything; they seem to always respond more quickly; they seem to know the answers to my questions; you can just tell, it's a higher level of service; their staff seems dedicated to this specific purpose."*

The call center approach can be a reasonable way to handle a high volume of call intake, provided a personalized follow-up call is made to the participant within one day to respond to the inquiry. Those applicants with among the lowest dissatisfaction ratings reported dialing into a call center phone tree without receiving a prompt personalized reply a short while later. In many cases, the reply call took place several days or weeks later.

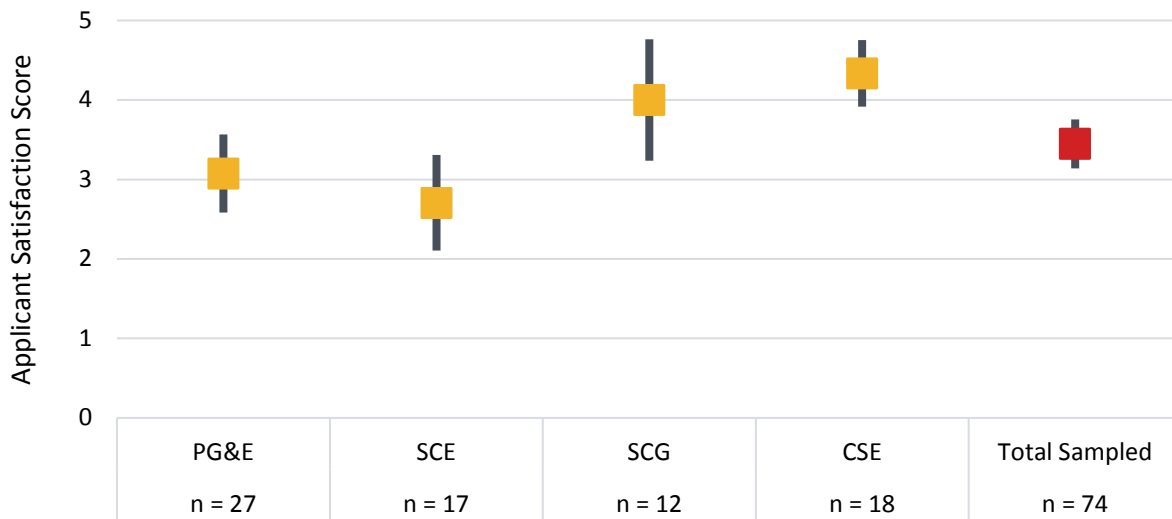
Participants provide similar relative rankings in their ratings for the clarity with which PAs communicate information. Across topic areas such as the clarity of program technical requirements, documentation requirements, program timelines, or the division of responsibility between host customers and applicants, participants rate CSE with scores at or above 4.0, SCG with scores ranging from 3.8 to 4.3, and PG&E and SCE with scores ranging from 2.6 to 3.0.

#### **1.2.4 Accessibility of PA SGIP Staff**

This general scoring pattern carries over to PA accessibility. When asked to rate how well PA SGIP staff make themselves available, participants rate SCG and CSE notably higher than PG&E and SCE.



**FIGURE 1-4: APPLICANT PROGRAM ACCESSIBILITY RATING BY PA**



For PAs using the call center approach, participants noted it was hard to know if one’s concerns/inquiry/message had arrived in the appropriate spot and would be addressed. As noted by one participant:

*“...we had to go through a phone tree which was impersonal. We also couldn’t get direct email and had to go through the SGIP site to communicate with their staff.”*

Those participants who were most satisfied from a PA accessibility standpoint described coming up with a back-door approach to evade the normal communication protocols with SGIP staff, develop a personal connection with that direct line to the PA, and then use that direct line thereafter. Also, participants noted it was sometimes hard to find appropriate and knowledgeable SGIP staff at the PA organizations. Participants describe some SGIP staff as insufficiently technically savvy, or not well-rooted in the specifics of the program. In these cases especially, participants sometimes described having been referred by the PA to third party engineering support staff (per program design), only to encounter the need to review and explain previously submitted and reviewed documentation.

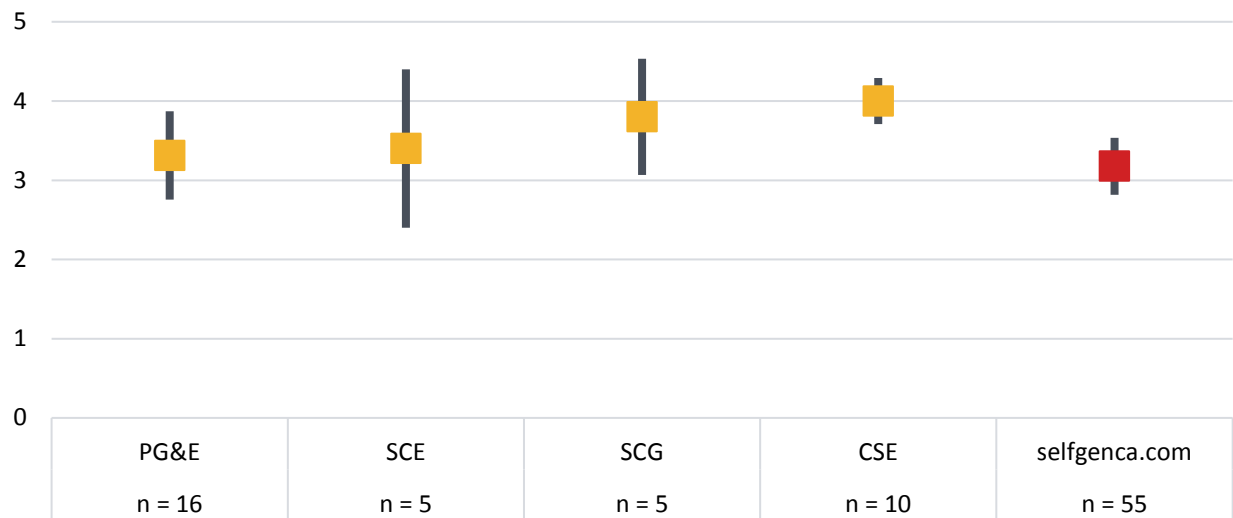
### 1.2.5 Usefulness of SGIP Websites

SGIP websites maintained by the individual PAs and for the state overall ([www.selfgenca.com](http://www.selfgenca.com)) are another example of the relatively consistent scoring seen in this evaluation. Applicants are generally satisfied but not highly satisfied with selfgenca.com and the individual PA websites. CSE stands out with the most highly rated website for its usefulness. Respondents noted that the online portal for application submission and other document submission works well overall. Participants who submitted project applications in prior



years as well as in 2016 commented the sensible layout of the portal with respect to fulfilling documentation requirements. At the same time, participants consistently noted that it can be difficult to know precisely how project documentation is to be filled out for different program-eligible technologies. Participants with SGIP technologies other than storage, such as CHP or fuel cells, sometimes feel they are adapting their reporting to a documentation structure that is designed around storage projects.

**FIGURE 1-5: USEFULNESS OF WEBSITES AS REPORTED BY APPLICANTS**



### 1.3 CONCLUSIONS AND RECOMMENDATIONS

A variety of recommendations regarding potential improvements to SGIP PA performance can be distilled from the quantitative data in this evaluation, as well as from specific participant experiences supported by the broader data messages. These recommendations fall broadly into the same categories that frame this overall evaluation:

- Usefulness of SGIP websites
- Clarity of information and the helpfulness of PAs
- Timeliness and efficiency of PA oral and written communications through the various project steps
- Accessibility of SGIP staff



### 1.3.1 Usefulness of SGIP Websites

**Recommendation: Provide more examples, videos, and other training to clarify documentation expectations associated with application and document submittal on the statewide portal.**

Respondents noted that the online portal for application submission and other document submission works well overall. Participants who submitted project applications in prior years as well as in 2016 commented the sensible layout of the portal with respect to fulfilling documentation requirements. At the same time, participants consistently noted that it can be difficult to know precisely how project documentation is to be filled out for different program-eligible technologies. In particular, participants with SGIP technologies other than storage, such as CHP or fuel cells, sometimes feel they are adapting their reporting to a documentation structure that is designed around storage projects. While it is understandable that documentation requirements be as standard as possible across SGIP technologies, participants requested/recommended that PAs provide examples, videos, and potentially other forms of training on precisely how to fill out the necessary documentation for each technology. In some cases, participants feel there is room for interpretation in how a required value is to be defined or measured. As an example, one participant wasn't certain whether generation from their solar PV system should be included when demonstrating compliance with the two-hour storage rule. Videos and pdfs that walk through the filling out of these documents could clarify some issues and pre-empt a variety of inquiries that otherwise go to PA SGIP staff on a one-off basis. Some participants suggested that a blog be set up so that people submitting documents can learn from each other's experiences. The statewide portal, selfgenca.com, can also provide a single landing page as a consolidated location for announcements and updates from program administrators.

### 1.3.2 Clarity of Information and the Helpfulness of PAs

**Recommendation: Ensure that PA SGIP staff are fully familiar with the SGIP handbook and are sufficiently technically savvy to address some technical questions directly and guide an efficient communication process when technical guidance from a third party is necessary.**

SGIP participants generally gave feedback that SGIP PA staff they interacted with are helpful, with good follow through. When participants expressed concerns regarding SGIP PA staff helpfulness, it was most often regarding insufficient expertise on the part of staff to answer technical questions directly or to efficiently steer a communication process with third party engineers. Respondents noted that these issues are exacerbated by staff turnover. PAs should consider structuring elements of SGIP staff training that focus on technical questions asked in past years, how to characterize the question effectively, and guide its efficient resolution with relevant parties. Emphasis should be on structuring the resolution process for technical questions such that the participant doesn't feel they are iteratively bringing SGIP PA staff and



other parties “up the curve” on their project or issue. Otherwise participants may feel that their time is being used inefficiently.

**Recommendation: Use the slide decks associated with the quarterly workshops as an ongoing and highly leveraged resource for program updates and clarifications.**

Participants who attended one or more SGIP quarterly workshops were outspoken about the fact that these are well organized, with useful, timely, and topically relevant program updates included in the slide decks. PAs should consider increasing their outreach efforts to ensure the quarterly workshop slide decks and other materials for the quarterly workshops are disseminated as widely as possible. As one means for accomplishing this, the PAs should consider posting the slide decks to selfgenca.com and to the individual PA SGIP websites (as is already done on at least one PA website). PAs should also consider using the quarterly workshops paired with an ongoing blog structure to promote sharing of experiences and discussion of options among applicants that inform subsequent quarterly workshop content.

**Recommendation: Provide more visibility regarding project status.**

A dominant message in the 2016 SGIP program is that participants felt uninformed about the status of their applications and projects. The most common case was participants who submitted their applications on opening day but didn’t hear any word on project status until two to seven months, if at all. In some cases, this was despite repeated inquiries with the PA SGIP staff. PAs should consider reviewing their project status tracking and communication structure with an eye toward maximizing transparency to participants. For example, increasing the granularity with which a given project’s status is characterized in the online tracking system would provide participants with more clarity about where their project stands and what is likely to happen next. PAs should also consider how they can improve their messaging process to participants to inform them of updates to a project’s status. Improved transparency on project status would reduce the rate of inquiries from participants to PA staff. It may be possible to communicate a given participant’s “place in line” for a given review process (in addition to just the current application step), along with explanation of the steps involved and reasonable setting of expectations regarding the process and timeline.

In addition, added transparency regarding project status would help applicants who are not themselves the host customer to communicate with their host customers and manage expectations. Some applicants described having engaged with clients using what they thought were reasonable assumptions about SGIP funding, only to confront angry customers who felt they had been misled by the time the lack of program funding was announced.

Finally, while not specifically a PY 2016 issue, several participants indicated a lack of transparency regarding the new lottery system created for PY 2017.



### **1.3.3 Timeliness and Efficiency of PA Oral and Written Communications Through the Various Project Steps**

**Recommendation: Review program technical requirements and documentation requirements with an eye toward minimizing total time from application to incentive payment.**

By its nature, SGIP has a variety of technical requirements and documentation requirements. This is inevitable, given the need to demonstrate that a given system is eligible for the program and ultimately meets program goals for energy generation and storage. Participants generally acknowledge the necessity and sensibility of program documentation requirements. However, because the inherent documentation requirements are nontrivial, PAs should revisit and review those requirements with an eye towards making them as streamlined and minimized as possible while still satisfying the basic needs of the program. As one example, participants should only need to enter a given piece of information about themselves or their project once and in one specific location. PAs should consider reflecting on and articulating the specific purposes and needs associated with technical review, eliminate any unnecessary steps or documents that can be streamlined out of the process, and ensure the documentation process is efficiently aligned with meeting these purposes and needs. Participants sometimes highlighted requirements where they were expected to submit information that the utility already has in their record-keeping system. Participants noted that some requirements seemed somewhat unnecessary and arbitrary. For example, requirements to submit DocuSign certification for all signatures submitted, including those on contracts between applicants and host customers, seemed unnecessary and excessive to some participants. Similar comments surfaced regarding interconnection agreements, the authorization letter, the monitoring plan, and the energy audit. Taken together, these requirements, and the potential redundancy of information among them, represented a formidable task for some participants that made the program incentive no longer worth the effort invested and/or pushed out project timelines to a degree that participants couldn't meet the timelines associated with their own business cycle. As one participant noted, "The incentive didn't come close to what we spent in terms of time and money to fulfill program requirements."

**Recommendation: Consider designing ways in which different sizes and types of participants can move through the program queue at different rates.**

In the general theme of timeliness, it may be possible for PAs to help SGIP participants move through the program process at a rate tailored to the size and complexity of their project. For larger and more complex projects, certain time-consuming project development and verification steps may be inevitable. But PAs should ensure that applicants or host customers with less complex projects do not perceive that they are held back unnecessarily. To a certain extent this is accomplished by having the Two Step Application Process for all residential and non-residential entities less than 10 kW. However, PA staff should consider





reflecting on and developing “parallel pathways” (or separate programs) whereby projects can proceed through the program in ways that are driven by the nature and complexity of the project and not by the timing associated with other project types.

**Recommendation: Consider extending the deadlines specifically for public entities where a bureaucratic decision making process may be inevitable.**

Participants generally find that program timeline requirements are reasonable to move through successive stages of project development and verification. The one exception to this general feedback is the 240-day window for public entities to submit Proof of Project Milestone documentation. Even though this is significantly longer than the 90-day window afforded to private entities for this same purpose, respondents from multiple public agency participants noted that 240 days was insufficient to move through the inherently slow public decision making and approval process. According to one respondent, “Everyone in the bureaucratic decision chain needs to sign off, and there are lots of questions as people at every level come up the learning curve.” Per another, “When dealing with public entities at a local and state level, the process is not very streamlined.” PAs should consider whether extending this time window to 300 days for public entities would more successfully support the public decision making process while not sacrificing other needs on the program side.

### **1.3.4 Accessibility of SGIP Staff**

**Recommendation: Consider combining the call center approach for providing access to SGIP staff with a personalized follow-up call within two hours, to provide a more direct communications channel.**

A consistent theme in this evaluation regarding SGIP staff accessibility is that participants feel highly satisfied when they have a personal connection with an SGIP staff member who knows them and knows their project(s). By contrast, participants who find themselves navigating a call center with a phone tree of options, only to leave voicemail in a general mailbox, describe a persistent concern of not knowing whether their project or inquiry has been recognized and is being attended to by anybody. PAs that currently use a call center system should consider modifying it to provide a hybrid system in which a personalized return call is made within one day of the original inquiry. Better still would be an approach offering a direct phone line and email for participants to reach the SGIP staff member assigned to their project. Emphasizing direct relationships between PA SGIP staff and participants has the potential to increase overall participant satisfaction while also streamlining the communication and project development process on both the PA and participant sides.

## 2 INTRODUCTION AND OBJECTIVES

The Self-Generation Incentive Program (SGIP) provides financial incentives for the installation of distributed generation (DG) 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).<sup>1</sup> The California Public Utilities Commission (CPUC) provides oversight and guidance on the SGIP.

The purpose of the SGIP is to contribute to greenhouse gas (GHG) emission reductions, demand reductions, and reduced customer electricity purchases. Additional goals include improvements to electric system reliability, transmission and distribution system utilization, as well as market transformation for distributed energy resources (DERs).<sup>2</sup>

### 2.1 PROGRAM DESIGN AND ADMINISTRATION

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 2016 Self-Generation Incentive Program Handbook describes the application process, technology eligibility requirements, and incentive levels applicable to Program Year (PY) 2016.

The 2016 program year began once the Program Year’s Handbook and forms were posted to the PAs’ websites and the PAs enabled the online database to begin accepting new application submissions.<sup>3</sup> Authorized incentive collections for PY 2016 totaled \$77,190,000. Allocations for each PA are summarized in Table 2-1. Program Administrators were authorized to accept new applications for incentives until 50% of their SGIP funds were reserved, at which point they would not disburse additional funds until further ordered by the Commission.<sup>4</sup>

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<sup>1</sup> The Program Administrators are Pacific Gas & Electric (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).

<sup>2</sup> 2016 SGIP Handbook. February 8, 2016. <https://www.selfgenca.com/documents/handbook/2016>

<sup>3</sup> 2016 SGIP Handbook - Section 2.1

<sup>4</sup> 2016 SGIP Handbook – Section 1.1



**TABLE 2-1: PROGRAM YEAR 2016 STATEWIDE PROGRAM BUDGET AND ADMINISTRATOR ALLOCATIONS**

Program Administrator	Authorized Incentive Collections	% of Total Authorized Incentive Collections
PG&E	\$33,480,000	43%
SCE	\$26,040,000	34%
CSE	\$10,230,000	13%
SCG	\$7,440,000	10%

During PY 2016, a total of 946 new applications were submitted across all PA service territories. As of February 17, 2017, when we accessed the SGIP tracking database, 822 of those applications had been cancelled, rejected, or withdrawn (additional information on application cancellation reasons is provided in subsequent sections). The remaining 124 PY 2016 applications, along with an additional 634 applications from prior program years, were being reviewed or received a payment during 2016. Applications received and processed in 2016 are summarized in Table 2-2. PG&E and SCE were each allocated over one-third of the authorized incentive collections and they each received over one-third of the new applications in program year 2016. CSE was allocated 13% of the authorized incentive collections but received 24% of the new applications, while SCG was allocated 10% of the budget but only received 6% of the new applications.

**TABLE 2-2: PY 2016 APPLICATIONS AND PRE-PY 2016 PROCESSED APPLICATIONS BY PA**

Program Administrator	Applied PY 2016			Applied Prior to PY 2016	% of Total Paid/In-Progress
	Cancelled	Paid/In-Progress	% of Total Applied PY 2016	Paid/In-Progress	
PG&E	277	44	34%	186	30%
SCE	303	44	37%	265	41%
CSE	197	28	24%	151	24%
SCG	45	8	6%	53	5%
<b>Total</b>	<b>822</b>	<b>124</b>	<b>--</b>	<b>634</b>	<b>--</b>

All SGIP applications and supporting documentation are submitted via the SGIP online application portal.<sup>5</sup> For PY 2016, applications were reviewed in the order they were received. There are two application processes: two-step and three-step. The two-step process includes a reservation request stage and an incentive claim stage. The three-step process includes a proof of project milestone (PPM) stage between the reservation request stage and incentive claim stage. All residential projects and small (< 10 kW) non-

<sup>5</sup> [www.selfgenca.com](http://www.selfgenca.com)



residential projects must follow the two-step application process. Non-residential projects 10 kW or greater must follow a three-step process.

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.

### **2.1.1 PA Websites**

In addition to the statewide SGIP online portal, each PA also maintains their own SGIP website.<sup>6,7,8,9</sup> These PA-specific websites contain links to the SGIP online application database in addition to PA specific content such as dashboards, program metrics, frequently asked questions (FAQs), and program contact information. Some PAs update their websites to reflect major program modifications whereas others more actively manage the content on their site. Due to the uncertainty surrounding the PY 2016 program opening, some PAs elected to delay updating their websites until further guidance was provided by the CPUC.

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<sup>6</sup> [https://www.pge.com/en\\_US/business/solar-and-vehicles/your-options/solar-programs/self-generation-incentive-program/self-generation-incentive-program.page](https://www.pge.com/en_US/business/solar-and-vehicles/your-options/solar-programs/self-generation-incentive-program/self-generation-incentive-program.page)

<sup>7</sup> <https://www.sce.com/wps/portal/home/business/generating-your-own-power/incentive-program/>

<sup>8</sup> <https://www.socalgas.com/for-your-business/power-generation/self-generation-incentive>

<sup>9</sup> <https://energycenter.org/program/self-generation-incentive-program>



## 2.1.2 Cancelled Projects

Not all SGIP applications go on to become installed projects. Of the 946 newly received applications in program year 2016, 822 were rejected or cancelled. This report refers to both rejected, withdrawn, or cancelled projects as “cancelled.” Projects can become cancelled for several reasons:

- The project applicant decided to withdraw the application
- The project applicant failed to submit the appropriate documentation within the required timeline
- The host customer associated with the project decided not to move forward with the project
- The project failed to pass the field inspection verification

During the PY 2016 SGIP opening on February 23<sup>rd</sup>, the number of applications submitted to the program greatly exceeded the SGIP’s allocated budget. A significant percentage of applications were received within a few seconds of the program opening, leading to one applicant capturing a large fraction of the SGIP budget. These events triggered a suspension in the SGIP while the CPUC and the PAs investigated the implications and consequences of the program opening. The program remained suspended and under investigation for several months. On May 9<sup>th</sup> one applicant submitted a letter into the record under Rulemaking 12-11-005 volunteering to forfeit a portion of their applications so that the SGIP could continue to operate. This recommendation was accepted and after several months of uncertainty the SGIP continued to operate.

## 2.2 PURPOSE AND SCOPE OF REPORT

CPUC Decision (D.) 16-06-055 (June 23, 2016) revised the SGIP pursuant to Senate Bill (SB) 871 and Assembly Bill (AB) 1478.<sup>10</sup> D. 16-06-055 states that an SGIP M&E plan should be developed by Energy Division (ED) staff in consultation with program administrators. On January 13, 2017, the CPUC ED submitted their plan to measure and evaluate the progress and impacts of the SGIP for Program Years 2016 – 2020.

The CPUC M&E plan calls for an annual review of the performance of each PA. These reviews should include at a minimum a survey of program participants’ feedback regarding the PA’s 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.

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<sup>10</sup> <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M163/K928/163928075.PDF>



The following primary research questions guided the development of this report:

- How is the program implemented?
- What are the perceived strengths and weaknesses of the program?
- How clear and timely are the written and oral communications from the PAs?
- How clear and helpful are the PAs' websites?
- How helpful are the PAs to applicants submitting and processing applications?
- How accessible are the PAs?
- Why did participants cancel or withdraw SGIP applications?

This report is an assessment of PA performance during 2016. The results of this report should be considered within the context of the size of each PA's program service territory and volume of applications. In addition, the reader should keep in mind that although survey respondents were asked to isolate answers to their PY 2016 experience, a respondent may likely answer based off an overall impression of the program over time.

## 2.3 REPORT ORGANIZATION

This report is organized into four sections and two appendices as described below.

- **Section 1** provides an executive summary of the key findings and recommendations from this evaluation
- **Section 2** summarizes the SGIP program design and administration in addition to describing the purpose, scope, and organization of the report
- **Section 3** describes the research methods and data sources used to quantify PA performance during 2016
- **Section 4** presents the findings from the 2016 PA performance evaluation along with key recommendations
- **Appendix A** includes copies of the survey instruments used in this evaluation
  - A.1 – PA in-Depth Interview Guide
  - A.2 – Applicant Survey Instrument
  - A.3 – Host Customer Survey Instrument
- **Appendix B** describes the firmographics and demographics of the applicants and host customers interviewed

# 3 RESEARCH METHODS AND SOURCES OF DATA

This section summarizes the research methods and data sources utilized for the 2016 PA Performance Evaluation. Primary data sources utilized in this evaluation include:

- The SGIP Statewide Project Database<sup>1</sup> managed by the PAs
- Site inspection and verification reports completed by the PAs or their consultants
- In-depth interviews (IDIs) conducted with PAs by professional evaluation staff
- Interviews conducted with SGIP project applicants by professional evaluation staff
- Web surveys and interviews with SGIP project host customers

## 3.1 PROGRAM ADMINISTRATOR IN-DEPTH INTERVIEWS

Itron conducted in-depth interviews with a census of the four program administrators (CSE, PG&E, SCE, and SCG). For each PA, the program manager participated in the interview, along with any additional SGIP team staff that were deemed appropriate by the program manager. PAs were interviewed on various topics relating to program operations and management including, staffing structure and level, program design, and communications approaches. Information gathered in those interviews helped inform the sample design and the instrument design for the applicant and host customer surveys. For example, those interviews informed the decision to attempt a census with wind project applicants, since wind projects are subject to somewhat different project dynamics and inherent timing constraints than other types of projects.

## 3.2 APPLICANT INTERVIEWS

Project applicants are a key constituency in the SGIP PA performance evaluation, since they are often the party to interface most directly with the program and its administrators. The applicant is the 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. The applicant is often a third-party in the PA/utility-customer relationship. See Appendix B for a breakdown of the business types of the surveyed applicants.

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<sup>1</sup> Accessed February 17, 2017



Relative to the host customer surveys, the applicant surveys are longer and involve a mixture of quantitative questions with open-ended follow-up questions. These surveys were conducted over phone by professional interviewers at Itron.

For this PY 2016 study, the applicant population is defined as any organization or person that either: a) applied to the SGIP during 2016, or b) received either an upfront incentive or performance based incentive (PBI) payment during 2016.<sup>2</sup> The sample design for the applicant surveys was based on the following criteria:

- Attempt a census (i.e. a study of every unit in the population) with applicants that have 20 or more projects in the overall population
- Attempt a census with applicants of wind projects
- Construct the main sampling domains across two strata
  - Technology type: Energy Storage/Other
  - Applicant is also host customer: Yes/No

The applicant survey sample is conservatively designed to achieve a margin of error of 0.25 points across the whole program applicant population for typical scalar questions in the survey on a 1-5 scale (at a significance level of 0.05). This means there is 95% probability that the overall average scores on 5-point scalar questions are within a quarter point of the true population value's average. At the individual PA level, this corresponds with a margin of error of 0.3 points for each of the PAs with larger applicant populations (PG&E, SCE, and CSE), and a margin of error of 0.4 points for SCG due to its smaller applicant population (defined as the number of distinct applicants working with each PA). Margin of error values are derived assuming an equal distribution of responses across all 5 values in the 5-point scalar questions. If actual responses reflect a more concentrated distribution, then achieved margin of error will be improved relative to the values in the sample plan.

### **3.2.1 Census with Prolific Applicants and Wind Applicants**

SGIP applicants that have 20 or more projects in the population are referred to as “prolific” applicants in this report. There are 11 applicants that meet this criterion, and they account for 79% of the 1,580 project applications (1,222 applications). Applications from prolific applicants are distributed across the PAs, with 324 in PG&E, 523 in SCE, 64 in SCG, and 311 in CSE. The evaluation team attempted a census with this group of applicants. There are two applicants with wind project applications in PY 2016, for which the evaluation team attempted a census. From these two wind applicants, four new wind applications were

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<sup>2</sup> Unique applicants were identified from the program tracking data by grouping applications with the same or similar applicant company name.





submitted in program year 2016, all of which were cancelled. There were eight additional wind applications from one of the wind applicants that received PBI payments from prior application years. Not all prolific and wind applicants are active in each PA service territory. Table 3-1 shows how many of these applicants have projects in each service territory (N) and the targeted sample size (n).

**TABLE 3-1: SAMPLE SIZES FOR PROLIFIC APPLICANTS AND WIND APPLICANTS BY PA**

	PG&E		SCE		CSE		SCG		Total Distinct	
	N	n	N	n	N	n	N	n	N	n
Prolific Applicant	11	11	10	10	9	9	5	5	11	11
Wind Applicant	2	2	2	2	1	1	-	-	2	2

### 3.2.2 Sampling of Non-Prolific, Non-Wind Applicants

The remaining applicant population consists of 135 unique applicant/developers. These were stratified by technology and whether they participated at least once as a host customer (self/non-self) for each PA in Table 3-2. Technologies were categorized as either advanced energy storage (AES) or other (includes fuel cell, gas turbine, internal combustion engine, microturbine, and pressure reduction turbine systems). To derive the sample sizes, 40 sample points were initially distributed proportionally across the relevant strata. Strata were then raised to a minimum of three sample points, or to a census if the total population of applicants for a given stratum was fewer than three.

**TABLE 3-2: SAMPLE SIZES FOR NON-PROLIFIC, NON-WIND APPLICANTS**

Non-Prolific Applicant		PG&E		SCE		CSE		SCG		Total Distinct	
		N	n	N	n	N	n	N	n	N	n
AES	Self	8	3	4	3	7	3	2	2	20	11
	Non-Self	24	7	25	7	14	4	1	1	64	19
Other	Self	13	4	1	1	3	3	3	3	20	11
	Non-Self	12	4	5	3	5	3	9	3	31	13
Total		57	18	35	14	29	13	15	9	135	54

Across the census of prolific and wind applicants plus the stratified random sampling of the other applicants, the evaluation team sought to interview 67 unique applicant companies (two wind, 11 prolific, and 54 other). This represents 45% of the total applicant population. In cases where strata quotas were not met, sample sizes were increased in neighboring strata to maintain the same total sample size for a given row or column in the tables above.



### 3.3 HOST CUSTOMER SURVEYS AND INTERVIEWS

SGIP host customers are another important constituency to the SGIP program, and their feedback is essential to inform the PA performance evaluation. The host customer is any retail gas or electric distribution customer of PG&E, SCE, SCG, or SDG&E. The host customer is the exclusive incentive reservation holder and has the right to designate the applicant.<sup>3</sup> For the purposes of the PY 2016 evaluation, the host customer population is defined as any organization or person that either: a) applied to the SGIP during 2016 (either directly or through a third-party applicant), or b) received either an upfront incentive or PBI payment during 2016.

