

California Solar Initiative  
Progress Report  
Q1 2011  
Data Annex

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*This report was compiled by the California Solar Initiative (CSI) Program Administrators (PA or PAs) – Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and the California Center for Sustainable Energy (CCSE) – pursuant to direction from the California Public Utilities Commission (CPUC).*

**1 Program History and Structure**

The original step allocations and megawatt (MW) goals were divided among the three investor-owned utilities (IOUs) according to the proportion of their respective electricity sales. Table 1 shows the original MW goals of the program allocated to PG&E, SCE, and CCSE (for San Diego Gas and Electric Company’s service territory), separated into residential and non-residential segments. The goals and budgets were determined by each utility’s percentage of electricity sales compared to the total of all three IOUs sales. These allocated percentages are:

<b>Program Administrator</b>	<b>Allocated Percent (%)</b>
PG&E	43.7
SCE	46.0
SDG&E	10.3

As each PA receives applications for solar incentives, it tracks the total MW reflected in the applications received. Table 1 also shows the actual MW available or used at each step. The “actual” MW amount is different from the “original” MW amount because the “actual” amount takes into account program dropouts and represents the actual number of MW that will be paid at a given step. Finally, the highlighted sections of Table 1 show the current step for each PA and each customer segment, based on the CSI Program demand as of March 31, 2011.

**Table 1. Incentive MW Available by Step, by Program Administrator and Customer Class**

Step	MW in Step	PG&E (MW)				SCE (MW)				CCSE in SDG&E Territory (MW)				SoCalGas (MW)			
		Residential		Non-Residential		Residential		Non-Residential		Residential		Non-Residential		Residential		Non-Res	
		Original	Actual	Original	Actual	Original	Actual	Original	Actual	Original	Actual	Original	Actual	Original	Actual	Original	Actual
1	50	0	0	27.8	11.4	0.1	0	12.4	5.5	0	0	6.4	0.3	0	0	3.3	3.3
2	70	10.1	11.9	20.5	17.4	10.6	9.3	21.6	21.4	2.4	2.2	4.8	7.5	SoCalGas was a Program Administrator in 2006 during the transition to CSI, but has no role in CSI projects that started since 1/1/2007.			
3	100	14.4	13.0	29.3	21.7	15.2	14.7	30.8	24.7	3.4	3.3	6.9	4.3				
4	130	18.7	18.0	38.1	28.4	19.7	20.8	40.1	19.9	4.4	4.3	9.0	4.8				
5	160	23.1	23.1	46.8	52.1	24.3	26.2	49.3	77.3	5.4	5.3	11.0	15.7				
6	190	27.4	28.8	55.6	75.2	28.8	2.7	58.6	48.8	6.5	6.6	13.1	14.5				
7	215	31.0	32.6	62.9	65.2	32.6		66.3	81.4	7.3	7.7	14.8	17.6				
8	250	36.1	11.8	73.2	46.6	38.0		77.1	7.3	8.5	2.6	17.3	0.2				
9	285	41.1		83.4		43.3		87.8		9.7		19.7					
10	350	50.5		102.5		53.1		107.9		11.9		24.2					
Subtotal		252.4		512.3		265.6		539.5		59.5		120.8					
Totals		764.7				805.1				180.3							
Percent		43.7%				46.0%				10.3%							

**Source:** CPUC data request to the PAs, dated April 1, 2011, and covering data through March 31, 2011.

**Notes:** (1) Shading in the table denotes Current Step as of March 31, 2010.

(2) The "Actual" MW field in Table 1 denotes the actual amount of MW that are either actively reserved or completed in each step and will be paid out at the given incentive level. The "Actual" MW numbers are equal to the "Original" MW in step less dropouts from that step plus dropouts from previous steps. The "Actual" numbers are current as of March 31, 2011. The "Original" MW amount represents the original number of MW allocated to the step in the CPUC decision D.06-12-033, Appendix B, Table 13.

(3) In accordance with the CPUC policy decisions that provided for a transition between the Self Generation Incentive Program (SGIP) and CSI, Step 1 was fully reserved in 2006 under the SGIP, which was only open to non-residential projects. The 50 MW in Step 1 were not allocated across the utilities and were reserved on a first come, first served basis. Although almost all Step 1 MW were reserved by non-residential entities, the PAs later reallocated Step 1 dropouts into both residential and non-residential customer segments.

(4) Southern California Gas Company (SoCalGas) is an SGIP administrator and had MWs reserved in 2006 for solar projects at the Step 1 incentive level, but since SoCalGas is not a CSI PA, it has no CSI MWs reserved after January 1, 2007.

