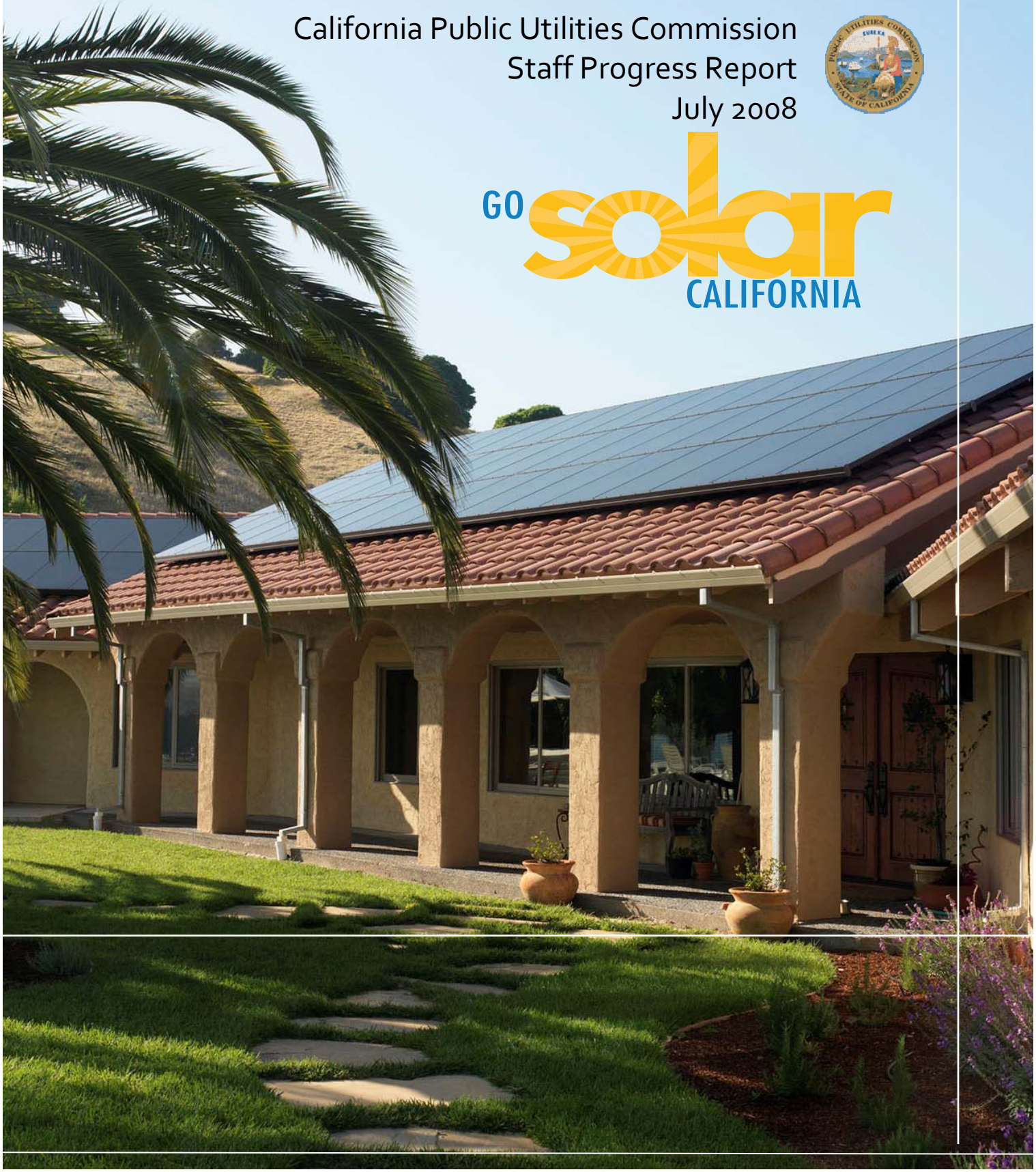
California Solar Initiative

California Public Utilities Commission
Staff Progress Report
July 2008

GO solar CALIFORNIA



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1 Executive Summary

The California Public Utilities Commission (CPUC or Commission) 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 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 dramatically reducing the cost of solar. As part of the statewide solar effort, the CPUC initiated the investor-owned utility solar program, known as the California Solar Initiative (CSI) on January 1, 2007. The CSI has generated enormous new demand for solar in California. This 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 (CEC) 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).

The State of California had installed 280 MW of installed grid-tied photovoltaic (PV) capacity statewide by the end of 2007, including 81 MW installed in 2007.[1] In the first six months of 2008, the CSI program has added an additional 59.4 MW of new solar.

- The new solar installed in first six months of 2008 through the CSI program in investor-owned utility territories equals the total amount of PV installed *statewide* in all of 2006.[2]
- The solar installation trend is expected to continue through the end of this year, due to the volume of projects in the CSI pipeline as well as the incentive to install caused by the uncertainty around the continuation of federal tax credits beyond the end of 2008.
- If the solar installation trend continues, the CSI program will install more than 100 MW in 2008.
- If the trend continues, the solar industry will likely have a 35-40% rate of growth statewide in California between 2007 and 2008, and be on track to significantly increase the total number of MWs of PV installed.

[1] The total number of MW installed in 2007 came from data from on grid-tied PV systems statewide is available from the California Energy Commission's *Grid Connected PV Capacity Installed in California*. Available: http://www.energy.ca.gov/renewables/emerging_renewables/GRID_CONNECTED_PV_12-31-07.XLS

[2] There was 81 MW of new grid-tied PV installed statewide in 2007, and 59 MW of new grid-tied PV installed statewide in 2006.

A record number of CSI projects were completed in the second quarter of 2008.

Between April 2nd and June 25th, the CSI program received notice of 2,806 completed projects – representing 33.9 MW of new solar. Combined with the 25.5 MW completed in the first quarter of 2008, the program has completed 59.4 MW of installed projects in the first half of 2008 and 78.6 MW since the program's inception in January 2007.

New demand for solar incentives under the CSI program remains robust midway through the program's second year.