The host customer survey was focused primarily on quantitative, scalar questions, with some selected follow-up open-ended questions. A survey invitation with web link and a letter from the CPUC explaining the legitimacy and purpose of the evaluation was first emailed to all host customers in the participant population. A physical letter was also mailed on behalf of the CPUC. Two additional follow up emails were sent to participants over the data collection time period.

The minimum desired sample sizes by stratum are shown in Table 3-3. Within each PA service territory, host customers were first characterized in terms of whether their project(s) were canceled or not. Host customers with non-canceled projects were then further grouped into whether their projects were for storage, wind, or other technologies. Finally, within each PA, host customers were grouped in terms of whether their applicant/developer was among the 11 prolific applicant companies with 20 or more projects in the overall population. Among these strata, sample points were distributed as follows. The evaluation team began with the goal of achieving an overall margin of error of 0.4 points at the individual PA level for typical scalar questions in the survey on a 1-5 scale (at a significance level of 0.05). For host customers of non-prolific applicants in each service territory, the target sample size was set to six, or a census if the total population of host customers for a given stratum was fewer than six. This ensured a reasonable sample size, for example, across the different technology groupings for a given PA, or across PAs for a given technology grouping among host customers of non-prolific applicants. Given the sample points that had been distributed among host customers of non-prolific applicants, the evaluation team then calculated the number of completed surveys with host customers of prolific applicants that would be required to meet the 0.4 margin of error for the PA overall.

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<sup>3</sup> 2016 SGIP Handbook Section 4.1.1



**TABLE 3-3: SAMPLE SIZES FOR HOST CUSTOMERS**

Host Customer		Non-Canceled						Canceled		Total Distinct	
		AES		Other		Wind		N	n	N	n
		N	n	N	n	N	n				
PG&E	Prolific App.	69	21	25	6	-	-	32	8	126	35
	Non-Prolific App.	11	6	29	6	3	3	63	6	106	21
SCE	Prolific App.	161	26	9	2	-	-	59	7	229	35
	Non-Prolific App.	15	6	8	6	3	3	44	6	70	21
CSE	Prolific App.	80	22	4	2	-	-	41	9	125	33
	Non-Prolific App.	6	6	4	4	1	1	32	6	43	17
SCG	Prolific App.	-	-	8	6	-	-	28	17	36	23
	Non-Prolific App.	-	-	12	6	-	-	8	6	20	12
Total		342	87	99	38	7	7	307	65	755	197

Following the initial round of completed surveys, Itron’s computer-assisted telephone interview (CATI) staff contacted host customers who had not completed the online survey to fill the strata quotas. Itron CATI staff also called host customers with four or more total projects.

Some host customers have projects in multiple PA service territories, non-canceled projects across multiple technology types, and/or projects with prolific and non-prolific applicants. Note that for sampling purposes, a given host customer can only be counted in one of the strata defined here. In cases where a host customer has projects in more than one of the strata below, the host customer was attributed to the stratum where its projects were most concentrated. Skip logic in the survey instrument was used to ask these host customers about their projects in all strata, regardless of the specific stratum where they were grouped for sampling purposes.

The overall host customer survey sample design yields a margin of error of 0.2 when looking across all PAs together. Margin of error by individual PA is 0.25-0.30 points (0.28 for PG&E, 0.30 for SCE, 0.29 for CSE, and 0.25 for SCG). When considering only host customers with non-canceled projects (for whom some survey questions will be targeted), margin of error by PA increases to 0.3-0.5 points (0.31 for PG&E, 0.36 for SCE, 0.36 for CSE, and 0.48 for SCG). The final sample sizes reflect moderate oversampling to promote the diversity of viewpoints informing the overall PA performance evaluation in a variety of strata where the overall population is relatively small. For example, whereas 21% of total projects were with non-prolific applicants, 36% of overall host customer surveys are expected to be conducted with this



population. Survey results were weighted proportionally to their representation in the overall population in terms of counts of unique applicants and host customers when rolling up to overall strata.

Applicants who were also host customers (41 applicants) were asked to participate in both the applicant and host customer surveys. They were notified during an applicant survey that they would receive the host customer web survey invitation and that it represented a separate survey effort.

Copies of all survey instruments are included in Appendix A. Applicant and host customer demographics and firmographics are summarized in Appendix B.

# 4 PROGRAM ADMINISTRATOR PERFORMANCE RESULTS

In this section, we present findings from the data collection activities in this evaluation. Results are organized thematically based on the overarching research questions that structured the evaluation from the outset. Data and analysis from the applicant survey and from the host customer survey are presented as they pertain to each research question (see Section 2).

## 4.1 OVERALL IMPRESSION OF THE PROGRAM

Overall impressions of the program are generally favorable. Applicants and host customers consistently rate elements of PA performance at between a three and four on a five-point scale. Across PAs, CSE and SCG were consistently ranked higher than PG&E and SCE across a variety of performance criteria. CSE and SCG stand out specifically with regards to timeliness of communications – these PAs respond to applicant queries within hours or days rather than weeks or months. As described in section 2, it’s important to keep in mind that PG&E and SCE’s program budgets (and therefore volume of applications) are several times larger than CSE and SCG’s. This could contribute to issues with timeliness of communications.

With regards to websites, applicants and host customers are generally satisfied but not highly satisfied with the statewide application portal ([www.selfgenca.com](http://www.selfgenca.com)). Several opportunities were identified for improvement of the website, including better presentation of program statistics and ease of use. CSE’s website stands out somewhat amongst PA websites regarding its usefulness to applicants and host customers.

Finally, opportunities for improvement were identified regarding application submittal, paperwork requirements, and the inspection process. Applicants who worked with multiple PAs generally reported consistency in program requirements with a few exceptions regarding data requirements and signature formats. With regards to the inspection scheduling process, several prolific applicants noted that the process could be improved by working with applicants directly rather than host customers since they are often more familiar with the finer details of the system.

## 4.2 ACHIEVED SAMPLE SIZES

As discussed in Section 3, the goal in sample design across the applicant and host customer surveys was to establish desired quotas for substrata such that data could be interpreted with statistical confidence at the individual PA level as well as, where possible, at the level of specific columns and rows in the table. While there is no requirement to achieve a particular level of statistical significance for these subgroupings, it enables some subdivision of the data into groups and crossings for analysis. For the applicant survey, the evaluation team attempted to conduct surveys with all 11 applicants that were



considered prolific and with the only two wind applicants. Since the prolific and wind applicants operated across multiple service territories, from a sampling standpoint they were seen as occupying each service territory where they had active projects. Table 4-1 shows population, target sample, and achieved sample size by stratum and overall for the applicant survey.

**TABLE 4-1: PROLIFIC AND WIND APPLICANT SAMPLE DESIGN AND COMPLETED INTERVIEWS**

<b>Program Administrator</b>		<b>Prolific</b>	<b>Wind</b>
PG&E	Population	11	2
	Target Sample	11	2
	Achieved Sample	7	1
SCE	Population	10	2
	Target Sample	10	2
	Achieved Sample	7	1
CSE	Population	9	1
	Target Sample	9	1
	Achieved Sample	7	1
SCG	Population	5	0
	Target Sample	5	0
	Achieved Sample	4	0
Total	Population	11	2
	Target Sample	11	2
	Achieved Sample	7	1

While attempting to interview all prolific applicants was appropriate from a sample design standpoint, it was not surprising that achieving a census was unrealistic. One prolific applicant company went out of business in the intervening period between their 2016 projects and the evaluation. Another refused to return calls and inquiries regarding participating in the survey. Nevertheless, given the dominant role that prolific applicants play in the program with respect to the proportion of the total project population that they represent, the eight completed surveys represent good coverage for this population.

Aside from prolific and wind applicants, the evaluation team attempted to represent important diversity in program participation from a sampling standpoint by stratifying for storage projects separately from other SGIP incentivized technologies and by stratifying for applicants who are also themselves the host customer and those who apply on behalf of others. Table 4-2 shows population, targeted sample, and achieved sample sizes for each of these strata.



**TABLE 4-2: NON-PROLIFIC NON-WIND APPLICANT SAMPLE DESIGN AND COMPLETED INTERVIEWS**

Program Administrator		AES		Non - AES		Total
		Self	Non-Self	Self	Non-Self	
PG&E	Population	8	24	13	12	57
	Target Sample	3	7	4	4	18
	Achieved Sample	5	8	4	5	22
SCE	Population	4	25	1	5	35
	Target Sample	3	7	1	3	14
	Achieved Sample	1	7	0	2	10
CSE	Population	7	14	3	5	29
	Target Sample	3	4	3	3	13
	Achieved Sample	2	4	1	3	10
SCG	Population	2	1	3	9	15
	Target Sample	2	1	3	3	9
	Achieved Sample	2	1	3	2	8
Total	Population	20	64	20	31	135
	Target Sample	11	19	11	13	54
	Achieved Sample	10	18	8	11	47

The evaluation team met or exceeded the target sample size for 11 out of 16 substrata among non-prolific and non-wind applicants and was able to achieve a total of 47 completed interviews for this overall group relative to a target of 54. As with the prolific and wind samples, it was not surprising that not all target sample sizes could be met, since the overall population size for some strata was small.

Separate from the applicant surveys, the host customer surveys served to supplement and complement data gathered from applicants. These surveys were administered via web to the entire population for whom email addresses were available, with an initial invitation by email to participate and three subsequent email reminders to host customers who had not yet completed the survey. This was followed by targeted phone calls from Itron staff to complete surveys for underrepresented strata. Table 4-3 shows population, targeted sample, and achieved sample size by stratum and overall for the host customer survey. Totals are shown for each column and row.



**TABLE 4-3: HOST CUSTOMER SAMPLE DESIGN AND COMPLETED SURVEYS**

		PG&E		SCE		CSE		SCG		Total	
		Prolific App.	Non-Prolific App.	Prolific App.	Non-Prolific App.	Prolific App.	Non-Prolific App.	Prolific App.	Non-Prolific App.		
Non-Cancelled	Storage	Population	69	11	161	15	80	6	-	-	342
		Target Sample	21	6	26	6	22	6	-	-	87
		Achieved Sample	17	8	30	3	39	4	-	-	101
	Other	Population	25	29	9	8	4	4	8	12	99
		Target Sample	6	6	2	6	2	4	6	6	38
		Achieved Sample	6	6	0	3	1	0	2	2	20
	Wind	Population	-	3	-	3	-	1	-	-	7
		Target Sample	-	3	-	3	-	1	-	-	7
		Achieved Sample	-	1	-	0	-	0	-	-	1
Cancelled	Population	32	63	59	44	41	32	28	8	307	
	Target Sample	8	6	7	6	9	6	17	6	65	
	Achieved Sample	4	15	15	4	9	5	3	1	56	
Total	Population	126	106	229	70	125	43	36	20	755	
	Target Sample	35	21	35	21	33	17	23	12	197	
	Achieved Sample	28	29	45	10	49	9	5	3	178	

The sample design for the host customer survey featured 25 strata in which ideally some host customer feedback would be represented. The evaluation team completed surveys for 20 of those 25 strata, which allowed for diverse representation in the survey results. The sample design intentionally oversampled for strata with small but non-zero representation in the overall program to emphasize diversity balanced with representativeness in the program experience. The achieved sample more closely represents the true population distribution than the sample design, which is not surprising given that some of the categories had very small populations which made it challenging to achieve the targeted survey completes for such instances.





## 4.2.1 Statistical Precision in Evaluation Findings

The achieved sample sizes noted in the previous section inform the statistical precision with which findings can be reported from the applicant and host customer surveys. Based on the sampling plan, the evaluation team sought to achieve a margin of error of 0.25 points across the whole program applicant population for typical scalar questions in the survey on a 1-5 scale (at a significance level of 0.05). This would mean there is 95% probability that the overall average scores on 5-point scalar questions are within a quarter point of the true population average. Achieved sample for the applicant survey delivered a margin of error of 0.27 points. Hence, when reviewing figures in this report based on the applicant surveys, responses should be viewed as having a 95% of being within 0.27 points of the true population average at the statewide level. At the individual PA level, achieved margin of error in the applicant survey was 0.4 for PG&E, 0.6 for SCE, 0.6 for CSE, and 0.6 for SCG.

For the host customer survey, the evaluation team sought a margin of error of 0.2 points across the whole population and 0.4 points at the individual PA level and. Achieved sample for the host customer survey successfully yielded a margin of error of 0.2 for the overall population. At the individual PA level, the margin of error was 0.2 for PG&E, 0.3 for SCE, 0.2 for CSE, and 0.7 for SCG.

## 4.3 PA IN-DEPTH INTERVIEW FINDINGS

Interviews were conducted with PA staff to understand how program staffing and overall management varies across service territories. Findings are summarized in Table 4-4.

**TABLE 4-4: PROGRAM STAFFING AND IMPLEMENTATION BY PROGRAM ADMINISTRATOR**

Program Administrator	Self-Reported Target Time to Respond to Inquiries	Self-Reported Target Time to Issue Incentive Payments	SGIP Staff Count (Full or Part Time, Excluding M&E)	Uses Cross-Cutting Application Support Staff?	Expecting Future Staff Increases?
PG&E	1-2 days	Within 30 days	2	Yes	No
SCE	2 business days		2	Yes	Maybe
CSE	1 day		3	No	Yes
SCG	Few hours to 1 day		4	No	Yes



PAs are generally consistent in their self-reported target times for responding to inquiries and issuing incentive payments. Across the board, PAs attempt to respond to inquiries within two days (at most) and consistently indicate a target time of 30 days to issue incentive payments. Staffing levels vary slightly across PAs both in terms of total staff levels and the number of full time vs. part time staff dedicated to the program. Staffing levels generally range from 2-4 persons per PA, excluding staff dedicated to M&E or those providing legal/regulatory support. PG&E and SCE rely on cross-cutting application support staff that are also involved in other programs, whereas CSE and SCG do not. When asked about plans to expand staffing levels, CSE and SCG indicated firm plans to bring on additional staff due to expected increases in the volume of applications.

## **4.4 APPLICANT AND HOST CUSTOMER SURVEY FINDINGS**

This section presents detailed findings from the completed applicant and host customer surveys. Findings are organized by broad thematic categories and are closely aligned with the areas of research outlined in the evaluation plan.

### **4.4.1 Satisfaction with Clarity and Timeliness of Communication**

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 performance based incentives. Providing clear guidance on what is required, in what sequence, and with what specifications of how to measure and report a given piece of information is an inherently challenging task.

A central way in which program administrators may influence participants' experience of the program is through the clarity and timeliness 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 email (49%), followed by website updates (27%), phone (5%), and the quarterly workshops (5%). Therefore, being clear and timely in both written and oral 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.

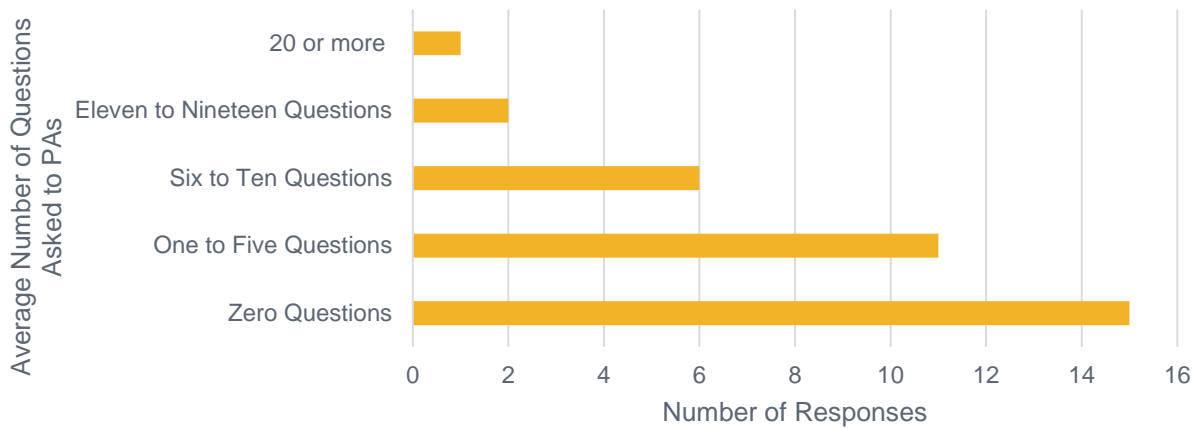


## Applicants' Oral and Written Communications with Program Administrators

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

Regarding the frequency of inquiries to the PA (see Figure 4-1), findings indicate that most applications involved five questions or fewer, and 40% (15 of 35 responses) did not have any questions that needed to be asked. This suggests that most applicants were relatively self-sufficient during the application process.

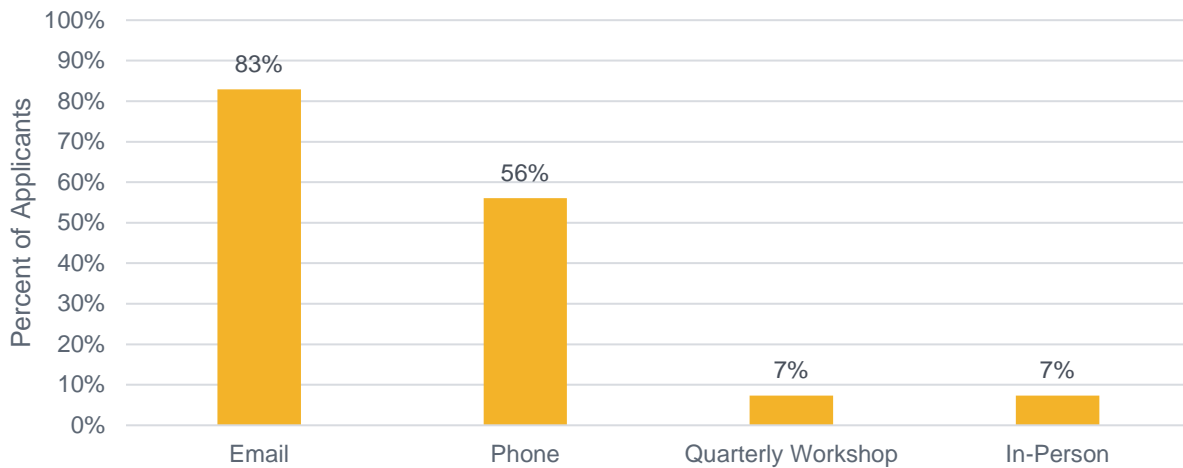
**FIGURE 4-1: FREQUENCY OF APPLICANT INQUIRIES TO THE PA**



When questions are asked, email is the preferred method of communication, as shown in Figure 4-2. Fully 83% of respondents used email for at least some of their inquiries, and 56% use phone calls for at least some of their inquiries. Workshops and on-site visits were rarely used for this purpose.

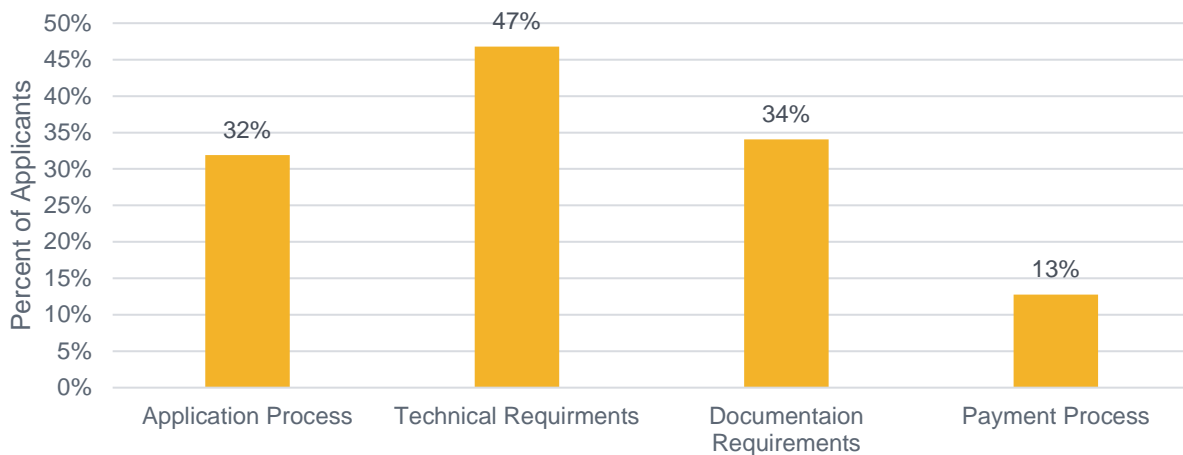


**FIGURE 4-2: APPLICANTS' PREFERRED METHOD OF COMMUNICATIONS**



Applicants were also asked about the types of questions they had during these inquiries (Figure 4-3). The majority of questions were technical in nature. Applicants sought clarification of technical requirements (47%), documentation requirements (34%), or the application process itself (32%). Only 13% of these inquiries concerned the payment process.

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

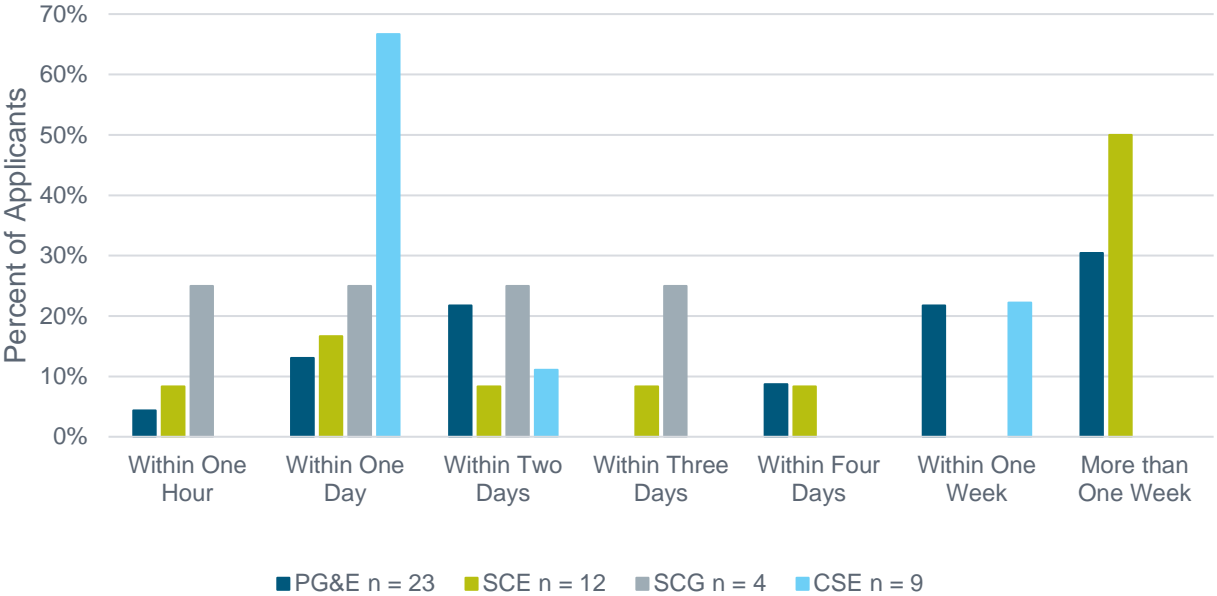


Another facet of these inquiries was the timeliness of the response by the PA. Applicants were asked both about the time it took to get an initial reply from the PA, and the total time it took to resolve the inquiry.



With respect to the timeliness of the initial response from the PA, findings varied significantly by PA (see Figure 4-4). In general, both CSE and SCG had much shorter response times than SCE and PG&E. For all but SCE, the initial responses to most inquiries took one week or less. However, significant percentages of both SCE and PG&E applicants (50% and 30%, respectively) indicated that these initial responses took more than one week to arrive.

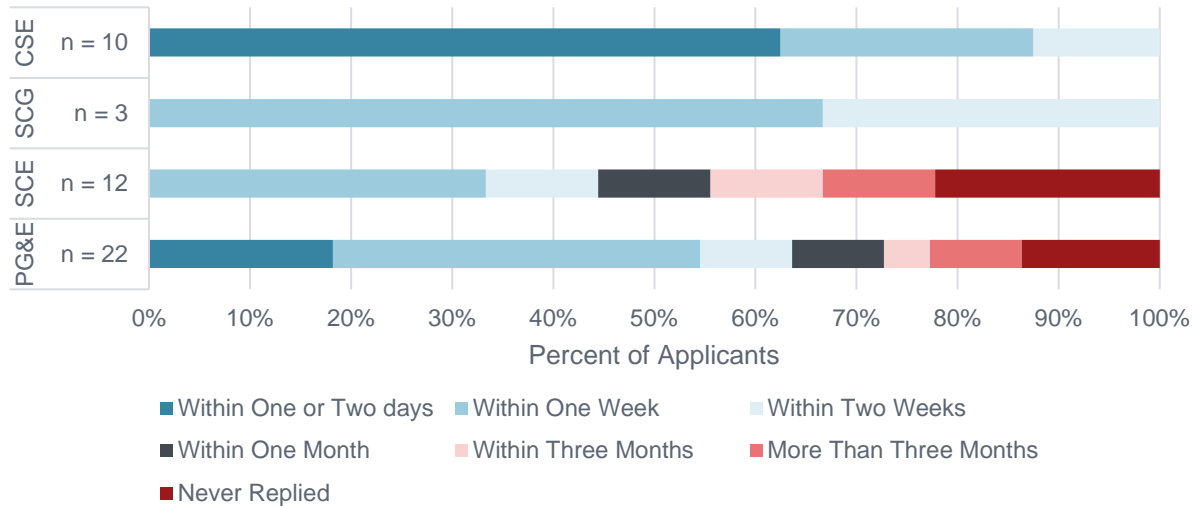
**FIGURE 4-4: INITIAL TIME TO RESPOND TO INQUIRIES BY PA**



Applicants were also asked what was the longest amount of time it took to receive a response from their PA (Figure 4-5). Again, the results showed wide variance by PA. Both SCG and CSE took the shortest time to reply, within two weeks in all cases. PG&E took one month or more for about one third of its applicants, and SCE took one month or more for more than half of its applicants. Both PG&E and SCE had cases where the applicants reported that they never received a response.

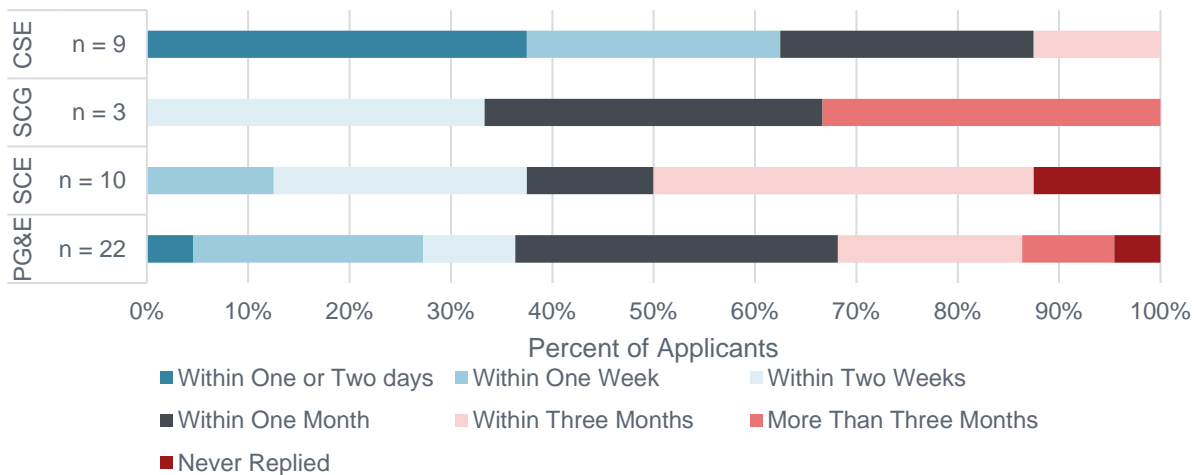


**FIGURE 4-5: LONGEST REPORTED TIME FOR APPLICANT TO RECEIVE A REPLY TO AN INQUIRY BY PA**



Another dimension was the cycle of time from start to finish for inquiries that required the most time to resolve. In general, CSE and SCG took the shortest time to resolve such inquiries; however, all PAs had inquiries that required more than one month to resolve. CSE had the highest proportion of instances that took one week or less to be completed. Applicants of SCE and PG&E had queries that were never resolved.

**FIGURE 4-6: LONGEST TIME APPLICANT WAITED FOR ISSUE RESOLUTION BY PA**

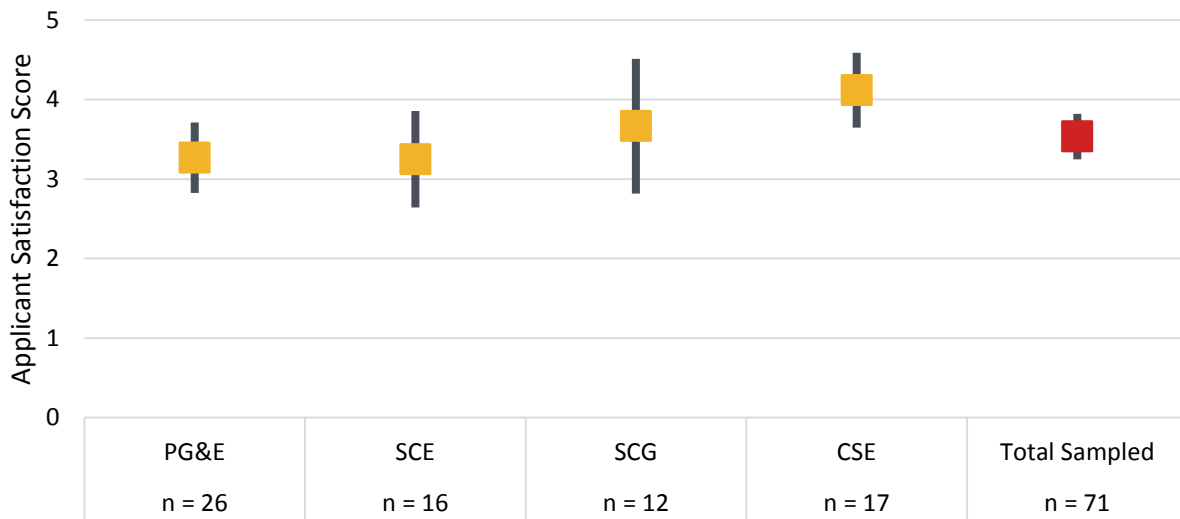




### Applicants' Perceptions of Helpfulness and Timeliness of Program Administrator Staff

Applicants were also asked to rate their satisfaction with the helpfulness of the PA during the application period. Numerical ratings across PAs were relatively consistent and ranged from a low of 3.3 (for PG&E and SCE) to a high of 4.1 for CSE, with an overall average of 3.5. Note the wide 95% confidence interval for SCG, indicating a high degree of variance around their average score of 3.7.