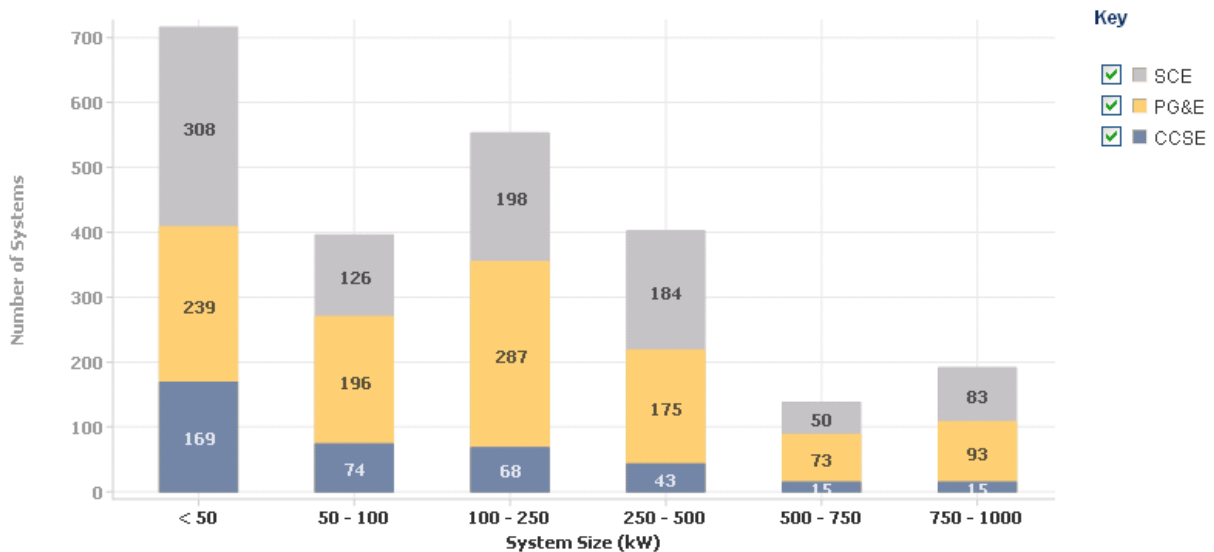
## 2 Additional CSI Program Demand Statistics

All references to capacity are reported as CEC-AC ratings (except Table 1 which is reported in CSI rating). Additional CSI Program data and information can be found at the following URL: [www.GoSolarCalifornia.ca.gov](http://www.GoSolarCalifornia.ca.gov).

### 2.1 PBI Incentive Demand

The Performance Based Incentive (PBI) path is required of larger projects in the CSI Program. Currently, the CSI Program has 2,396 PBI projects. Figure 1 shows the number of PBI systems by size and PA as of March 31, 2011.

**Figure 1. Number of PBI Systems by System Size and Program Administrator**



Source: [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov)

## 3 Administrative Statistics

The CPUC continues to track a number of administrative metrics in order to monitor potential program administration issues. In particular, the CPUC is interested in application and payment processing times, including the amount of time needed for moving projects from: application to reservation; application to project completion; and incentive claim request to payment. Additionally, the CPUC monitors the average number of days for interconnection applications to be completed.

The data in this section is responsive to a CPUC data request to the PAs dated April 1, 2011. The data presented is current through March 31, 2011, except as indicated.

### 3.1 Application and Incentive Processing Times

The PAs strive to process reservation requests in 30 days or less for both residential and non-residential customer applications. Table 2 shows the most recent application processing times, from the date the application is electronically received through PowerClerk and time-stamped, to the date that a reservation is granted (either “first reservation reserved” status or “first pending RFP” for non-residential applications or

“first confirmed reservation” status for residential applications). This time period includes both PA application processing time and time that the host customer takes to respond to requests for more information or application corrections. Table 2 compares processing times from the most recent quarter (Q1, 2011) to average processing times for the same quarter of the last calendar year (Q1, 2010).

Applications for which the PA takes more than 60 days to grant a reservation typically have a problem. Problems encountered in these applications include, but are not limited to:

- Listed equipment does not match the Expected Performance Base Buydown (EPBB) printout
- Mailing address is different from the project site address
- Missing signatures
- Missing or incomplete documentation
- Slow customer responsiveness
- Non-Residential 3-step applications have a 60-day period for RFP submittal

**Table 2. Time from Application to Reservation**

Percentage of applications whose processing time between "Application Received" and "Confirmed Reservation" is:								
	15 days or less		30 days or less		60 days or less		Greater than 60 days	
	Q1 2011	Q1 2010	Q1 2011	Q1 2010	Q1 2011	Q1 2010	Q1 2011	Q1 2010
<b>RESIDENTIAL</b>								
CCSE	23.0%	43.4%	80.9%	83.1%	98.7%	96.7%	1.3%	3.3%
PG&E	78.0%	63.6%	95.1%	94.5%	99.4%	98.9%	0.6%	1.1%
SCE	61.8%	19.7%	86.3%	52.1%	99.7%	86.5%	0.3%	13.5%
<b>NON-RESIDENTIAL</b>								
CCSE	0.0%	31.4%	0.0%	45.7%	0.0%	91.4%	0.0%	8.6%
PG&E	3.3%	19.8%	22.2%	47.4%	77.8%	84.5%	22.2%	15.5%
SCE	4.9%	13.6%	30.1%	33.3%	81.6%	63.0%	18.4%	37.0%

