California Solar Initiative

California Public Utilities Commission
Staff Progress Report
April 2009

The California Public Utilities Commission (CPUC) Energy Division staff prepared this report to describe recent progress on the California Solar Initiative, the country's largest solar incentive program.

In January 2007, the State of California launched the Go Solar California campaign, an unprecedented $3.3 billion ratepayer-funded effort that aims to install 3,000 MW of new grid-connected solar over the next decade and to transform the market for solar energy by reducing the cost of solar. The Go Solar California campaign is the product of Governor Schwarzenegger's "Million Solar Roofs" vision for the State of California. The Governor signed into law Senate Bill 1 in 2006 to authorize the state solar program.

As part of the effort to increase the use of solar statewide, the CPUC launched the California Solar Initiative (CSI), which offers solar incentives to energy users (except new homes) in investor-owned utility territories in California. The CSI Program has a 10 year budget of $2.167 billion, and a goal to install 1,940 MW of new solar.

This Staff Progress report focuses exclusively on CSI Program developments and consumer demand, and does not report on the other parts of the state's solar offerings, such as the California Energy Commission's New Solar Homes Partnership (NSHP), which funds solar installations on new home construction, or the dozens of small solar programs administered by the state's 40+ municipal utilities (or publicly owned utilities, POUs). See Section 2 for additional background information.

Cover Photo Credits:
"19th Century House Meets 21st Century Technology"
3.08 kW system owned by Peter Schiller of Berkeley, CA (photo)
Installed November 7, 2008.

First Quarter Program Highlights

Participants in the California Solar Initiative have installed 211 megawatts (MW) of distributed solar photovoltaics in California since the program's start in 2007.

Customers within California's investor-owned utility (IOU) territories have installed 211 MW of new distributed, grid-tied solar photovoltaic (PV) projects at over 15,000 sites since 2007. This Staff Report estimates the CSI Program has another 5,040 applications still pending, which, if installed, will result in an additional 145 MW of new PV. Combining projects installed under the CSI Program with installations completed under prior solar programs brings the total installed PV capacity to over 500 MW in California.[1]

Table 1. All CSI Projects, January 1, 2007 through April 1, 2009

All CSI Projects	
Installed Projects	
Applications	15,245
MW	211 MW
Incentive $million	$514
Pending Projects	
Applications	5,040
MW	145 MW
Incentive $million	$320
Total CSI Activity	
Applications	**20,285**
MW	**356 MW**
Incentive $million	**$835**

Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

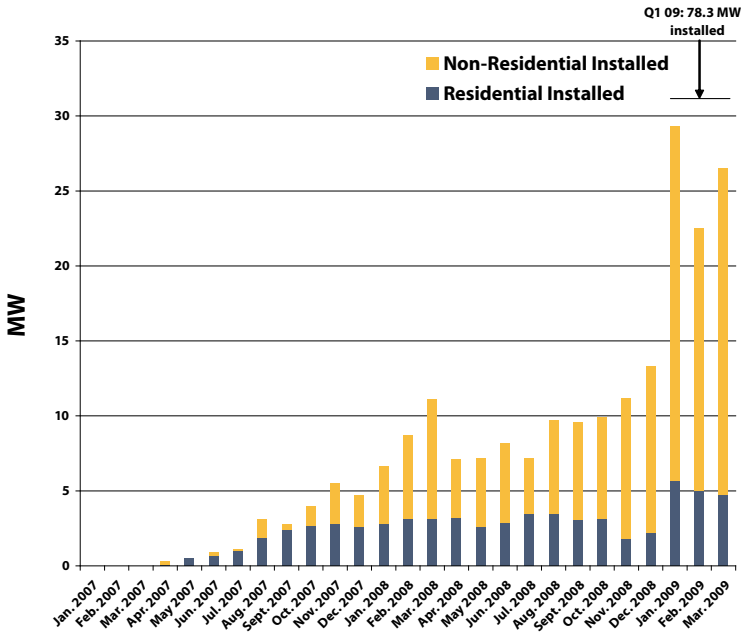
The CSI Program supports the installation of new PV projects with incentives. The installations to date will claim an estimated $514 million. The installations of pending projects will be paid an estimated $320 million.

Participants in the California Solar Initiative installed a record number of MW in the first quarter of 2009 — over 78 MW of PV at over 3,600 sites. As shown in the monthly installed data in Figure 1 and Figure 2, the CSI Program participants installed PV at an unprecedented rate in the first quarter of 2009. Figure 1 shows that 78 MW of projects were installed in the first quarter, and Figure 2 reports on the same activity in terms of numbers of applications, showing 3,606 applications installed in the first quarter.

The high volume of installation activity in the first quarter of 2009 can be attributed, at least in part, to changes in federal tax law, effective January 1, 2009, which allow residential consumers to be refunded a larger percentage of PV system costs as an investment tax credit. Anticipation of the tax law change sent new applications up in the fourth quarter of 2008 and those systems were installed in early 2009. In addition, a number of non-residential projects benefited from tax law changes and needed to be installed prior to the completion deadlines that are part of the CSI Program application process.

[1] Prior Solar programs in California include the CPUC's Self Generation Incentive Program and the California Energy Commission's Emerging Renewables Program (ERP), both now closed to solar projects.

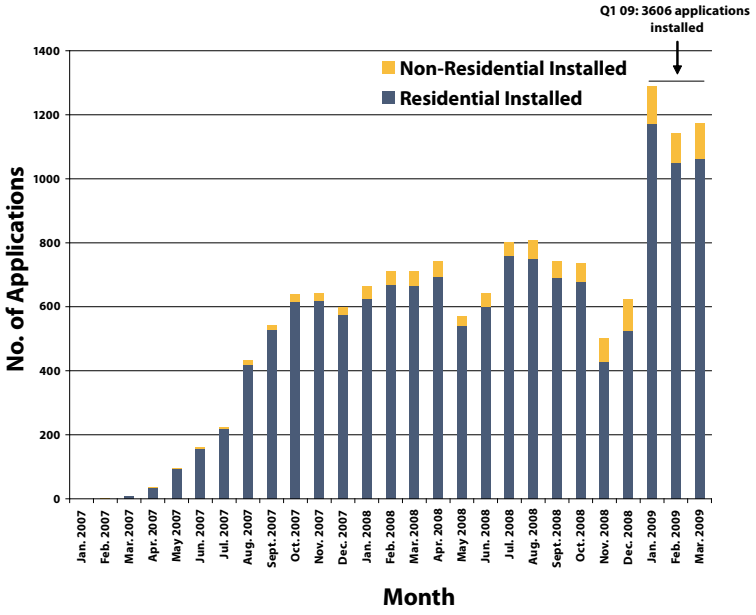
Figure 1. Total Capacity (MW) of Installed Applications per Month by Customer Sector, January 2007-March 2009



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

Note: Figure 1 shows "Installed" defined as a project that has entered the "Online Incentive Claim Form Submitted status of the online CSI application process.

Figure 2. Total Number of Installed Applications per Month by Customer Sector, January 2007-March 2009



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

Note: See note for Figure 1.

Measured in terms of MW, new applications in the California Solar Initiative spiked in February 2009, leading to a total of more than 52 MW of new solar PV applications for the first quarter of 2009. In terms of number of applications, however, new applicant demand dropped off in the first quarter of 2009 relative to a peak in the fourth quarter of 2008. The CSI Program broke a new record for "MWs in new applications" received in a single month in February 2009. Largely driven by anticipation of PG&E's incentive level change for non-residential PV projects on February 27, 2009, a record 33 MW worth of applications were received in February 2009, as shown in Figure 3. In terms of number of applications, the CSI Program received 3,452 worth of new applications in the first quarter, as shown in Figure 4. First quarter 2009 volume was down from the peak volume experienced in the fourth quarter of 2008. Last year's bump in applications in the fourth quarter was driven both by a bump in demand due to the federal tax law changes and expectation of PG&E's residential incentive level reduction which ocurred in December 2008. Although first quarter demand declined in terms of volume of applications, the total capacity received in new applications (52 MW) was higher than any other single quarter in the CSI program.

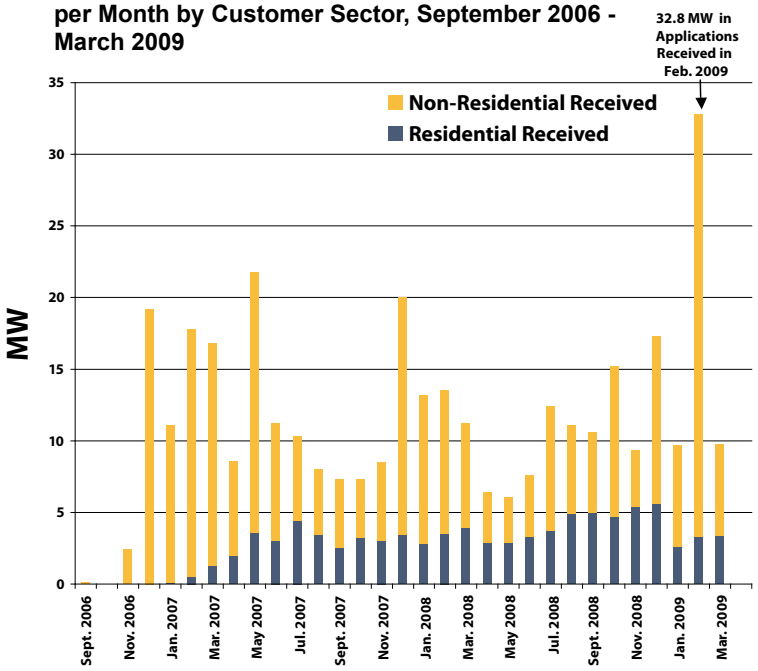
Program Handbook Changes. There were three sets of Program Handbook changes proposed in the first quarter. All of these changes are still under review by the staff at the CPUC. The changes include: changes to implement the Single-family Affordable Solar Housing (SASH) program, changes to implement Track 2 of the Multi-family Affordable Solar Housing (MASH) program, and changes to conform with the California Energy Commission's issuance in December 2008 of approved Guidelines for California's Solar Electric Incentive Program's (SB 1 Guidelines). Once approved, these changes will be incorporated into the CSI Program Handbook, and the CPUC staff will release the new CSI Program Handbook.