In the second quarter of 2008, the program received 1,968 new applications for 22.5 MW of new solar electric generating capacity. The per month application volume remained strong, with only a slight decline from a spike in demand experienced at the start of the year.

Total demand in the CSI program over the first 18 months of the program is roughly on target to meet its 10-year goal of adding 1,750 MW of solar generating capacity by 2016.[3]

In the first 18 months, the program has received 12,055 applications. Of those, 11,653 applications for 251.5 MW are still active and are worth $635 million of solar incentive payments. Residential applications (10,511 active applications) comprise 90% of all applications received. The total capacity of non-residential applications, however, makes up 81% of the capacity of the applicant pool with 201.6 MW.

Despite steady demand for incentives, the total number of projects in the program grew by only 2.2 MW this quarter, from 249.3 MW in April 2008 to 251.5 MW in June[4].

Several factors account for this only slight increase in the total size of the applicant pool. First, dropouts have been higher this quarter than in previous quarters. There were 22.5 MW of new projects added to the applicant pool, and 20.2 MW of project dropouts in the second quarter.[5] The increase in dropouts is partially due to the fact that projects have 12 months to complete installation and the first large group of projects did not meet the 12 month milestone until the second quarter of 2008. The total quantity of dropouts for the life of the program is now 52.9 MW, and just 24.9 MW of the total were ever reserved. The other 28.0 MW were cancelled or withdrawn prior to receiving a

[3] At this level of program demand, the CSI would add 1640 MW over 10 years.
[4] The figure represents all active applications, including projects that have been completed.
[5] There is a rounding issue (not a math error) which makes the total applicant pool change only 2.2 MW overall.

confirmed reservation. Dividing 52.9 MW by all projects ever in the program – 304.4 MW – brings the overall dropout rate to 17%; however dividing just those projects that were ever reserved (24.9 MW) by the total number of projects – brings the dropout rate projects that to 8%.

Also, in the past few months it has become increasingly uncertain whether the federal Investment Tax Credit (ITC) – which is essential to the financial viability of most large projects – will be extended past its expiration date of December 31. Because a project must be completed and interconnected in order to claim the federal tax credit, some large project developers might be waiting to start any new project applications to see whether the ITC will be extended, rather than take the risk of building a project only to miss the interconnection deadline and be ineligible for the tax rebate. Likewise, some projects may be dropping out to avoid the risk of constructing the project only to miss the deadline to collect the credit.

Third, the US economy has been struggling in the first half of 2008, with particular trouble for the housing and credit markets. Problems in these markets would tend to reduce the amount of investment capital available for homes and businesses to purchase solar energy systems. Like the expiration of the ITC, this factor is likely to decrease demand for projects and increase the rate of dropouts of projects already in the pipeline, as economic uncertainty makes investors more cautious.

Finally, demand at the start of the program has caused incentive levels to decline in every utility territory and for every applicant category, in accordance with the intentional program design whereby the incentive levels drop as demand grows. The number of MWs available per customer type at the higher incentive levels is smaller than the number of MWs available at lower incentive levels (i.e. the lower incentive levels will last longer because there are more MWs in each "step"). In PG&E and SCE's territory, incentive levels have dropped three times for non-residential customers since the start of the program 18 months ago, reducing incentive levels by 38% for those customers. Meanwhile, high worldwide demand for solar PV systems, especially in Europe, has kept costs for crystalline silicon panels nearly steady, as manufacturers struggle to increase capacity to keep up with demand.

Total CSI-installed solar PV capacity is growing rapidly and will likely reach 100 MW by the end of 2008.

Although program growth has slowed this quarter, the capacity of installed projects now producing electricity continues to increase rapidly. In the first half of 2008 alone, the CSI program has increased California's statewide grid-installed solar capacity by

59.4 MW – 73 percent of the capacity installed by all state solar programs combined in 2007 (81 MW). Since its inception on January 1, 2007, the CSI program has installed a total of 78.6 MW of new solar PV generating capacity.

Since the capacity of applications spiked between December 2007 and February 2008, and projects generally come on-line within 12 months of application processing, the CSI program is likely to reach 100 MW of installed solar PV generating capacity by December 31, 2008. Not counting those CSI-funded projects that have already been built, there are 186.4 MW of solar PV projects in the CSI pipeline. The actual dropout rate for the program is currently about 17.8% of all MWs enrolled in the program.[6] Even if the dropout rate increased dramatically, to 50%, there would still be nearly 100 MW of solar coming online in the next year.

In the second quarter of 2008, the CPUC and its Program Administrators continued to make improvements to the California Solar Initiative and address implementation issues.

In the area of application processing, the Program Administrators (PAs) are creating internal efficiencies to reduce the amount of time required to process applications. As a result, the processing time for CSI applications has improved significantly in the most recent quarter. PG&E and SCE have both been able to process around 90 percent of their residential applications in 30 days or less during the quarter. The PAs also continue to add new features to the online application tool to increase its functionality.

The CPUC continues to move forward to create a framework for measuring progress and evaluating the results of the CSI program as well. In May, Energy Division released a staff proposal for the CSI Measurement and Evaluation Plan. The plan recommends a three-pronged approach to measurement and evaluation that includes quarterly reports, annual assessments to the Legislature, and evaluation reports that look at five distinct elements of the program.

Metering Accuracy and Performance Monitoring have also made significant progress this quarter, as Energy Division staff and the PAs work to develop standards for measuring and verifying the output of solar PV equipment. The CSI metering sub-committee released a plan in late March to develop requirements to certify metering accuracy. And in June, Energy Division directed the PAs to file final drafts of their Performance Data Provider protocols.

[6] See Program Dropouts, Section 6.7, p. 42

Program areas outside of the CSI general market program are also advancing. Energy Division is currently reviewing responses to a Request for Proposals (RFP) seeking a manager for the Single-Family Low Income Program, and the program is expected to begin by the end of 2008. In addition, Energy Division has selected a program manager for the CSI Research, Development and Deployment program. The CPUC will vote on that selection on July 31. Finally, the Solar Hot Water Heating Pilot Program was recently extended for an additional year, and new construction was allowed to participate in the program.