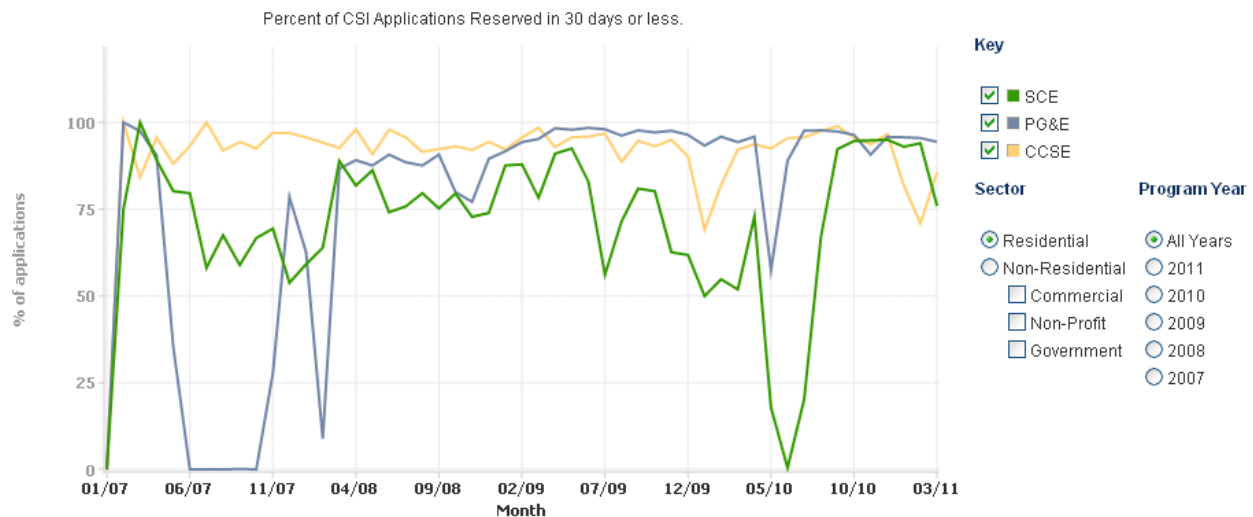
**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov).

**Notes:** “Q1” includes all applications that were reserved by the Program Administrators between January 1 and March 31 of a specific year.

The data in Figures 2 and 3 offer another look at the PAs’ progress toward achieving their administrative processing goals. These graphs show the percent of applications that were granted a reservation within 30 days, by month since the program began on January 1, 2007. The data is presented separately for each PA and is divided into residential and non-residential customer sectors. Since March 2008, the PAs consistently processed the majority of residential reservations in 30 days or less. Analyzing data for non-residential applications is particularly challenging because the

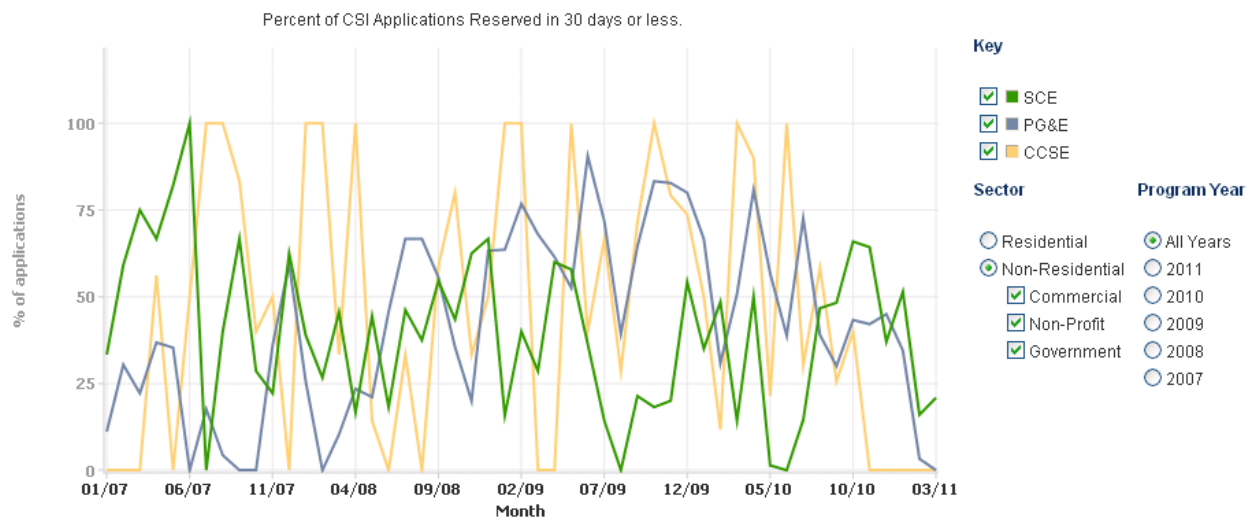
PAs have received far fewer non-residential applications compared to the number of residential applications. As a result, the percentages appear erratic.