Program Evaluation. On July 29, 2008, an Assigned Commissioner Ruling established an Evaluation Plan for the CSI Program. Accomplishments this quarter on CSI Program Evaluation include:

- ***Program Evaluation Contractors Selected.*** The CPUC selected four contractors to undertake the following projects: CSI Impact Evaluation, CSI Process Evaluation, CSI Program Evaluation Project Coordination, and CSI Cost-Effectiveness Evaluation. The CSI program staff and evaluation contractors will be working on a number of evaluation reports throughout 2009 and 2010.

- ***CSI Program Weekly Data Reporting Enhanced.*** In January 2009, the CSI Program enhanced the weekly public reporting of CSI program data at www.CaliforniaSolarStatistics.ca.gov. New charts and features were added to the website, including a powerful new search function that facilitates customized reports of CSI data.
- ***Solar Hot Water Pilot Program Evaluation Reports Released.*** In January 2009, the California Center for Sustainable Energy (in consultation with CPUC staff) released the Solar Hot Water Pilot Program (SHWPP) evaluation contractor's Interim Evaluation Report, and in April 2009, released the Report's appendix related to program Cost-Effectiveness. These reports are now under review by staff as part of consideration of a statewide solar hwot water program.

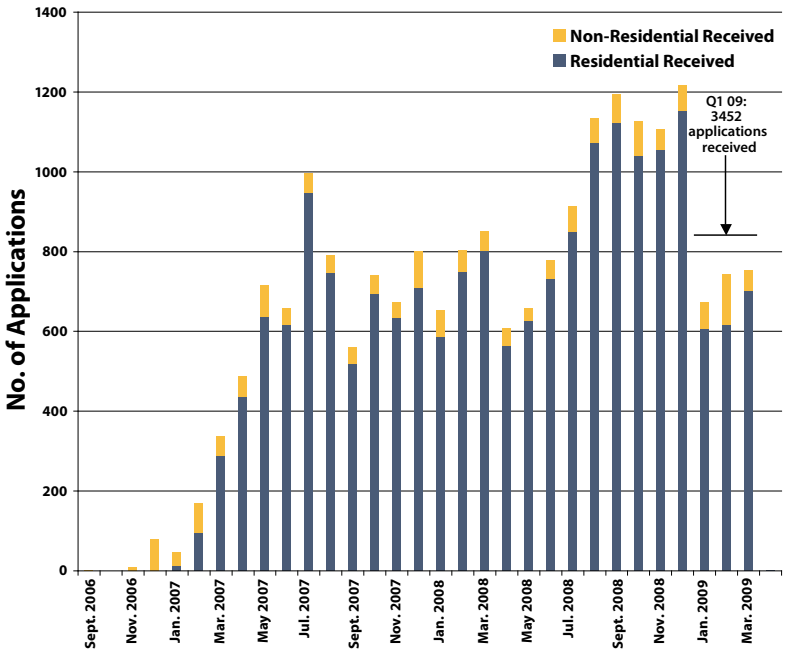
Figure 3. Total Capacity (MW) of New Applications Received per Month by Customer Sector, September 2006 - March 2009



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009. Figure 3 shows "Applications" defined as a project entering the "Reservation Request Review" phase of the CSI application process.

Note: This chart starts prior to the CSI launch date of Jan. 1, 2007, because a small number of CSI non-residential projects (referred to as "SGIP Transition Projects") were received prior to Jan. 1, 2007, but received reservations after that date.

Figure 4. Total Number of New Applications per Month by Customer Sector, September 2006-March 2009



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009. Figure 4 shows "Applications" defined as a project entering the "Reservation Request Review" phase of the CSI application process.

Note: See note for Figure 3.

The CSI Program made progress in several key areas in the first quarter, including launch of the Multifamily Affordable Solar Housing (MASH) program, submittal of CSI Program Handbook changes, and progress on CSI Program Evaluation.

MASH launched. In February 2009, the Program Administrators started accepting CSI Program applications for the MASH program that provides solar incentives to multifamily affordable housing sites. The MASH program was adopted by CPUC decision in October 2008, and the rollout of the program met all deadlines. Program Administrators report receiving a number of applications for the program. Still pending CPUC approval are two aspects of the MASH program, "Track 2" incentives[2] and Virtual Net Metering tariffs, which were both filed as Advice Letters in accordance with the decision.

[2] The MASH Program has two different incentive paths: "Track 1" provides fixed, up front, capacity based incentives for solar systems, and "Track 2" provides higher incentives for applicants when the solar projects provide "quantifiable direct tenant benefits", and is only available through a competitive request for proposal (RFP) process. Track 1 is analogous to the Expected Performance Based Buy-down part of the general market program; however, the incentives are higher and vary whether solar systems offset common load (at $3.30/watt) or tenant load at ($4.00/watt).

Introduction to the California Solar Initiative (CSI)

Background

The California Solar Initiative (CSI) is overseen by the California Public Utilities Commission (CPUC) and provides incentives for solar system installations to customers of the state's three investor-owned utilities (IOUs): Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E). The CSI Program provides upfront incentives for solar systems installed on existing residential homes, as well as existing and new commercial, industrial, government, non-profit, and agricultural properties within the service territories of the IOUs.

The CSI Program expanded state support for solar technology and is the product of Governor Schwarzenegger's "Million Solar Roofs" vision for the State of California. The CSI Program was authorized by the CPUC through a number of regulatory decisions throughout 2006. In addition, the legislature expressly authorized the CPUC to create the California Solar Initiative in 2006 in Senate Bill 1 (Murray). When it launched in January 2007, the CSI Program built upon nearly 10 years of state support for solar, including other incentive programs such as the Emerging Renewables Program (ERP) and the Self-Generation Incentive Program (SGIP). Both programs still exist to provide incentives for other technologies but have been closed to new solar projects as of the end of 2006.

CSI Program Components

The CSI Program has a budget of $2.167 billion over 10 years, and the goal is to reach 1,940 MW of installed solar capacity by the end of 2016. The goal includes 1,750 MW of capacity from the general market program, as well as 190 MW of capacity from the low income programs. The general market program is the main incentive program component of the CSI, and is administered through three Program Administrators: PG&E, SCE, and California Center for Sustainable Energy (CCSE) in SDG&E territory.

In addition to the general market program, the CSI Program has four other program components, each with their own program administrator and 10 year budgets:

- A research and development (RD&D) program, providing grants to solar technologies that can advance the overall goals of the CSI Program; the RD&D program is administered through the RD&D Program Manager, Itron, and has a budget of $50 million.
- The Single-family Solar Affordable Solar Housing (SASH) program, providing solar incentives to single family low income housing; the SASH program is administered through the SASH Program Manager, GRID Alternatives, and has a budget of $108 million.
- The Multifamily Affordable Solar Housing (MASH) program, providing solar incentives to multifamily low income housing; the MASH program is administered through the same Program Administrators as the general market program: PG&E, SCE, and CCSE, and it has a budget of $108 million.
- The Solar Hot Water Pilot Program (SHWPP), providing solar hot water incentives to residences and businesses in San Diego only; the SWHPP is administered through CCSE.

In addition to the CPUC's CSI Program, Senate Bill 1 envisioned that the State of California would also have other programs to support onsite solar projects, including the California Energy Commission's New Solar Homes Partnership (NSHP), and a variety of solar programs offered through publicly owned utilities (POU). The statewide effort includes the CSI – as well as the NSHP and the POU programs – and it is known collectively as Go Solar California. The statewide goal of the Go Solar California campaign is 3,000 MW and there is a statewide budget of $3.3 billion. The CSI Program is a subset of the wider solar effort in California.

Solar Incentive Level Design

The CSI Program is designed to be responsive to economies of scale in the California solar market – as the solar market grows, it is expected solar system costs will drop and incentives offered through the program decline. The CPUC divided the overall megawatt goal for the incentive program into 10 programmatic incentive level steps, and assigned a target amount of capacity in each step to receive an incentive based on dollars per-watt or cents per-kilowatt-hour. The MW targets in each incentive step level are assigned to particular customer classes (residential, commercial, and government / non-profit) and allocated across the three IOU service territories, in proportion with each group's contribution to overall state electricity sales.

Once all the MW targets in a particular incentive step level are reserved via CSI application, which can occur at different times for each customer class in each utility service territory, the incentive level offered by the CSI Program automatically reduces to the next lower incentive step level. This creates a demand-driven incentive program that adjusts solar incentive levels based on local solar market conditions.

Figure 5 shows how CSI incentives decline as the program progresses through the 10 steps and more MWs are installed. Figure 6, on page 8, shows how CSI incentive levels have declined by customer class and utility, from January 2007 to the present. PG&E moved to residential incentive level Step 5 in December 2008, and to non-residential incentive level Step 6 in late February 2009.

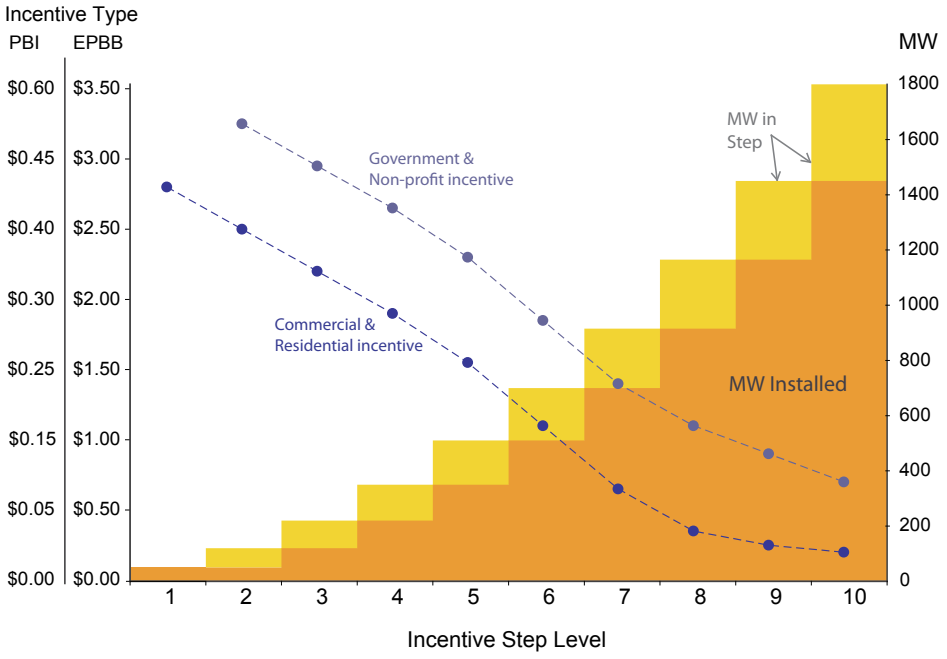
Incentive Types

The CSI Program pays solar consumers their incentive either all at once for smaller systems or over the course of five years for larger systems. Smaller systems receive an upfront, capacity-based incentive that is adjusted based on expected system performance, called the Expected Performance-Based Buy-down (EPBB). Larger systems receive incentives based on their actual performance over the course of five years, called the Performance Based Incentive (PBI). These two incentive tracks are explained in more detail in Table 2, below.