2 Go Solar California! Overview

The goal of the Go Solar California campaign is to install 3,000 MW of new, solar electricity generation capacity by 2016 - moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. The Go Solar California statewide budget is $3.3 billion over 10 years, and it has three distinct program components, each with a portion of the statewide budget and solar installation goals, as shown in the Table below.

- The **California Solar Initiative** is overseen by the CPUC and provides solar incentives to customers in investor-owned utility (IOU) territories of Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric. These three utilities represent about 75-80% of California's electric use. The California Solar Initiative provides cash back for solar for existing homes and existing and new commercial, industrial, government, non-profit, and agricultural properties – within the service territories of the investor-owned utilities. The California Solar Initiative has a budget of $2,167 million over 10 years, and the goal is to reach 1,940 MW of installed solar capacity by 2016. This goal includes 1,750 MW from the general market program and 190 MW from the low-income residential incentive program. *This Staff Progress Report focuses only on the California Solar Initiative.*
- The **New Solar Homes Partnership (NSHP)**, managed by the California Energy Commission (CEC), advances solar in new home construction within the territories of the three investor owned utilities. This program compliments the CSI (which does not fund solar on residential new construction) and has a budget of $400 million over 10 years, with a goal of 360 MW.
- The **Publicly Owned Utilities (POU)** component requires each municipal utility to offer a solar incentive program, an aggregate commitment of $784 million over 10 years, toward a goal of 700 MW.

Table 1. Go Solar California campaign by Program Component, 2007-2016

Program Authority	California Public Utilities Commission	California Energy Commission	Publicly Owned Utilities (POU)
Budget	$2,167 million	$400 million	$784 million
Solar Goals (MW)	1,940 MW	360 MW	700 MW
Scope	All systems in IOU areas except new homes	New homes in IOU territories	All systems in POU areas
Audience	Various	Builders, home buyers	Various
Begins	January 2007	January 2007	January 2008

2.1 California Solar Initiative Program History

- The CSI Program builds on nearly 10 years of state solar rebates offered to customers in IOU territories, i.e. Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric.
    - Prior to January 1, 2007, California's solar incentive programs were organized according to the **size of the system**.
    - For small systems, the CEC managed the **Emerging Renewables Program (ERP)** since 1998, and for larger systems over 30 kW, the CPUC managed solar incentives through its **Self-Generation Incentive Program (SGIP)** since 2001.
- In August 2004, Governor Schwarzenegger affirmed his support for solar energy, and announced the Million Solar Roofs program.
- In January 2006, the CPUC collaborated with the CEC to develop the framework of the CSI Program through 2016, resulting in Decision (D.) 06-01-024.
    - The new framework included a major **administrative transition** where the CEC and the CPUC changed the responsibilities shared between the two state agencies. In the new program, the solar incentive programs would be organized by building type (instead of by the size of the system as discussed above). The CEC would provide incentives to New Homes (new construction), and the CPUC administered program would provide incentives to all other facilities in investor-owned utility territories.

    - The new framework also included a major shift in the way solar incentives were calculated – away from a system that funded solar incentives based only on capacity and towards one where **incentive levels are based on performance** factors such as installation angle, tilt, and location.
- In March 2006, the CPUC initiated a distributed generation **Rulemaking (R.) 06-03-004**, to implement the CSI Program, as well as decide other distributed generation program and policy matters. Among the major CSI related policy decisions made in R.06-03-004 were how to organize and adjust the incentive levels, how to provide performance based incentives, and how to require metering. The rulemaking also decided issues related to low income solar program development, marketing and outreach, research, development and demonstration (RD&D), program evaluation, and the Self Generation Incentive Program (SGIP).
- In August 2006, the CPUC adopted D.06-08-028 that established the CSI Program incentive schedule, program budgets, system performance and metering requirements, and other fundamental program design decisions.
- In August and September 2006, **Governor Schwarzenegger signed SB1 and AB 2723**, which authorized the CPUC's CSI Program and introduced a number of new program requirements related to the general market incentive program and the low-income program.[7]
- In December 2006, the CPUC revised the CSI Program requirements and design features to comply with the new laws, and adopted D.06-12-033. Also, the CPUC issued the CSI Program Handbook for the first time.
- In January 2007, the CPUC determined that distributed generation system owners (including CSI systems) retained ownership of their Renewable Energy Credits (RECs) in D.07-01-018.
- **In January 1, 2007, the CSI program launched and the program began** operating under the CSI Program Handbook.
    - The CEC's Emerging Renewables Program and the CPUC's Self Generation Incentive Program stopped taking new applications after December 31, 2006.
- Throughout 2007, the CPUC issued a number of decisions to revise parts of the general market incentive program, as well as implement the RD&D, low-income, and non-PV programs.
- In March 2008, the CPUC closed R.06-03-004 and **opened a new rulemaking, R.08-03-008** to handle remaining CSI program and policy issues, as well as other Distributed Generation issues, such as the Self Generation Incentive Program.

[7] Chapter 132, Statutes of 2006 (SB 1, Murray) and Chapter 864, Statutes of 2006 (AB 2723, Pavley).

3 California Solar Initiative Basic Information

3.1 Program administration and budgets

- In January 2007, the CPUC's CSI Program launched with a budget of $2,167 million (2007-2016) as detailed in Table 2.