**Figure 2. Residential Reservation Processing**



**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov). Data covers January 1, 2007-March 31, 2011

**Figure 3. Non-Residential Reservation Processing**



**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov). Data covers January 1, 2007-March 31, 2011

### 3.2 Installation time

The average installation time is determined by the applicant and not the PA. Residential applicants have 12 months and non-residential applicants have 18 months from the date of the confirmed reservation to submit an Incentive Claim Form (ICF). Installation times also vary according to residential and non-residential projects. Table 3 shows the average number of calendar days between the customer's confirmed reservation date

and the date that the ICF was received by the PA, for all applications for which the ICF was received in Q1 2011 and Q1 2010.

**Table 3. Installation time**

Average Installation Time				
	Residential Q1 2011	Residential Q1 2010	Non-Residential Q1 2011	Non-Residential Q1 2010
CCSE	118.2	93.1	341.4	223.2
PG&E	154.6	134.3	303.4	218.6
SCE	104.6	75.9	232.3	138.4

**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov).

**Notes:** "Q1" includes all projects whereby ICFs were received by the Program Administrators between January 1 and March 31 of a specific year.

### 3.3 Interconnection Time

The time for interconnection is determined by the date the utility's interconnection department deems the application to be complete (e.g., final single line, final building permit, etc.) and the date that the utility inspects the interconnection and issues the "permission to operate" letter. This time is generally under the utility's control and does not depend on additional inputs from other entities, such as cities, counties, etc. However, exogenous factors, such as customer availability or adverse weather conditions, may impact this process. Table 4 shows the average number of calendar days for the interconnection of residential and non-residential customer projects by IOU, for all projects that have been interconnected in the Q1 2010 and Q1 2011.

**Table 4. Interconnection Time**

	Residential Q1 2011	Residential Q1 2010	Non-Residential Q1 2011	Non-Residential Q1 2010
PG & E	15.5	7.2	18.6	12.0
SCE	10.7	8.4	20.4	15.6
SDG&E	3.4	3.1	8.5	3.3

**Source:** Program Administrators and SDG&E

### 3.4 Incentive Claim Processing

For CSI Program participants, incentive claim processing is an extremely important part of the project timeline. Table 5 shows how quickly incentive claims are processed for different types of projects, from the date that the ICF is electronically received and time-stamped through PowerClerk by the PA to the date that the application is changed to "pending payment" status. After the ICF is submitted, the PA selects a random number of projects for onsite field inspection, during which inspectors verify that the installed system matches the system identified in the paperwork. As scheduling and inspection



times often vary, projects identified in Table 5 are sorted into groups that were or were not inspected. Table 5 compares data from those projects that were identified as “pending payment” in Q1 2011 to those in Q1 2010. The majority of residential incentive claims are processed in 60 days or less. Applications for which the PA takes more than 90 days to process the incentive claim typically have a problem. Problems encountered with applications at the ICF stage include, but are not limited to:

- System not interconnected
- Revised EPBB not submitted to reflect changes in installed equipment
- Missing PMRS documentation
- Missing 10-year warranty for equipment and/or installation
- Incomplete or missing data about Performance Data Provider (PDP)
- Host customer unaware the need for a CSI inspection
- Failed meter or system inspection
- Missing or incomplete documentation

**Table 5. Incentive Claim Processing Times**

Percentage of applications whose processing time between "Incentive Claim Form Received" and "Pending Payment" stage is:								
	30 days or less		60 days or less		90 days or less		Greater than 90 days	
	Q1 2011	Q1 2010	Q1 2011	Q1 2010	Q1 2011	Q1 2010	Q1 2011	Q1 2010
<b>RESIDENTIAL with inspection</b>								
CCSE	3.0%	25.2%	49.3%	81.3%	82.1%	93.5%	17.9%	6.5%
PG&E	5.6%	12.9%	56.6%	74.5%	80.3%	89.0%	19.7%	11.0%
SCE	33.3%	14.8%	67.8%	48.1%	81.3%	68.5%	18.7%	31.5%
<b>RESIDENTIAL without inspection</b>								
CCSE	89.9%	83.3%	97.2%	96.8%	98.6%	98.9%	1.4%	1.1%
PG&E	78.3%	74.0%	93.1%	92.5%	97.0%	97.2%	3.0%	2.8%
SCE	74.1%	54.4%	91.2%	72.7%	95.4%	79.4%	4.6%	20.6%
<b>NON-RESIDENTIAL with inspection</b>								
CCSE	6.2%	0.0%	56.2%	50.0%	100.0%	100.0%	0.0%	0.0%
PG&E	0.0%	6.7%	10.7%	80.0%	25.0%	100.0%	75.0%	0.0%
SCE	33.3%	22.2%	66.7%	70.4%	75.0%	88.9%	25.0%	11.1%
<b>NON-RESIDENTIAL without inspection</b>								
CCSE	84.6%	83.3%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
PG&E	32.8%	40.7%	65.7%	71.2%	83.9%	83.1%	16.1%	16.9%
SCE	64.3%	58.8%	88.1%	76.5%	100.0%	94.1%	0.0%	5.9%

**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov).

**Notes:** “Q1” includes all applications that were approved for “Pending Payment” by the Program Administrators between January 1 and March 31 of a specific year.