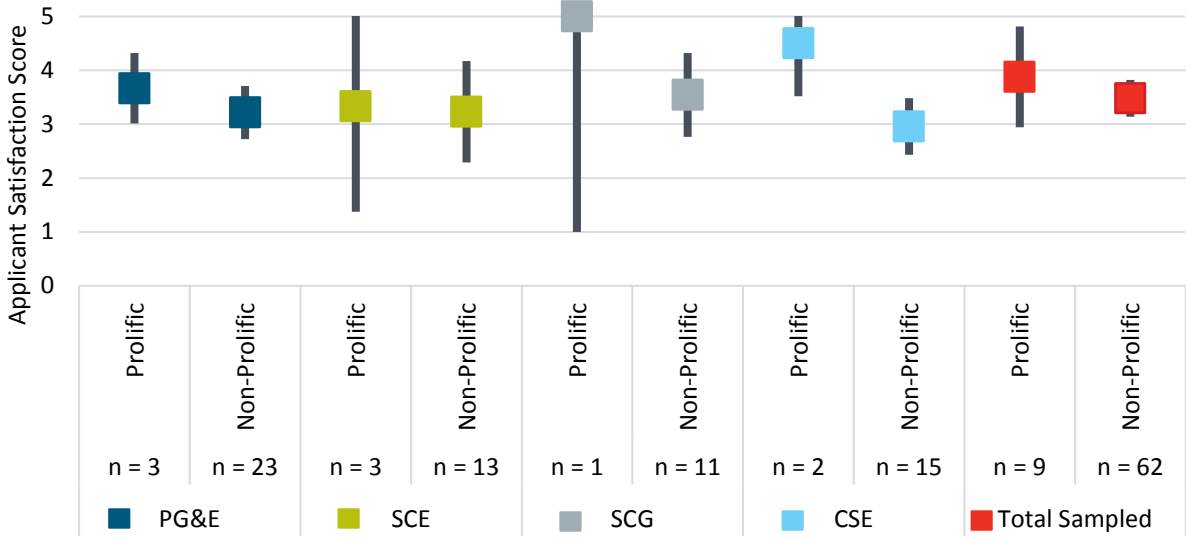
**FIGURE 4-7: APPLICANT SATISFACTION WITH PA HELPFULNESS DURING APPLICATION PROCESS**



Applicant satisfaction with PA helpfulness can be further broken out by prolific and non-prolific applicants. Figure 4-8 shows that overall, prolific applicants were more satisfied than non-prolific applicants with PA helpfulness, with scores of 3.9 and 3.5 respectively. A trend that is consistent with each program administrator as well.

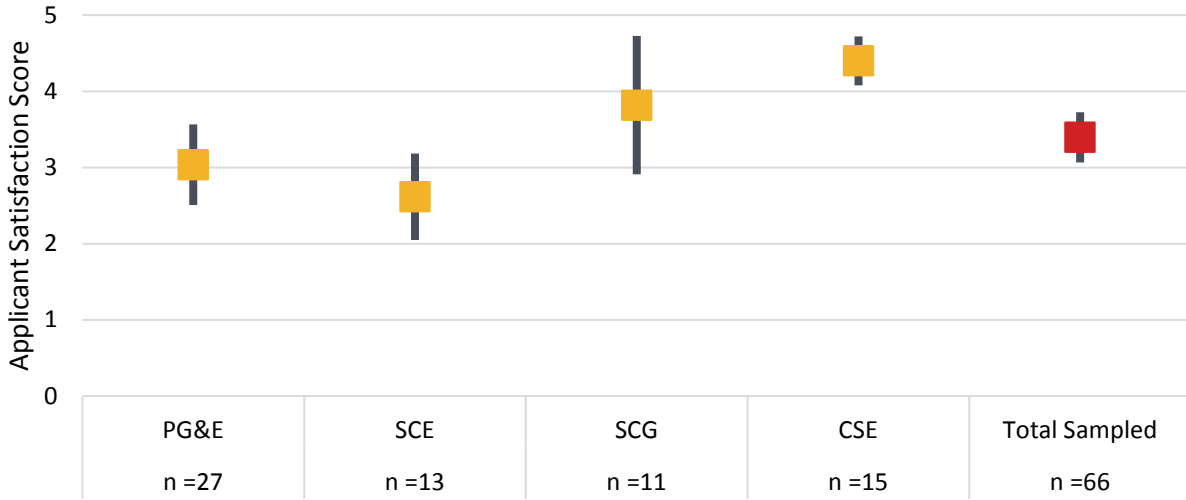


**FIGURE 4-8: APPLICANT SATISFACTION WITH PA HELPFULNESS BY PROLIFICITY**



Applicants also provided ratings on their satisfaction with the timeliness of their PA’s written and oral communications. These findings are shown below in Figure 4-8 and Figure 4-9, respectively.

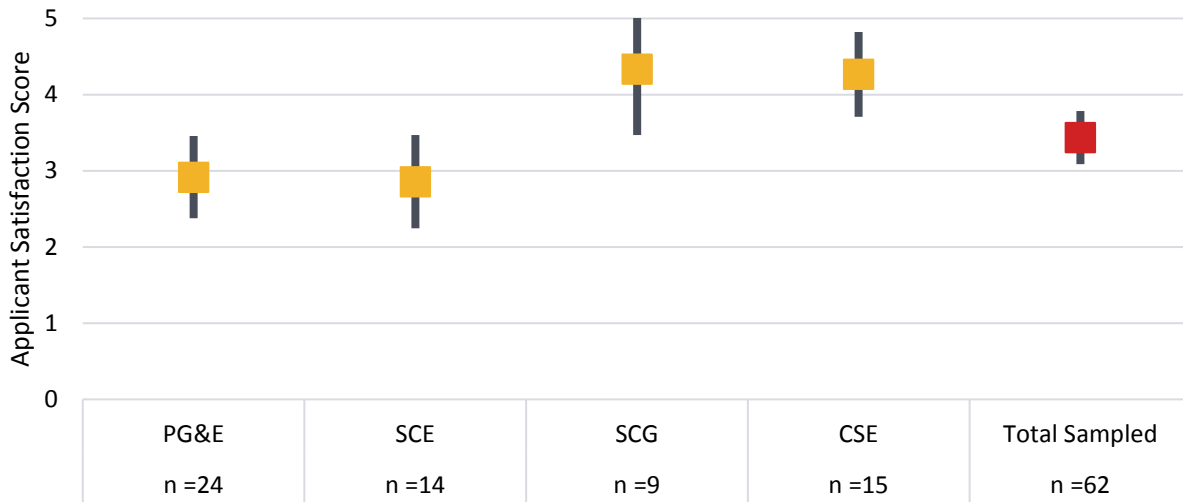
**FIGURE 4-9: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA WRITTEN COMMUNICATIONS**







**FIGURE 4-10: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA ORAL COMMUNICATIONS**



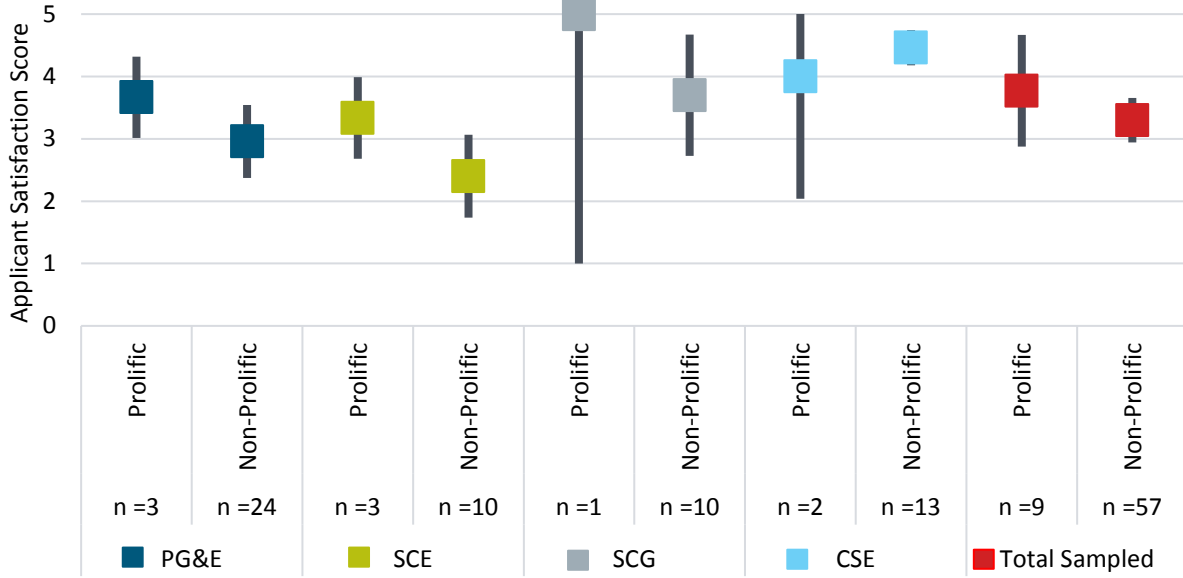
Satisfaction levels with the timeliness of responses, whether written or oral, are highest for CSE and SCG, and lowest for PG&E and SCE. These findings are consistent with those reported earlier on accessibility, and are likely a function of whether a personalized or impersonal approach was used for communications. Direct comments from project applicants on the impersonal call center approach were mostly negative, while that for the personalized approach was extremely positive. Note that the call center approach can be a reasonable way to handle a high volume of call intake, provided a personalized follow-up call is made to the participant within one day to respond to the inquiry. Those applicants with among the lowest dissatisfaction ratings reported dialing into a call center phone tree without receiving a prompt personalized reply a short while later. In many cases, the reply call took place several days or weeks later.

Both PG&E's and SCE's oral communications timeliness ratings below 3.0 indicate moderate dissatisfaction with this aspect of the program.

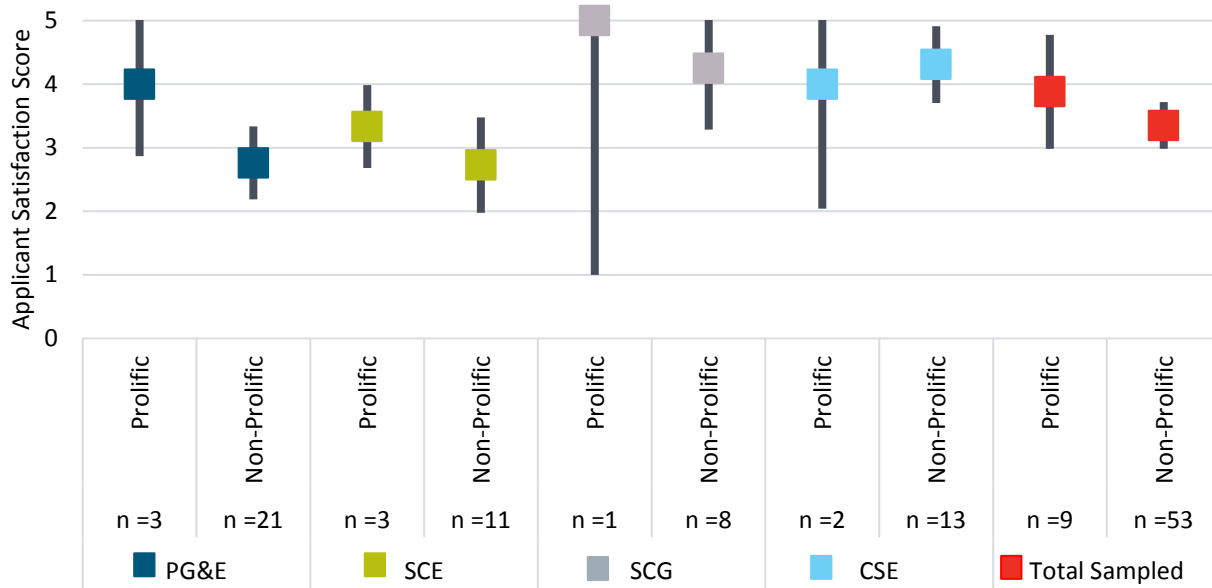
Overall, prolific applicants are more satisfied than non-prolific applicants with the timeliness of PA written and oral communications (see Figure 4-11 and Figure 4-12). With written communications, the overall score given by prolific applicants was 3.8 and the score given by non-prolific applicants was 3.3. With oral communications, the overall score given by prolific applicants was 3.9 and the score given by non-prolific applicants was 3.4, indicating moderate satisfaction.



**FIGURE 4-11: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA WRITTEN COMMUNICATIONS BY PROLIFICITY**



**FIGURE 4-12: APPLICANT SATISFACTION WITH THE TIMELINESS OF PA ORAL COMMUNICATIONS BY PROLIFICITY**





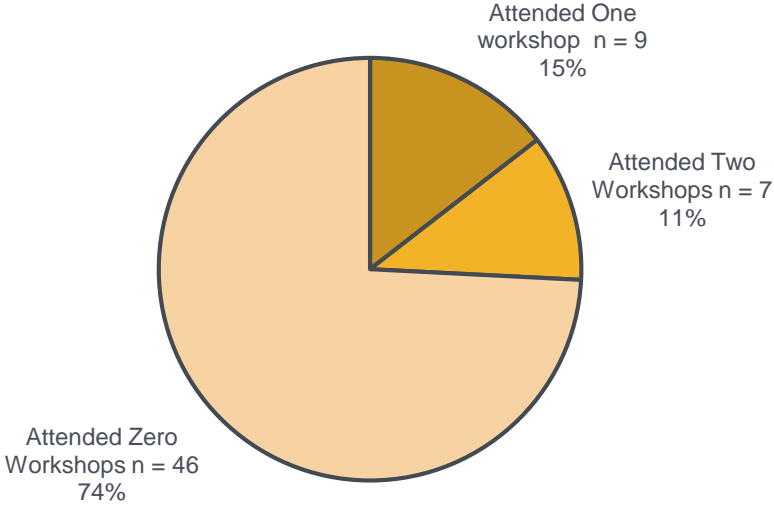
### Quarterly Workshops

Quarterly workshops are one tool 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 on-line. The first quarterly workshop took place in November of 2016 while the majority occurred in 2017. Though this report focuses on 2016, respondents were asked about their experience with all workshops regardless of calendar year.

Applicants were asked about their frequency of workshop attendance. Survey findings indicate that workshops were not very widely attended among surveyed applicants. As shown in Figure 4-10, just 15% (9 of 62 respondents) attended one workshop and only 11% (7 of 62) attended two workshops. The majority, 74% (46 of 62) did not attend a single workshop.

Among those respondents that attended more than one workshop were representatives of the prolific firms interviewed. Those prolific firms reported being very satisfied with the workshops overall, which is very important considering the high proportion of completed projects that they represent. Attendees noted that workshops were a good way to network and “gave representation to small residential and other low power groups.” One phone attendee mentioned that the experience could be improved for phone attendees by “repeating the question asked” before responding.

**FIGURE 4-13: APPLICANT PARTICIPATION AT QUARTERLY WORKSHOPS**





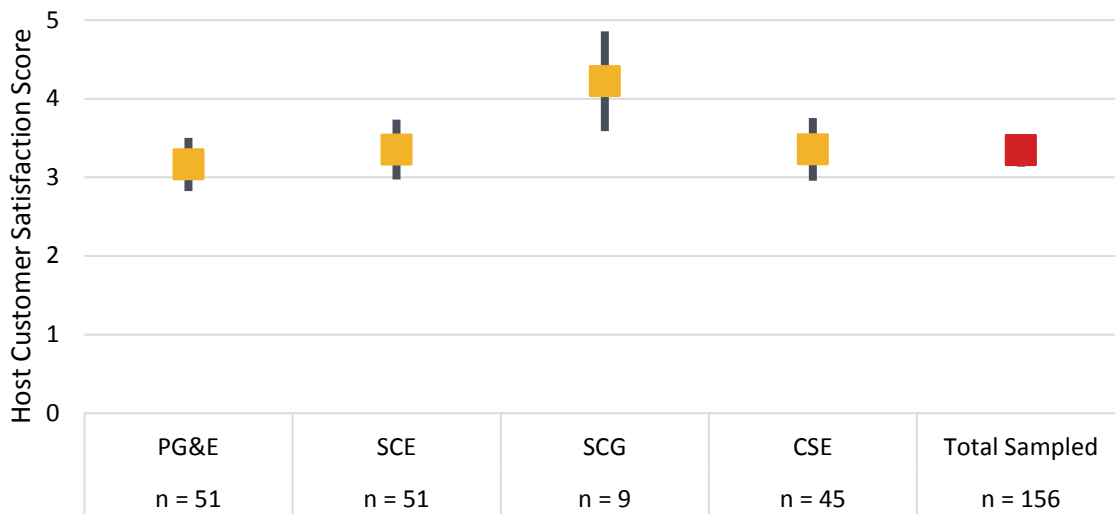
## Host Customers' Written and Oral Communications with Applicants and PAs

Assembling and submitting program documentation and application forms is the job of the applicant, and a given host customer may or may not play an active role accumulating the required information. Given the fact that some host customers' experience of SGIP is largely mediated through their applicant, it's important to keep in mind that the responses in this section may not directly reflect the PA performance. However, it serves as a lens for framing host customer feedback as it pertains to PA performance.

With this qualification in mind, host customers generally give positive scores to the clarity with which PAs specify program requirements, with some variation across PAs. For each aspect of the program noted in Figure 4-11 through Figure 4-17 below, most respondents gave scores of 4 or 5 on a 5-point scale where 1 means 'Not at All Satisfied' and 5 means 'Extremely Satisfied'.

As shown in Figure 4-11 below regarding the clarity of program technical requirements, host customers gave an overall average rating of 3.3, with SCG receiving the highest average score of 4.4 and PG&E receiving the lowest average score of 3.1.

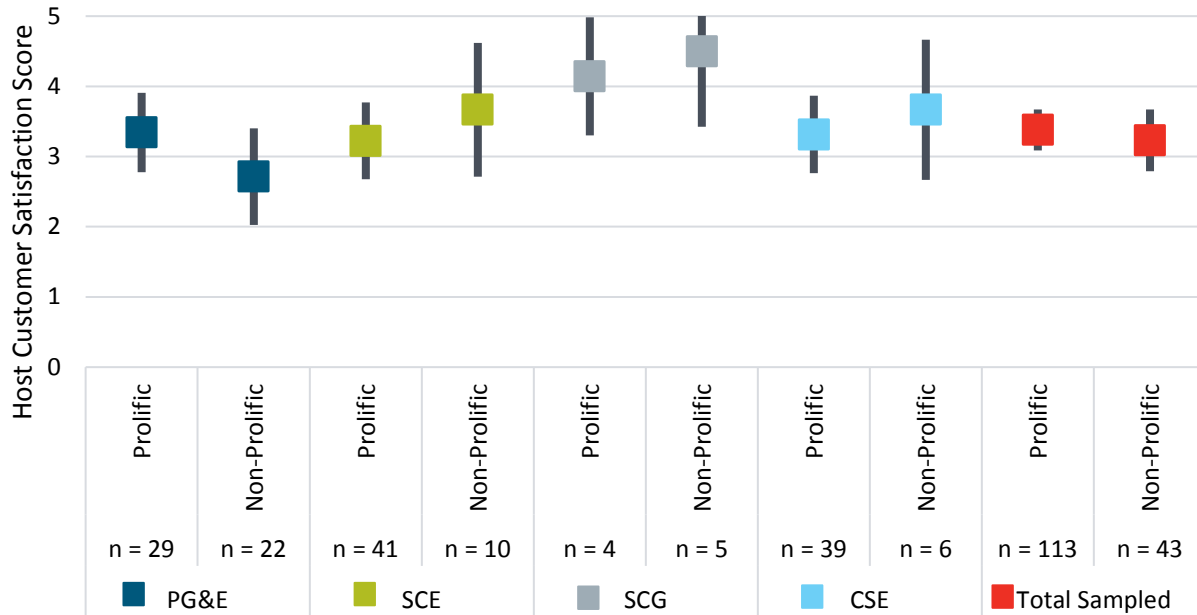
**FIGURE 4-14: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM TECHNICAL REQUIREMENTS**



Overall, both host customers with prolific and non-prolific applicants were moderately satisfied with scores of 3.4 and 3.2 respectively.

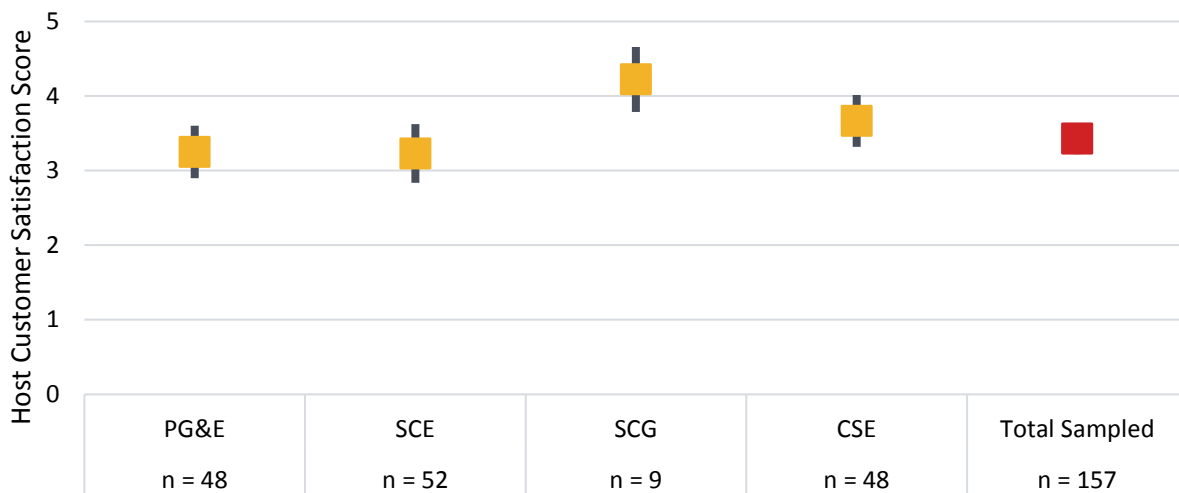


**FIGURE 4-15: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM TECHNICAL REQUIREMENTS BY PROLIFICITY**



Regarding clarity of program documentation requirements, host customers gave a slightly higher average score of 3.4. Based on the distribution of scores shown in Figure 4-12, SCG and CSE received the highest average scores of 4.4 and 3.7, respectively.

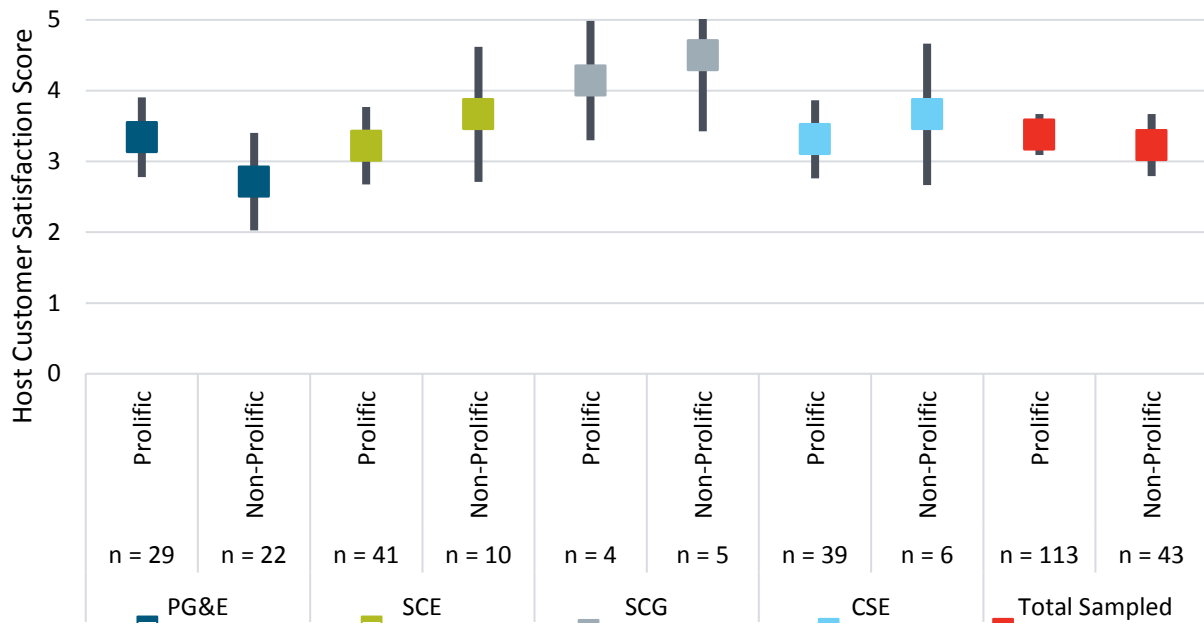
**FIGURE 4-16: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM DOCUMENTATION REQUIREMENTS**





Overall, host customers of both prolific and on-prolific applicants were moderately satisfied with clarity of program documentation requirements with scores of 3.4 and 3.2 respectively.

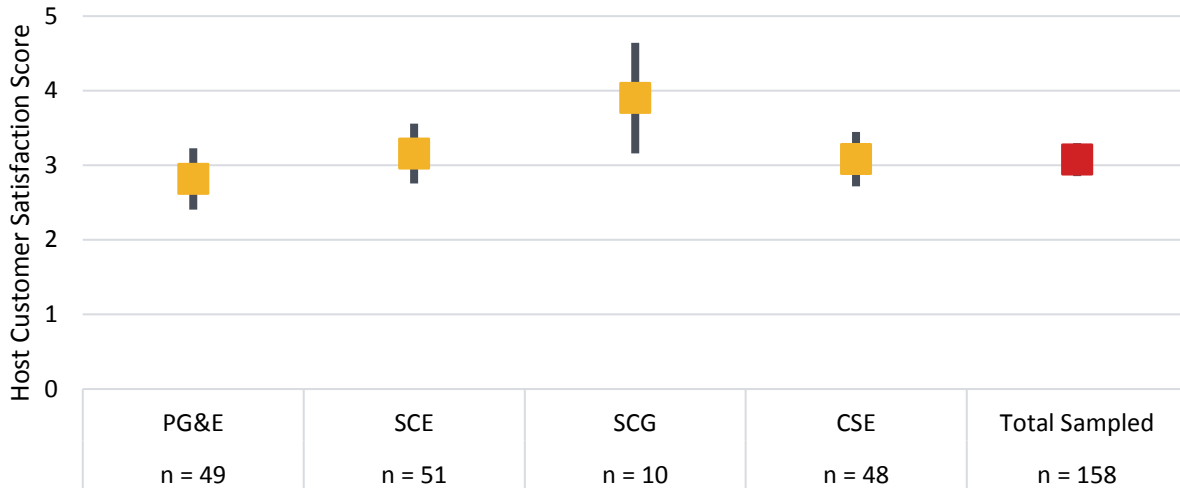
**FIGURE 4-17: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM DOCUMENTATION REQUIREMENTS BY PROLIFICITY**



Participation in SGIP includes multiple stages as a project moves from initial application through completion and payment. Some key stages for all projects include application submission, conditional reservation, confirmed reservation, incentive claim form, onsite inspection, and incentive payment. Depending on the size and scope of the project, additional key stages may include regular performance data submission, proof of project milestones, and performance-based incentive payment. Deadlines for completing the subsequent stage are often defined as a specific number of days since completion of the prior stage. Host customers gave an overall average score of 3.0 to the clarity of these program timeline requirements. SCG received the highest average score of 3.9, and PG&E received the lowest average score of 2.8 (see Figure 4-13).

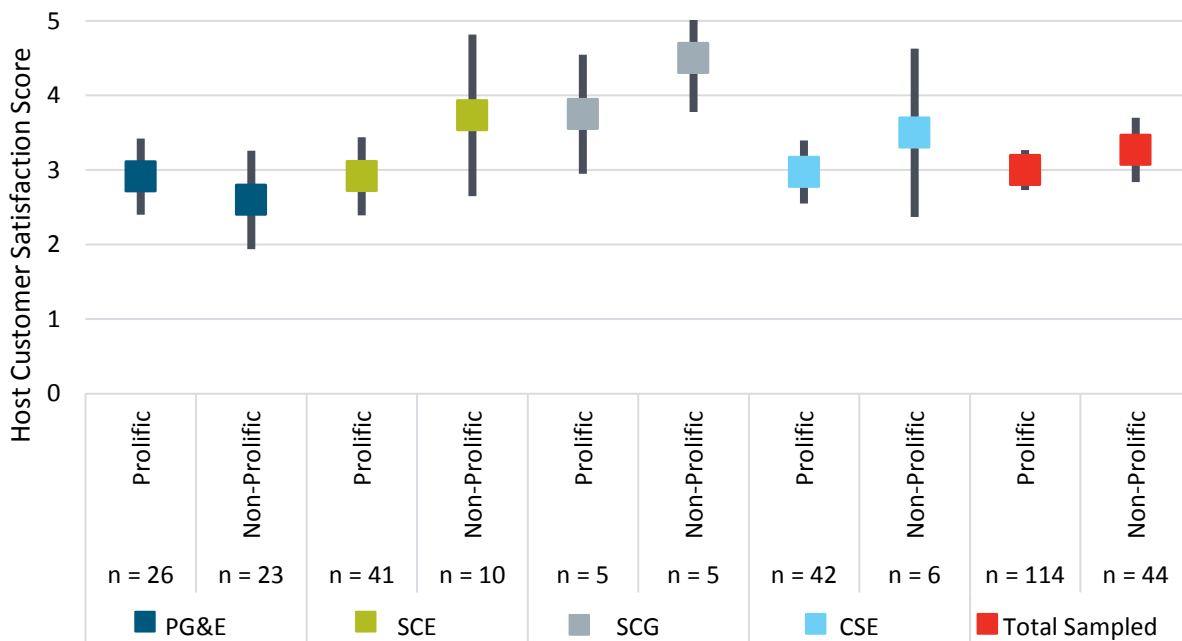


**FIGURE 4-18: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM TIMELINE REQUIREMENTS**



Overall, host customers of both prolific and non-prolific applicants were moderately satisfied with the clarity of program timeline requirements with scores of 3.0 and 3.3, respectively.