Table 2. CSI Incentive Types

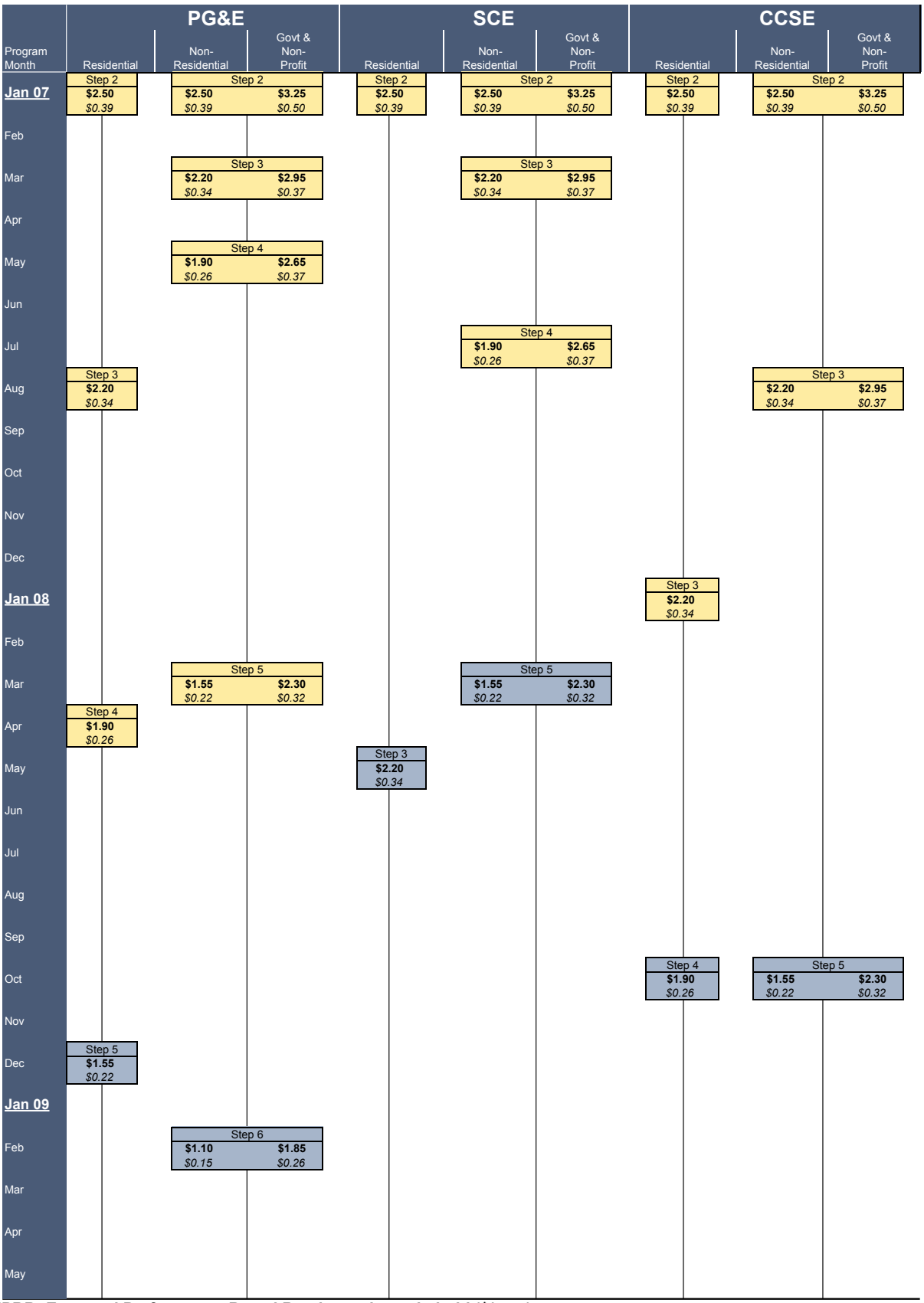
Expected Performance-Based Buydown (EPBB) **(Paid in dollars / Watt)**
Intended for residential and small business customers
Systems less than 50 kW
Incentive paid per watt based on your system's expected performance (factors include CEC-AC rating, location, orientation and shading)
One-time, lump sum upfront payment
Performance-Based Incentive (PBI) **(Paid in cents / kWh)**
Ideal for large commercial, government and non-profit customers
Mandatory for all systems 50 kW and greater Systems less than 50 kW can opt-in to PBI
Incentive paid based on the actual energy produced by your solar system, measured in kilowatt-hours
60 monthly payments over five years

Figure 5. Overview of the CSI Step Level Changes



PBI: Performance Based Incentive, paid over 5 years, in $ / kWh
EPBB: Expected Performance Based Buydown, paid upfront, in $ / W

Figure 6. California Solar Initiative incentive levels, current (blue) and historic (yellow), January 1, 2007 to April 2008



EPBB: Expected Performance-Based Buydown shown in bold ($/watt)
PBI: Performance-Based Incentive shown in italics ($/kWh)
Blue shading denotes current incentive level

Photo Credits: The 42 kW "Sun Dragon" owned by the City of Sebastopol, CA, installed December 22, 2008 by Sebastopol Heat and Cool, Inc. Photo by Alyssa Kyes of Solar Sonoma County.

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CSI Program Data

Data Notes. This Staff Progress Report considers CSI Program data through April 1, 2009, but additional program demand data is refreshed weekly and is available online at www.CaliforniaSolarStatistics.ca.gov.

Data Annex. Additional CSI Program data, including administrative processing information can be found in the Data Annex to this report, available online at www.GoSolarCalifornia.ca.gov.

CSI Data is not Statewide Data. The CSI Program is the largest solar program in the state; however, CSI data does not reflect statewide totals. The CSI data needs to be combined with other program data, namely SGIP, ERP, and NSHP data, to determine the total amount of solar installed in investor-owned utility territories. Further, all the investor-owned utility territory program data needs to be combined with the publicly-owned utility data to determine the statewide solar data.

Units of Data. All references to capacity are reported in "CEC-AC" units, which is the industry standard for net electricity output in megawatts (MW) based on the California Energy Commission's Alternating Current (CEC-AC) rating of solar panels.

Data Filters. This report covers all CSI projects contained in CSI's online program database known as Powerclerk. The CSI data is filtered to remove applications with data entry errors in accordance with the filters used to display data at www.CaliforniaSolarStatistics.gov.

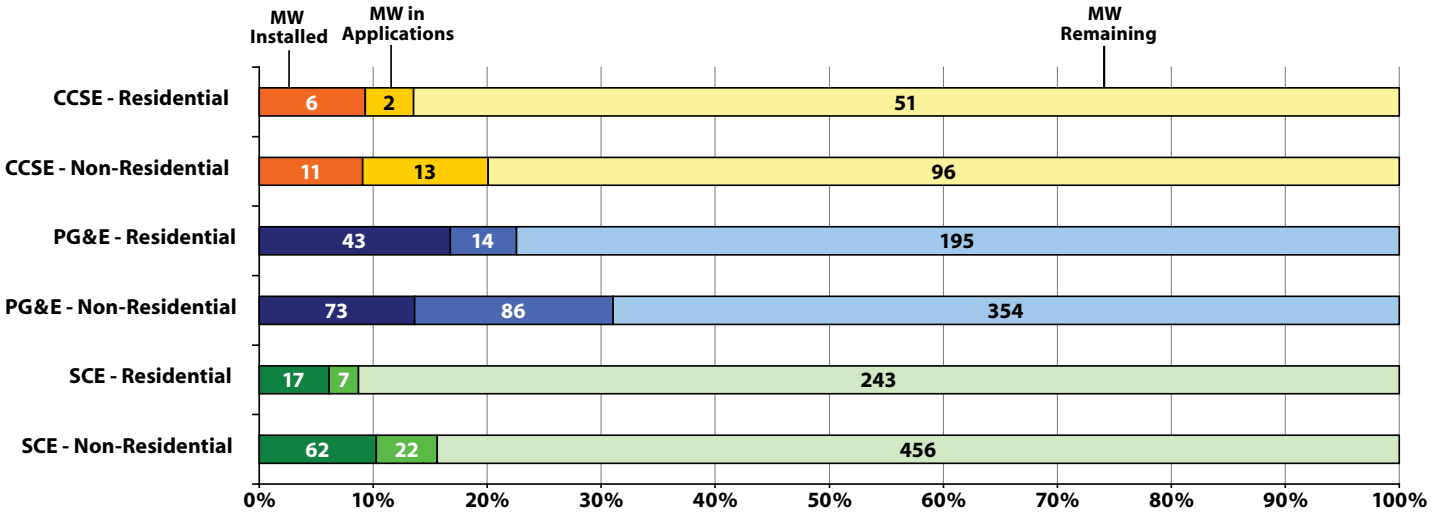
The CSI Program's general market program is making progress towards meeting the program's goal of 1,750 MW installed by 2017.

It is important to note that the CPUC did not establish annual targets for the program when it was adopted and the CPUC did not expect that the program would install an equal number of projects each year. Rather the expectation is that the market will increase the annual rate of installations each year. This Staff Report shows that the CSI Program has pending or installed applications for roughly 356 MW of grid-tied, distributed solar PV projects. The 356 MW of projects includes both installed and pending projects and represents 20 percent of the general market program's goal of 1,750 MW. The CSI Program appears to be roughly on track to meet its goal by 2017.

Each utility territory is progressing towards the CSI goals at different rates. Figure 7 displays applications in each utility territory as a percentage of the overall program goals. Figure 7 is normalized across the three utility territories, so that it is easy to compare relative attainment towards the goals. The per-utility goals vary because the size of service territories of the three utilities varies.