Table 2. CPUC California Solar Initiative Budget, 2007-2016

Program Category	Budget ($ Million)
General Market Program Subtotal	$1,897
• *Direct Incentives to Consumers for PV and non-PV technologies*	*$1,707*
• *Program Administration, Marketing & Outreach, Evaluation (10%)*	*$190*
Low-Income Programs (10%)	$217
Research, Development, Deployment and Demonstration (RD&D)	$50
Solar Hot Water Pilot (Administered in San Diego by CCSE)	$2.6
Total California Solar Initiative Budget	$2,167

- The CPUC designated three Program Administrators to administer the general market program (incentive program) that provides solar incentives to consumers for PV and non-PV solar technologies. The three Program Administrators are:
  - Pacific Gas & Electric (PG&E),
  - Southern California Edison (SCE), and
  - California Center for Sustainable Energy (CCSE, formerly known as the San Diego Regional Energy Office) in San Diego Gas & Electric's territory.
- The other program components of the CPUC's California Solar Initiative have separate budget and administration plans. All budgets are for 10 years.
  - The Low-Income Single Family Program will have a single statewide Program Manager (not yet selected) and a budget of $108 million.
  - The Low-Income Multifamily Program will have a budget of $108 million, and the CPUC has not yet made a final program administration decision.
  - The Research, Development, Deployment and Demonstration (RD&D) Program will have a single statewide Program Manager (selected, but not yet finalized) and a budget of $50 million.

- The Solar Hot Water Heating Pilot Program is administered by CCSE and has a budget of $2.6 million for 1.5 years, and is only available in San Diego Gas & Electric service territory.

3.2 California Solar Initiative Incentive Program Resources

Table 3. CSI Program Resources

The CSI **statewide consumer website**, includes information on the CPUC, CEC, and POU programs, including the CSI Program Handbook	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
Information about the **CPUC regulatory** proceeding that deals with the CSI Program	www.cpuc.ca.gov/PUC/energy/solar/
Pacific Gas & 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 & Electric Territory and the Solar Hot Water Pilot Program	www.energycenter.org

3.3 California Solar Initiative incentive levels

The California Solar Initiative offers financial incentives for solar installations based on the expected performance of a given solar installation. The expected performance is derived principally from the size of the solar array, and also takes into consideration the angle and location of the system installation. For larger systems, the incentive is based on the actual performance of the system over the first five years.

The incentive level available to a given project is determined by currently available incentive in each utility territory for each customer class. The CSI was designed so that

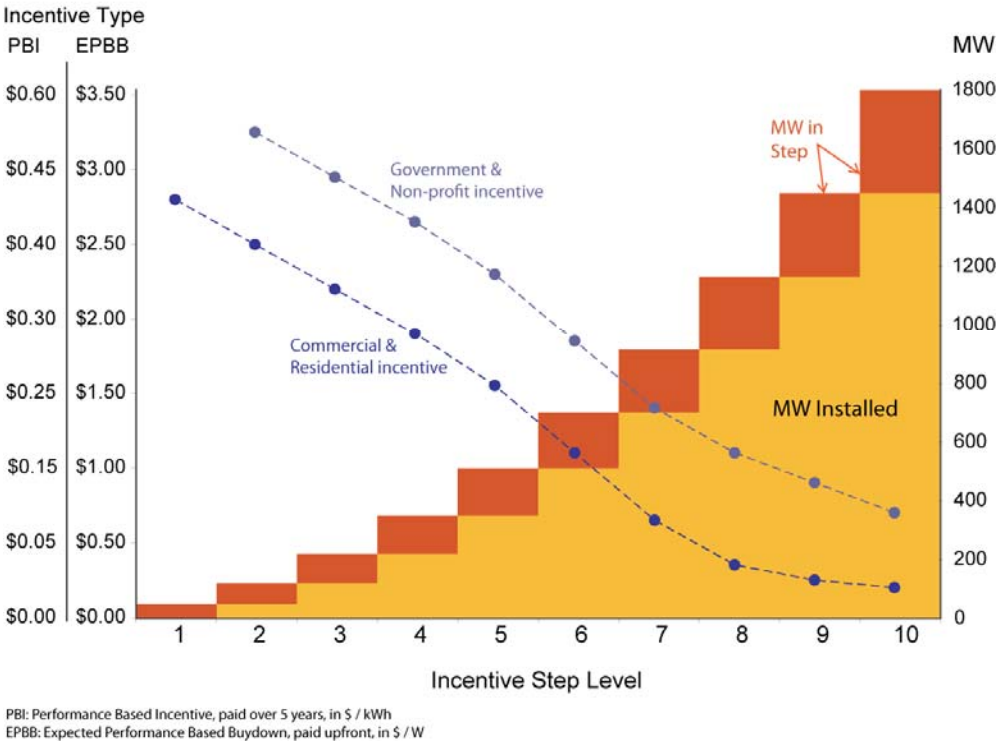
the incentive level decreases over ten steps, after which it is expected to go to $0, as the total demand for solar energy systems grows.[8]

The CPUC divided the overall goal of 1,750 MW by the ten steps.[9] Each step has an incentive amount and a number of MWs. The incentive declines in each step, and the number of MWs available at each step increases. Each step has MWs allocated to each Program Administrator and customer class, residential and non-residential (a combination of commercial and government/non-profit). Once project applications (demand) for the total number of MWs for each step is reached within a particular customer class, the Program Administrator moves to the next step and offers a lower incentive level for that class. Therefore, high commercial demand in SCE's territory will not lower the incentive level offered to PG&E's residential customers, and so on. Figure 1 offers a visual explanation of the increasing MW installations and decreasing incentive levels over the life of the program. The dark orange box in each "Incentive Step Level" represents the available MWs at that incentive value. The light orange box represents the cumulative installed MWs as the program proceeds through the steps.

[8] In previous versions of the State's solar programs, incentives declined based on a calendar year regardless of demand for incentives.

[9] The goal for the CPUC portion of the CSI program is 1,940 MW, divided into 1,750 MW for the general market incentive program, and 190 MW for the low-income program.

Figure 1. Overview of the CSI Step Level Changes



The original step allocations and megawatt goals were divided among the three investor-owned utility according to a relative proportion of electricity sales. Table 4 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 MWs reflected in the applications received. Table 4 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. See Table 3 Notes for additional explanation.

Finally, Table 4 shows in highlight the current step for each Program administrator and each customer segment, based on CSI Program demand as of May 31st, 2008. PG&E and SCE are both in Step 5 for Non-Residential, for example.