Table 6 shows the average number of calendar days for an application in “Pending Payment” status to reach “Completed” status (EPBB payments) or “PBI in Payment” status (PBI payments). The time from “Pending Payment” to “Completed” status reflects the amount of time it takes for payment to be made to the applicant for EPBB payments and the time from “Pending Payment” to “PBI in Payment” status reflects the amount of time it takes for the first payment to be made to the applicant for PBI Payments. Timeframes vary according to residential and non-residential projects, but also depend upon whether the project is receiving an EPBB or PBI payment.

**Table 6. Payment Time**

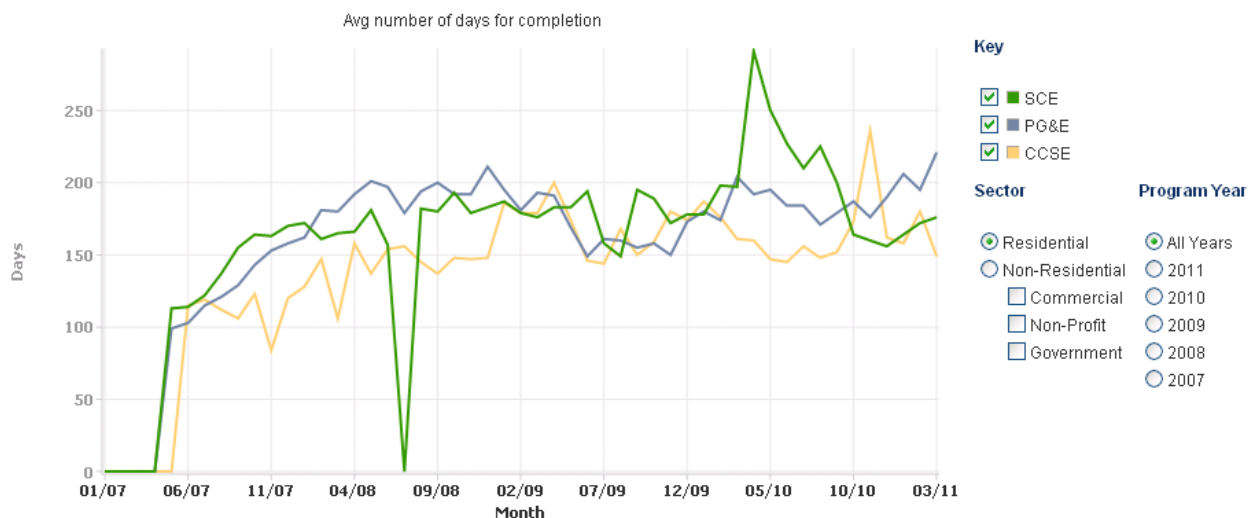
Average Payment Time				
	Residential		Non-Residential	
	Q1 2011	Q1 2010	Q1 2011	Q1 2010
CCSE				
EPBB Avg Days	19.2	29.2	14.4	20.1
EPBB Projects	633	758	16	15
PBI Avg Days	36.4	17.0	50.0	43.3
PBI Projects	9	16	1	3
PG&E				
EPBB Avg Days	24.0	12.7	19.5	16.1
EPBB Projects	2,099	2,109	90	40
PBI Avg Days	417.0	101.3	73.3	105.5
PBI Projects	1	10	29	29
SCE				
EPBB Avg Days	10.0	23.2	13.8	25.9
EPBB Projects	1,050	978	31	22
PBI Avg Days	43.5	59.4	42.0	53.0
PBI Projects	4	10	21	6

**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov).

**Notes:** “Q1” includes all ICFs applications that have reached either “PBI-In Payment” or “Completed” status between January 1 and March 31 of a specific year.