- Customers in SDG&E territory who receive rebates via the CCSE have installed 6 MW of residential projects and 11 MW of non-residential projects; they have an additional 3 MW of residential and 13 MW of non-residential projects pending installation.
- Customers in PG&E territory have installed 42 MW of residential and 70 MW of non-residential projects; they have an additional 15 MW of residential and 90 MW of non-residential projects pending installation.
- Customers in SCE territory have installed 16 MW of residential and 56 MW of non-residential projects; they have an additional 7 MW of residential and 29 MW of non-residential projects pending installation.

Figure 7. CSI Progress Towards Program Goal of 1,750 MW



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

The CSI Program has over 20,000 active solar applications for 356 MW of new solar since the start of the program in 2007.

Figures 8 and 9 on page 12 show the cumulative installed and pending CSI Program applications, broken out by Program Administrator and sector, in both MWs and volume of applications.

PG&E. PG&E's territory demonstrates the highest demand for solar, both in terms of volume (the number of residential applications) and capacity (the cumulative size of the projects). The capacity of PG&E's non-residential installed applications rose from 45 MW at the end of 2008, to 73 MW by April 1, 2009. Customers in PG&E's territory have now installed 9,465 residential CSI projects, which represent 43 MW of new solar.

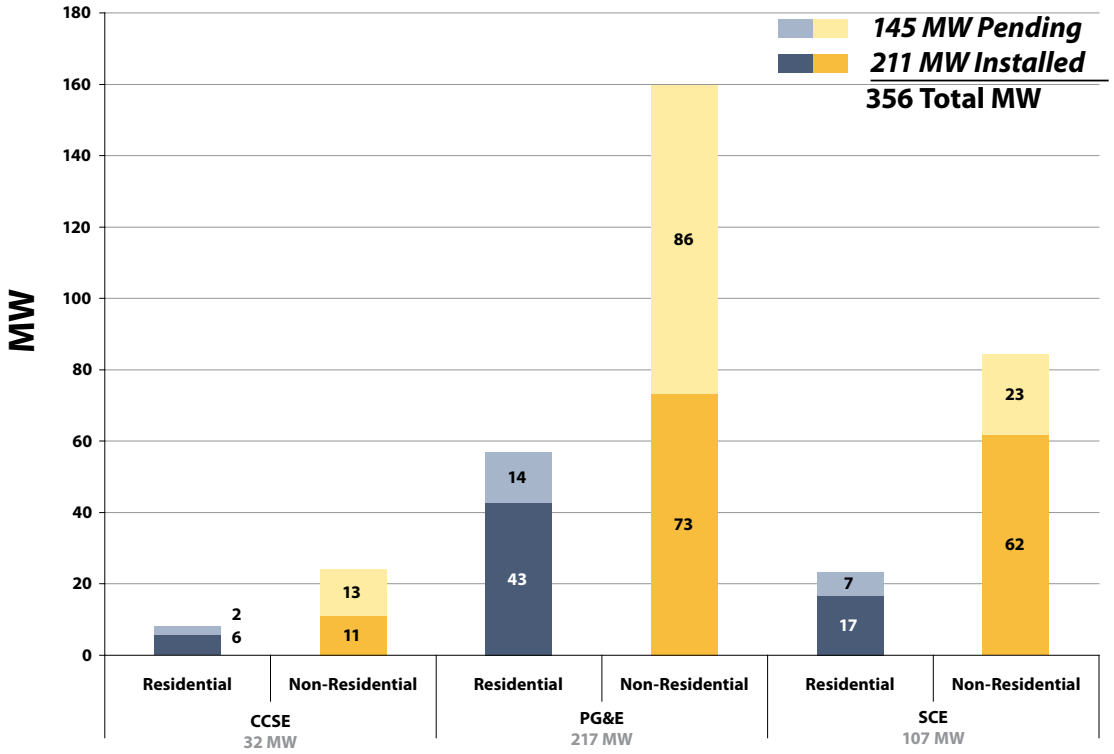
SCE. SCE's territory has a lower rate for CSI application activity (both volume and capacity) than PG&E's territory. However, although SCE's overall program demand in the non-residential sector is lower relative to PG&E, it still accounts for a significant amount of installed MWs – 62 MW. Customers in SCE territory have now installed 3,404 residential CSI projects, which represents 17 MW of new solar.

CCSE. CCSE is the program administrator in SDG&E territory. CCSE has administered applications for 11 MW of non-residential installed capacity. Customers in SDG&E's territory have now installed 1,312 residential CSI projects, which represents 6 MW of new solar.

Photo credits: Photographer: Mark Figearo, System Owner: Mark Figearo, System Size: 6.3kW STC, Location: Valencia, CA, Installer: Scherer & Guitard, Install Date: January 02, 2009

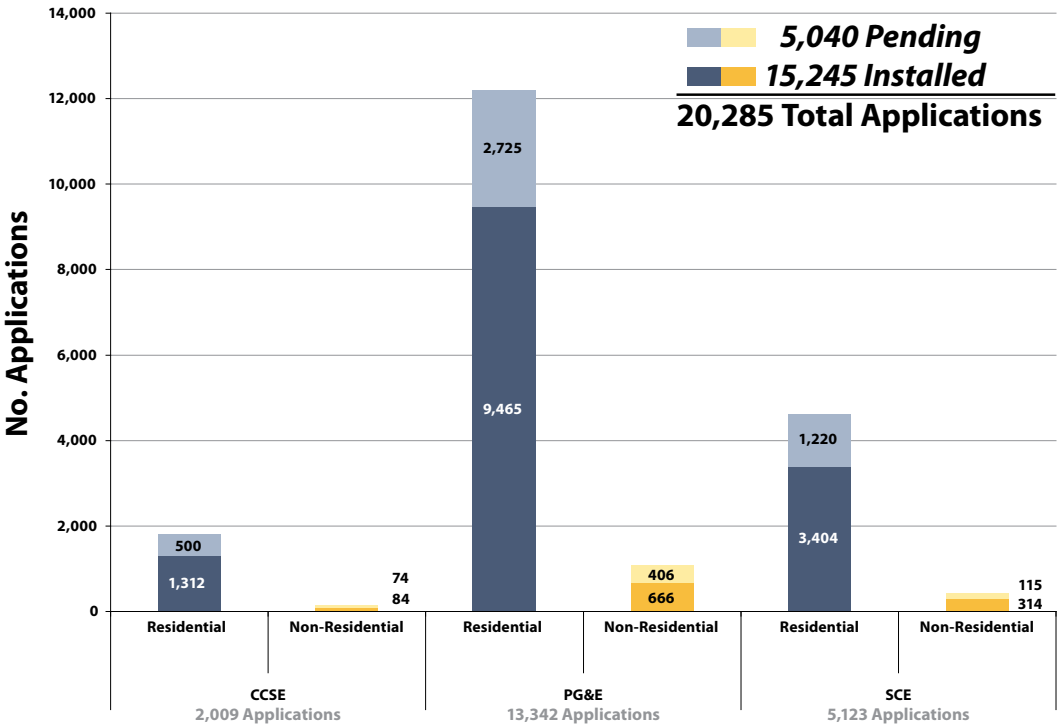
Photo credits: Photographer: Jeff Ritchey, System Owner: Ray Martin, System Size: 1.714 CEC-AC, Location: Fremont, CA, Installer: Jeff Ritchey, Install Date: September 18, 2007

Figure 8. Total Capacity of Pending and Installed CSI Applications by Program Administrator and Sector (MW)



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

Figure 9. Total Volume of Pending and Installed CSI Applications by Program Administrator and Sector (in Number of Applications)



Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

Table 3. Total CSI Applications by Program Administrator and Incentive Type (MW, Number of Applications, and Percentages)

Customer Class	Data	*Program Administrator*			Total
		CCSE	PG&E	SCE	
Residential	# Of Applications	1,812	12,190	4,624	18,626
	Applications %	9%	60%	23%	92%
	MW	8	57	24	88
	MW %	2%	16%	7%	25%
Commercial	# Of Applications	96	689	321	1,106
	Applications %	1%	3%	2%	6%
	MW	17	87	67	170
	MW %	5%	25%	19%	48%
Government/Non-Profit	# Of Applications	62	383	108	553
	Applications %	0.3%	2%	1%	3%
	MW	8	72	18	98
	MW %	2%	20%	5%	27%
All Customer Classes	**Total # of Applications**	**1,970**	**13,262**	**5,053**	**20,285**
	% of Applications	**10%**	**65%**	**25%**	
	Total MW	**32**	**217**	**108**	**356**
	% of Total MW	**9%**	**61%**	**30%**	

Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

The non-residential participants in the CSI Program represent 75 percent of the MWs, and the residential participants represent about 25 percent of the MWs in the program.

Table 3, above, offers a closer look at the geographic and customer demand patterns in the CSI Program. As of the first quarter of 2009, the number of residential applications continued to make up the vast majority — or 92 percent — of all CSI applications in terms of volume, while these smaller systems account for just 25 percent in terms of capacity. The non-residential applications are just 8 percent of all applications, but 75 percent of all MWs. PG&E has both the highest volume and the highest capacity of the three Program Administrators– with 65 percent of total CSI application volume and 60 percent of application capacity.

Photo credits: System Owner: Limoneira Co., System Size: 1 MW on 5.5 acres, Location: Santa Paula, CA, Installer: Perpetual Power

Photo credits: System Owner: Rancho California Water District, System Size: 1.1 MW, Location: Murrieta, CA, Installer: SunPower

Table 4. CSI Program Estimated Incentives and Total Project Costs ($ millions), by Sector and Pending vs. Installed

	Residential		Non-Residential		Total CSI Applications	
	$CSI Incentives	$ Total Project Costs	$CSI Incentives	$ Total Project Costs	$CSI Incentives	$ Total Project Costs
Pending Projects						
PG&E	$23.8	$130.2	$184.7	$350.8	$208.4	$481.1
SCE	$14.8	$69.1	$56.1	$183.8	$70.9	$252.9
CCSE	$4.4	$21.0	$36.7	$105.5	$41.1	$126.5
Subtotal, Pending	$43.0	$220.3	$277.5	$640.1	$320.5	$860.4
Installed Projects						
PG&E	$86.3	$402.7	$173.3	$819.3	$259.7	$1,221.9
SCE	$38.7	$155.8	$169.4	$418.3	$208.2	$574.1
CCSE	$13.0	$53.5	$33.2	$69.7	$46.3	$123.1
Subtotal, Installed	$138.1	$611.9	$376.0	$1,307.2	$514.1	$1,919.2
Total, All Projects	**$181.1**	**$832.2**	**$653.5**	**$1,947.4**	**$834.6**	**$2,779.6**

Source: www.CaliforniaSolarStatistics.ca.gov, April 1, 2009.