Table 4. 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*	***5.5***	*0*	***0***	*6.4*	***0.2***	0	**0**	3.3	**3.3**
2	70	10.1	**12.8**	20.5	**20.6**	10.6	**10.6**	21.6	**22.7**	2.4	**2.4**	4.8	**9.6**				
3	100	14.4	**14.7**	29.3	**27.2**	15.2	**15.2**	30.8	**32.6**	3.4	**3.4**	6.9	**7.6**				
4	130	18.7	**19.0**	38.1	**40.0**	19.7		40.1	**42.0**	4.4		9.0	**9.7**				
5	160	23.1		46.8	**60.0**	24.3		49.3	**51.5**	5.4		11.0		*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.*			
6	190	27.4		55.6		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 June 9th, 2008, and covering data through May 31st, 2008.

Table Notes:

(1) Shading Denotes Current Step as of July 11, 2008.

(2) The "Actual" MW field in Table 3 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 05/31/2008. 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.

3.4 California Solar Initiative incentive types

The California Solar Initiative pays solar consumers their incentive either all-at-once for smaller systems, or over the course of five years, for larger systems. The program's two incentive payment types are:

(1) **Expected Performance-Based Buy-Down, or EPBB**:

- **EPBB payments are provided on a $ per watt basis**.
- In 2008, systems smaller than 50kW in capacity can receive a one-time, up-front incentive based on expected performance, and calculated by equipment ratings and installation factors (geographic location, tilt and shading).
- EPBB is available for systems under 30 KW after 2010.
- Systems eligible for EPBB can choose to opt-in to the PBI system described below.

(2) **Performance Based Incentive, or PBI**:

- **PBI payments are provided on a $ per kilowatt-hour basis**.
- As of January 1, 2008, all systems over 50 kW must take the PBI, and by 2010 all system over 30 kW must be on PBI.
- Any sized system can elect to take PBI.
- The PBI pays out an incentive, based on actual kWh production, over a period of five years.

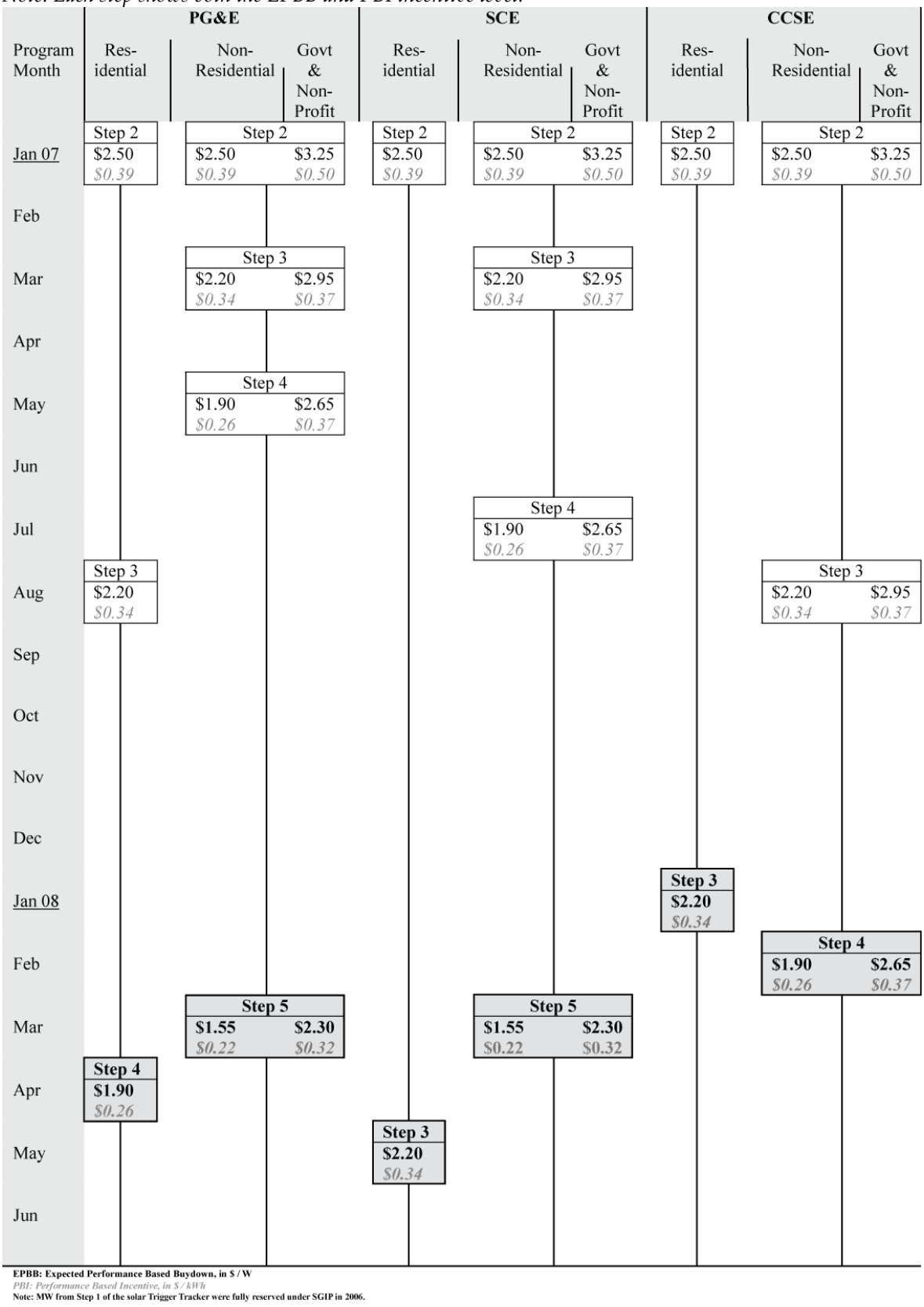
Figure 2 shows the current incentive payment available for each Program Administrator, according to the current step and customer segment. The Figure also shows the dates on which the step levels changed for each customer class and each utility territory.

A website is maintained daily with information about the currently applicable incentive available in each utility territory, it is known as the "CSI Trigger Tracker", and a link is provided here: http://www.csi-trigger.com/

For a complete listing of all incentive amounts for all steps and all customer types, see the California Solar Initiative Program Handbook.