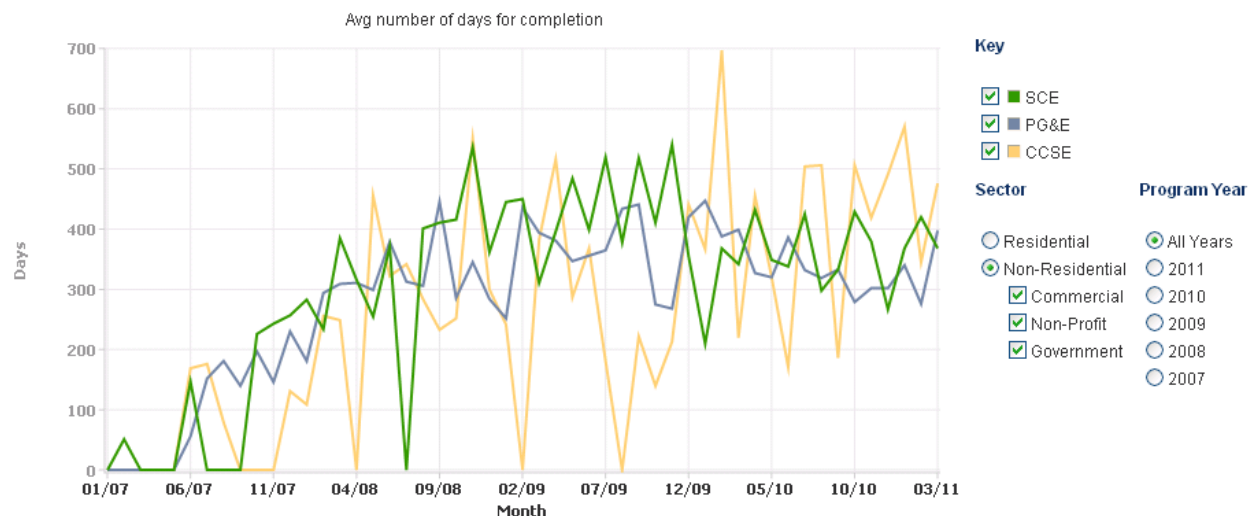
Figures 4 and 5 show the end-to-end monthly average project completion times (defined as time between "First Reservation Request Review Date" to either "First Completed Date" or "First PBI - In Payment Date") in calendar days for all projects completed through March 31, 2011. These times reflect both the PA processing times and host customer responsiveness to inquiries, requests for additional data and inspection scheduling. The data in the figures below are separated by residential and non-residential customer projects completed in each given month, according to PA.

**Figure 4. Residential project completion times**



**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov). Data covers January 1, 2007- March 31, 2011.

**Figure 5. Non-Residential project completion times**



**Source:** Based on public export from CA Solar Statistics at [www.californiasolarstatistics.ca.gov](http://www.californiasolarstatistics.ca.gov). Data covers January 1, 2007- March 31, 2011.

## 4 CSI Program Trainings

Each of the PAs regularly offer training for both customers and solar installers on the CSI Program and the benefits and technical details of solar generally. In Q1 2011, the CSI PAs held more than 40 trainings and trained more than 1500 attendees.

**Table 7. Number of Trainings by Program Administrator**

	PGE		SCE		CCSE	
	Q1 2011	Q1 2010	Q1 2011	Q1 2010	Q1 2011	Q1 2010
Number of attendees at trainings	789	970	469	477	313	359
Number of CSI Program Trainings held	19	41	12	11	15	10

**Source:** CSI Program Administrator’s Marketing and Outreach departments

**Notes:** “Q1” refers to the period January 1 through March 31 of a given year.

#### **4.1 PG&E Training Offerings**

PG&E continued its very popular trainings in all aspects of solar, with strong attendance in the first quarter of 2011. With PG&E’s “Solar Noon” webinar series every Tuesday and Friday from 12:00 PM to 1:00 PM, PG&E presents an even wider variety of timely information. The attendance is growing on these as well. PG&E also hosted the CSI Program Forum on January 26 in San Francisco at PG&E’s Pacific Energy Center helping inform and educate the solar community on the various solar programs that PG&E manages.

##### **4.1.1 CSI-Funded Classes**

CSI Program Workshops are offered for PV (quarterly) and Thermal (monthly) in both San Francisco and Stockton as well as outlying areas as demand dictates. These classes are intended for contractors and cover all aspects of the CSI programs including incentives, applications, and inspections. The PV version is also webcast.

For homeowners PG&E, offers the very popular “Solar Saturday” classes in both PV and Thermal. These classes explain in simple and clear terms the basics of the technologies, how to assess feasibility and finances, and how to proceed in obtaining bids.

##### **4.1.2 CSI-Funded Webinars**

PG&E’s “Solar Noon” series consists of twice-a-week live webinars at noon on Tuesdays and Fridays. These cover a variety of subjects including solar basics, CSI Program basics (MASH, SASH, SGIP, NSHP, etc.), energy efficiency, and maintenance, as well as timely updates on changes in the various programs and handbooks.

#### **4.1.3 Energy Center-Funded Classes**

The Pacific Energy Center in San Francisco and the Energy Training Center in Stockton have full slate of solar-related classes for both contractors and the general public, in both PV and Thermal. These include beginning, intermediate and advanced, along with classes in solar inspections geared for building officials.

#### **4.1.4 Energy Center-Funded On-demand Classes**

PG&E is also instigating the development of on-demand (archived) classes in a variety of basic solar topics. These are more than just recorded webinars but are fully indexed, self-paced trainings along with quizzes, with the capability of tracking students' progress. The first modules on Solar Water Heating Basics can be found here: [www.pge.com/ondemandenergyclasses](http://www.pge.com/ondemandenergyclasses).