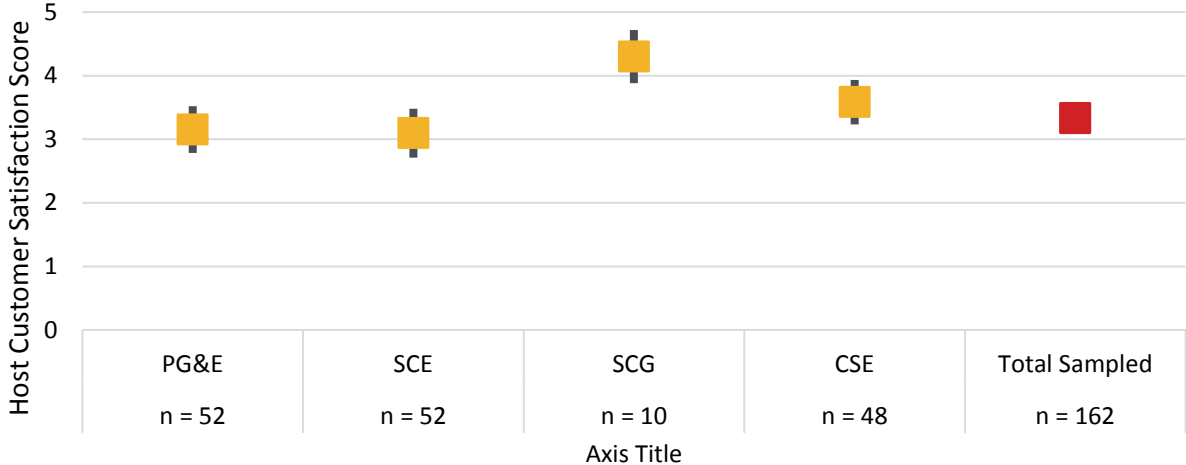
**FIGURE 4-19: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROGRAM TIMELINE REQUIREMENTS BY PROLIFICITY**





Throughout the application submittal, processing, development, payment, and completion of a given project, project status and the likely timeline associated with that status can be a moving target. A frequently cited reason noted by both host customers and applicants for checking program websites and making inquiries of SGIP staff at the individual PAs is to know the status of their projects. As shown in Figure 4-14, host customers give an overall average satisfaction score of 3.3 to the clarity with which project status is communicated. SCG and CSE received the highest average scores of 4.3 and 3.6, respectively.

**FIGURE 4-20: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROJECT STATUS COMMUNICATIONS**

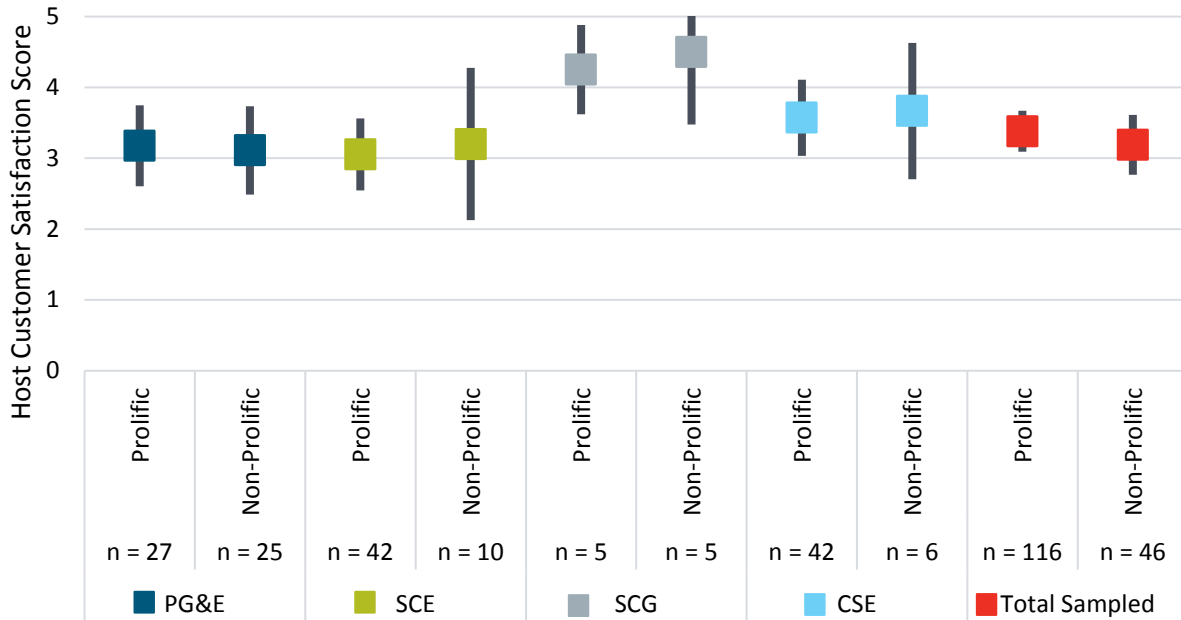


Overall, host customers of both prolific and non-prolific applicants were moderately satisfied with the clarity of project status communications, with scores of 3.4 and 3.2 respectively.





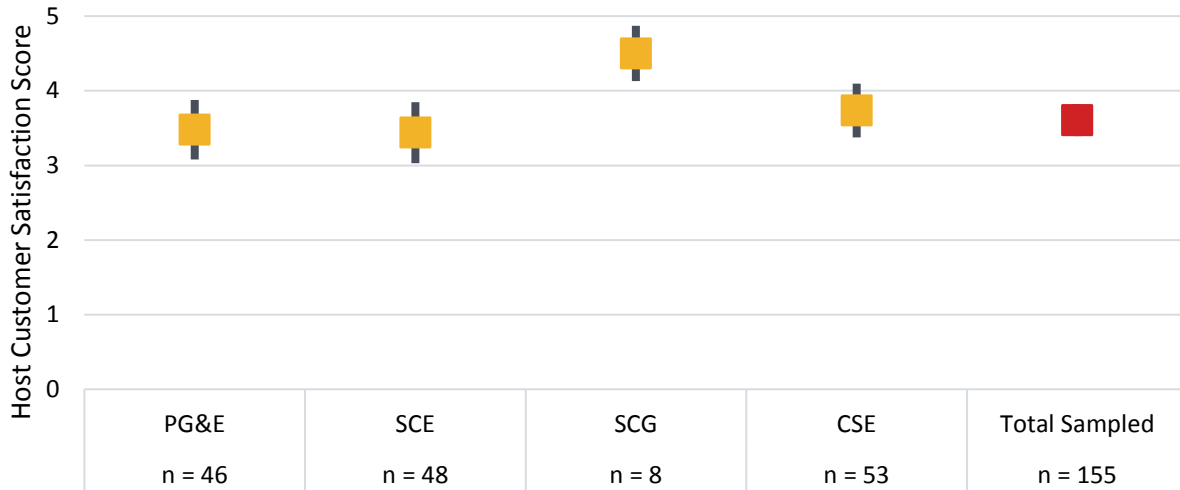
**FIGURE 4-21: HOST CUSTOMER SATISFACTION WITH CLARITY OF PROJECT STATUS COMMUNICATIONS BY PROLIFICITY**



For every SGIP project, an individual or an organization develops and submits the application and, the physical location for the proposed project, its host site, is designated. The applicant is typically not the same entity as the host customer. For example, a firm may be in the business of proposing and then building SGIP-eligible projects for an array of residential and/or nonresidential customers. Host customers on whose behalf an SGIP application is submitted by another party may experience SGIP largely through the lens of their direct interactions with the applicant. Host customers who did not submit their own application were asked about their level of satisfaction with the level of clarity regarding the division of responsibility between themselves and the applicant. As shown in Figure 4-15, overall satisfaction with this element of communication was 3.6, with SCG scoring the highest at 4.5, followed by CSE at 3.7. While not necessarily an indicator of PA performance, these metrics shed light on the general relationship between parties and potential improvement areas.

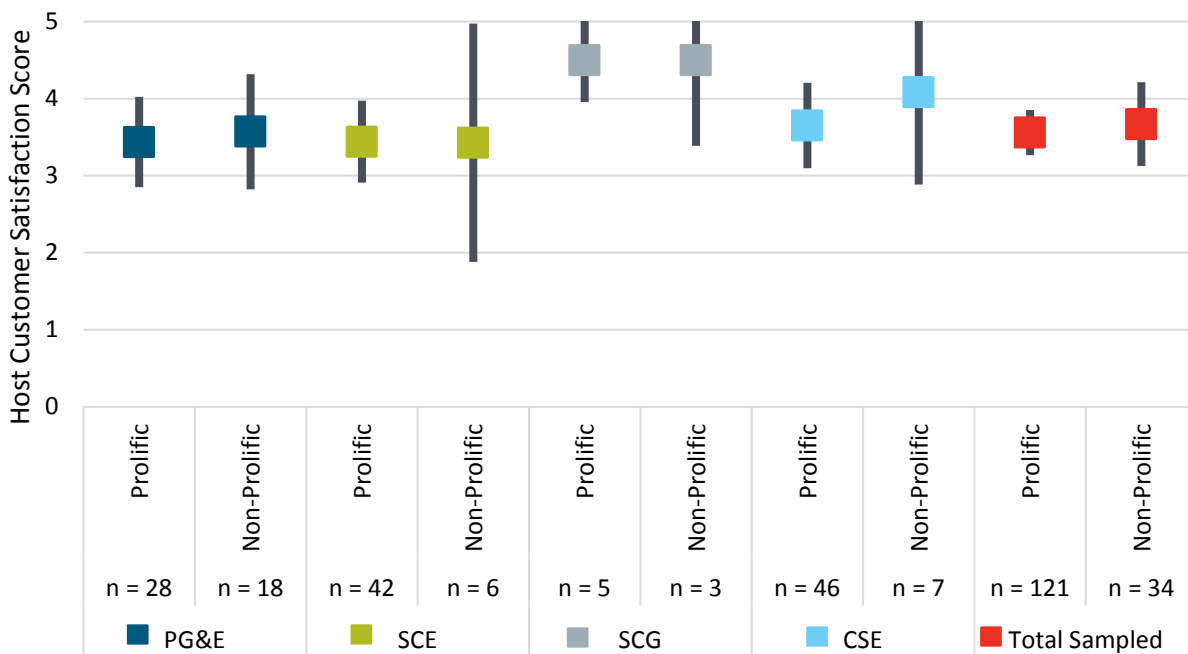


**FIGURE 4-22: HOST CUSTOMER SATISFACTION WITH CLARITY REGARDING DIVISION OF RESPONSIBILITY WITH APPLICANTS**



Overall, host customers of both prolific and non-prolific applicants were moderately satisfied with the clarity regarding division of responsibility with applicants, with scores of 3.6 and 3.7, respectively.

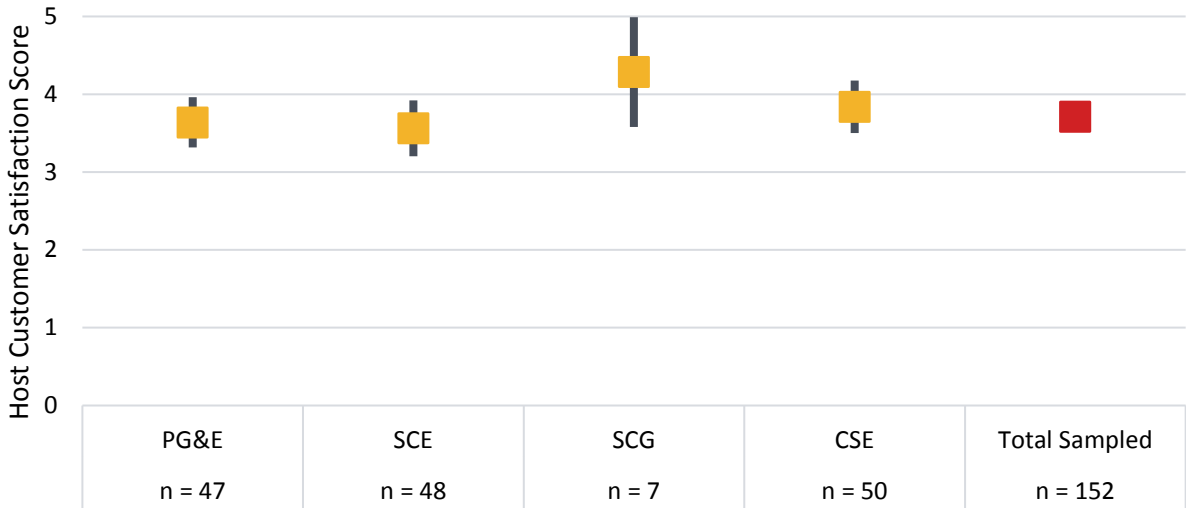
**FIGURE 4-23: HOST CUSTOMER SATISFACTION WITH CLARITY REGARDING DIVISION OF RESPONSIBILITY WITH APPLICANTS BY PROLIFICITY**





Given the fact that some host customers' experience of SGIP is largely mediated through their applicant company, host customers were asked to rate their level of satisfaction with the information provided by the applicant regarding SGIP. This level of satisfaction does not reflect program administrator performance. However, it serves as a lens for framing host customer feedback as it pertains to PA performance and further illuminates how the program is implemented across each PA. As shown in Figure 4-16, overall average satisfaction with information provided by the applicant was 3.7 and was highest for applicants within SCG territory at 4.3.

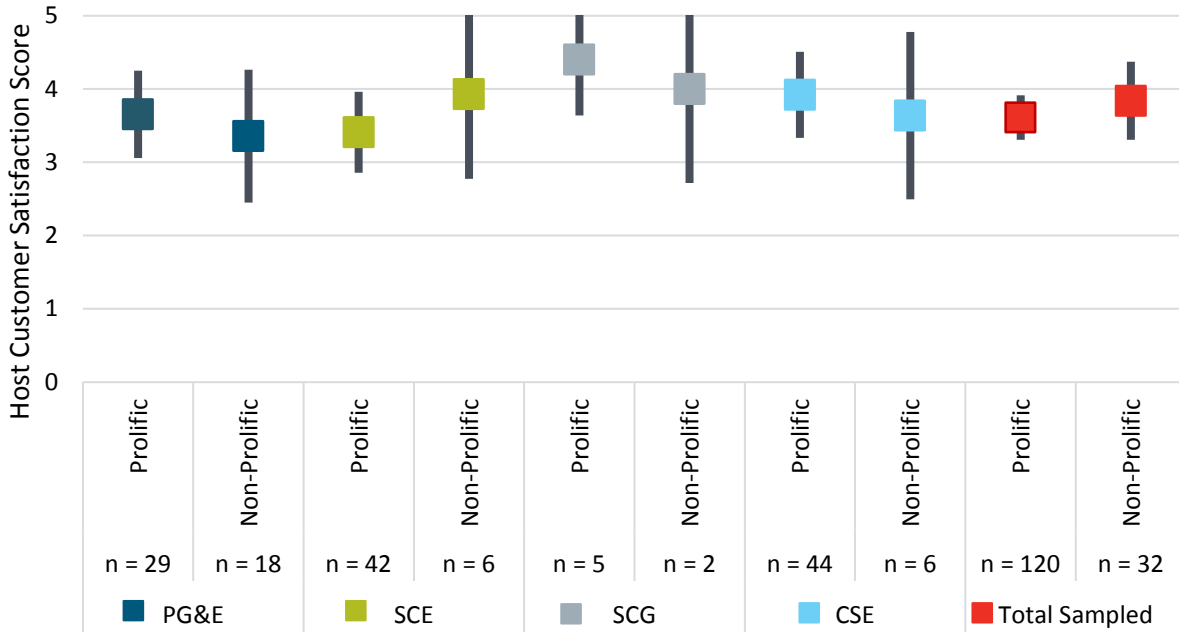
**FIGURE 4-24: HOST CUSTOMER SATISFACTION WITH INFORMATION PROVIDED BY THE APPLICANT**



Overall, host customers of prolific and non-prolific applicants were satisfied with the information provided by the applicant, with scores of 3.6 and 3.8, respectively.



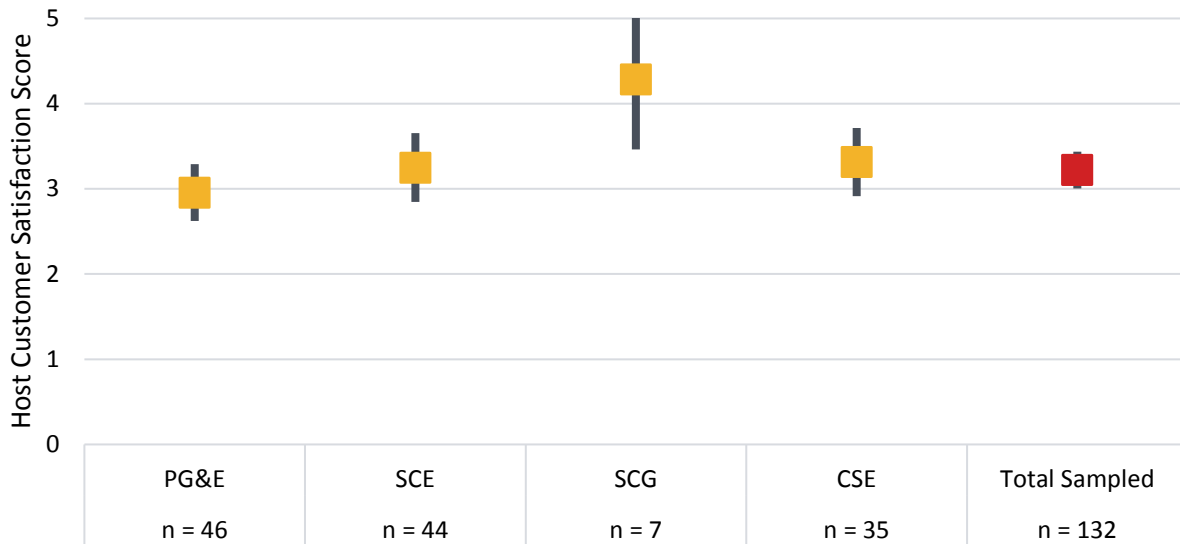
**FIGURE 4-25: HOST CUSTOMER SATISFACTION WITH INFORMATION PROVIDED BY THE APPLICANT BY PROLIFICITY**



As a means of rolling up from more narrowly specified questions, host customers were asked to rate their overall satisfaction with written communications from PAs. Though applicants primarily act as a go-between for PAs and host customers, the PAs often copy host customers on written communications with the applicant to ensure transparency. As shown in Figure 4-17, host customers rated their overall satisfaction with written communications as 3.2 on a 5-point scale. SCG received the highest average rating, at 4.3, followed by SCE and CSE both at 3.3 and by PG&E at 3.0.

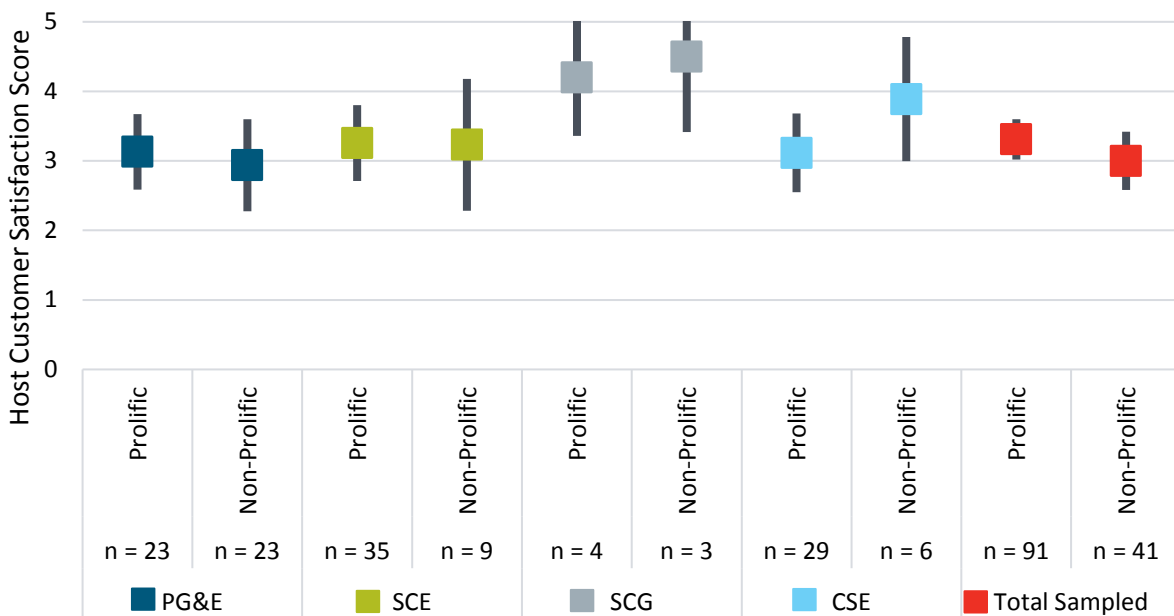


**FIGURE 4-26: HOST CUSTOMER OVERALL SATISFACTION WITH WRITTEN COMMUNICATIONS FROM PA**



Overall, both host customers of prolific and non-prolific applicants were moderately satisfied with the written communications from the PA, with scores of 3.3 and 3.0 respectively. Within PG&E, SCE, and SCG there is also no distinctive difference with satisfaction based on the prolificity of the applicant.

**FIGURE 4-27: HOST CUSTOMER OVERALL SATISFACTION WITH WRITTEN COMMUNICATIONS FROM PA BY PROLIFICITY**

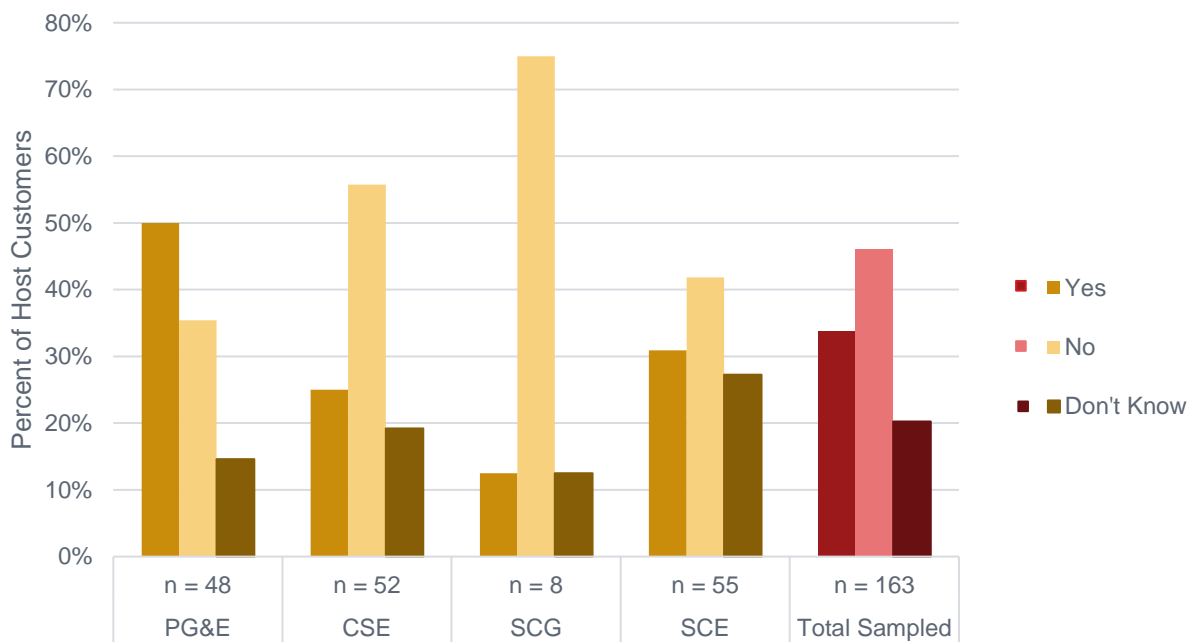




#### 4.4.2 Host Customer Experience of Problems, Issues, or Delays

Whereas applicants were asked if they had initiated clarifying questions or other inquiries with a given program administrator, host customers were asked questions on a similar theme but in a somewhat different way. Specifically, host customers were asked if they experienced any kinds of 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. Findings are reported below in Figure 4-18. When asked if they experienced a problem, issue, or delay, a notable proportion of 21% responded that they didn't know. This outcome may support the hypothesis that many host customers' experience of the program is largely mediated through the applicant. If a host customer is providing information to the applicant when asked to do so, but is otherwise essentially waiting for approval or denial of incentive funds and associated project installation, they may be somewhat shielded from awareness of problems, issues, or delays that take place over the course of the project. Among all respondents, 34% of host customers said they experienced some kind of problem, issue, or delay. Host customers noted the occurrence of these issues most commonly for PG&E at 50% and least commonly for SCG at 13%.

**FIGURE 4-28: DID HOST CUSTOMERS EXPERIENCE A PROBLEM, ISSUE, OR DELAY**

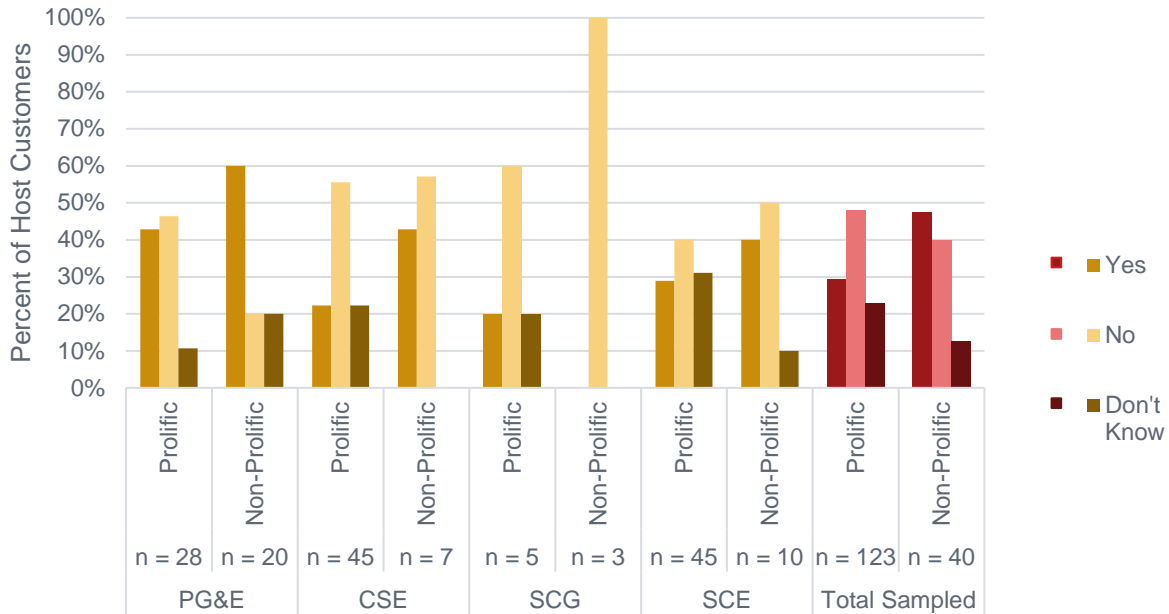


Prolific applicants are more experienced with the program, so it is reasonable to expect that their host customers would experience less issues due to misunderstanding of the program. In Figure 4-28, the responses from the prior figure are broken out by whether their applicant is prolific or not. Overall, 48% of those with non-prolific applicants reported issues, while only 29% of customers of prolific applicants.



There is a similar pattern, where customers of prolific applicants reported issues less frequently than those of non-prolific applicants.

**FIGURE 4-29: DID HOST CUSTOMERS EXPERIENCE A PROBLEM, ISSUE, OR DELAY BY APPLICANT PROLIFICITY**



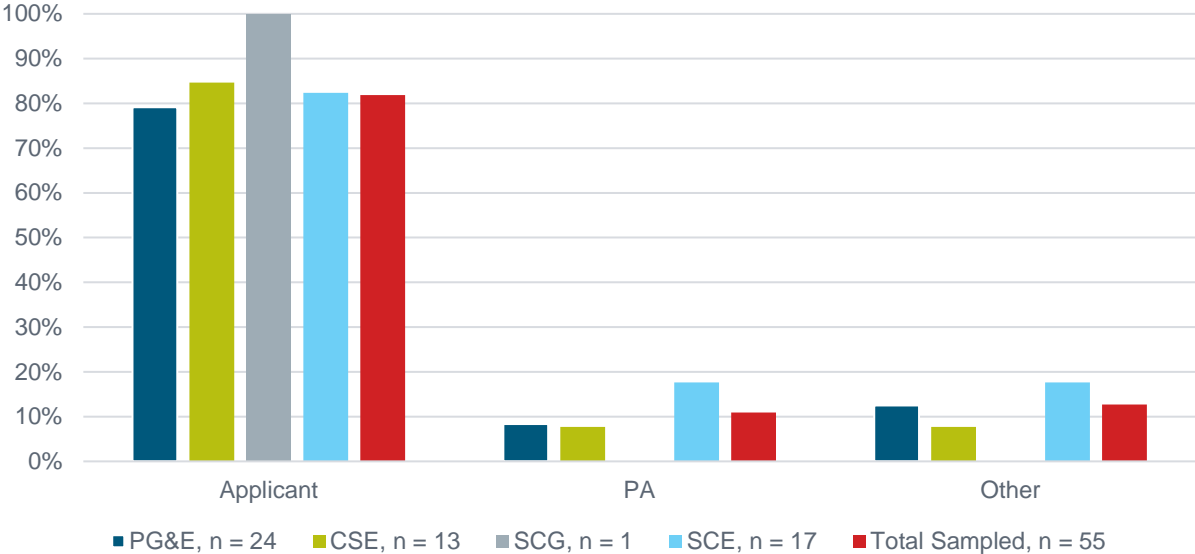
Host customers who noted having experienced an issue of some kind were then prompted in an open-ended way to describe the problem. Responses varied across a range of issues, but clustered around a few common themes. Respondents noted that the program ran out of funds quickly on opening day. They noted long periods in which they heard nothing from their program administrator one way or the other in terms of 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. Similarly, host customers noted that staff turnover at the program administrator level and/or at third party support agencies would sometimes lead to inefficient communication or the need to repeat and reorient on prior communication.