Figure 2. California Solar Initiative Incentive Level, Current and Historic, Jan. 1, 2007 – June 25, 2008

Note: Each step shows both the EPBB and PBI incentive level.



4 CPUC CSI Administration

The CPUC's general market incentive program launched on January 1, 2007, and the CPUC has been carefully monitoring CSI Program implementation throughout the inaugural year. As program implementation issues have arisen, the CPUC has taken action to address them to ensure the program's success. The CPUC will consider additional program modifications, as necessary, some of which are already identified and discussed below.

4.1 Program implementation

Program Forum (Updated July 2008)

The next program forum will be held on July 18, 2008 in San Francisco at PG&E's auditorium at 245 Market Street.

The CPUC established the CSI Program Forum as a quarterly public meeting intended to allow stakeholders to learn about program updates and discuss solutions to implementation issues. Program Forums were previously held in April, June and October of 2007 and January and April of 2008.[10]

Marketing and Outreach (Updated July 2008)

The CPUC adopted D.07-05-047 for Interim Marketing and Outreach in May, 2007 with the intention of considering a long-term marketing and outreach plan as the CSI Program developed. The Decision granted Program Administrators an annual budget of $500,000 per year for basic marketing and outreach activities during this interim period.

The PAs are working in accordance with their approved 2008 Interim Marketing and Outreach plans, which include program collateral, monthly installer trainings, and a monthly electronic newsletter. The newsletter has grown 138% in 8 months from an original distribution of 985 to over 2,200. Of this growth, 32% stems from opt-in subscribers. The newsletter highlights regulatory activity affecting the CSI Program, PA updates, a calendar of events, a monthly Trigger Tracker snapshot, and a call for photos of CSI-funded projects that can be featured in future CSI promotions. In July, a supplemental newsletter was launched to announce the various free PA solar training opportunities and international solar conferences hosted statewide. All issues of the

[10] Program Forum presentation are available at:
http://www.cpuc.ca.gov/PUC/energy/Solar/misc/070417_csiprogramforum.htm

CSI Monthly Newsletter are available on the Go Solar California! website www.gosolarcalifornia.com.

The PAs are coordinating on projects to support CSI program users, including a Consumer Guide to the California Solar Initiative, and a Flash-based tutorial for users of the on-line application tool. PAs also plan to coordinate on a singular CSI presence at major solar events, which involves the development of tradeshow properties such as banners and backdrops. The long-term marketing and outreach strategy will be developed in accordance with the Rulemaking.

Pursuant to the Interim Marketing and Outreach Decision, the PAs submitted semi-annual updates to their 2008 M&O Plans, which are currently under Staff review.

Program Handbook (Updated April 2008)

The Program Handbook was last updated in February, 2008. The changes (1) removed the independence requirement for the Performance Monitoring and Reporting Service and (2) established requirements to validate PBI data reporting, including a set of interim performance data provider protocols.

Originally released in December, 2006, the CSI Program Handbook provides a compendium of all program rules and eligibility requirements. The CPUC periodically revises and re-releases the Handbook to reflect changes in program rules and/or modifications proposed by the Program Administrators and approved by CPUC.

EPBB Calculator (Updated April 2008)

The CSI PAs and the CPUC are assessing how the hourly photovoltaic production calculation requirements in the CEC's *"Guidelines for California's Solar Electric Incentive Program Pursuant to Senate Bill 1"* will necessitate future changes be made to the CSI Program's EPBB calculator.

The EPBB Calculator was reissued in March 2008 to incorporate changes necessary to calculate incentives for building integrated photovoltaic (BIPV) technologies.

Application Processing (Updated July 2008)

Program Administrators are striving to create internal efficiencies to reduce the amount of time required to process applications. In addition, they are conducting at least one

installer training class per month on key program requirements, tools and application processing.

Online Application Tool and Program Data (Updated July 2008)

The Program Administrators have added new features to the online application tool, Powerclerk, to increase functionality. For instance, an option was added to calculate and display when one project has split incentives across multiple steps. In addition, the project components page was reformatted to allow applicants to assign arrays to inverters, which will make incentive calculations more precise. The database now includes more options for "Applicant Status", this will contribute to more precise tracking of projects as they proceed through the program.

The Program Administrators continue to work to increase functionality and improve data integrity within the database. Program data, which is updated weekly, is available to the public at csi.powerclerk.com.

In August 2007, the CSI Program launched the online CSI Application tool to facilitate online submission and tracking of all CSI applications.

4.2 Program requirements

Time of Use (TOU) Rates (Updated April 2008)

Legislation is pending (AB 2768, Levine) that would make optional the requirement that owners of solar PV systems take service under TOU rates. The pending legislation removes the condition that TOU rates are optional only until the next utility rate case.

SB 1 required solar incentive recipients to go on TOU rates. An unintended consequence was that a few customers with high peak demand had higher electricity bills after reducing demand with solar than on "flat" electricity rates without solar. In June 2007, the legislature, the governor and the CPUC all took necessary action to delay the TOU mandatory requirement until new TOU rates are established as part of each utility's rate case.

Metering Accuracy and Performance Monitoring (Updated July 2008)

The CSI metering sub-committee is continuing to work on the development of a metering accuracy testing for inverter integrated metering systems accurate to +/- 5%.

A proposed plan for metering accuracy certification requirements and testing procedures was submitted to the CPUC by Advice Letter (PG&E AL 3239-E) on March 28, 2008. The metering sub-committee is also now working with a nationally recognized testing laboratory and a number of inverter manufacturers to test the metering accuracy certification requirements on actual inverter integrated meters.

On the Performance Monitoring front, the CPUC and CSI PAs have held a series of three workshops (2/25/08, 2/26/08 and 05/19/08) on the subject of performance data protocols (PDP) for performance based incentive (PBI) reporting. On June 31, 2008, Energy Division released a workshop report that directed the CSI PAs to file an Advice Letter within 30 days which is to include a final draft of the PDP protocols. This final draft PDP protocol will serve as the basis for the PDP protocol that are added to the CSI Handbook.