#### **4.1.5 Train-the-Trainer and Other Outreach**

PG&E continues its ongoing collaboration with state and community colleges to conduct teacher trainings and share curriculum, being prominent in the Energy Faculty Forum and other similar groups. PG&E is a prominent member of many solar advocacy groups such as CALSEIA and Solartech, often providing speakers as well as financial support at their many events.

#### **4.2 SCE Training Offerings**

SCE continues to offer classes geared toward contractors as well as non-residential and residential customers. During the first quarter of 2011, SCE reached 122 contractors through three "CSI Contractor Solar Classes," all of which were also offered via Webinar; 48 commercial customers through two "CSI Commercial Solar Workshops"; 158 residential customers through three Homeowner Solar Classes (HSC); 110 residential customers through two Solar Fairs; and two CSI Thermal training classes with a total of 31 attendees.

The subject matter SCE presents in its classes is updated as program changes dictate. SCE also makes adjustments based on feedback received from attendees.

##### **4.2.1 Intro to CSI Classes**

The "Contractor Solar Class" is a course designed for solar contractors, self-installers, managers and PV owners, and features new and updated information on the CSI Program. During the course discussion, information is given to attendees on the following topics: (i) how to participate in the program; (ii) system basics, including the different types of solar systems, metering, monitoring, site and equipment requirements; and (iii) PowerClerk. In addition, SCE enhanced the Interconnection information provided during this course. Contractors can register online at [www.sce.com/ctac](http://www.sce.com/ctac).

##### **4.2.2 Homeowner Solar Classes**

SCE's HSC classes are 90-minute, easy-to-understand sessions that provide the basics of how residential customers can "go solar" without the "techy" jargon so often used and confusing to potential solar customers. For more information, please visit [www.sce.com/solartraining](http://www.sce.com/solartraining)

#### **4.2.3 Commercial Solar Workshop**

To help boost commercial CSI applications in 2010, SCE added a new Commercial Solar Workshop to its training curriculum to help explain the CSI programs to SCE's nonresidential customers. Customers can register online at [www.sce.com/ctac](http://www.sce.com/ctac).

#### **4.2.4 Solar Fairs**

SCE's Solar Fairs serve a key role to our residential education and outreach efforts as they provide an excellent opportunity for residential customers to learn about the CSI program offerings and meet with solar contractors on the spot in a no-sale, low-pressure situation to take the next step toward realizing their home's potential for a solar generating system. For more information, please visit [www.sce.com/solartraining](http://www.sce.com/solartraining).

#### **4.2.5 CSI Thermal Contractor & Self-Installer Training**

SCE's Thermal Workshop is a required introductory course for contractors, self-installers and applicants interested in participating in the CSI Thermal program. The class is designed to provide a thorough understanding of the program, its requirements and the application process. An overview of solar water heating technologies is also provided.

### **4.3 CCSE Training Offerings**

In Q1 of 2011, CCSE continued to offer a wide variety of workshops for homeowners, contractors, solar installers, and the general public.

CCSE continued to strengthen its outreach to solar consumers in Q1 of 2011. In addition to the workshops offered previously, CCSE added new courses such as the second part of the Solar for Homeowners series focusing on consumer awareness in the market, and streamlined existing series such as the Solar Savers which is now the Reduce then Produce Series which educates homeowners about maximizing savings through combining energy efficiency, building science and solar PV systems.

CCSE also continued its emphasis on solar contractor outreach to improve application processing efficiency, educate contractors on the CSI inspection protocol, and ensure ethical sales and marketing behaviors in the rapidly growing solar market. CCSE offered many well attended workshops for solar contractors in Q1 of 2011 that focused on these topics (see detailed description below).

CCSE continued the new workshop series focusing on the latest technological developments in the solar market called "Solar Technology Series" with two very successful events in Q1 showcasing new technology in solar electrical/ thermal panels

and software being developed through the CSI Program to assist contractors in assessing production potential in solar markets.

CCSE has partnered with various stakeholders and solar experts to run the workshops presented in Q1. They include PVT Solar, Critigen, Sunflower Tax, Integra Insurance Services and Sun Marketing Solar.

CCSE's in-house workshops and trainings in Q1 of 2011 included:

#### ***4.3.1 Solar Technology Series***

CCSE continued this bi-monthly workshop series which focuses on existing and emerging solar technologies. The first workshop in this series of Q1 was held on January 18<sup>th</sup>, 2011 and showcased a PV panel that produced both electrical and thermal energy. This panel integrates both solar technologies to create a cost effective hybrid for consumers. The next workshop during Q1 was held on March 1<sup>st</sup> 2011 and focused on improving the functionality of the San Diego Solar Map. The technology will be used by solar contractors to see individual roofs' exposure to the sun, allowing the contractors to focus their marketing efforts and estimate system size. This workshop was held by representatives from PVT Solar and Critigen respectively.