The California Solar Initiative has spurred more than $2.8 billion worth of private investment in solar projects by California consumers. On average, for every $1 in incentive paid by the CSI Program, an additional $3 in other funds has been invested in solar technology in California by other capital. To date, the CSI Program has paid or reserved nearly $835 million in incentives for total estimated project costs totaling nearly $2.8 billion, as shown in Table 4. The CSI Program continues to support this important sector of California's economy.

The program has already installed systems that are valued at approximately $1,919 million, that received (or will receive) incentives of $514 million. An additional $860 million worth of solar systems are pending installation, which will receive an additional $321 million in incentives.[3]

The residential market is 30 percent of the total solar market covered by CSI in terms of project value. Considering both pending ($220 million) and installed ($612 million) projects, the residential market represents an $832 million investment in solar in the California economy.

The non-residential market (includes businesses, governments, and non-profits) is 70 percent of the total CSI solar market in California in terms of market value. Considering both pending ($640 million) and installed ($1,307 million) projects, the non-residential market represents a $1,947 million investment in solar in the California economy.

Table 5. Summary of CSI Program Administrator Administrative Expenditures, as of December 31, 2008.

PA	2007 Administration	2007 Marketing & Outreach	2007 Total	2008 Administration	2008 Marketing & Outreach	2008 Total	Program To Date
PG&E	$3,441,063	$276,857	$3,717,920	$6,823,091	$722,751	$7,545,842	$11,263,762
SCE	$2,044,504	$239,056	$2,283,560	$5,055,336	$183,476	$5,238,812	$7,522,372
CCSE	$881,974	$411,942	$1,293,916	$1,077,287	$604,351	$1,681,638	$2,975,554
Totals	***$6,367,541***	***$927,855***	***$7,295,396***	***$12,955,714***	***$1,510,578***	***$14,466,292***	***$21,761,688***

Source: January 2008 and January 2009 Program Administrator Semiannual Expense Reports submitted to CPUC Energy Division.

[3] Projects are not required to provide total project data until the last phase of application processing, and therefore the system cost and estimated incentives figures of pending applications is based on preliminary data.

The CSI Program spent $21.7 million on Program Administration through the end of 2008.

The CSI Program requires that the Program Administrators report to the CPUC semi-annually on non-incentive program expenditures. Summarized in Table 5, the CSI Program Administrators have spent $21.7 million through the end of 2008. The Program Administrators report both administrative budgets, as well as marketing and outreach expenditures, since those budgets were authorized separately by the CPUC. PG&E has the highest expenditures of the three Program Administrators, but as noted elsewhere in this report, PG&E also has handled the highest volume of CSI applications.

CSI Program dropout rate is currently estimated at 18 percent.

Applicants to the CSI Program sometimes do not move forward with a reservation and are considered "dropouts". Reasons for dropouts vary, and include but are not limited to lack of site suitability determined during project design, changing business conditions, and project financing constraints. The CPUC hosted a workshop on CSI Program dropouts and their effects on the CSI budget in July 2008. Since that time, CPUC staff has continued to monitor and report on both the CSI Program dropout rate and the amount of incentive dollars "unreserved" when projects drop out and unreserved incentives are added back in to the program at current (i.e., lower) incentive levels.

As of March 31, 2009, about 18 percent of reserved MW has dropped out of the Program, representing 18 percent of reserved incentive dollars. The sum of all unreserved incentive dollars was approximately $47.6 million, as of March 31, 2009. See the Data Annex for more information on dropouts.

Approximately 41 percent of CSI projects in terms of MWs appear to have third-party ownership.

Third-party ownership, including solar power purchase agreements (PPAs) between a solar provider and a solar project host site, is a common business arrangement in the solar project development world. Third-party ownership transactions are not tracked directly by the CSI Program database. However, there is a reasonable proxy of the frequency of third-party ownership based on looking at projects that have a "Host Customer" that is different from a "System Owner". Similarly, the CSI database does not include information on whether a "System Owner" has a PPA with the "Host Customer."

Table 6 shows 573 projects (3 percent of all projects) where the "Host Customer" is known to be different from "System Owner"; however these projects make up 41 percent of total capacity.

Table 6. Third Party Owned Projects

	Program Administrator			Total
	CCSE	PG&E	SCE	
No. applications with different Host Customer/System Owner	67	350	156	**573**
No. of all CSI Projects	1,970	13,262	5,053	**20,285**
Total Capacity-applications with different Host Customer/System Owner (MW)	14	79	53	**146**
Total Capacity-all CSI projects (MW)	32	217	108	**356**

Source: www.CaliforniaSolarStatistics.ca.gov; April 1, 2009.

Photo credits: System Owner: Rancho California Water District, System Size: 1.1 MW, Location: Murrieta, CA, Installer: SunPower

Contact Information and Other Useful Sources of Information

For ***PRESS INQUIRIES*** about the CPUC portion of the California Solar Initiative, contact:

Terrie Prosper, News and Public Information Office
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102-3298
Email: **news@cpuc.ca.gov or 415-703-1366**

For ***POLICY OR PROGRAM DEVELOPMENT QUESTIONS*** about the CPUC portion of the California Solar Initiative, contact:

California Solar Initiative and Distributed Generation
Information Line: **energy@cpuc.ca.gov or 415-355-5586**

GoSolar California is the CSI **statewide consumer website**	www.GoSolarCalifornia.ca.gov
The CSI Program Administrators use an online tool to calculate the up-front Expected Performance Based Buy down (EPBB) incentive, known as the **EPBB Calculator**	www.csi-epbb.com
The CSI Program Administrators use an online application tool and reporting database, known as **PowerClerk**	csi.powerclerk.com
Up-to-date information about the program's current incentive level, or "step" can be found on the online **CSI Trigger Tracker**	www.csi-trigger.com
California Solar Statistics, a data reporting website that draws directly from the CSI database and is updated weekly	www.CaliforniaSolarStatistics.ca.gov
Information about the **CPUC regulatory** proceeding that deals with the CSI Program	www.cpuc.ca.gov/PUC/energy/solar
Pacific Gas and Electric Company	www.pge.com/solar
Southern California Edison	www.sce.com/CSI
California Center for Sustainable Energy (CCSE) – offering Solar Rebates in San Diego Gas and Electric Territory and the Solar Hot Water Pilot Program	www.energycenter.org
GRID Alternatives, Program Manager for the Single Family Affordable Solar housing (SASH)	www.gridalternatives.org

California Public Utilities Commission

California Solar Initiative
Staff Progress Report
April 2009

Data Annex

Data Annex: Table of Contents

Data Annex: List of Tables & Figures

The Data Annex for the California Solar Initiative (CSI) April 2009 Staff Progress Report was compiled by the CSI Program Administrators at direction of the CPUC Energy Division.

1 Program History and Structure

The original step allocations and megawatt goals were divided among the three investor-owned utility according to a relative proportion of electricity sales. Table 1 shows the original MW goals of the program divided by PG&E, SCE, and CCSE, as well as residential and non-residential. The goals (and budgets) were divided by utility territory based on a relative percentage of electricity sales, and they are PG&E - 43.7%, SCE - 46.0%, SDG&E - 10.3%.

As each Program Administrator 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 than the "original" MW amount because the actual amount takes into account Program dropouts, and represents that actual number of MW that will be paid out at a given step.

Finally, Table 1 shows in highlight the current step for each Program Administrator and each customer segment, based on CSI Program demand as of March 31, 2009. For example, SCE is in Step 5 and PG&E is Step 6 for Non-Residential.

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	0.07	0	12.4	5.46	0	0	6.4	6.4	0	0	3.3	3.3
2	70	10.1	11.9	20.5	18.7	10.6	10.3	21.6	21.5	2.4	2.5	4.8	10.0	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	14.0	29.3	23.1	15.2	15.6	30.8	27.0	3.4	3.5	6.9	7.7				
4	130	18.7	20.4	38.1	32.2	19.7		40.1	29.9	4.4	2.2	9.0	12.0				
5	160	23.1	6.7	46.8	69.9	24.3		49.3	70.4	5.4		11.1	1.1				
6	190	27.4		55.6	7.1	28.8		58.6		6.5		13.1					
7	215	31.0		62.9		32.6		66.3		7.3		14.8					
8	250	36.1		73.2		38.0		77.1		8.5		17.3					
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		764.8				805.0				180.3							
Percent		43.7%				46.0%				10.3%							

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.

Table Notes:

(1) Shading Denotes Current Step as of Mar 31, 2009.

(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 3/31/2009. The "Original" MW amount represents the original number of MW allocated to the step in CPUC decision D.06-12-033, Appendix B, Table 13.

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

(4) SoCalGas is an SGIP administrator, and therefore has MW reserved in 2006 at the Step 1 incentive level, but is not a CSI Program Administrator and has not reserved any CSI MW after 1/1/07.