Host customers who said they experienced a problem of some kind were asked who, if anyone, helped them resolve the issue (see Figure 4-19). Overall, 11% of respondents noted that their program administrator helped them resolve the issue, while 82% noted that their applicant helped them resolve the issue. In a small number of cases, respondents pointed out that another party (including the CPUC,



selfgenca.com, or inspection contractors) helped them resolve their issue. These findings are consistent with program design, where applicants are designed to be the primary contact for host customers.

**FIGURE 4-30: WHO HELPED RESOLVE HOST CUSTOMER ISSUES**

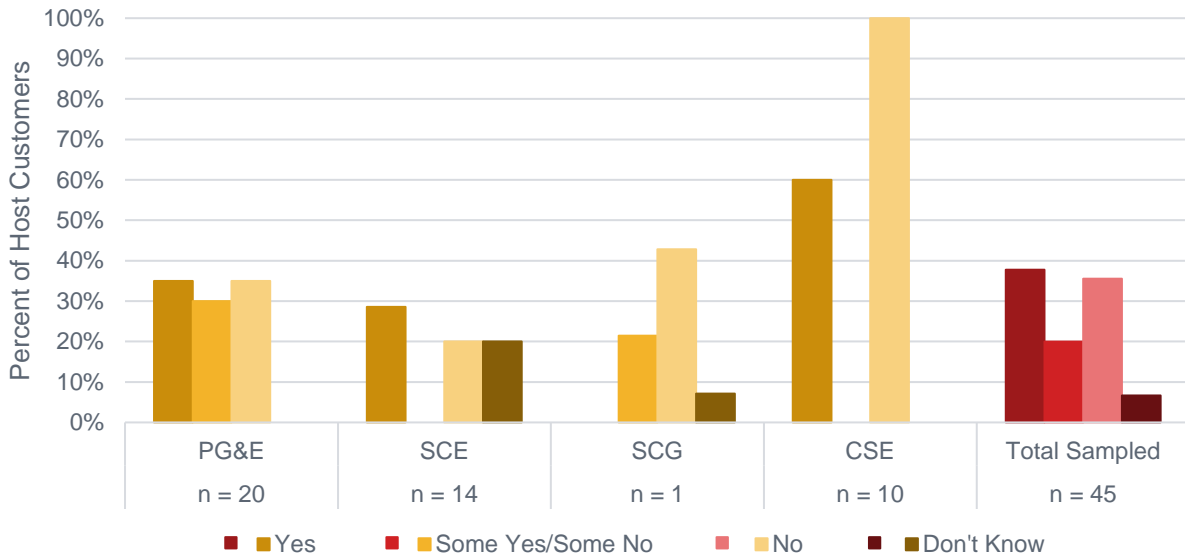


Most host customers who noted having experienced a delay or issue of some kind said that some or all of their issues were ultimately resolved (see Figure 4-20). Specifically, 40% of host customers said their issues were fully resolved, and 19% said some but not all of their issues were resolved, while 35% said their issue or concern was never addressed.



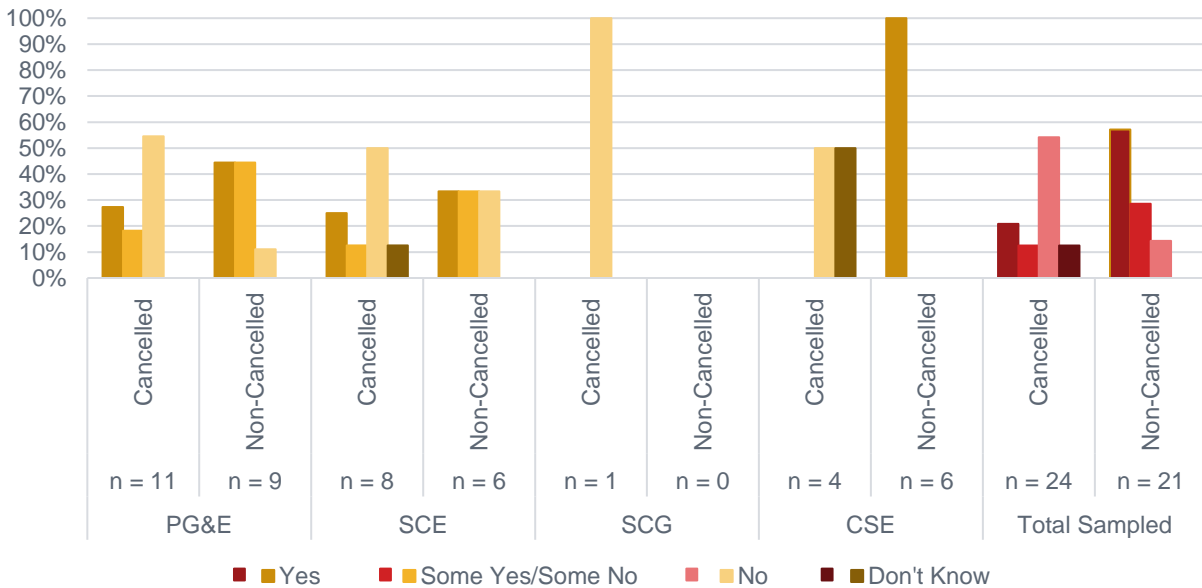


**FIGURE 4-31: HOST CUSTOMER ISSUES WERE RESOLVED**



Comparing host customers with and without cancelled projects we see that those without cancelled projects reported higher rates of issue resolution (Figure 4-30). Specifically, for host customers with non-cancelled projects, 43% said their issues were ultimately resolved. In contrast, only 21% of respondents with cancelled projects reported successful resolution of issues.

**FIGURE 4-32: RESOLUTION OF HOST CUSTOMER ISSUES BY CANCELLATION STATUS**





## Findings Summary Regarding Communications

Several findings emerge from the analysis regarding the clarity and timeliness of PA communication with program participants.

- *Protocols used by the various PAs to communicate with applicants varied widely. Some PAs, generally those with larger numbers of applications, used a “hands off” Call Center approach to communicate with project applicants and host customers. Others used a more personal approach, by assigning each project representative their own personal contact.*
- Applicants’ perceptions of communication quality and timeliness varied significantly, and feedback was largely a function of the communication protocols used. Feedback from project applicants and host customers on the call center approach was mostly negative, while that for the personalized approach was extremely positive.
  - Applicants under the call center approach reported long call-back and wait times, and the need for many call-backs to resolve an issue. In some cases, for example, with the cancellation of projects due to funding constraints for 2016 projects, applicants reported they were never notified formally but had to read about it in the local press: "We had no notification of the cancellation. We found out from press release, public sources. Our customers were very angry. When we found out the project was cancelled, we found out from third party press. Our people sent an email to the administrator to ask about it but were never notified."
  - In contrast, applicants with personalized customer service routinely praised their assigned representative for providing personalized, prompt responses and resolution of their issues. One respondent offered that “[they are] more on top of everything; they seem to always respond more quickly; they seem to know the answers to my questions; you can just tell, it’s a higher level of service; their staff seems dedicated to this specific purpose.”

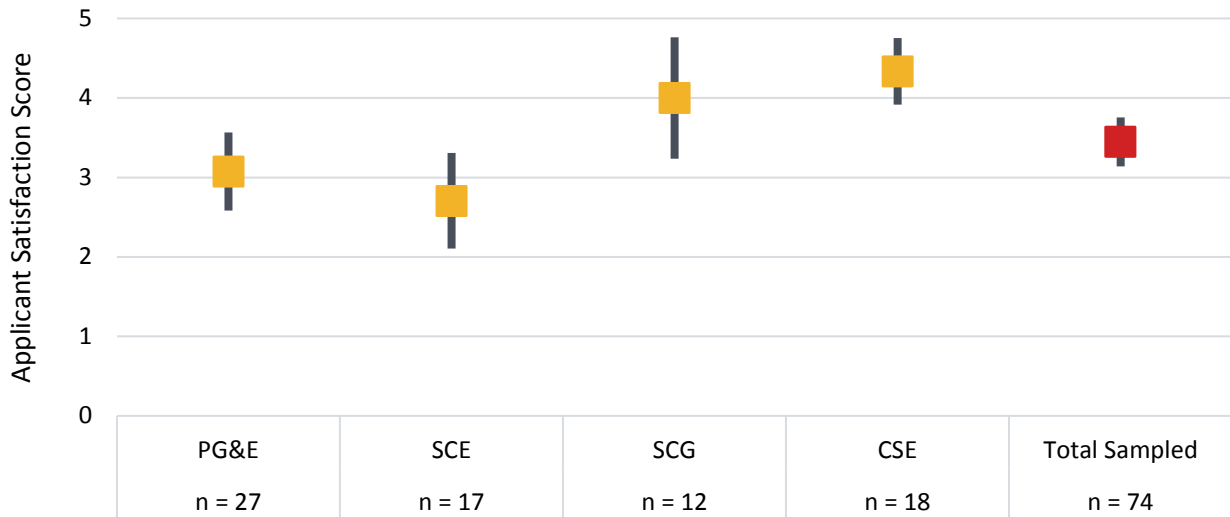
### 4.4.3 Accessibility of Program Administrator Staff

Applicants were asked to rate their experiences with several program participation elements. Generally, all ratings are based on a 1-to-5 point scale, where 1 is the lowest rating for the element and 5 is the highest rating.

Numerical satisfaction ratings on the accessibility of PA staff during the application process varied widely across PAs, reinforcing the qualitative feedback received. These findings are shown in Figure 4-21 below. Both CSE and SCG received high satisfaction ratings of 4.3 and 4.0 respectively. Ratings for SCE and PG&E were lower, averaging 2.7 and 3.1 respectively. Overall, satisfaction with PA staff accessibility averaged 3.4.

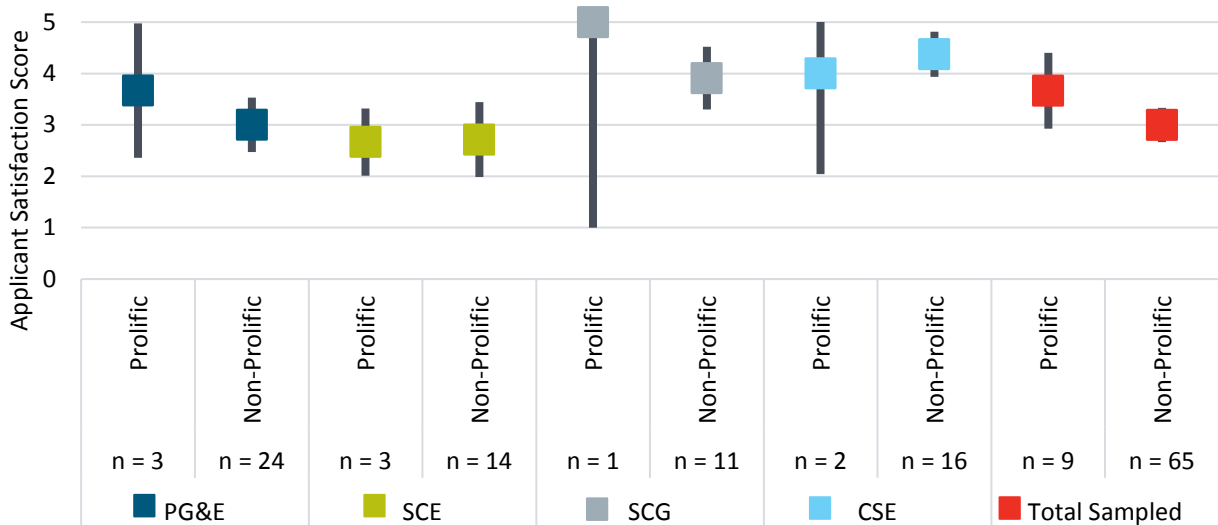


**FIGURE 4-33: APPLICANT PROGRAM ACCESSIBILITY RATING BY PA**



Overall, prolific applicants were more satisfied with the accessibility of PA staff than non-prolific applicants, with scores of 3.7 and 3.0 respectively. In PG&E and SCG, prolific applicants were more satisfied than non-prolific applicants. Whereas in CSE the non-prolific applicants reported higher satisfaction with PA accessibility. There was no significant difference in satisfaction between prolific and non-prolific applicants in SCE.

**FIGURE 4-34: APPLICANT PROGRAM ACCESSIBILITY RATING BY PA AND PROLIFICITY**





## Findings Summary Regarding Program Administrator Accessibility

Several findings emerge from the analysis regarding the accessibility of program administrators to program participants.

- *Applicants' perceptions of the accessibility of PA staff varied as a function of the communication protocols used.* Staff of those PAs using a Call center approach were generally viewed as impersonal and distant, particularly compared with those of PAs using a personalized approach.
  - One offered, "We had to go through a phone tree which was impersonal. We also couldn't get direct email and had to go through the SGIP site to communicate with their staff."
  - One stated, "...there were delays and trouble getting hold of them in a timely way. It was hard to get in touch with their new team."
  - Another, "phone number takes you to the solar program; oh you just have to pretend you're a solar participant but then push this other button, but then sometimes I got in endless cycle. Then we went through back door to find actual people and call them at their desks."
  - "frustrating communication, but we did get the incentive eventually"
- *Another concern is related to the lack of continuity in the staff assigned to perform technical review of an application.* This results in an inefficient technical review process since the technical aspects must be re-explained to a different staff person each time. As one respondent stated, "it gets reviewed by a different engineering firm every time, and each time each firm has a different thing or focus so they call out different stuff; it would be nice if it were limited to 1-2 engineers, who have specific experience on the technology involved."

### 4.4.4 Usefulness of Websites

The various websites operated by the SGIP program ([www.selfgenCA.com](http://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.

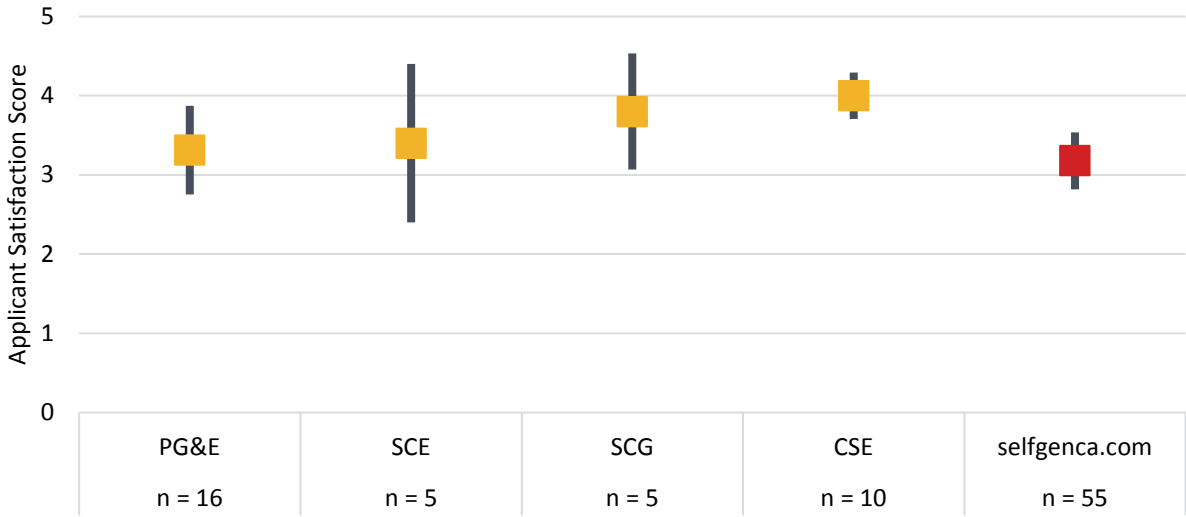
#### Applicant Findings

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 2016. Typical use of the PA websites by applicants is infrequent, averaging between three and six times per year.



Applicants were asked to rate the usefulness of both the statewide portal ([www.selfgenca.com](http://www.selfgenca.com)) and of the PAs' SGIP websites, using the same 1 to 5 scale. Overall, ratings for the PAs' SGIP websites were generally moderate, ranging from a low of 3.3 for the PG&E SGIP website to a high of 4.0 for the CSE SGIP website, as shown in Figure 4-22 below. The statewide portal received an average rating of 3.2, below the ratings for the PA SGIP websites in all cases, and suggesting a perception of medium usefulness. Respondents mentioned the site is "hard to navigate" and could be improved with "FAQs based on what people have asked" regarding how to navigate the site.

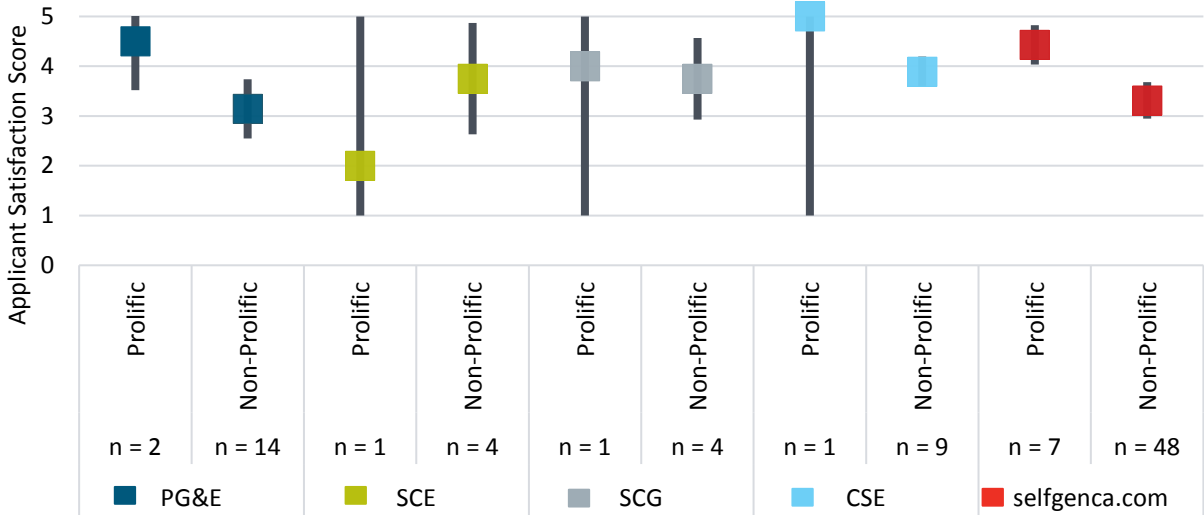
**FIGURE 4-35: USEFULNESS OF WEBSITES AS REPORTED BY APPLICANTS**



Prolific applicants found the websites of PG&E, SCG, CSE, and selfgenca.com more useful than the non-prolific applicants, rating each with a usefulness of 4.0 or above.



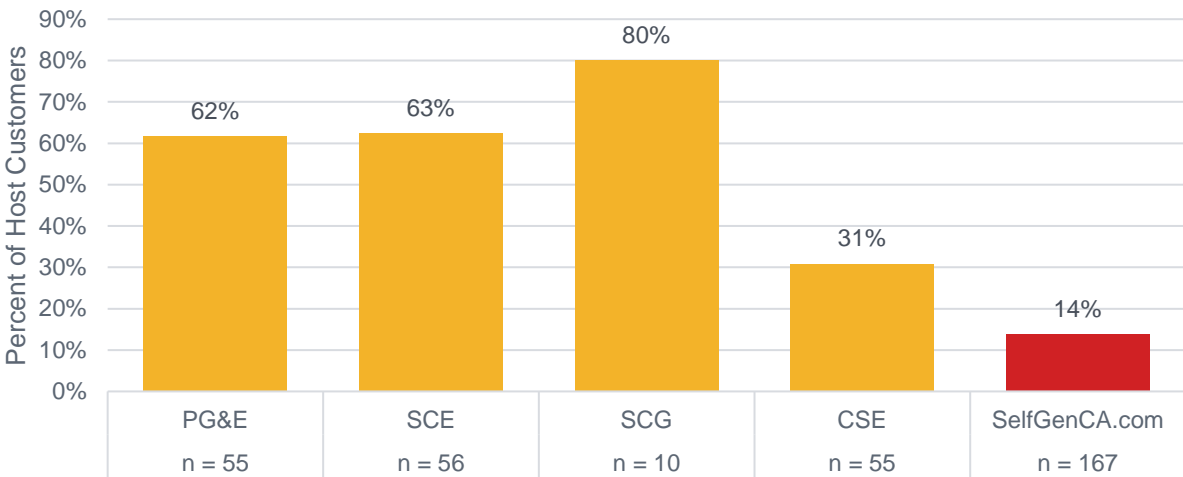
**FIGURE 4-36: USEFULNESS OF WEBSITES AS REPORTED BY APPLICANTS BY PROLIFIC TYPE**



**Host Customer Findings**

In addition to applicants, host customers were also asked whether they had visited selfgenca.com or any of the PA-specific SGIP websites during 2016. As shown in Figure 4-23 below, a small fraction of host customers visited the statewide portal, while visits to the PAs’ SGIP websites were more common. This is consistent with the observation noted earlier that for many host customers, their experience of SGIP is largely mediated through the applicant company. Visits to SCG’s SGIP website were commonly reported, while those to CSE’s were rarely reported.

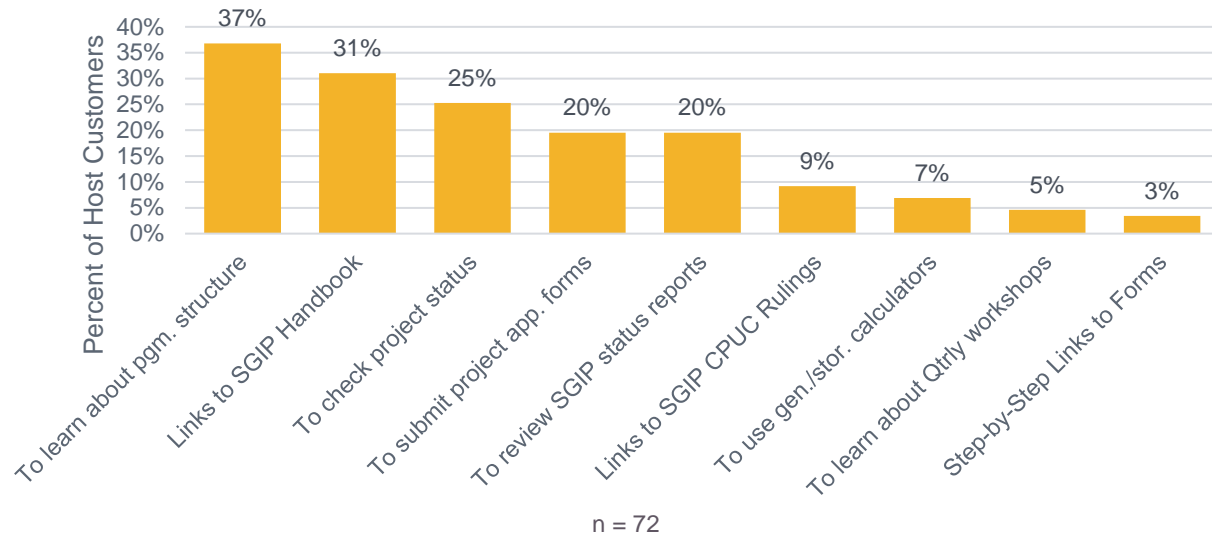
**FIGURE 4-37: PERCENTAGES OF HOST CUSTOMERS THAT VISITED SGIP WEBSITES DURING 2016**





The most frequent reasons host customers gave for visiting these SGIP websites were to submit project applications (where the host was also the applicant), check on project statuses, obtain a copy of the SGIP Handbook and other program documentation, and learn about program FAQs. Figure 4-24 reports these findings. Other motivations were to obtain and use the on-line calculator tools, obtain information and sign-up for quarterly workshops, and access the links provided.

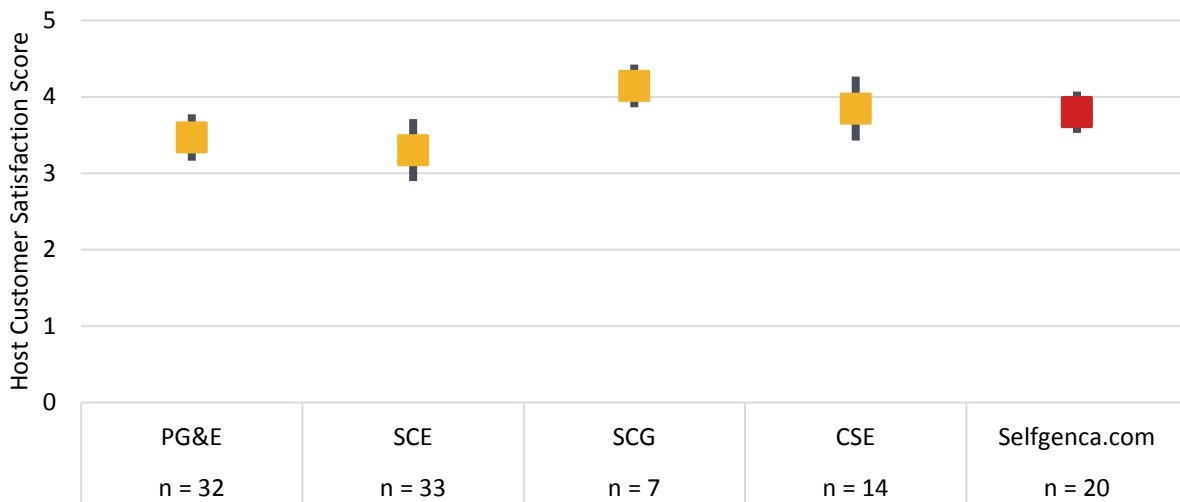
**FIGURE 4-38: HOST CUSTOMER REASONS TO VISIT PROGRAM WEBSITES**



Overall, host customers rated the usefulness of selfgenca.com at a 3.8 on a 5-point scale, with most respondents scoring it at a 4. These findings are shown below in Figure 4-25. Their ratings were similar to those of Applicants, ranging between 3.3 (SCE) and 4.1 (SCG) and showing relatively little variation by PA.



**FIGURE 4-39: USEFULNESS OF WEBSITES AS REPORTED BY HOST CUSTOMERS**



### Summary of Findings Regarding Satisfaction and Usefulness of Websites

- Feedback on the statewide portal ([www.selfgenca.com](http://www.selfgenca.com)) was mostly positive though some identified particular areas of improvement.
  - “The portal can be made more user-friendly. We would like to see training offered on how to use the portal”
  - “Communication from listserve on the statewide portal is confusing. Need more consolidated form for announcements from the program administrators. Ideally there would be one landing page with announcements.”
  - ““They told us we were late on a deadline; I uploaded the RFP to the website; the submit button wasn’t clear; i.e. Submit or process some other button; they said we notice you have this document but it’s not submitted”

## 4.4.5 Satisfaction with Program Elements

### Applicant Findings

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

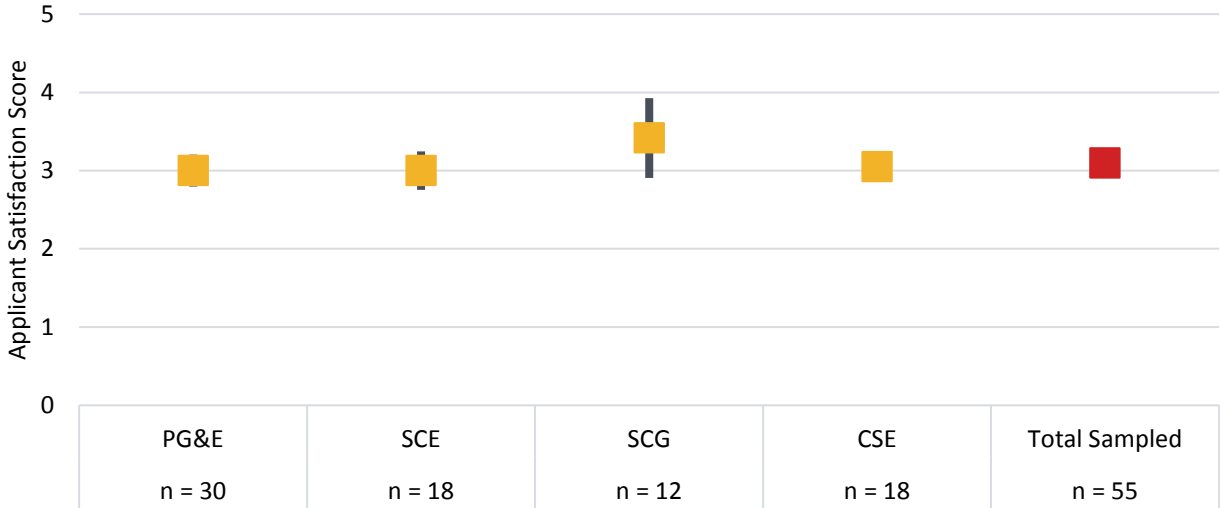
**Satisfaction with the Application Submission Process.** In general, applicants are moderately satisfied with this process. Applicants in SCG reported an average score of 3.4, while applicants in the remaining





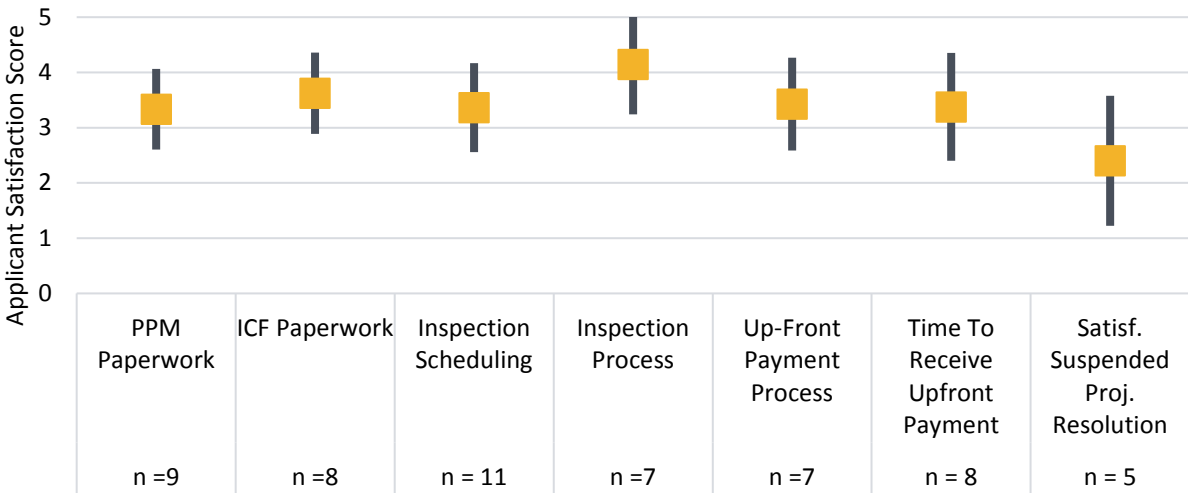
PAs each reported average satisfactions of 3.0 (Figure 4-26). Findings are differentiated by PA based on applicant participation.