#### ***4.3.2 Reduce then Produce***

CCSE held a monthly workshop that presented case studies of residential buildings to examine the synergy of energy efficiency measures and solar PV, specifically focusing on a whole building approach that relies on basic building science. This workshop used data from the Solar Savers Series to create a more comprehensive study on efficiency and solar. The workshop focused on the possibilities with energy efficiency, where solar PV fits in, and how to finance the project. The workshop was held on January 26<sup>th</sup>, 2011, February 17<sup>th</sup> 2011 and March 16<sup>th</sup> 2011.

#### ***4.3.3 How to Market Your Solar Business***

CCSE held a workshop for solar installers, developers, financiers and other solar companies that outlined ethical marketing and sales practices in the solar industry. The workshop was led by Dr. Mary Beth McCabe from Sun Marketing Solar and was held on March 29<sup>th</sup>, 2011.

#### ***4.3.4 Solar for Homeowners 1: "Getting Started"***

CCSE conducts a monthly Solar for Homeowners Workshop that educates homeowners in the San Diego area about how to read their annual electricity usage and properly size a PV system. The workshop also provides an overview of the CSI Program, and explains the financial and environmental benefits of going solar. These workshops were held on January 27<sup>th</sup>, 2011, February 24<sup>th</sup>, 2011 and March 31<sup>st</sup>, 2011.

#### **4.3.5 Solar for Homeowners 2: “Be a Smart Solar Customer”**

CCSE expanded the Solar for Homeowners series to include a second workshop that showed homeowners how to research solar companies and what to expect throughout the purchasing process. The workshop educated consumers on what they need to know to be confident and knowledgeable when talking with potential contractors. These workshops were held on January 13<sup>th</sup>, 2011, February 10<sup>th</sup>, 2011 and March 10<sup>th</sup>, 2011.

#### **4.3.6 California Solar Initiative (CSI) Application Process**

CCSE holds a quarterly workshop focused on the CSI application process and any recent changes to the program. This training session is designed for contractors but is open to the public. This workshop was held on February 3<sup>rd</sup>, 2011.

#### **4.3.7 California Solar Initiative (CSI) Inspection Protocol**

CCSE holds a workshop that discusses the CSI Program’s shade measurement requirements and inspection protocol. CCSE strongly encourages all installers to attend. This workshop was held on January 12<sup>th</sup>, 2011 and March 7<sup>th</sup>, 2011.

#### **4.3.8 Insurance for Solar Integrators**

CCSE held a workshop that discussed how General Liability, Professional Liability, Workers Compensation and Bonding can help protect a Solar Integrator when designing, installing and maintaining residential and commercial systems. Ryan Fenchel of Integra Insurance Services held this workshop on January 20<sup>th</sup>, 2011.

#### **4.3.9 Soup to Nuts: Green Tax Benefits 2011**

CCSE held a workshop that discussed the green tax benefits that often play a significant role in the decision-making process for the purchase of renewable energy equipment and making energy-efficiency improvements. Walter Wang of Sunflower Tax held this workshop on March 15<sup>th</sup>, 2011.

For more information on CCSE’s workshops, [www.energycenter.org/calendar](http://www.energycenter.org/calendar)

## **5 Net Energy Metering**

The Public Utilities Code (PUC) Section 2827 establishes net energy metering (NEM) for solar and small wind customer-generators. NEM information for each IOU’s service territory is included in this section of the report.

- a. How many total NEM customer generators, pursuant to PUC Section 2827, are interconnected in your service territory as of March 31<sup>st</sup>, 2011?



Service Territory	# of Customers
<b>PG&amp;E</b>	50,353
<b>SCE</b>	20,105
<b>SDG&amp;E</b>	12,522

- b. How many NEM customer generators from subsection a. are **solar** customer generators?

Service Territory	# of Customers
<b>PG&amp;E</b>	50,231
<b>SCE</b>	19,817
<b>SDG&amp;E</b>	12,495

- c. What is the “total rated generating capacity” (in MW) of all NEM customer-generators pursuant to PUC Section 2827, as of March 31<sup>st</sup>, 2011?

Service Territory	MW
<b>PG&amp;E</b>	440.6
<b>SCE</b>	224.9
<b>SDG&amp;E</b>	96.1

- d. What is the “total rated generating capacity” (in MW) of **solar** NEM customer-generators only pursuant to PUC Section 2827, as of March 31<sup>st</sup>, 2011?

Service Territory	MW
<b>PG&amp;E</b>	439.1
<b>SCE</b>	219.9
<b>SDG&amp;E</b>	96.0

e. What percentage of your “aggregate customer peak demand,” pursuant to PUC Section 2827(c)(1), is accounted for by all NEM customer-generators, as of March 31<sup>st</sup>, 2011?

Service Territory	Percent
<b>PG&amp;E</b>	2.10%
<b>SCE</b>	0.97%
<b>SDG&amp;E</b>	2.05%