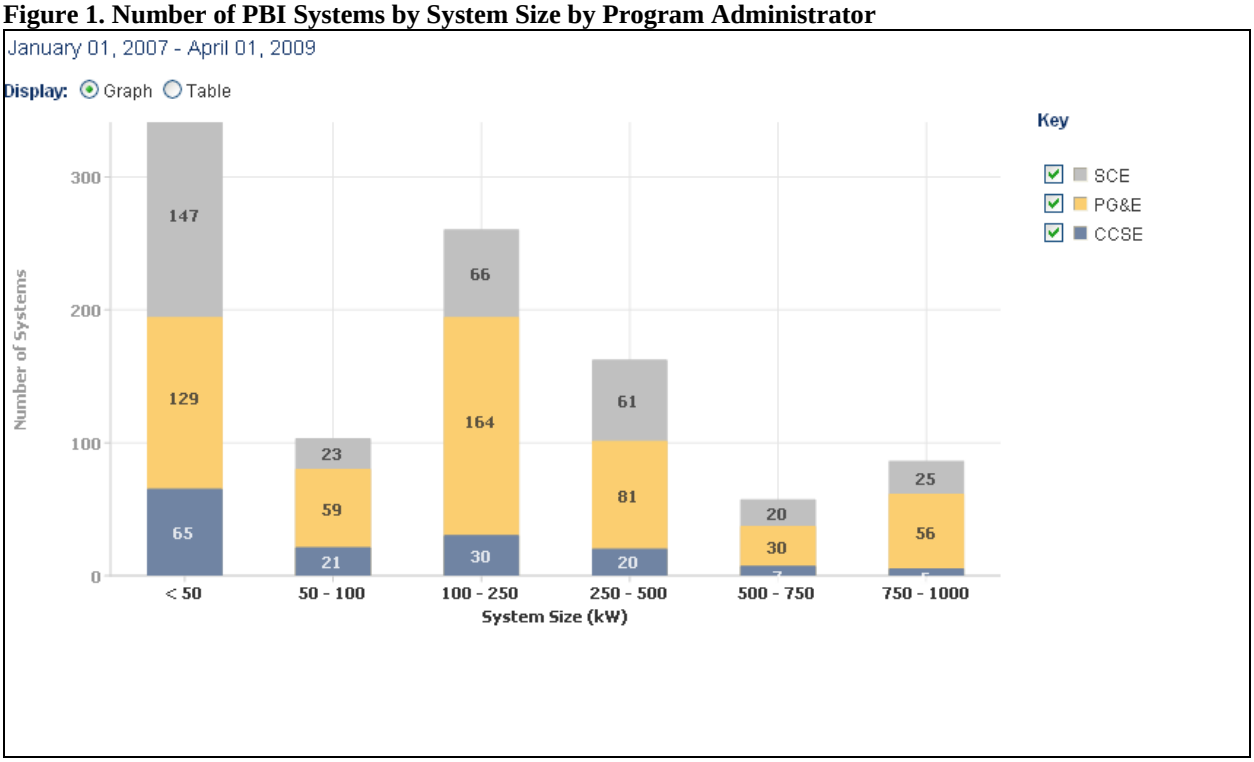
2 Additional CSI Program Demand Statistics

2.1 PBI Incentive Demand

All references to system size are reported as CEC-AC ratings.

The PBI incentive path is required of larger projects in the CSI Program. There are currently 1,023 PBI projects. Figure 1 shows the number of PBI systems by size and program administrator.

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



Source: californiasolarstatistics.ca.gov through 4/1/09.

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 from application to reservation, for project completion and interconnection and from incentive claim request to payment.

The data in this section is drawn from the Program Administrators. The data presented is current through March 31, 2009, except where noted.

3.1 Application and incentive processing times

The Program Administrators strive to process reservation requests in 30 days or less for both residential and non-residential applications. Table 2 below shows the most recent application processing times, from the date the application paperwork is physically received and time-stamped by the Program Administrator to the date that a reservation is granted (either "reservation reserved" status for non-residential applications or "confirmed reservation" status for residential applications). It is important to note that this time includes both Program Administrator 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 to average processing times for the 2008 calendar year.

Applications that take more than 60 days to be granted a reservation can be assumed to have some sort of problem. Some of the most common problems encountered in these applications include:

- Listed equipment does not match EPBB printout
- Mailing address different than project site address
- Missing signatures
- Other missing or incomplete documentation
- Slow customer responsiveness

Table 2. Time from application to reservation

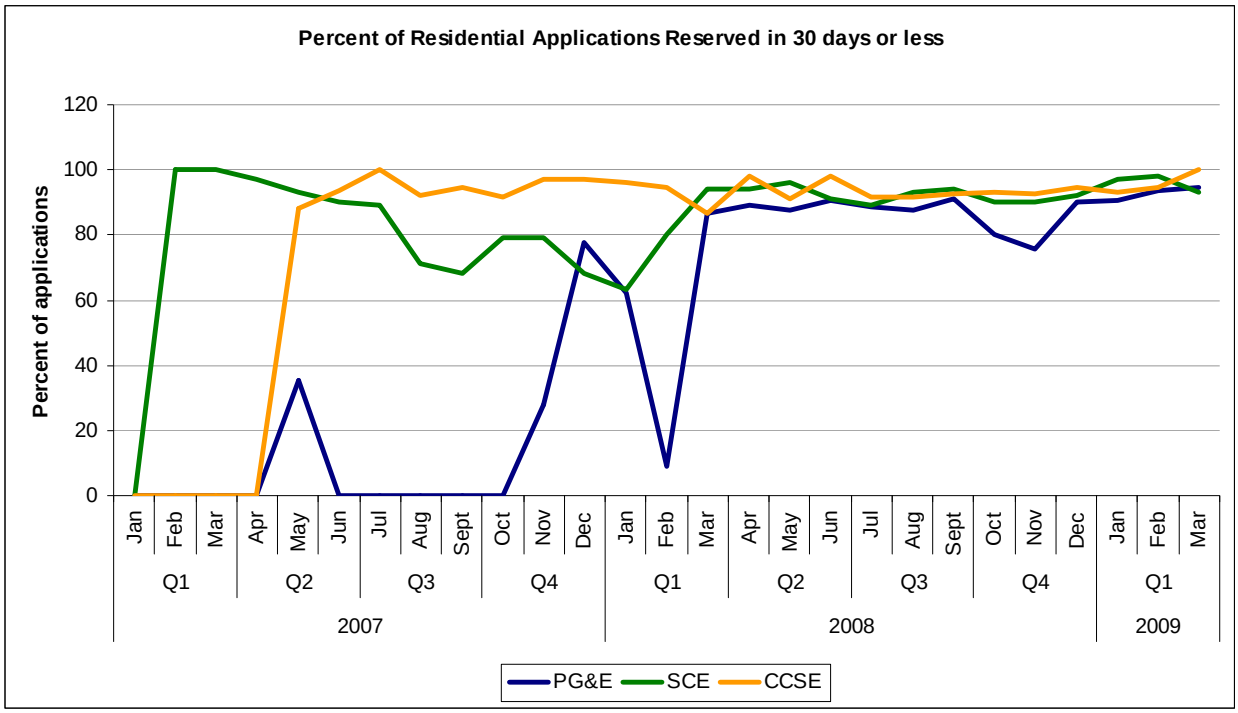
Percentage of applications whose processing time between "Application Received" and "Confirmed Reservation" is:										
	15 days or less		30 days or less		60 days or less		Greater than 60 days		Not yet reserved	
	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008
RESIDENTIAL										
PG&E	90%	14%	94%	83%	95%	96%	0%	3%	5%	1%
SCE	56%	55%	72%	85%	74%	91%	0%	0%	26%	9%
CCSE	80%	83%	91%	93%	93%	98%	0.0%	2%	7%	0%
NON-RESIDENTIAL										
PG&E	43%	13%	73%	42%	77%	77%	1%	23%	22%	0%
SCE	9%	13%	30%	35%	35%	50%	0%	11%	65%	39%
CCSE	50%	21%	60%	46%	70%	71%	0.0%	16%	30.0%	13%

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.

Table Notes: "Jan. – Mar." includes all applications that were received by the Program Administrators between Jan 1, 2009, and Mar 31, 2009. "2008" refers to all applications received by Program Administrators between January 1, 2008, and Dec 31, 2008. Please note that columns are additive. Data are within $\pm$ 1percent accuracy.

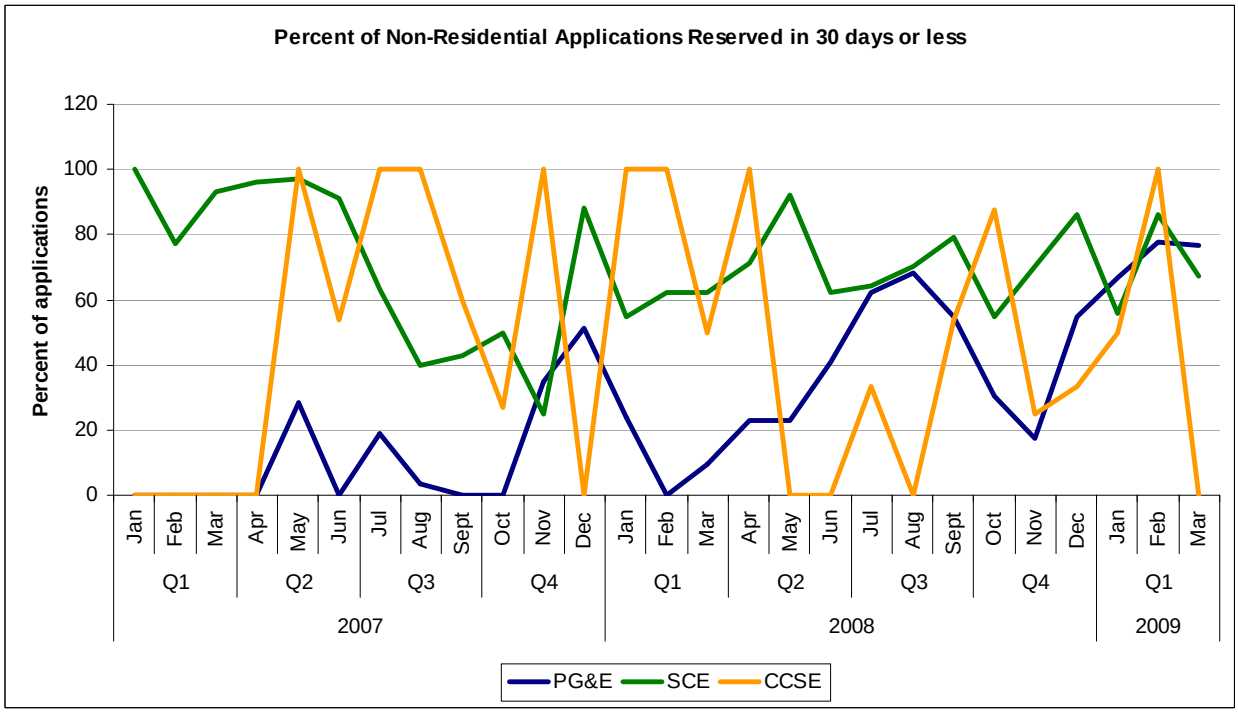
Figure 3 and Figure 4 offer another look at our progress towards achieving administrative processing goals. These graphs show the percent of applications granted a reservation within 30 days each month for the past year. The data is separated by Program Administrator and by residential and non-residential applications. Since March of 2008, the Program Administrators have been able to consistently process nearly 90 percent of residential reservations in 30 days or less. Data for non-residential applications is particularly challenging as far fewer non-residential applications have been submitted to the program when compared to the number of residential applications submitted, therefore the percentage numbers appear erratic.