**FIGURE 4-40: APPLICANT SATISFACTION WITH THE APPLICATION SUBMISSION PROCESS**



Due to low response levels, the remaining program elements are only reported at the overall level (not by PA). See Figure 4-36 for summary of responses.

**FIGURE 4-41: APPLICANT SATISFACTION WITH VARIOUS PROGRAM ELEMENTS**





**Satisfaction with paperwork for the proof of project milestones.** Applicants are moderately satisfied with this element. Overall satisfaction with paperwork for the proof of project milestones averaged 3.3.

**Satisfaction with the paperwork for the incentive claim stage.** Findings for this element, were somewhat more favorable, with an overall satisfaction score averaging 3.6

**Satisfaction with the inspection scheduling process.** Applicants were moderately satisfied with this element of the program, with satisfaction scores averaging 3.4 overall.

**Satisfaction with the inspection process.** Applicants were also asked about their level of satisfaction with the inspection process. The overall average rating of 4.1 revealed high satisfaction overall with this element.

**Satisfaction with the up-front payment process.** Overall, applicants were moderately satisfied with the up-front payment process. Overall, applicants expressed moderate satisfaction with this element with an average rating of 3.4.

**Satisfaction with the time it takes to receive the upfront incentive.** Applicants expressed medium satisfaction with the payment interval for the upfront incentive component. The overall score of 3.4 reflected moderate satisfaction.

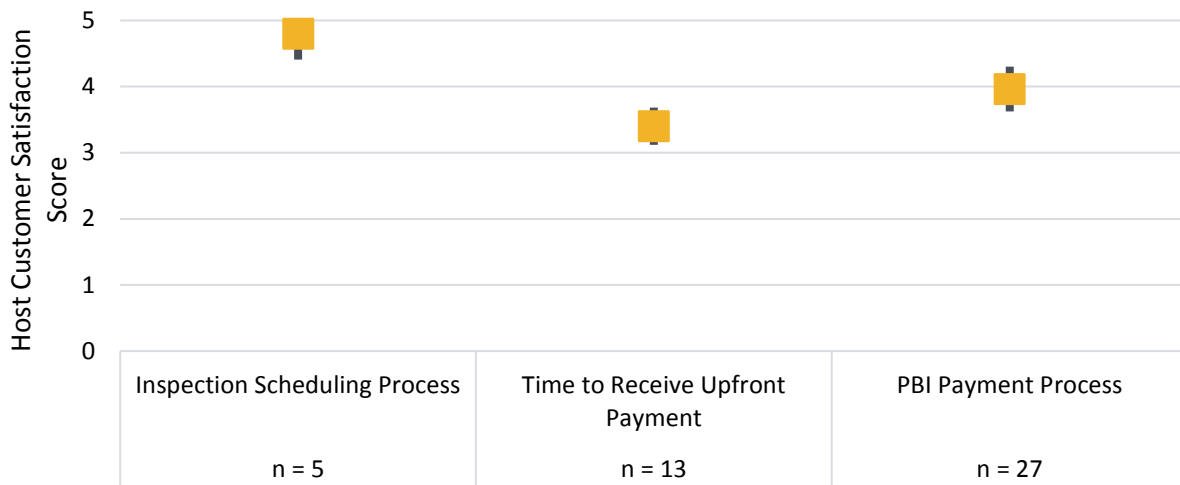
**Satisfaction with the program administrator's involvement in resolving suspended projects.** Applicants also provided quantitative feedback on their satisfaction with the PA's effectiveness in resolving suspended projects. Overall, satisfaction with this element is relatively low at 2.4, indicating moderate dissatisfaction.

### **Host Customer Findings**

Similarly, host customers were queried regarding their satisfaction with specific program elements and procedures. Findings are summarized below.



**FIGURE 4-42: HOST CUSTOMER SATISFACTION WITH VARIOUS PROGRAM ELEMENTS**



**Satisfaction with Inspection scheduling process.** Host customers were generally quite pleased with the inspection scheduling process. The average satisfaction rating was 4.8 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 3.4 on a 5-point scale.

**Satisfaction with Performance-Based Incentive (PBI) payment process.** Host customers are well-satisfied with performance based incentive payment process based on an overall average rating of 4.0 on a 5-point scale.

#### 4.4.6 Overall Program Satisfaction

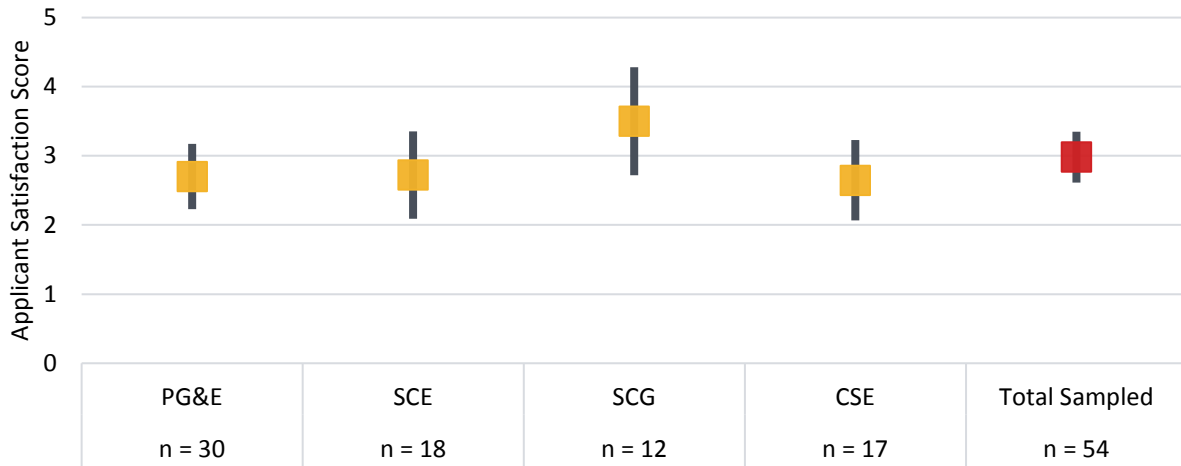
In addition to rating satisfaction with these individual program elements, applicants and host customers were asked to rate their satisfaction with the SGIP program overall. Scores are reported by PA based on applicant and host customer participation within each PA.

#### Applicant Findings

Applicants' satisfaction scores were consistent across PAs, and nearly identical for three of the four PAs, as shown in Figure 4-37. PG&E, SCE and CSE received average ratings in the 2.6 to 2.7 range, while SCG's was somewhat higher at 3.5. These ratings indicate neutral satisfaction with the program, considering all dimensions of it.

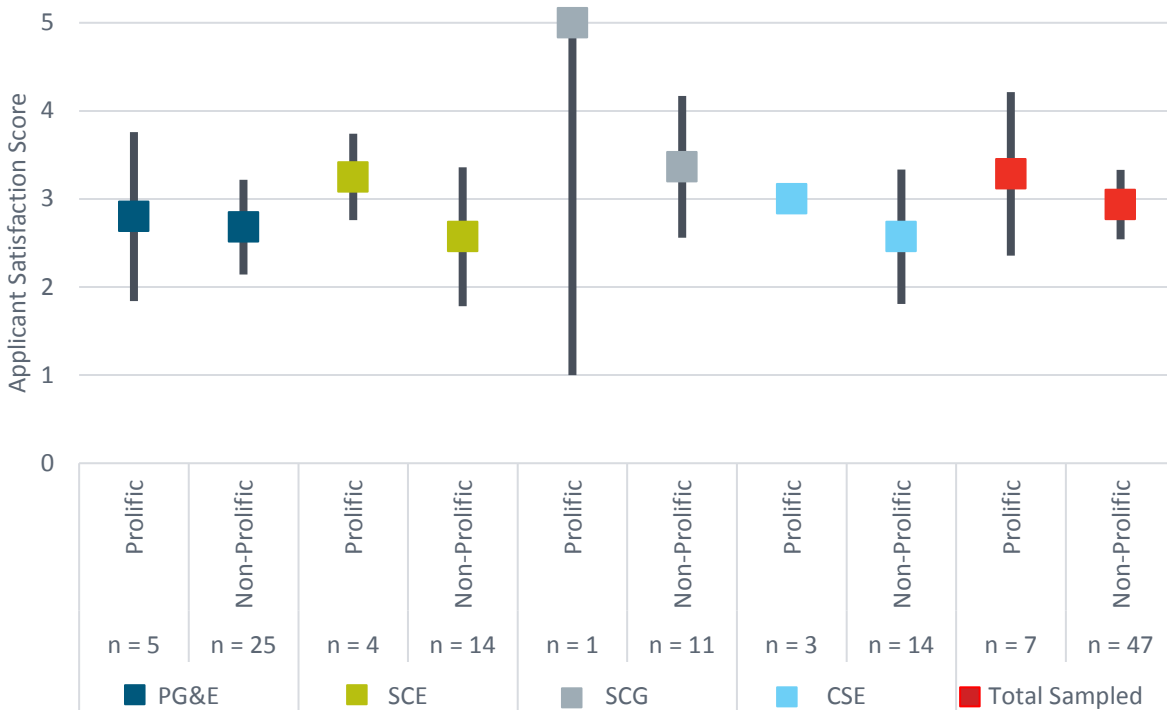


**FIGURE 4-43: APPLICANTS' OVERALL SGIP PROGRAM SATISFACTION**



Overall, prolific applicants were more satisfied with the SGIP than non-prolific applicants, with scores of 3.3 and 2.9 respectively. Although there is some variation by PA, the overall trend in scores for non-prolific applicants versus prolific applicants is downward.

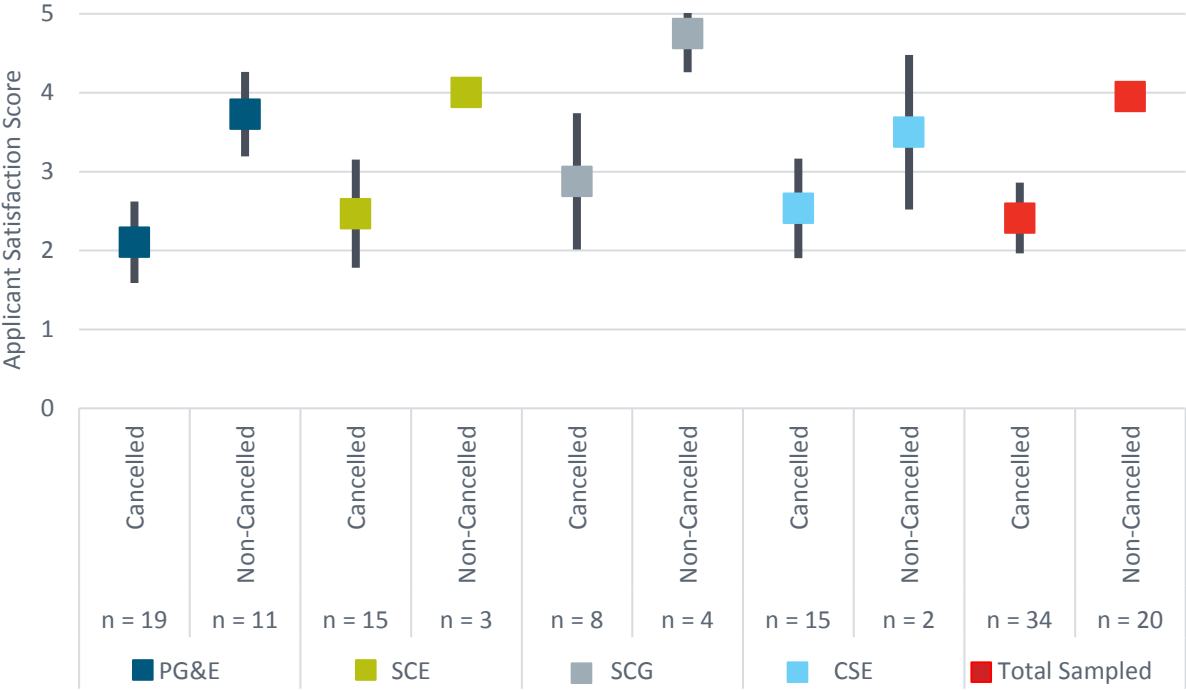
**FIGURE 4-44: APPLICANTS' OVERALL APPLICANT'S SGIP PROGRAM SATISFACTION BY PROLIFICITY**





Satisfaction levels for applicants with cancelled projects were lower than those with projects that were not cancelled, as shown below in Figure 4-38. Average satisfaction ratings for those with cancelled projects are over 1.5 points lower than those with projects that were completed (2.4 rating for cancelled projects vs. 4.0 rating for non-cancelled projects). Although there is some variation by PA, the overall trend in scores for cancelled projects vs. non-cancelled projects is downward.

**FIGURE 4-45: COMPARISON OF APPLICANT'S SGIP SATISFACTION RATINGS FOR THOSE WITH CANCELLED AND NON-CANCELLED PROJECTS**

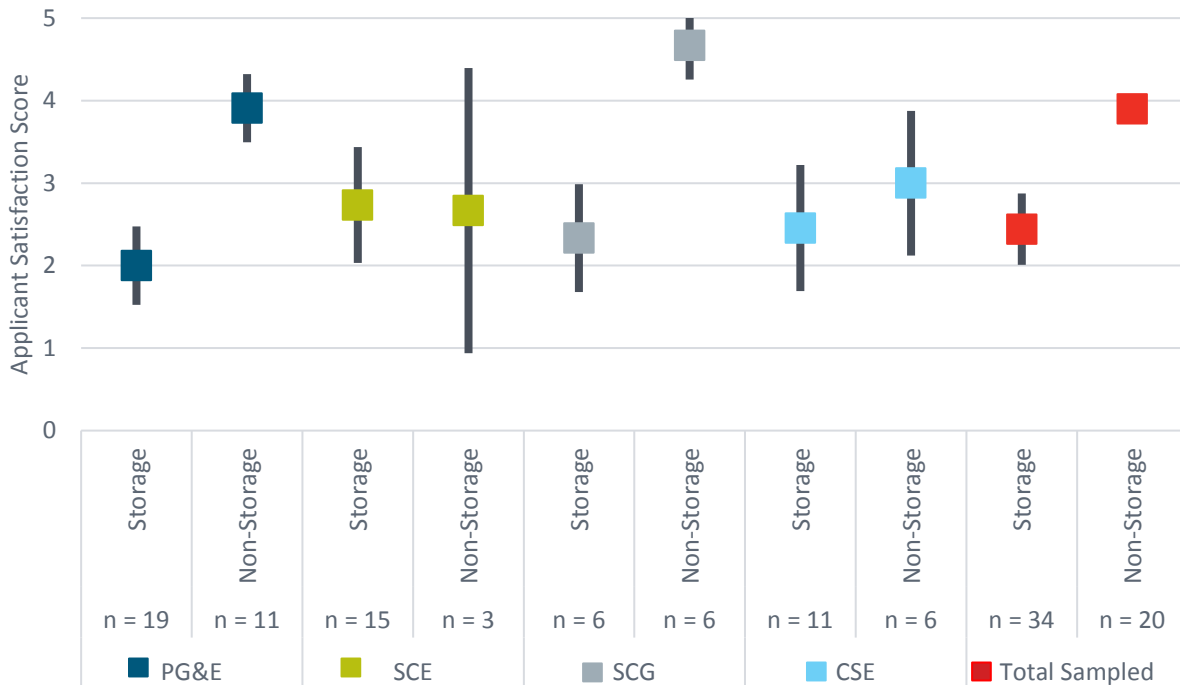


Program satisfaction levels also vary considerably as a function of the incited technology, as depicted in Figure 4-39. Ratings for storage and non-storage measure categories were examined and compared. Non-storage projects consist of technologies such as internal combustion engines, gas turbines, wind turbines, pressure reduction turbines, and fuel cells.

Satisfaction ratings for storage technologies are down compared with those for non-storage technologies. Storage satisfaction levels overall average 2.4, while those for non-storage average 3.9. This is consistent with the findings in Figure 4-38 above. That is, the low storage satisfaction levels are driven by the high incidence of cancelled storage projects in 2016, while the non-storage projects were not cancelled as often.



**FIGURE 4-46: COMPARISON OF APPLICANT’S SGIP SATISFACTION RATINGS FOR THOSE WITH STORAGE AND NON-STORAGE TECHNOLOGIES**



Many applicants reported high satisfaction with the program while simultaneously expressing concerns about various program elements. Despite these areas of concern, they appreciate the availability of incentives and technical support for the emerging technologies targeted by the SGIP program. Their comments included the following:

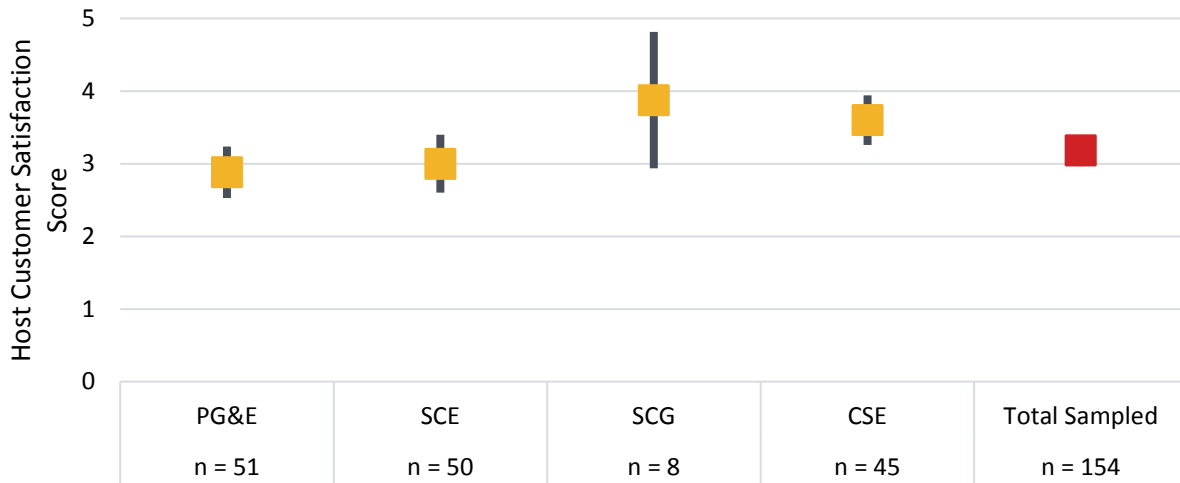
- "It was a good experience overall, we wouldn't have done this project without the program."
- "Extremely satisfied – they have done a really good job. They have really gotten the hang of it."

### Host Customer Findings

Overall, host customers' satisfaction levels with the SGIP program were similar to those of applicants with an average rating of 3.2 (and reflecting moderate satisfaction with the program). These findings are reported below in Figure 4-40. Participants in SCG and CSE were most satisfied with SGIP, giving average satisfaction scores of 3.9 and 3.6, respectively. The confidence band for SCG's result is fairly wide due to the small sample size.

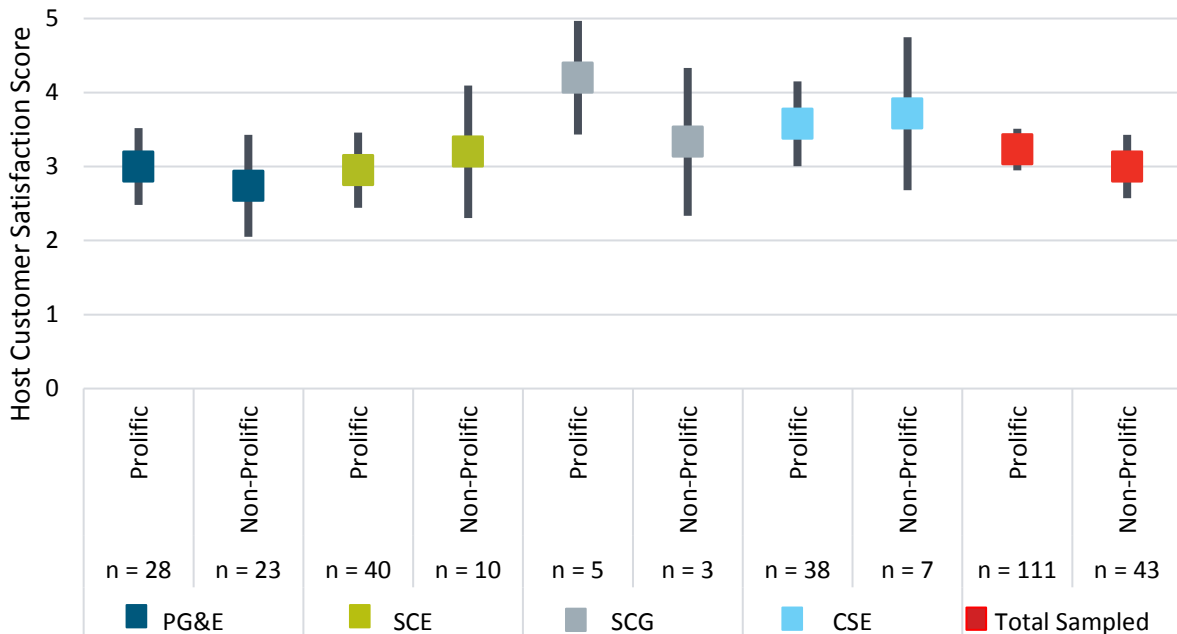


**FIGURE 4-47: HOST CUSTOMERS' OVERALL SGIP PROGRAM SATISFACTION**



Overall, host customers of both prolific and non-prolific applicants were moderately satisfied with the SGIP with scores of 3.2 and 3.0, respectively. Host customers of prolific applicants in PG&E and SCG were more satisfied than those of non-prolific applicants, while the reverse holds true in SCE and CSE.

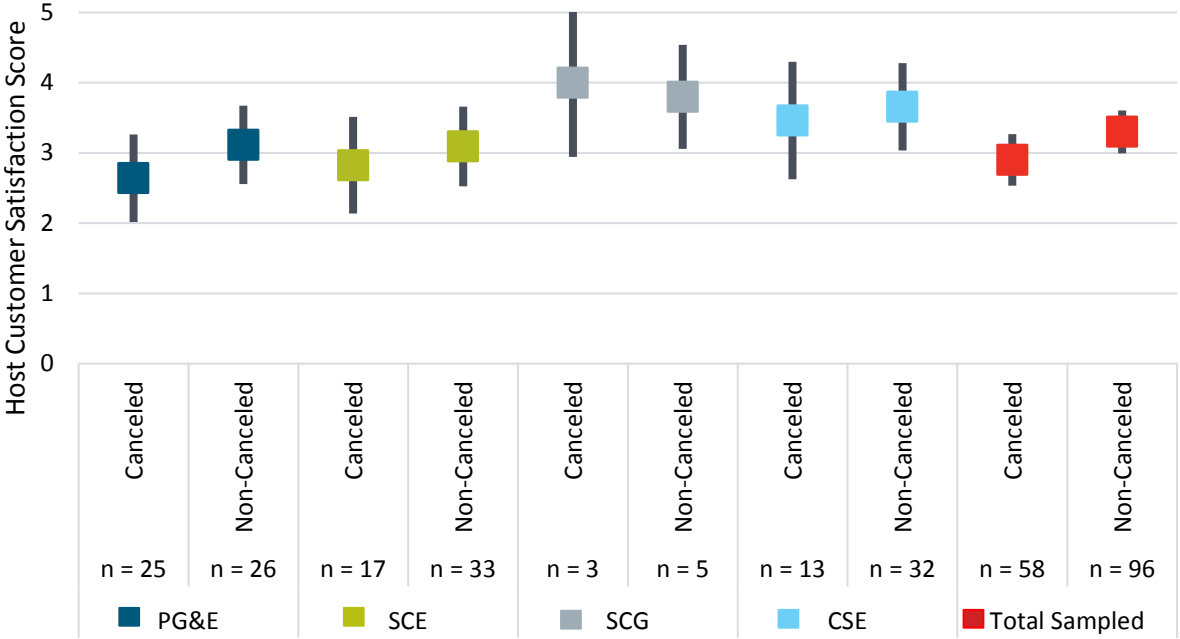
**FIGURE 4-48: COMPARISON OF HOST CUSTOMER'S SGIP SATISFACTION RATINGS BY PROLIFIC TYPE**





Satisfaction levels for host customers with cancelled projects were lower than those with projects that were not cancelled, as shown below. Average satisfaction ratings for those with cancelled projects are over 0.4 points lower than those with projects that were completed (2.9 rating for cancelled projects vs. 3.3 rating for non-cancelled projects). Although there is some variation by PA, the overall trend in scores for cancelled projects vs. non-cancelled projects is downward.

**FIGURE 4-49: COMPARISON OF HOST CUSTOMER'S SGIP SATISFACTION RATINGS FOR THOSE WITH CANCELLED AND NON-CANCELLED PROJECTS**

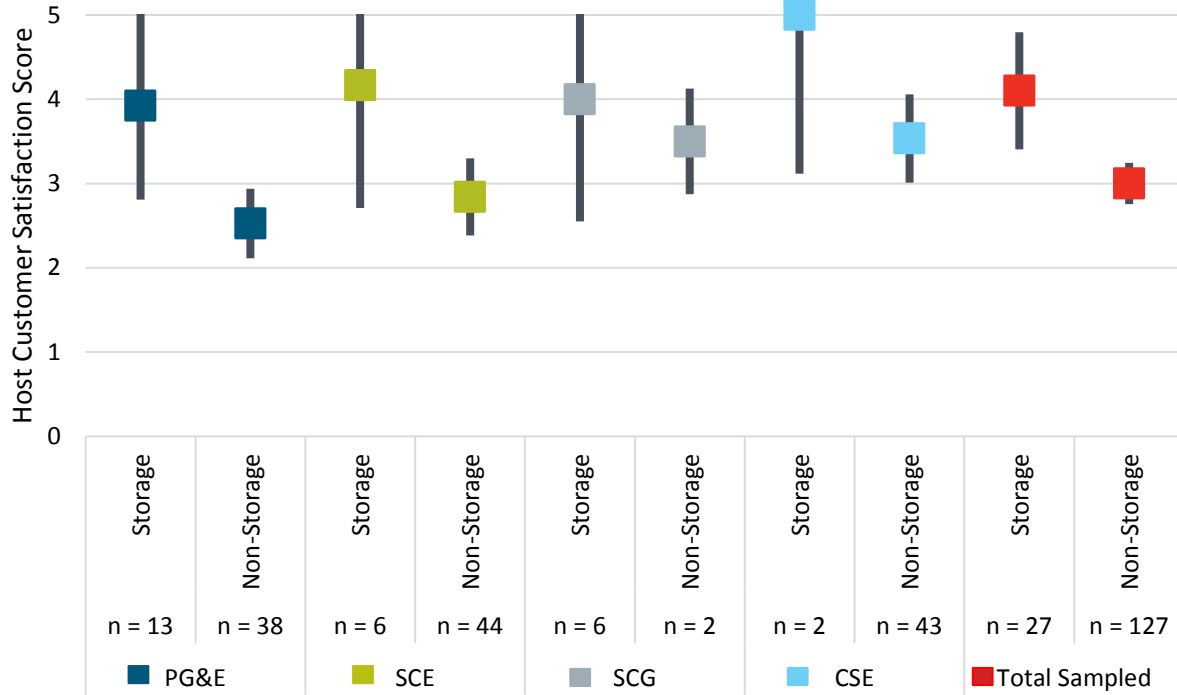


Satisfaction ratings for non-storage technologies are down compared with those for storage. Storage satisfaction levels overall average 4.1, while those for non-storage average 3.0. This is consistent with the findings above. Also, similar to the applicant findings, the low storage satisfaction levels are likely driven by the high incidence of cancelled storage projects in 2016.





**FIGURE 4-50: COMPARISON OF HOST CUSTOMER’S SGIP SATISFACTION RATINGS FOR THOSE WITH STORAGE AND NON-STORAGE PROJECTS**



#### 4.4.7 Participant Recommendations for Program Improvement

At the end of the applicant and host customer interviews/surveys, participants (both applicants and host customers) were asked to provide recommendations for program improvement. To the extent possible we attempted to focus responses on improvements to program mechanics (e.g. communications) rather than program design (e.g. incentive levels).

Nearly all applicants suggested ways to improve the SGIP program, which spanned a wide range of topic areas.

- “Authorizing CSE to look at utility bill and metering data. One thing required is electric load data. PG&E and SCE don't require it because they're the utility.”
- “The application process needs to be simplified and more flexible. It needs to have some human being involved (i.e., a single point of contact).”