Shading Criteria and Installation Inspection Protocols (Updated July 2008)

The CSI PAs and the CPUC continue to work with the California Energy Commission (CEC) to assess how the shading measurement criteria and installation verification requirements in the CEC's *"Guidelines for California's Solar Electric Incentive Program Pursuant to Senate Bill 1"* might change current shading measurement rules of the CSI Program.

4.3 Program evaluation

CSI Program Measurement and Evaluation Plan (Updated July 2008)

On May 30, 2008, the CPUC's Energy Division released a staff proposal for the CSI Measurement and Evaluation Plan, in accordance with SB 1 and previous Commission decisions. The staff proposal recommends a measurement and evaluation plan composed of three elements: (1) the Progress Reports that are currently issued quarterly; (2) Evaluation Reports, looking at five elements of the CSI program, including impact evaluations, retention and performance studies, market transformation reports, process evaluations and cost-effectiveness studies; and (3) Annual Program Assessments, which will be delivered to the legislature and include information from the Progress Reports and Evaluation Reports. The Commission will consider the comments on the proposal and determine an evaluation plan as discussed in the scoping ruling.

4.4 Program components

Building Integrated PV (Updated April 2008)

On March 10, 2008, the CSI EPBB calculator integrated a function that accommodates calculation of incentives for BIPV systems. This change means that BIPV systems can now fully access all available CSI incentives. An explanation of how estimated performance of BIPV systems has been included in the EPBB calculator user guide.

Initially, the CSI Program could not allow applicants using BIPV products to apply for the up-front EPBB incentive, because the state could not accurately predict temperature influences on the performance of BIPV technologies. In July 2007, the Commission adopted D. 07-08-007, which approves BIPV products for the incentive program based on the fact that the Commission had received satisfactory data to use in modifying the incentive calculator.

Non-PV Solar Technologies (Updated July 2008)

The CSI PAs and the CPUC continue to work to finalize the process for certifying non-PV equipment for the CSI Program. As a process note, for non-PV electric generating technologies, all equipment must be certified eligible by the California Energy Commission (CEC), while non-PV electric displacing technologies must be certified eligible by the CPUC and the CSI PAs.

Solar Water Heating Pilot Program (Updated July 2008)

In June 2008, the CPUC approved a Decision allowing the program administrator, CCSE, to extend the pilot program until December 31, 2009 or until the $3 million in funding for the pilot has been exhausted. The decision also allows CCSE to offer solar hot water heating incentives to new construction buildings.

As per Commission Decision 08-06-029, the Energy Division will host a workshop on August 26, 2008 to discuss issues related to the evaluation of the Solar Water Heating Pilot Program.

Single-Family Low Income Program (Updated July 2008)

The CPUC issued a competitive Request For Proposals (RFP) for a statewide Program Manager on April 16, 2008. Bids on this RFP were received on June 9, 2008. Following

the final selection of Program Manager, the selected bidder will begin implementation of the Program, which is expected at the end of 2008.

Multi-Family Low-Income Incentive Program (Updated April 2008)

On February 29, 2008, CPUC staff released a proposal for the Multi-Family Low-Income portion of the CSI program. A public workshop was held on March 17, 2008, and the Assigned Commissioner and Administrative Law Judge are considering this proposal and public comments. A proposed decision on the program is expected in 2008.

Research Development and Demonstration (Updated July 2008)

On April 1, 2008, CPUC Energy Division released the Request for Proposals (RFP) for the CSI Research Development and Deployment (RD&D) Program Manager. Three bidders submitted proposals on May 23, 2008. CPUC Energy Division scored each proposal and, by draft Resolution E-4179, selected Itron as the winning bidder. The Resolution will be considered by the Commission on July 31.

5 Program Demand Statistics

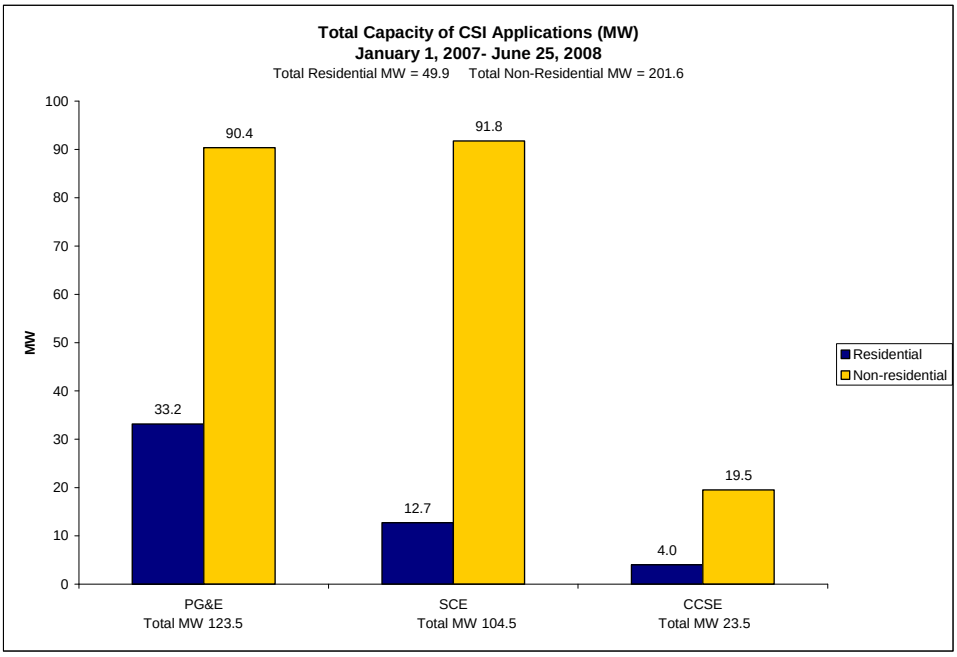
Important Note: This section provides analysis from newly generated data from the program database on June 25, 2008. The data has improved significantly since the earlier versions of the Staff Progress Report, but the data continues to be incomplete in some cases. In order to produce this report, the staff had to clean some parts of the data to remove null fields and remove applications with insufficient data. Improving the integrity of the data in online database continues to be a top priority with the CPUC and the Program Administrators. All references to capacity throughout are CEC-AC rating, not CSI rating which includes an expected performance adjustment for the installation and design of the system, aka the design factor.