Figure 2. Residential Reservation Processing



Source: CPUC data request to Program Administrators, dated Mar 25, 2008, and covering data through Mar 31, 2009.

Figure 3. Non-Residential Reservation Processing



Source: CPUC data request to Program Administrators, dated Mar 25, 2008, and covering data through Mar 31, 2009.

3.2 Installation time

The average installation time is determined by the applicant, not the Program Administrator. Residential and commercial applicants have 12 months, while government/non-profits applicants have 18 months from the date of their confirmed reservation to submit an Incentive Claim Form (ICF). Installation times also vary according to residential and non-residential projects. Table 3 below shows the average number of calendar days between confirmed reservation date and the date that the Incentive Claim Form was received by the Program Administrator, for all applications where the ICF was received in 2009.

Table 3. Installation time

	RESIDENTIAL Q1 2009	NONRESIDENTIAL Q1 2009
PG&E	129.7	240.1
SCE	99.0	129.0
CCSE	135.7	199.8

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: "2009" refers to all applications where ICF was received by Program Administrators between January 1, 2009, and Mar 31, 2009. Time is shown in calendar days.

3.3 Interconnection time

The time for interconnection is based upon the date the utility interconnection department deems the application to be complete (final single line, final building permit, etc.) to the date where the interconnection inspection is performed and the permission to operate letter is issued. This time is generally under the utility's control, and not dependent on additional inputs from 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 projects by program administrator, for all projects that have been interconnected in 2009.

Table 4. Interconnection time

	RESIDENTIAL Q1 2009	NONRESIDENTIAL Q1 2009
PG&E	4.8	6.6
SCE	5.1	8.3
CCSE	3.1	5.0

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: "2009" refers to all projects that were interconnected between January 1, 2009, and Mar 31, 2009. Time is shown in calendar days.

3.4 Incentive claim processing

For CSI Program participants, incentive claim processing is an extremely important part of the project timeline. Table 5 below shows how quickly incentive claims are processed for different types of projects, from the date that the Incentive Claim Form is physically received and time-stamped (often different than the date the ICF is electronically submitted in PowerClerk) by the Program Administrator to the date that the application is changed to "pending payment" status. Normally, once the ICF is submitted, the Program Administrators select a random number of projects for onsite field inspection, where 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 the

last quarter to those projects whose claims were processed in 2009. The majority of residential incentive claims are processed in 60 days or less.

Applications that take more than 90 days for incentive claim processing can be assumed to have some sort of problem. Some of the most frequent types of problems encountered with applications at the incentive claims stage include:

- 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 of CSI inspection need
- Other missing or incomplete documentation

Table 5. Incentive claim processing

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		Not yet in "Pending Payment" Stage	
	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008	Jan. – Mar.	2008
RESIDENTIAL with inspection										
PG&E	30%	14%	67%	60%	74%	78%	3%	19%	24%	2%
SCE	51%	19%	90%	57%	96%	76%	0%	9%	4%	15%
CCSE	12%	34%	40%	74%	52%	94%	0.0%	5%	48%	1%
RESIDENTIAL without inspection										
PG&E	80%	66%	87%	87%	89%	93%	3%	6%	8%	0%
SCE	61%	73%	72%	84%	74%	88%	0%	3%	26%	9%
CCSE	83%	81%	87%	91%	88%	94%	0%	5%	12%	1%
NON-RESIDENTIAL with inspection										
PG&E	11%	15%	52%	42%	59%	73%	28%	27%	13%	1%
SCE	63%	14%	88%	49%	88%	63%	0%	19%	12%	18%
CCSE	50%	14%	75%	50%	75%	50%	0%	50%	25%	0%
NON-RESIDENTIAL without inspection										
PG&E	63%	64%	77%	87%	80%	94%	5%	4%	14%	1%
SCE	24%	23%	32%	41%	37%	49%	0%	17%	63%	34%
CCSE	58%	54%	90%	77%	90%	95%	0%	0%	10%	5%

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.

Table Notes: "Jan - Mar." includes all applications that were received by the Program Administrators between Jan 1, 2009, and Mar 31, 2009. "2008" refers to all applications received by Program Administrators between January 1, 2008, and Dec 31, 2008. Please note that columns are additive. Data are within $\pm$ 1 percent accuracy.

Table 6 below shows the average number of calendar days for an application in "pending payment" status to reach "completed" status. The time from "pending payment" to "completed" status reflects the amount of time it takes for payment to be made to the applicant. Timeframes vary according to residential and non-residential projects, but also depend upon whether the project is receiving an EPBB or PBI payment.

The Program Administrators have made relatively few PBI payments, so the average number of days for first payment on these projects is expected to decrease with increased volume and a larger universe of data.

Table 6. Payment time

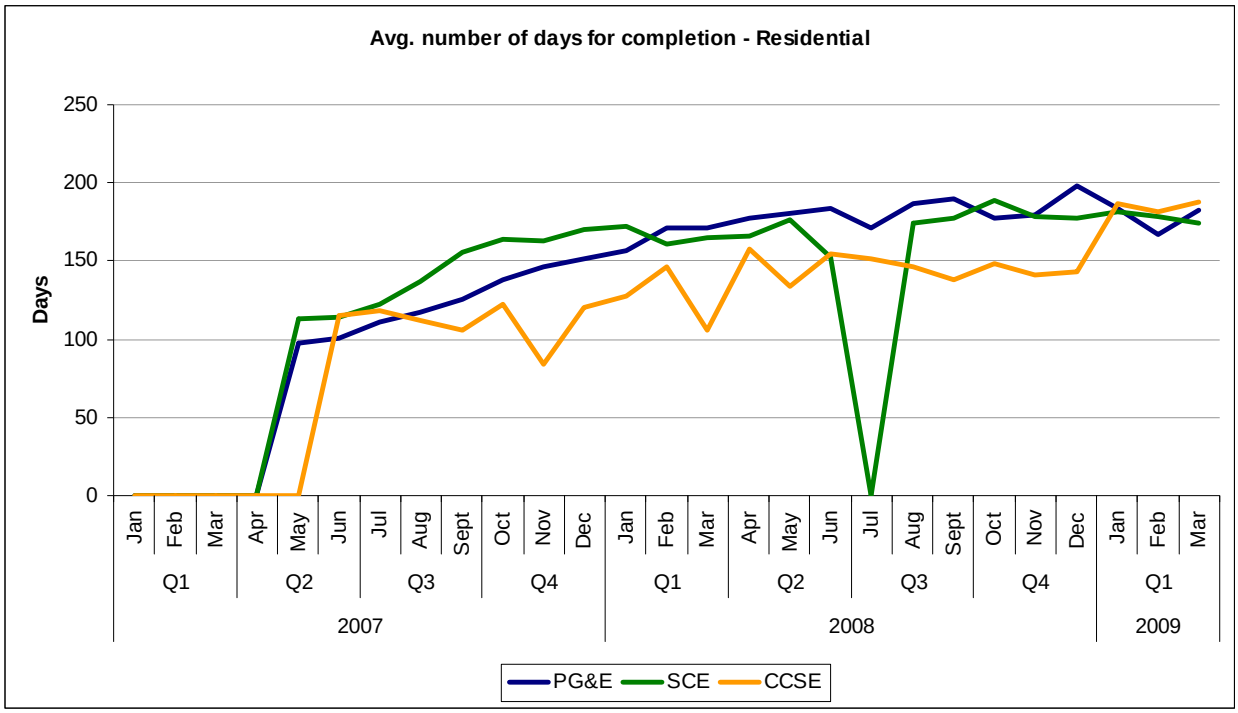
	Residential 2009		Non-Residential 2009	
	EPBB	PBI	EPBB	PBI
PG&E				
Avg. number of days	12	74	14	72
No. processed	1959	4	99	54
SCE				
Avg. number of days	30	39	28	41
No. processed	602	15	26	23
CCSE				
Avg. number of days	19	35	21	33
No. processed	177	4	8	12

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: "2009" refers to all projects where check issue date is between January 1, 2009, and Mar 31, 2009. Time is shown in calendar days.

3.5 End-to-end project completion times

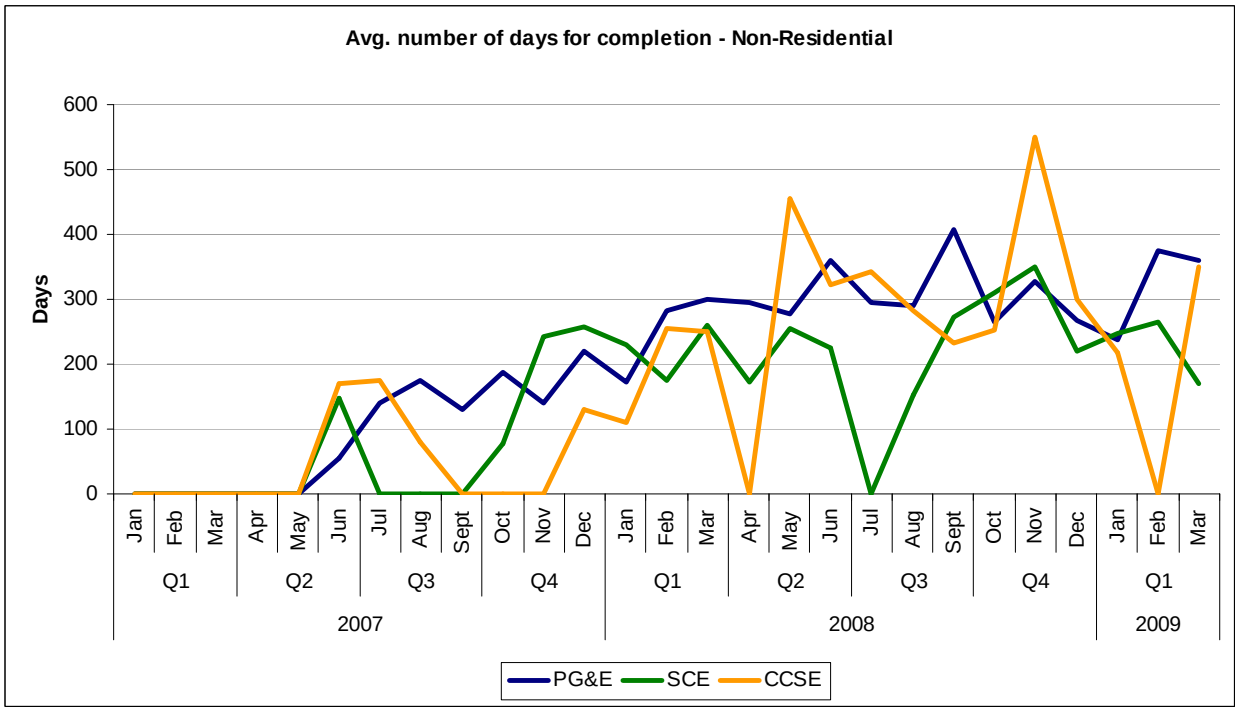
Figure 4 and Figure 5 show the end-to-end project completion times for the past year, in calendar days. It is important to note that these times reflect both the Program Administrator processing times and host customer responsiveness to inquiries, requests for additional data and inspection scheduling. The data in the figures below are separated by residential and non-residential projects completed in each given month, according to Program Administrator. As the CSI Program is relatively young and projects are given at least 12 months to complete, little data exists for early- and mid- 2007, particularly for non-residential projects. As we move through the second year of this ten-year program, we will continue to amass data on end-to-end completion times, and will monitor the progress of applications in the CSI Program.