- “It would be nice to be able to enter the information just once and have it auto populate; then if it changes (contractor and application person are always the same), they can overwrite as needed.”
- “Set up a blog to share experiences or an FAQ document. Also, provide examples of successful documentation. Need better descriptions of what documentation is required.”
- “Need much greater communication and openness - this is probably the only recommendation. Need more communication between applicants to hear about their experiences. Use workshops to discuss options.”
- “Make the documentation more specific to the technology you're applying for.”
- “For public entities, extend the 240-day deadline to 300 days, especially when it's the first time for a given type of project. Everyone in the bureaucratic decision chain needs to sign off, and there are lots of questions as people at every level come up the learning curve.”
- “Need more clarity on the award process. Need funding to be distributed more evenly.”

Host customer suggestions regarding PA performance focused on giving more clarity and transparency to participants, from an application’s “place in line” all the way through the timing and process for receiving program incentive payments. Respondents suggested that PAs do a better job maintaining and tracking their paperwork and internal tracking systems so that a given application’s status and chance of payment would be clearer, both to the PA staff directly, and in turn, to the host customer. This connects to feedback received from program applicants that the experience of interacting with SGIP staff is sometimes one of feeling passed from one person to another, due to staff turnover or to the role of third party engineers and other service providers who may or may not be up to speed on a given project’s status and details.

In a similar vein, host customers recommended that the process of determining eligibility be improved, since lack of awareness of program requirements or timelines on the part of SGIP project developers can cause hold-ups for projects. Respondents suggested that chat support among participants in an online workshop may provide an efficient means of identifying and answering key questions or areas of confusion. A focal point for communication from the program to participants can and should be steady messaging about when and how rebates will be delivered. Lastly, host customers recommended that, in cases where a delay on a given project is due to a PA-related issue, the extension of subsequent project deadlines should be automatic.

#### **4.4.8 Final Recommendations for Program Improvement**

A variety of recommendations regarding potential improvements to SGIP PA performance can be distilled from the quantitative data in this evaluation, as well as from specific participant experiences supported



by the broader data messages. These recommendations fall broadly into the same categories that frame this overall evaluation:

- Usefulness of SGIP websites
- Clarity of information and the helpfulness of PAs
- Timeliness and efficiency of PA oral and written communications through the various project steps
- Accessibility of SGIP staff

### **Usefulness of SGIP Websites**

**Recommendation:** Provide more examples, videos, and other training to clarify documentation expectations associated with application and document submittal on the statewide portal.

### **Clarity of Information and the Helpfulness of PAs**

**Recommendation:** Ensure that PA SGIP staff are fully familiar with the SGIP handbook and are sufficiently technically savvy to address some technical questions directly and guide an efficient communication process when technical guidance from a third party is necessary.

**Recommendation:** Use the slide decks associated with the quarterly workshops as an ongoing and highly leveraged resource for program updates and clarifications.

**Recommendation:** Provide more visibility regarding project status.

### **Timeliness and Efficiency of PA Oral and Written Communications Through the Various Project Steps**

**Recommendation:** Review program technical requirements and documentation requirements with an eye toward minimizing total time from application to incentive payment.

**Recommendation:** Consider designing ways in which different sizes and types of participants can move through the program queue at different rates.

**Recommendation:** Consider extending the deadlines specifically for public entities where a bureaucratic decision making process may be inevitable.

### **Accessibility of SGIP Staff**

**Recommendation:** Consider combining the call center approach for providing access to SGIP staff with a personalized follow-up call within one day, to provide a more direct communications channel.

# APPENDIX A SURVEY INSTRUMENTS

This section contains the following survey instruments:

- A.1 – PA in Depth Interview Guide
- A.2 – Applicant Survey Instrument
- A.3 – Host Customer Survey Instrument



## **A.1 SGIP PROGRAM ADMINISTRATOR IN-DEPTH INTERVIEW GUIDE**

[Note to Interviewer]: Throughout the interview, answers should be tailored as needed to reflect the 2016 SGIP program year specifically. If the respondent has different answers across years, for example if they describe the program as it is today, probe for answers as applied to 2016, but also capture any comparison with other time periods for context.

### **A.1.1 Roles & Responsibilities**

1. How many members from your organization comprise the SGIP staff?
2. What is the general organizational structure of the SGIP staff (i.e., titles and reporting structure)?
3. What is the role of each member on the team?
4. For each person participating in the interview:
  - a. What is your title?
  - b. How long have you been on the SGIP team for [PA]?
5. What changes, if any, do you anticipate for your staffing structure in the future? Please explain.

### **A.1.2 Program Overview**

1. Can you give me a high-level overview of the SGIP in terms of the incentive application and reporting steps for program participants?
  - a. 2 step projects (residential and < 10 kW):
  - b. 3 step projects (non-residential > 10 kW):
2. What are your team's strategies to ensure consistent rollout of the program across the state?
3. How often do you communicate with fellow PAs on programmatic issues? Are these meetings structured or ad hoc?
4. How often do you communicate with the CPUC on programmatic issues?

### **A.1.3 Program Opening**

1. From your perspective, how did the program opening on February 23, 2016 affect how funds were allocated across applicants in your territory? How did it affect how funds were allocated across territories? How did it impact how funds were allocated towards host customers?
2. From your perspective, please explain how the program opening impacted applicants' general satisfaction with the program. What about for host customers?



3. How satisfied are you with the way the application platform is set up? From your perspective, what could be done to improve the process of future program openings?
4. Please provide any other feedback you may have on the program opening process of 2016

#### A.1.4 Clarity and Timeliness of Communications

The next set of questions addresses the clarity and timeliness of your written and oral communications with program participants.

1. How does the **average number** and **duration** of your interactions with an applicant vary depending on the following:
  - a. Whether a project is residential or nonresidential?
  - b. The program eligible technology?
  - c. Whether the applicant is a repeat participant (either in the current year or prior years)?
  - d. Whether the applicant is also the host customer?
2. How does the **average number** and **duration** of your interactions with a host customer vary depending on the following:
  - a. Whether a project is residential or nonresidential?
  - b. The program eligible technology?
  - c. Whether the host customer is a repeat participant (either in the current year or prior years)?
3. Through what media do you address clarifying questions and other inquiries from applicants and host customers? Please list from most frequent to least frequent:
  - a. Oral feedback
  - b. Follow up email
  - c. Refer to website/FAQs/handbook
4. Do any of your written communications go only to the applicant or only to the host customer? [If Yes]: Please explain the rationale for selecting the part(ies) to whom a given piece of communication is addressed.
5. How quickly do you respond to applicant or host customer inquiries on average?:
  - a. Within one hour
  - b. Within one day
  - c. Within 3 days
  - d. Within one week
  - e. More than 1 week



6. What, if anything, might cause delays in your communications with applicants and host customers?
7. On a scale of 1 to 5, where 1 is very poor and 5 is excellent, how would you assess your company's performance in 2016 in terms of timeliness of your written communications with applicants and host customers? Please explain.
8. On that same scale, how would you assess your company's performance in 2016 in terms of timeliness of your oral communications with applicants and host customers? Please explain.
9. Do you have any plans to change the way you communicate with applicants or host customers in the future? Please explain.
10. What is the average time for payment processing once the applicant has submitted all required paperwork?
11. Do you think it is possible to reduce processing times? [If yes] What conditions are needed to make that happen?

### A.1.5 Websites

The next set of questions focuses on the SGIP website maintained by each program administrator.

1. How often is your SGIP website updated?
2. In general terms, how do you think different users, such as applicants and host customers, engage with your website?
3. What, if anything, can be done to improve the program website experience for applicants with respect to its understandability, comprehensiveness, and any other aspects? What about for host customers?

### A.1.6 Canceled Projects

1. What are the main reasons that a given project might not proceed to completion? Please, list the reasons in frequency of occurrence.
2. Does the **number** of cancelations vary by host customer type?
  - a. Whether it is a residential or non-residential customer
  - b. Eligible program technology
  - c. Whether the host customer has multiple SGIP projects (across years or across service territories)
3. Do the **reasons** for cancellations vary by host customer type?
  - a. Whether it is a residential or non-residential customer
  - b. Eligible program technology



- c. Whether the host customer has multiple SGIP projects (across years or across service territories)
4. Are there any reasons for cancellations you try to resolve with the customer? If so, please explain.
5. From your perspective, do any of the reasons for cancellation and their frequencies point to potential improvements that can be made to:
  - a. Program marketing and outreach?
  - b. Program eligibility requirements?
  - c. Project paperwork requirements?
  - d. Project timing requirements?
  - e. Written communications on the part of PA's?
  - f. Oral communication on the part of PA's?
  - g. PA websites?

#### **A.1.7 Staff Training**

1. Do you provide training to your SGIP staff?
2. If yes to #1:
  - a. What type of staff receives this training? What material is covered in the training(s)?
  - b. What format(s) do you use for the training? [Select all that apply]:
    - i. Web-based self-paced training
    - ii. Class-room style lecture
    - iii. Hands on
    - iv. Role playing to simulate customer interactions
    - v. Other. Please describe.
  - c. How often do you conduct trainings?
  - d. What improvements, if any, do you think can and should be made to staff training?

#### **A.1.8 Participant Satisfaction and Feedback**

1. In your view, how satisfied are applicants with the application process? Please explain.
  - a. Very satisfied
  - b. Satisfied
  - c. Neutral
  - d. Dissatisfied





- e. Very dissatisfied
2. In your view, how satisfied are host customers with the application process? Please explain.
  - a. Very satisfied
  - b. Satisfied
  - c. Neutral
  - d. Dissatisfied
  - e. Very dissatisfied
3. In your view, how satisfied are applicants overall with the program? Please explain.
  - a. Very satisfied
  - b. Satisfied
  - c. Neutral
  - d. Dissatisfied
  - e. Very dissatisfied
4. In your view, how satisfied are host customers overall with the program? Please explain.
  - a. Very satisfied
  - b. Satisfied
  - c. Neutral
  - d. Dissatisfied
  - e. Very dissatisfied
5. Through what channels do you gain a sense, either directly or indirectly, of how satisfied applicants/Host Customers are with the following elements of the program:
  - a. Your written communications?
  - b. Your oral communications?
  - c. Your website?
  - d. The application process?
  - e. The field inspection process?
  - f. Rebate levels?
  - g. The program overall?
6. In the past three years, have you used feedback received through these channels to make changes in any of the following areas?
  - a. Written or oral communication with applicants or host customers? Please explain.
  - b. Program tracking data systems? Please explain.
  - c. Internal program management practices? Please explain.



- d. Proposing potential program design or implementation changes to the CPUC and/or the other PAs? Please explain.

### A.1.9 Areas for Program Improvement

1. In your view, what elements of SGIP are working well?
2. Are there any key process evaluation questions you would like to see explored in this evaluation?
3. Is there anything else relevant to the program or its operations that we have not discussed that we should know about?
4. Are there other key individuals that we should try to talk to during this evaluation effort? Can you provide their names and contact information?

### A.1.10 Combined Storage and PV/GEN:

I'd like to ask you a couple more questions regarding PV and advanced energy storage that will help with our annual storage evaluation effort.

1. Some SGIP participants install PV systems that do not receive SGIP incentives but are installed at the same time as energy storage that **is** incentivized through the SGIP program.
  - a. What factor(s) do you think motivate customers to install PV and energy storage together?
  - b. Do you think the SGIP program plays a role in host customer's decision to install PV even though there is no SGIP incentive for PV? Please explain. Would you answer this question differently with respect to... (probe for specifics)?
    - i. Which applicant company is involved?
    - ii. Whether it is a residential or non-residential customer?
    - iii. Specific building types (e.g. schools, manufacturing, food service, etc) for non-residential customers?
    - iv. Customer size for non-residential customers?
    - v. Specifics of the technologies involved?
    - vi. Whether the host customer has multiple SGIP projects (across years or across service territories)?

**Those are all the questions I have for you today regarding the PA Evaluation component of this interview. Thank you for your time.**



## A.2 PROGRAM APPLICANT SURVEY INSTRUMENT

This survey instrument will be used to interview the SGIP applicants for the 2016 SGIP PA Performance Evaluation.

**TABLE A.2-1: SURVEY INPUT VARIABLES**

Variable	Description
Num_proj_pre2016	# of projects from the applicant company still active from program years prior to 2016
Num_proj_2016	# of projects from the applicant company in program year 2016
Measure_List_2016	List of distinct technologies from applicant in program year 2016
Multi_PA_Flag	Applicants that participated in more than one PA territory
PGE_Flag	IF applicant participated in PGE territory
SCE_Flag	IF applicant participated in SCE territory
SCG_Flag	IF applicant participated in SCG territory
CSE_Flag	IF applicant participated in CSE territory
Cancelled_Flag	Applicant with Cancelled Projects
Cancelled_#	Number of applicant's projects that were cancelled
Host_Customer_Flag	Applicant is also a host customer
onlyApp_Flag	1 if there are projects where applicant is only the applicant and not the host customer (this flag is used in conjunction with host_customer_Flag for skip logic)
Storage_Flag	Applicant's projects included storage
>30kW_Flag	If applicant had project with >30kW
2Step_flag	Applicant within the 2-step process
ThreeStep_flag	Applicant within the 3-step process
LastStep	The farthest step an applicant ever got to on any project from PY2016 (e.g., RRF, PPM, ICF, First Payment, PBI)
PDP_Same_Flag	1 if the performance data provider is the same entity as the applicant

### 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 2016.

### A.2.2 Screening Questions

#### Confirmation of Measure Volumes

[Ask if num\_proj\_2016 <>0, else skip to m2]



**M1.** Our records show that in 2016, your firm submitted <num\_proj\_2016> applications consisting of <Measure\_List\_2016>. 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\_2016.** What is the correct number of projects?

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

**\*\*IF xxNum\_proj\_2016 <> NULL THEN zzNum\_proj\_2016 = xxNum\_proj\_2016; ELSE zzNum\_proj\_2016 = Num\_proj\_2016\*\*\***

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

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

- 1 Advanced Energy Storage
- 2 Fuel Cell CHP
- 3 Fuel Cell Electric
- 4 Gas Turbine
- 5 Internal Combustion
- 6 Microturbine
- 7 Pressure Reduction Turbine
- 8 Wind Turbine
- 9 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

**xxLastStepa.** Our records show that the latest stage you reached on any of these projects from 2016 is <LASTSTEP>. Is that Correct?

- 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 in the application process in 2016? Was it ... [READ LIST] [NOTE TO INTERVIEWER: PLEASE TRY HARD TO GET AN ANSWER TO THIS QUESTION AS IT KEYS SKIPS THROUGHOUT THE SURVEY]

- 1 Submission of Reservation Request Form
- 2 **[IF 3Step\_flag = 1]** Submission of Proof of Project Milestone
- 3 Submission of Incentive Claim Form
- 4 Received First Payment
- 5 **[>30kW\_Flag =1]** Receiving performance-based-incentives
- 77 N/A
- 88 Refused
- 99 Don't Know

**\*\*IF xxLastStepb <> {77,88,99, NULL} THEN zzLastStep = xxLastStepb; ELSE zzLastStep = LastStep \*\*\***

**[ASK IF num\_proj\_pre2016 <>0, Else skip to M3]**

**M2.** Our records show that <num\_proj\_pre2016> projects consisting of <Measure\_list\_Pre\_2016>, **from prior years were still active** (in payment or processing) in 2016. 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
- 2 Fuel Cell CHP
- 3 Fuel Cell Electric
- 4 Gas Turbine
- 5 Internal Combustion
- 6 Microturbine
- 7 Pressure Reduction Turbine
- 8 Wind Turbine
- 9 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

**\*\*\*IF (storage\_Flag = 1 or xxTech1 = AES or xxTech2 = AES) then zzStorage\_FLAG = 1; else zzStorage\_flag = 0;\*\*\***

**\*\*\*IF (PGE\_Flag = 1) then SET zzPGE\_Flag = 1; ELSE set zzPGE\_Flag = 0\*\*\***

**\*\*\*IF (SCE\_Flag = 1) then SET zzSCE\_Flag = 1; ELSE set zzSCE\_Flag = 0\*\*\***

**\*\*\*IF (SCG\_Flag = 1) then SET zzSCG\_Flag = 1; ELSE set zzSCG\_Flag = 0\*\*\***

**\*\*\*IF (CSE\_Flag = 1) then SET zzCSE\_Flag = 1; ELSE set zzCSE\_Flag = 0\*\*\***

**\*\*\*IF Multi\_PA\_Flag = 1 THEN zzMULTI\_PA\_FLAG = 1; ELSE zzMULTI\_PA\_FLAG = 0;\*\*\***

**xxHostFlag.** In addition to applying as an applicant, did your firm act as a **host customer** for any of the SGIP projects we have been talking about? (IF NEEDED: For example, did you submit an SGIP application for a project located at your corporate offices?)

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



[ASK IF Host\_Customer\_Flag = 1 and xxHostFlag = no]

**xxHostFlag\_P1.** Our records show that your firm did act as a host customer for an SGIP project. Can you recall this project, for example, did your firm install an SGIP technology at your corporate offices?

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

**\*\*\*IF (Host\_Customer\_Flag = 1 OR xxHostFlag = Yes OR xxHostFlag\_QC = 1) then SET zzHostFlag = 1;  
ELSE set zzHostFlag = 0\*\*\***

### A.2.3 Background

**B1.** What type of business is your firm? Would you say **[Multiple Select]**:

- 1 "Traditional" ESCO (predominantly performance based contracts)
- 2 Installation Contractor
- 3 Equipment Lessor
- 4 Architecture / Engineering / Design Engineering
- 5 Equipment Vendor/Distributor
- 6 Other Type of Business **[RECORD VERBATIM]**
- 7 This is a residence, not a business
- 8 Manufacturer
- 77 N/A
- 88 Refused
- 99 Don't Know

[ASK IF onlyApp\_Flag = 1]

**B2.** As an applicant, how would you describe your role with the SGIP relative to the host customer? Did your firm...[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
- 3 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



**[ASK IF zzStorage\_Flag = 1]**

**B5.** Was your firm involved in any SGIP advanced energy storage projects where the host customer already had, or was installing, a renewable generation technology (if needed: technologies like solar, wind turbines, geothermal, etc)?

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

**[ASK IF B5 = YES, ELSE SKIP TO B8]**

**B5a.** How many such projects was your firm involved with? (IF NEEDED: again, we're discussing the number of SGIP advanced energy storage projects where the host customer also already had, or was installing, renewable generation technology)

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

**B6.** In those projects, was the renewable generation technology ever **Photovoltaic Solar Panels (PV)**?

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

**[ASK IF B6 = YES, ELSE SKIP TO B8]**

**B6a.** How many projects already had, or were installing, **Photovoltaic Solar Panels**? (IF NEEDED: SGIP AES projects where the host customer also already had, or was installing PV)

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





**B7.** To your recollection, of those projects that combined advanced energy storage and PV, in what percent was....

**B7a.** the PV technology installed BEFORE the advanced energy storage [RECORD %]

**B7b.** the PV technology installed AFTER the advanced energy storage [RECORD %]

**B7c.** the PV technology installed AT THE SAME TIME as the advanced energy storage [RECORD %]

**B8.** What is the first year your firm applied for an incentive through the SGIP?

1 [RECORD VERBATIM]

77 N/A

88 Refused

99 Don't Know

#### **A.2.4 Process**

**[ASK IF zzNum\_proj\_2016 <>0 and zzlastStep<>Cancelled, ELSE SKIP TO P7]**

Next, I would like to ask you a few questions about your experience with each step in the application process.

**[ASK IF 3Step\_flag = 1, ELSE SKIP TO P1\_2s]**

**P1\_3s.** On average, how long does it take for the program administrator to issues a conditional reservation letter after a reservation request has been submitted?

1 [RECORD]

77 N/A

88 Refused

99 Don't Know

**[ASK IF zzLASTSTEP >=PPM, ELSE SKIP TO P1\_2s]**

**P2\_3s.** Do you think the 90 day window (240 days for public entities) to submit Proof of Project documentation is reasonable?

1 Yes

2 No

3 Unaware of 90-day window

77 N/A

88 Refused

99 Don't Know



**P3\_3s.** On average, how long does it take for the program administrator to issues a confirmed reservation letter after the Proof of Project documents have been submitted?

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

**[ASK IF zzLASTSTEP =ICF OR zzLASTSTEP =FIRST PAYMENT OR zzLASTSTEP =PBI, ELSE SKIP TO P1\_2s]**

**P4\_3s.** Do you think the 18-month window to submit the Incentive Claim Form is reasonable?

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

**[ASK IF 2Step\_flag = 1, ELSE SKIP TO P5]**

**P1\_2s.** On average, how long does it take for the program administrator to issues a confirmed reservation letter after the reservation request form has been submitted?

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

**[ASK IF zzLASTSTEP =ICF OR zzLASTSTEP =FIRST PAYMENT OR zzLASTSTEP =PBI, ELSE SKIP TO P10]**

**P2\_2s.** Do you think the 12-month window to submit the Incentive Claim Form is reasonable?

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

**P5.** On average, how long does it take for the program administrator to schedule a site inspection to confirm eligibility after the Incentive Claim Form has been submitted?

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



**P6.** 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?

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

**[ASK IF P6 = 1 or 2]**

**P6a.** Do you have any suggestions on how the inspection scheduling process might be improved?

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

**[ASK IF zzLASTSTEP >=First Payment, ELSE SKIP TO P10]**

**P7.** On average, how long does it take to receive the upfront incentive after the project has been approved?

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

**P8.** 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?

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

**[ASK IF P8 = 1 or 2]**

**P8a.** Why do you say that?

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



**[ASK IF zzLASTSTEP>=PBI, ELSE SKIP TO P10]**

**P9.** 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?

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

**[ASK IF P9 = 1 or 2]**

**P9a.** Why do you say that?

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

**[ASK IF zzNum\_proj\_2016 <>0, ELSE SKIP TO D1]**

**P10.** Have you ever been informed by a program administrator that your 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 D1]**

**P10a.** What information was missing?

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

**P10b.** Of the projects that were missing information, what percentage were suspended?

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

**[ASK IF P10b >0%, ELSE SKIP TO D1]**



**P10c.** Of the projects that were suspended, what percentage went on to completion or become 'active' again?

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

**[ASK IF P10c <> 100%]**

**P10d.** In the case(s) where a project did not become 'active' again, could you give the reason(s) why?

- 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 P10c<>0%]**

**P10e.** 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.2.5 Communication**

**D1.** On an average project, how many clarifying questions or other inquiries for the program administrator does your firm have (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

**D2.** How do you contact your program administrator when you have questions? [**Select All that Apply**]

- 1 Ask by email
- 2 Ask by phone
- 3 Ask during a quarterly workshop
- 4 Schedule & ask during an in-person meeting
- 5 Other [RECORD]
- 77 N/A
- 88 Refused
- 99 Don't Know

[Loop through D3a\_<PA> to D5a\_<PA> for each PA {PGE, SCE, SCG, CSE} where zz<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 [RECORD time]
- 77 N/A
- 88 Refused
- 99 Don't Know



**[ASK IF D3b\_<PA> is greater than one week]**

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

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

**D3d\_<PA>**. Thinking about all of the questions you have asked <PA>, 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 [RECORD time]
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF D3f\_<PA> greater than one week]**

**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?, XXXX?, etc.

- 1 [RECORD time]
- 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 **written** 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

**D5\_<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 oral communications?

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

**[ASK IF D5\_<PA> <3]**

**D5a\_<PA>**. Why do you say that?

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

**[END PA LOOP]**

**D6.** Are there any written communications (letter or email) you receive from the program administrator, as an applicant, that you think should go to the Host Customer?

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

**[ASK IF D6 = 1]**

**D6a.** What written communications do you think should go to the Host Customer?

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





**D7.** Are you aware of any written communications (letter or email) host customers receive from the program administrator, that you think should go to the applicant?

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

**[ASK IF D7 = 1]**

**D7a.** What written communications do you think should go to the applicant?

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

**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

**[IF zzMULTI\_PA\_FLAG =1 THEN ASK]**

**D11.** Was the application paperwork, required by SGIP, the same across all PAs?

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

**[IF D11 = 2 THEN ASK]**

**D11a.** How was it different across the PAs?

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



**[ASK IF D2 = 'workshop', else skip to C1]**

**WK1.** How many quarterly workshops have you attended?

- 1 1
- 2 2
- 3 None
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF WK1 in (1,2), else skip to C1]**

**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 = 1 or 2]**

**WK3a.** Why do you say that?

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

## **A.2.6 PA Differences**

**[IF zzMULTI\_PA\_FLAG =1 THEN ASK C1 to C6]**



Earlier, we discussed your SGIP participation in multiple territories. I'd like you to think about your experience within each of those territories. Please rate the following as aspects of SGIP as completely exactly the same, slightly different, of completely different for all PAs across territories ...

Would you say the....

**[ASK IF zznum\_projects\_2016 >0, else skip to C5]**

**C1.** ... The application submission process ... [READ 1-3]

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C1 in (2,3)]**

**C1a.** How did the differences affect your experience with the program?

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

**[ASK IF zzLastStep >=PPM, ELSE SKIP TO C7\_<PA>]**

**C2.** ... The paperwork required for the proof of project milestone

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C2 in (2,3)]**

**C2a.** How did the differences affect your experience with the program?

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



**[ASK IF zzLastStep >=ICF, ELSE SKIP TO C7\_<PA>]**

**C3. ... The paperwork required for the incentive claim stage**

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C3 in (2,3)]**

**C3a. How did the differences affect your experience with the program?**

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

**C4. ... The inspection process**

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C4 in (2,3)]**

**C4a. How did the differences affect your experience with the program?**

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

**[ASK IF zzLastStep >=First Payment, ELSE SKIP TO C7\_<PA>]**

**C5. ... The up-front payment process**

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C5 in (2,3)]**



**C5a.** How did the differences affect your experience with the program?

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

**[ASK IF zzLastStep >=PBI and PDP\_Same\_Flag = 1, ELSE SKIP TO C7\_<PA>]**

**C6.** ... The performance data upload process for annual PBI payments

- 1 Was exactly the same for all of the PAs
- 2 Was slightly different for all of the PAs
- 3 Was completely different for all of the PAs
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF C6 in (2,3)]**

**C6a.** How did the differences affect your experience with the program?

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

**[Loop through C7\_<PA> to C9a\_<PA> for each PA {PGE, SCE, SCG, CSE} where zz<PA>\_Flag = 1]**

**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> during the lifecycle of the project?

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

**C7a\_<PA>.** Why do you say that?

- 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> during the lifecycle of the project?

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



**C8a\_<PA>**. Why do you say that?

- 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>'s SGIP ?

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

**C9a\_<PA>**. Why do you say that?

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

**[END PA LOOP]**

## **A.2.7 Website**

Next, I'd like to ask about your experiences with the CPUC SGIP website at [www.selfgenca.com](http://www.selfgenca.com).

**W1\_A**. Generally, why do you visit selfgenca.com? **[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 review online SGIP status reports
- 6 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**W2\_A**. How frequently do you visit selfgenca.com?

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



**W3\_A.** 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?

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

**[ASK IF W3\_A <3]**

**W3a\_A.** Why do you say that?

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

The next set of questions focuses on the SGIP website maintained by each program administrator.

**[Loop through W1\_<PA> to W4a\_<PA> for each PA {PGE, SCE, SCG, CSE} where zz<PA>\_Flag = 1]**

**W1\_<PA>.** Have you ever visited the < PA > SGIP website?

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

**[ASK IF W1 = Yes, ELSE SKIP TO CP1]**

**W2\_<PA>.** Generally, why do you visit the <PA> SGIP website? **[DO NOT READ. SELECT MULTIPLE]**

- 1 To learn information about quarterly workshops schedules/location
- 2 To learn more about the program structure (through FAQs & summarized info)
- 3 Links to CPUC Rulings related to SGIP
- 4 Links to SGIP Handbook
- 5 Step-by-Step Links to Forms
- 6 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**W3\_<PA>.** How frequently do you visit the < PA > SGIP website?

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



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

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

**[ASK IF W4\_<PA> <3]**

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

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

## **A.2.8 Cancelled Projects**

**[ASK IF Cancelled\_Flag = 1, ELSE SKIP TO A1a]**

Now I'd like you to think about SGIP projects that were cancelled.

**CP1**. Our records show that [**cancelled\_#**] project(s) your firm submitted to SGIP in **2016** were cancelled, is this correct?

- 1 Yes
- 2 No, that is the wrong number
- 3 No, zero projects were cancelled
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF CP1 = 2]**

**CP1a**. What is the correct number of cancelled projects?

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

**[ASK IF CP1=1 or 2]**





**CP2.** What is the reason (or reasons) that the project(s) was (were) cancelled? **[Do not read; Select all that Apply]**

- 1 The host customer withdrew the application
- 2 Our firm withdrew the application
- 3 Reservation Request was incomplete
- 4 Proof of Project Milestone package was not received in time
- 5 Incentive Claim Package not received by the Reservation Expiration Date
- 6 Failed field verification
- 7 Program Administrator Cancelled project due to applicant flooding on Feb23 opening day
- 8 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know

**[ASK IF CP2 = 1 or 2]**

**CP3.** Why did your firm (or the host customer) withdraw the application?

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

**[ASK IF CP2 in (3,4,5,6,8)]**

**CP4.** Why couldn't this (these) issue(s) be resolved with the Program Administrator?

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

## **A.2.9 Attribution**

**[ASK IF zzSTORAGEFLAG = 1 and B5 = 1 and onlyApp\_Flag = 1, ELSE SKIP TO K1]**

Now I'd like you to think about projects where Advanced Energy Storage is combined with renewable generation technology.

**A1a.** Does your firm promote the installation of **paired** AES and renewable generator energy systems to your customers, or do you promote each type of equipment separately?

- 1 Promote together as one package
- 2 Promote each measure separately
- 3 Other [RECORD VERBATIM]
- 77 N/A
- 88 Refused
- 99 Don't Know



**[ASK IF A1a = 1, ELSE SKIP TO K1]**

**A1b.** In 2016, how important was the SGIP in your decision to **promote** renewable generator systems along with AES? Was it. . . [READ]

- 1 Very important
- 2 Somewhat Important
- 3 Not at all Important
- 77 N/A
- 88 Refused
- 99 Don't Know

**A1c.** Has the suspension of the incentives for PV systems through the California Solar Initiative program influenced your promotion of AES and PV as one package?