Figure 4. Residential Project Completion Times



Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.

Figure 5. Non-Residential Project Completion Times



Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: Data provided only for those months where non-residential projects were completed.

Installer trainings

Each of the Program Administrators regularly offers training for both customers and solar installers on the CSI Program and the benefits and technical details of solar generally. In the first quarter of 2009, the CSI Program Administrators held 41 trainings and trained at least 2,109 attendees.

Table 7. Installer trainings

	Number of CSI Trainings Held in Q1 2009	Number of Attendees at Installer Trainings in Q1 2009
PG&E	21	945
SCE	13	736
CCSE	7	428
Total	41	2,109

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: "2009" refers to all trainings held between January 1, 2009, and Mar 31, 2009.

Since the CSI's inception, PG&E has offered over 100 classes to varied customer segments on the operations of the CSI program as well as on relevant subject matter related to the CSI and to the solar installation process in general. These include, but are not limited to, Solar System Sizing, Financial Analysis, and System Basics. In 2009, we've continued offering these consistently popular core workshops and also added additional subject matter based on trends in feedback received from our CSI customers. For example, we recently launched an expanded webinar series on subjects ranging from the Performance Data Provider Automation Process, to Solar as an Integrated Solution, Understanding CSI Statistics, Solar for the Entrepreneur, Understanding the CSI Application Process, CSI and Non-pv, and others. For more information on PG&E trainings, call (415)973-2777 or visit www.pge.com/solar.

SCE has added information on interconnections to its training seminars in Q1 2009. SCE trainings also include information on participation in the CSI Program, including siting and equipment requirements and assistance with completing CSI forms. For more information on SCE's solar programs, visit the SCE website at http://www.sce.com/rebateandsavings/californiasolarinitiative?form=csi

CCSE holds a quarterly workshop that focuses on the CSI application process and any changes to the program that may have occurred. CCSE also holds a bi-annual solar financing workshop that utilizes the expertise of Andy Black from Ongrid Solar as well as CCSE in house solar financing expertise. On a monthly basis, CCSE holds a solar shade workshop that also incorporates the CSI inspection protocol, which CCSE strongly encourages all installers to attend. For the first time, CCSE had a representative from Solmetric Suneye, the makers of one of the industries most popular solar analysis tools, give a workshop on shade and the usability of their tool. Also on a monthly basis, CCSE performs a Solar for Homeowners workshop that educates homeowners in the San Diego area on the financial and environmental benefits of going solar.

On an annual basis, CCSE puts on a workshop geared toward those seeking employment in the solar industry. By utilizing the industry knowledge of consultant Liz Merry from Verve Solar Consulting, CCSE aims to help increase the number of qualified workers that are needed in California's solar market. For more information, visit www.EnergyCenter.org and click "Events & Workshops".

3.6 Transition from SGIP to CSI

In 2006, the CPUC provided a transition between SGIP and the CSI. The most important aspects of this transition was that the CPUC (1) funded the SGIP program to meet a sharp rise in the demand for solar incentives and (2) set declining incentive declines based on the CPUC adopted CSI "step table" approved in advance of the actual program launch on January 1, 2007.

In 2006, nearly 97 MW of solar PV projects were reserved under the Self-Generation Incentive Program (SGIP). The first 50 MW of projects reserved in 2006 are considered "Step 1" of the CSI Trigger Tracker, and received incentive payments of $2.80 per watt for all customer classes. The Step 1 projects were based on "first come first serve" in all four SGIP Program Administrator territories. (SGIP has a fourth Program Administrator, Southern California Gas Company.) After these first 50 MW were reserved, the incentive levels declined to Step 2. In May 2006, projects began receiving "Step 2" level incentives of $2.50 per watt for residential & commercial customers and $3.25 per watt for government & non-profit customers. Although we originally expected to fund all of the "Step 2" MW from the CSI budget, a portion of these MW- those that were reserved in 2006- were paid out of SGIP funds.

Any unspent funds in the 2006 SGIP solar budget were transferred to the CSI balancing accounts on December 31st, 2006. Starting on January 1, 2007, all funds committed under the CSI are subject to the statutory budget limits expressly set for solar incentives from January 1, 2007 through 2016, as well as the budgetary detailed guidance provided by the CPUC.

3.7 Program Dropouts

The CPUC hosted a workshop on CSI Program Dropouts and their effects on the CSI Budget in July 2008. Since that time, CPUC staff has continued to monitor and report on both the CSI Program dropout rate and the amount of incentive dollars unreserved when projects and their associated MW drop out of a higher incentive level and are added back in to the program after a step change, at a newer, lower incentive level.

The CSI dropout rate is currently about 18%. As of March 31, 2009, about 18% of reserved MW has dropped out of the Program, representing 18% of reserved incentive dollars. This average dropout rate was calculated from the Public Data Export, which draws on data from the March 31, 2009, PowerClerk data, and includes ***only those applications that have ever been granted a CSI reservation*** (non-blank "Reservation Reserved" or "Confirmed Reservation" date for non-residential projects, and non-blank "Confirmed Reservation" date for residential projects).

CPUC staff also continues to monitor the potential for future dropouts, based on projects that have passed the normal implementation timeline without becoming complete. For residential and commercial projects, this normal implementation timeframe is 12 months after a reservation is granted, and for government and non-profit projects the normative timeframe is 18 months after a reservation is granted. According to the PowerClerk data, approximately 10% of total reserved MW, representing 11% of reserved incentive dollars, remain "active" and incomplete beyond their normal implementation time under the CSI Program, though it is important to note that the majority of these projects have demonstrated installation progress to the CSI PAs and have been granted extensions in accordance with the rules of the CSI Program Handbook. However, if we were to assume that all these incomplete projects will drop out, the percentage of incomplete projects beyond their normative timeframe plus the existing percentage of Program dropouts would yield an overall dropout rate of no more than 25% of reserved MW and 26% of reserved incentive dollars. Even this "worst case scenario" dropout rate is significantly less than the programmatic dropout rate of the CSI Program's predecessor, the Self Generation Incentive Program, which experienced dropout rates for solar projects at or above 50%.

There is $47.6 million in unreserved incentive associated with CSI Program dropouts. Additionally, when CSI projects drop out of the program and their associated MW are added in at a lower incentive rate, a small amount of incentive dollars become "unreserved". For example, if a 1 MW commercial project were to be reserved at incentive Step 4, its associated incentive would be $1.9 million (1 MW x $1.90/watt incentive). If that project was to drop out, and the MW was to be added back in at incentive Step 5, the associated incentive would be $1.55 million (1 MW x $1.55/watt incentive). That represents a difference of $350,000 in unreserved incentive. The CPUC requires Program Administrators to regularly report on the amounts of these unreserved incentives, and publishes the overall sum of these unreserved incentives in the quarterly Staff Progress Reports. Table 8 shows that as of March 31, 2009, the sum of all unreserved incentive dollars was approximately $47.6 million.

Table 8. CSI MW dropouts and dollar differentials

Step	PG&E			SCE			CCSE			Total		
	Res MW	NonRes MW	$million un-reserved	Res MW	NonRes MW	$million un-reserved	Res MW	NonRes MW	$million un-reserved	Res MW	NonRes MW	$million un-reserved
1	*3.314*	*13.531*	*$5,389,500*	*0.07*	*6.94*	*$0*	*0.0*	*6.159*	*$17,552,449*	*3.384*	*26.63*	*$22,941,949*
2a	*0.0*	*3.063*	*$0*	*0.00*	*0.13*	*$0*	*0.0*	*0.765*	*$1,912,538*	*0.0*	*3.958*	*$1,912,538*
2b	1.338	11.953	$8,520,300	0.41	4.90	$2,604,093	0.105	1.443	$3,869,645	1.853	18.296	$14,994,038
3	1.053	11.234	$4,953,600	0.62	8.19	$4,577,102	1.482	1.916	$7,476,641	3.155	21.34	$17,007,343
4	9.667	25.891	$5,209,500	0.0	16.49	$4,421,180	0.015	3.119	$5,954,385	9.682	45.5	$15,585,065
5	1.02	9.027	$1,164,776	0.0	1.34	$0	0.0	0.002	$2,421	1.02	10.369	$1,167,197
6	0.0	1.152	$0	0.0	0.0	$0	0.0	0.0	$0	0.0	1.152	$0
Totals	13.078	59.257	$18,683,400	1.03	30.92	$11,602,375	1.602	6.48	$17,303,092	15.71	96.657	$47,588,867

Source: CPUC data request to Program Administrators, dated Mar 25, 2009, and covering data through Mar 31, 2009.
Table Notes: (1) The "$ unreserved" figure is an estimate based on the assumption that all non-residential dropouts are commercial projects. The actual figures may differ slightly based on government & non-profit participation in the steps. The "$ unreserved" figure does not equal the total amount of incentive money associated with the dropped-out MW. (2) Steps 1 and 2a were fully reserved under the Self Generation Incentive Program in 2006, and these applications were subject to different programmatic rules. Therefore, Step 1 and 2a dropout rates are not directly comparable to the rates for Step 2 and beyond, and are not included in the totals row at the bottom of Table 8.