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

**[ASK IF A1c=1]**

**A1cc.** How has it influenced your promotion of AES and PV as one package?

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

## **A.2.10 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 znum\_projects\_2016 >0, ELSE SKIP TO K5]**

**K1.** ... The application submission process

- 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 zzLastStep >= PPM, ELSE SKIP TO K7]**

**K2.** ... The paperwork for the proof of project milestones

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

**[ASK IF K2 <3]**

**K2a.** Why do you say that?

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

**[ASK IF zzLastStep >= ICF, ELSE SKIP TO K7]**

**K3.** ... The paperwork for the incentive claim stage

- 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

**K4.** ... The inspection process

- 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

**[ASK IF zzLastStep >= FIRST PAYMENT, ELSE SKIP TO K7]**

**K5.** ... The up-front payment process

- 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 zzLastStep >= PBI, ELSE SKIP TO K7]**

**K6.** ... The data uploading process for annual PBI payments

- 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

**K7.** ... The SGIP overall

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



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

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

**K8.** Using a scale from 1 to 5, where 1 means extremely unlikely and 5 means extremely likely, how likely are you to participate in the SGIP in the future?

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

**K8a.** 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 zzHOSTCUSTOMER = 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 zzHOSTCUSTOMER = 0]**

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

**END OF SURVEY**



### A.3 HOST CUSTOMER SURVEY INSTRUMENT

This is the web survey for host customers.

**TABLE A.3-2: SURVEY INPUT VARIABLES**

<b>Variable</b>	<b>Description</b>
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} (Written as "y1, y2, ..., and yn")
NumProjPre2016	# of projects from the host customer still active from program years prior to 2016
numProj2016	# of projects from the host customer applied in 2016
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)
NumCancelled	# of projects from the host customer that were cancelled
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
InspectionFlag	Indicates if Host Customer got to Inspection Step IN PROGRAM YEAR 2016
Payment_Flag	Indicates if host customer EVER reached payment stage
PBI_Flag	Indicates if host customer EVER reached PBI stage



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 projects your organization, <Company\_Name>, applied for in <Application\_Yrs>.”]

### A.3.1 Background

**A1.** Are you aware that you [IF OnlyHost = 1 THEN “or your applicant company (<ApplicantNoSelf\_and\_list >)”] [IF numProj2016>0 THEN “applied for” ELSE “received”] an incentive from California’s Self-Generation Incentive Program for energy generation and/or energy storage at your [IF HouseFlag = 1 THEN “home” ELSE IF HouseFlag = 0 THEN “organization”] in 2016?

- 1 Yes
- 2 No

[ASK IF NumProjPre2016 = 0 ELSE SKIP TO A4]

**A3.** [IF HouseFlag = 1 THEN “Did you” ELSE IF HouseFlag = 0 THEN “Did your organization”] apply for an incentive from the Self-Generation Incentive Program prior to 2016?

- 1 Yes
- 2 No
- 99 Don’t Know

[ASK IF OnlyHost = 1, ELSE SKIP TO A5]

**A4.** How would you describe your relationship with <ApplicantNoSelf\_and\_list> relative to your SGIP application(s)? [Select all that apply]

- 6 < ApplicantNoSelf\_or\_list > sold (or intended to sell) the incentivized technology
- 7 < ApplicantNoSelf\_or\_list > leased (or intended to lease) the incentivized technology
- 8 < ApplicantNoSelf\_or\_list > installed (or intended to install) the incentivized technology
- 9 < ApplicantNoSelf\_or\_list > provided advice regarding the incentivized technology
- 10 Other [RECORD]
- 99 Don’t Know

[ASK IF HouseFlag = 0]

**A5.** How many locations does your organization have in the State of California?

- 1 1 location
- 2 2-3 locations
- 3 4-10 locations
- 4 11-30 locations
- 5 More than 30 locations
- 99 Don’t Know



### 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>. Through what channels did you hear from <PA\_or\_List> regarding the status of your application(s) with the Self-Generation Incentive Program in 2016? [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>]

On a scale of 1 to 5, where 1 is not at all clear and 5 is extremely clear, how clear were the following aspects of the Self-Generation Incentive Program:

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

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

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

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

[ASK IF OnlyHost = 1] C2e\_<PA>. Division of responsibility between you and <ApplicantNoSelf\_or\_list > [1-5, N/A, Don't Know]

C3\_<PA>. Please comment (if desired) on your experience, in <PA>, with any of the above program aspects. [OPEN]

### A.3.3 Website

E1. Please select which of the following websites you visited in 2016: [MULTI-SELECT]

- 1 SelfGenCA.com
- 2 PGE.com/SGIP
- 3 EnergyCenter.org/program/self-generation-incentive-program
- 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 F1]





**E2. Why did you visit these websites in 2016? [SELECT MULTIPLE]**

- 7 To submit project application forms
- 8 To check project status
- 9 To use the generation or storage calculators
- 10 Links to SGIP Handbook
- 11 To review online SGIP status reports
- 12 To learn information about quarterly workshops schedules/location
- 13 To learn more about the program structure (through FAQs & summarized info)
- 14 Links to CPUC Rulings related to SGIP
- 15 Step-by-Step Links to Forms
- 16 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 Cancelled

**[ASK IF numCancelled >0, ELSE SKIP TO H1]**

**F1.** What is the reason (or reasons) that [IF HouseFlag = 1 THEN “your” ELSE IF HouseFlag = 0 THEN “your organization’s”] [IF numCancelled = 1 THEN “project was” ELSE “projects were”] cancelled in 2016? [MULTI-SELECT]

- 1 The project(s) was cancelled due to lack of SGIP program funds following high applicant traffic on opening day
- 2 [IF HouseFlag = 1 THEN “I” ELSE IF HouseFlag = 0 THEN “My organization”] withdrew the application
- 3 [IF onlyHost = 1] <ApplicantNoSelf\_or\_list > withdrew the application
- 4 The Reservation Request was incomplete
- 5 The proof of project milestone package was not received in time
- 6 The incentive claim package was not received by the reservation expiration date
- 7 The project failed field verification
- 8 N/A'



- 9 Other [RECORD]
- 99 Don't know

**[ASK IF F1 = 2]**

**F2. Why did [IF HouseFlag = 1 THEN "you" ELSE IF HouseFlag = 0 THEN "your organization"] withdraw the application(s)? [OPEN]**

### **A.3.5 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 numProj2016 >0 and InspectionFlag = 1] H1\_<PA>. ... the inspection scheduling process?**

**[ASK IF numProj2016 >0 and PAYMENT\_FLAG = 1] H2\_<PA>. ... the time it takes to receive the upfront incentive?**

**[ASK IF HOUSEFLAG = 0 and PBI\_FLAG = 1] H3\_<PA>. ...the performance-based-incentive payment process in 2016?**

**[ASK IF C1 <> 7] H4\_<PA>. ... the information provided in the written communications from <PA\_and\_List> regarding SGIP?**

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

**H6\_<PA>. ...your experience with <PA\_and\_List> on the self-generation incentive program overall? [1-5, N/A, Don't Know]**

**H7. Please comment (if desired) on any of your above responses. [OPEN]**



### A.3.6 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 2016, 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 D1]

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]

[IF B3 = {1,2,3,4} THEN ASK B4 once, and show a column to respond to B4 for each <PA> selected in B3]

B4\_<PA>. How did you contact <PA\_or\_List> when you had issues, problems, or delays [MULTI-SELECT]?

- 1 By email
- 2 By phone
- 3 Contact during a quarterly workshop
- 4 Schedule an in-person meeting
- 5 Other [OPEN]
- 98 N/A
- 99 Don't Know

[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? [OPEN END]



### A.3.7 Attribution

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

**G1.** Is advanced energy storage technology combined with a renewable energy generation system [IF HouseFlag = 1 THEN “at your home” ELSE IF (HouseFlag = 0 and A5=1) THEN “at your organization” ELSE IF (HouseFlag = 0 and A5<>1) THEN “at any of your organization’s locations”]? (e.g., solar panels or wind turbines) {Yes, No, Don’t Know}

[ASK IF G1 = ‘Yes’ and HouseFlag = 0 and A5<>1, ELSE SKIP TO G3\_house]

**G2\_Org.** How many combined advanced energy storage and renewable energy generation systems does your organization have? [RECORD #]

In how many cases was...

**G3a\_org.** the renewable energy generation technology installed AT THE SAME TIME (within 3 months) as the advanced energy storage [RECORD #]

**G3b\_org.** the renewable energy generation technology installed BEFORE the advanced energy storage [RECORD #]

**G3c\_org.** the renewable energy generation technology installed AFTER the advanced energy storage [RECORD #]

\*\*\*G3a\_org+G3b\_org +G3c\_org MUST EQUAL G2\_org \*\*\*

[ASK IF ((G1 = ‘Yes’ and HouseFlag = 1) OR (G1 = ‘Yes’ and HouseFlag = 0 and A5=1)) ELSE SKIP TO I1]

**G3\_House.** Was the renewable energy generation technology installed...

- 1 AT THE SAME TIME (within 3 months) as the advanced energy storage
- 2 BEFORE the advanced energy storage
- 3 AFTER the advanced energy storage
- 4 n/a
- 99 Don’t know

[ASK IF onlyHost = 1]

**G4.** Did <ApplicantNoSelf\_or\_list> recommend the combined renewable energy generation and storage system? {Yes, No, Don’t Know}

[ASK IF G3a\_org >0 OR G3\_House = 1]

**G5.** 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 have installed a renewable energy generation system without the SGIP incentive? [1-5, don’t know]



### A.3.8 Closing

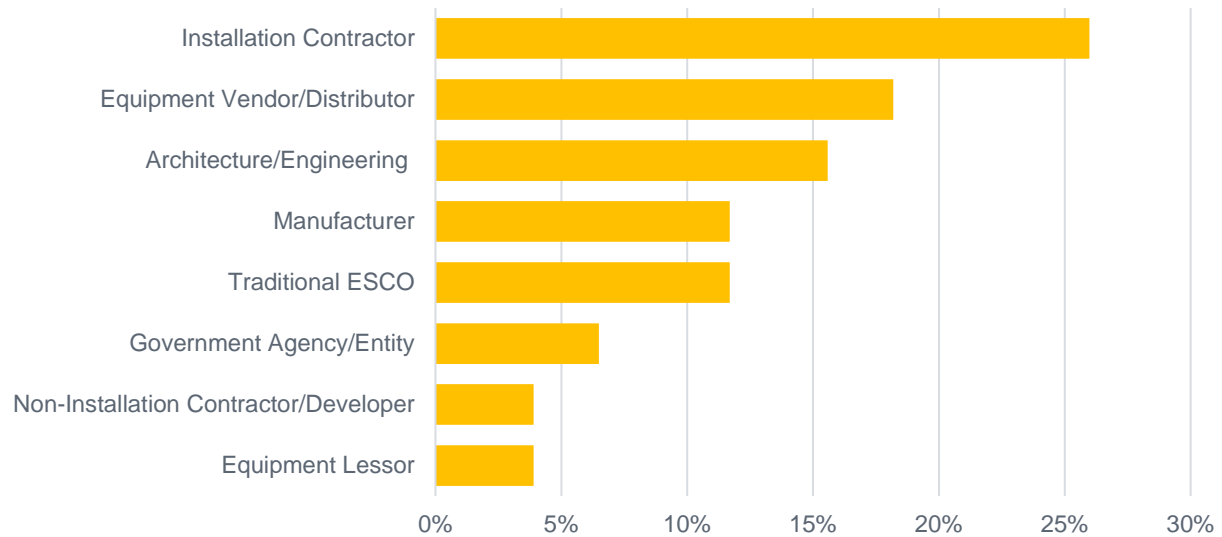
I1. Do you have any suggestions on how to improve the Self-Generation Incentive Program in the future?  
**[OPEN]**

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

## APPENDIX B FIRMOGRAPHICS AND DEMOGRAPHICS

This appendix summarizes interviewee demographic characteristics including applicants and host customers.

**FIGURE B-1: APPLICANT BUSINESS TYPES**

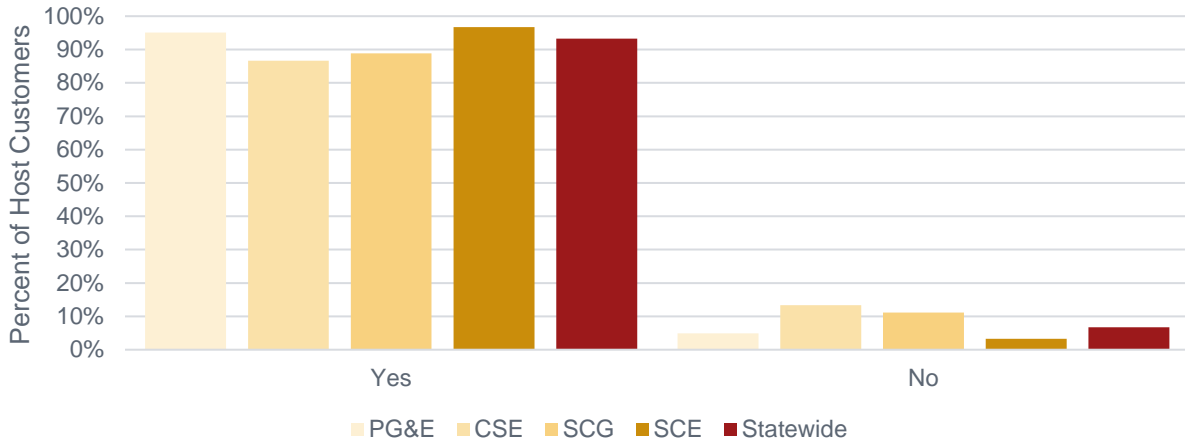


Most applicants identify themselves as installation contractors, followed by equipment vendors and architecture/engineering firms. Equipment lessors, non-installation contractors, and government entities were the least represented group in the applicant sample.

Turning to host customers, the evaluation team asked about program awareness (Figure B-2). In most cases (more than 90% of the sample), host customers were aware of program participation. Host customer lack of awareness with the SGIP does not necessarily indicate a problem with the sample (e.g. incorrect contact information). It's possible that program applicants shield their customers from program interactions and project costs inherently reflect the influence of the incentive. This is most common with "upstream" incentive programs such as lighting rebates.

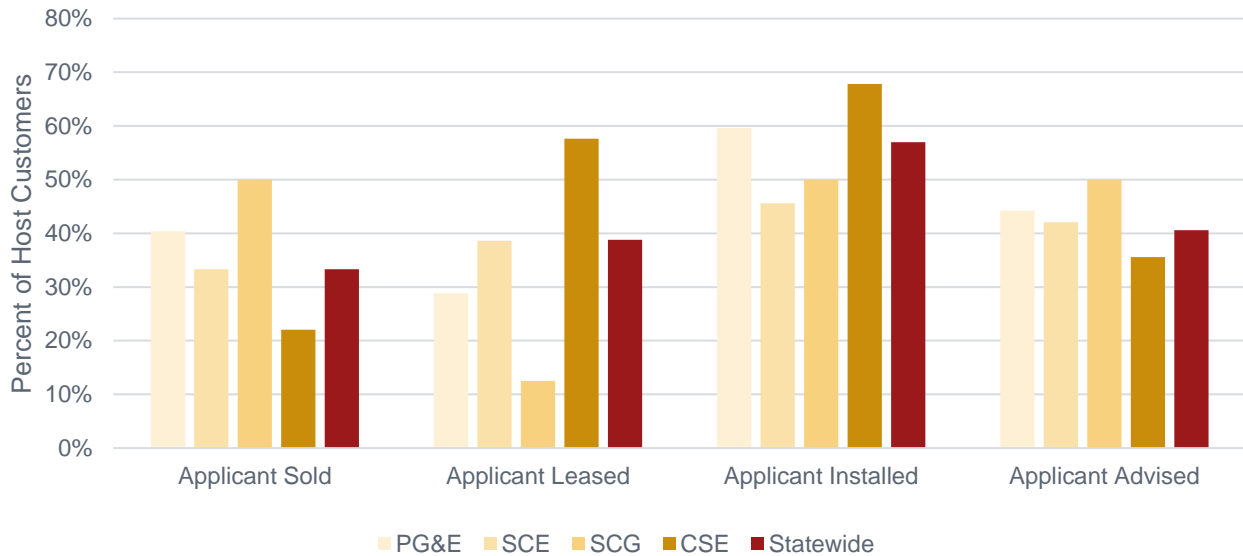


**FIGURE B-2: HOST CUSTOMER AWARENESS OF SGIP PARTICIPATION**



When an SGIP applicant is not also the host customer for an SGIP-incentivized project, the applicant typically plays one or more of the following roles with respect to the host customer for an SGIP project: Sell the technology, lease the technology, install the project, or provide advice on project decision making. Looking across the state, the roles of selling, leasing, or installing the technology are represented equally in terms of the frequency with which host customers attributed a given role to their applicant. This was especially true for PG&E and SCE. For SCG, most host customers described their applicant as leasing the technology, and for CSE they described the applicant as either selling or installing the technology. A much smaller proportion of respondents across service territories characterized their applicant as providing advice.

**FIGURE B-3: ROLE OF APPLICANT PER HOST CUSTOMERS**

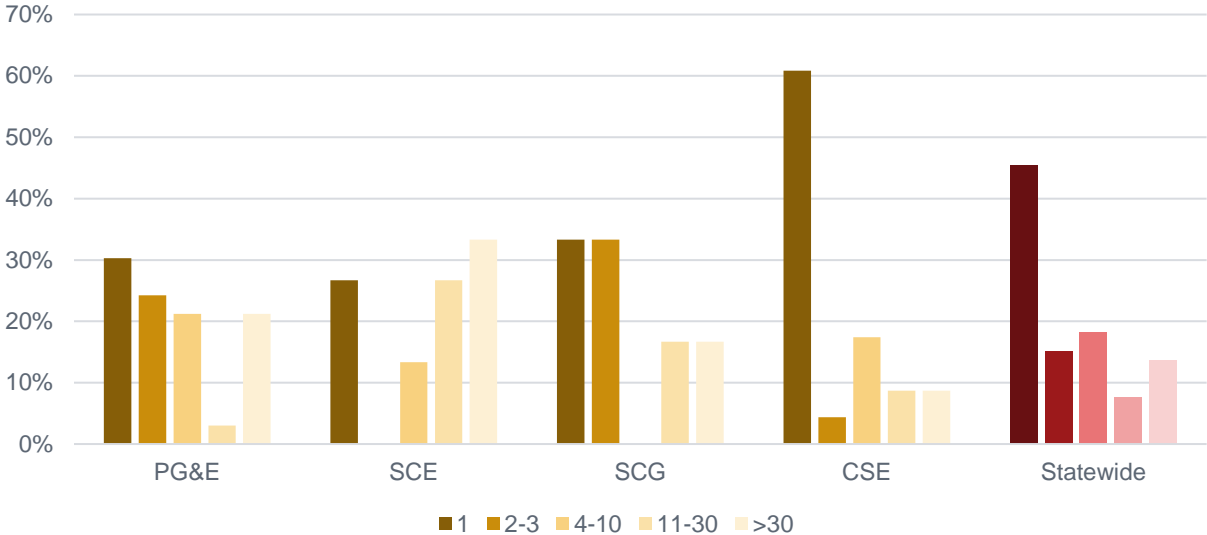




For purposes of this evaluation a host customer is defined as an individual homeowner or business. For commercial customers, a host customer is defined as an organization rather than an individual location. For example, a national retail chain is treated as a single host customer regardless of how many distinct applications they submitted to the program. Sample weighting was applied to appropriately capture the influence of these multi-location customers.

Host customers ranged in terms of the total number of locations they have in California. For all four PAs, the greatest representation in the program is for participants with just one location, with approximately half of all host customers falling in this group. In terms of participants with more than one location, PG&E is most conspicuous in having a large proportion (69%) of participants with more than one site, and CSE is least conspicuous, with only 39% of respondents having more than one site in California.

**FIGURE B-4: NUMBER OF HOST CUSTOMER LOCATIONS IN CALIFORNIA**

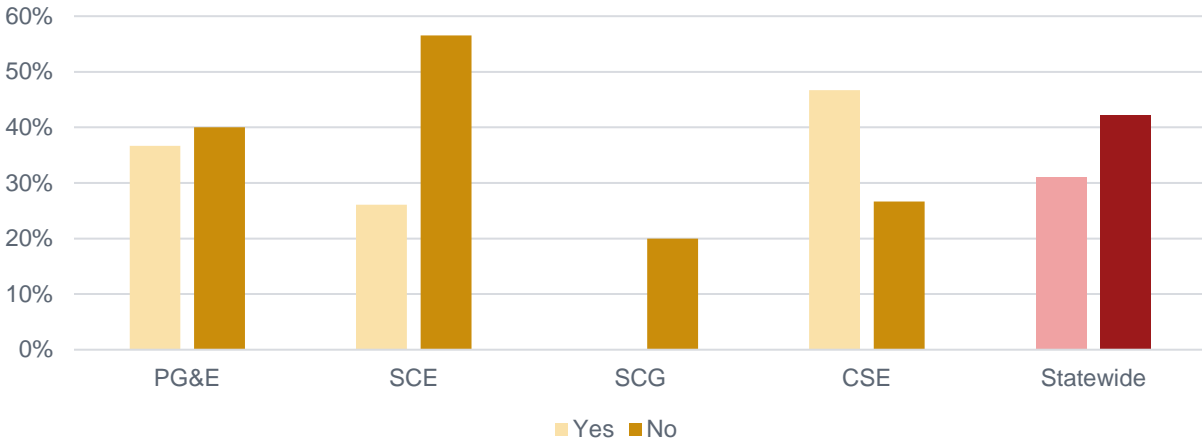


Host customers were also asked about their experience with SGIP prior to PY 2016. Statewide, approximately 31% of host customers who either applied to SGIP in 2016 or received an upfront payment or PBI payment in 2016 reported having first applied to SGIP in a prior year. CSE was most notable in this regard, with approximately 47% having applied at least once in a prior year.



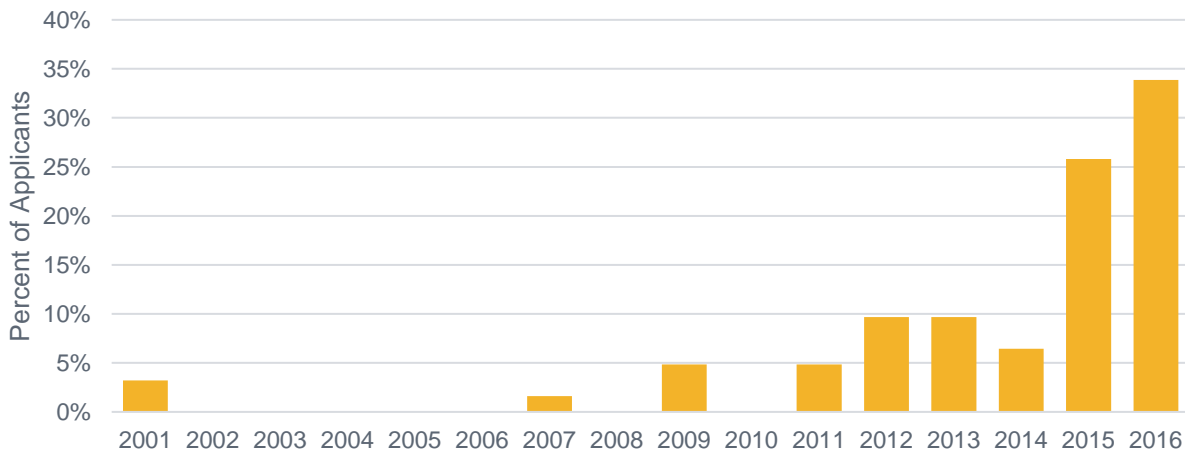


**FIGURE B-5: HOST CUSTOMER INDICATION OF SGIP PARTICIPATION PRIOR TO 2016**



Several applicants indicated having experience with the program as early as 2001 (the year of its inception).

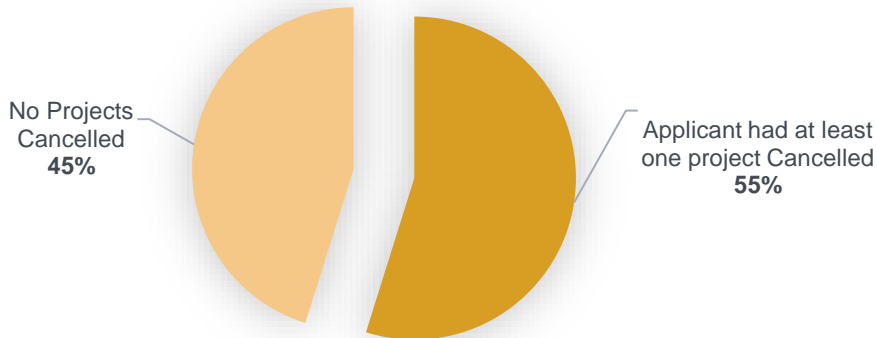
**FIGURE B-6: APPLICANT FIRST YEAR OF SGIP PARTICIPATION**



Applicants were asked about cancelled projects. Among the applicants interviewed, 55% reported having at least one project cancelled during 2016.

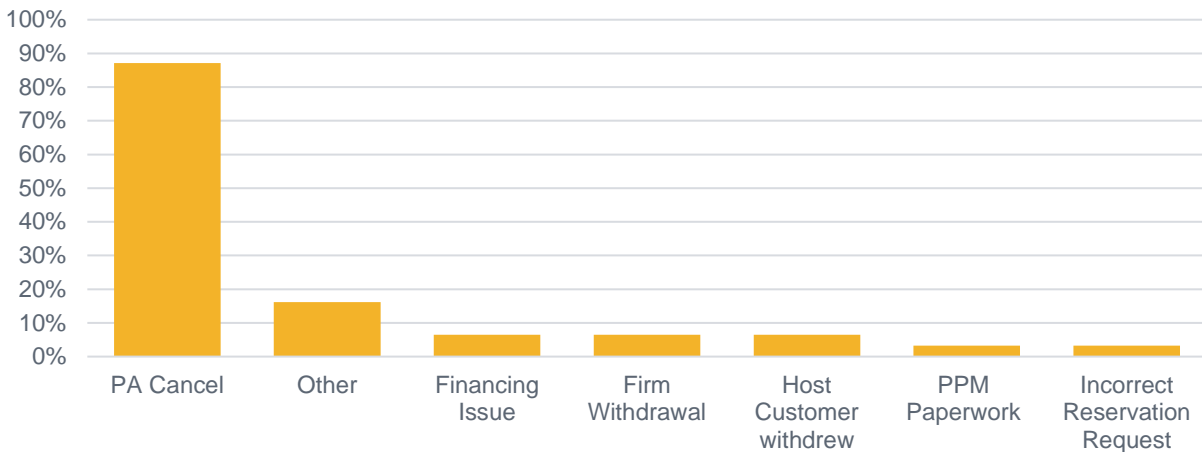


**FIGURE B-7: APPLICANTS WITH AND WITHOUT CANCELLED PROJECTS**



Applicants overwhelmingly cite PA cancellations (proxy for opening day funds) as the most common reason for cancelled projects. Other reasons for cancellations include financing issues, incorrect paperwork, and host customer withdrawal.

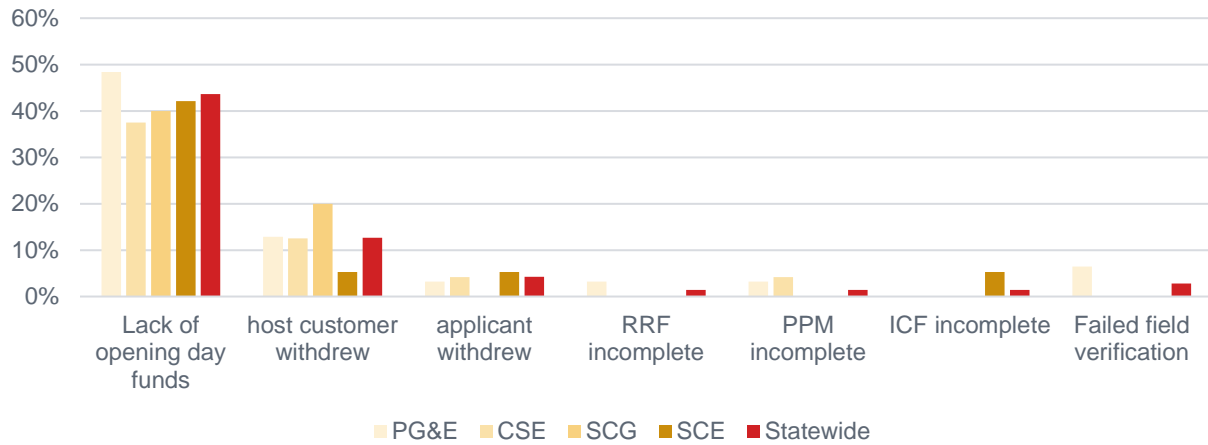
**FIGURE B-8: APPLICANT PERSPECTIVE ON CANCELLED PROJECTS**



Host customers cite a variety of reasons for their project having been canceled (Figure B-9). Statewide, the dominant reason reported was the lack of program funds, driven in large part by the very rapid attribution of funds on opening day. This reason was cited by almost 50% of all respondents across service territories. The second most common reason cited were cases where the host customer withdrew their own application, followed by instances where the applicant withdrew the application.



**FIGURE B-9: HOST CUSTOMER PERSPECTIVE ON CANCELLED PROJECTS**



For the specific cases where host customers noted having withdrawn their application, they were asked to explain their reason(s) for doing so. While relatively few respondents addressed this question, their responses noted a few distinct reasons. One respondent noted that carrying the project and its various requirements all the way through wouldn't be worth the money in their particular case. Another noted that while SGIP projects were proceeding for some of their locations, one location lacked the appropriate physical space to house the system.