5.1 Program Participation Continues to Grow in 2008

The California Solar Initiative has received over 12,000 applications, and there are currently 11,653 active applications for 251.5 MW of new solar and $635 million in incentives. An additional 402 applications were received but have been withdrawn or rejected from the program.

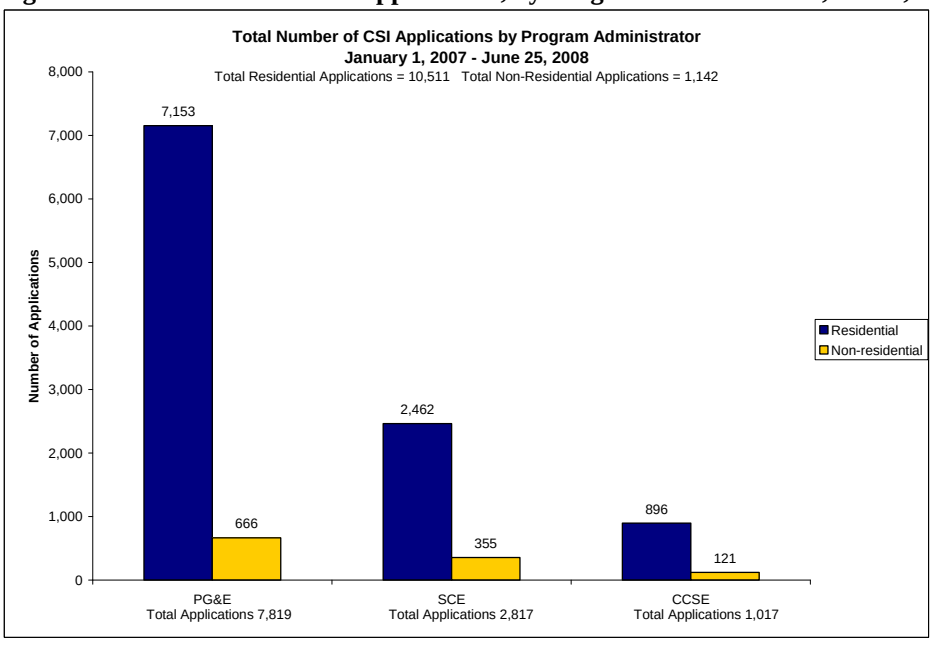
- Less than halfway through 2008, the number of active applications in the program has increased by 55 percent - from 7,504 applications at the end of 2007 to 11,653 at the end of June 2008.
- The number and capacity of residential projects continues to increase through the second quarter of 2008. PG&E has 33.2 MW (a 14 percent increase from Q1), SCE has 12.7 MW (a 32 percent increase from Q1), and CCSE has 4.0 (a 25 percent increase from Q1) in active residential projects.
- Over 10,000 applications that have been received in the residential sector alone (10, 511 to be exact). The non-residential sector has 1,142 projects statewide. As shown in Figure 4, PG&E's participation in the residential sector- 7,153 projects to date-continues to far exceed that of SCE and CCSE. While SCE continues to lead in non-residential capacity.
- As shown in Figure 3, SCE, PG&E, and CCSE saw a slight drop in demand in non-residential applications, 91.8 MW, 90.4 MW, and 19.5 MW respectively, nearly 18 months into the program. This is due in part to the capacity of applications that were cancelled and withdrawn Q2 – up 61 percent with a total of 52.9 MW that are no longer active.

Figure 3. Total Capacity of CSI Applications, by Program Administrator, Jan. 1, 2007 -Jun. 25, 2008



Source: CSI PowerClerk Online Database, June 25, 2008. *Note*: Total **does not include** cancelled or withdrawn projects.

Figure 4. Total Number of CSI Applications, by Program Administrator, Jan. 1, 2007-Jun. 25, 2008



Source: CSI PowerClerk Online Database, June 25, 2008. *Note*: Total **does not include** cancelled or withdrawn projects.

5.2 Program Participation Varies by Geography

A closer look at the application requests per program administrator reveals more about the geographic and customer demand patterns, as well as administrative challenges. Non-residential applications, equaling 201.6 MW, continue to comprise a bulk of the capacity in the application pool (153.2 MW in commercial and 48.7 MW in government/non-profit). While there has been a drop in capacity in commercial projects from Q1, the capacity of government/non-profit projects has increased by 2 MW in Q2. The number of applications were smaller residential application has increased to 90% of total applications, while non-residential projects still make up a small percentage of the application pool–commercial is 7% of the total and government/non-profit sector is 3% of the total.

Table 5. Number of Applications and MW by Customer Type and Administrator

		Program Administrator							
Customer Class	**Data**	**CCSE**		**PG&E**		**SCE**		**Total**	
Residential	# of Applications	896		7,153		2,462		10,511	
	Applications %	8%		61%		21%		90%	
	MW	4.0	MW	33.2	MW	12.7	MW	49.9	MW
	MW %	2%		13%		5%		20%	
Commercial	# of Applications	81		486		269		836	
	Applications %	1%		4%		2%		7%	
	MW	15.0	MW	64.6	MW	73.5	MW	153.2	MW
	MW %	6%		26%		29%		61%	
Government/ Non-Profit	# of Applications	40		180		86		306	
	Applications %	0.3%		2%		1%		3%	
	MW	4.4	MW	25.7	MW	18.2	MW	48.4	MW
	MW %	2%		10%		7%		19%	
Total # of Applications		**1,017**		**7,819**		**2,817**		**11,653**	
% of Total Applications		**9%**		**67%**		**24%**			
Total MW		**23.5**		**123.5**		**104.5**		**251.5**	
% of Total MW		**9%**		**49%**		**42%**			

***Source*:** CSI PowerClerk Online Database, Jun. 25, 2008. ***Note*:** total **does not include** cancelled or withdrawn projects.

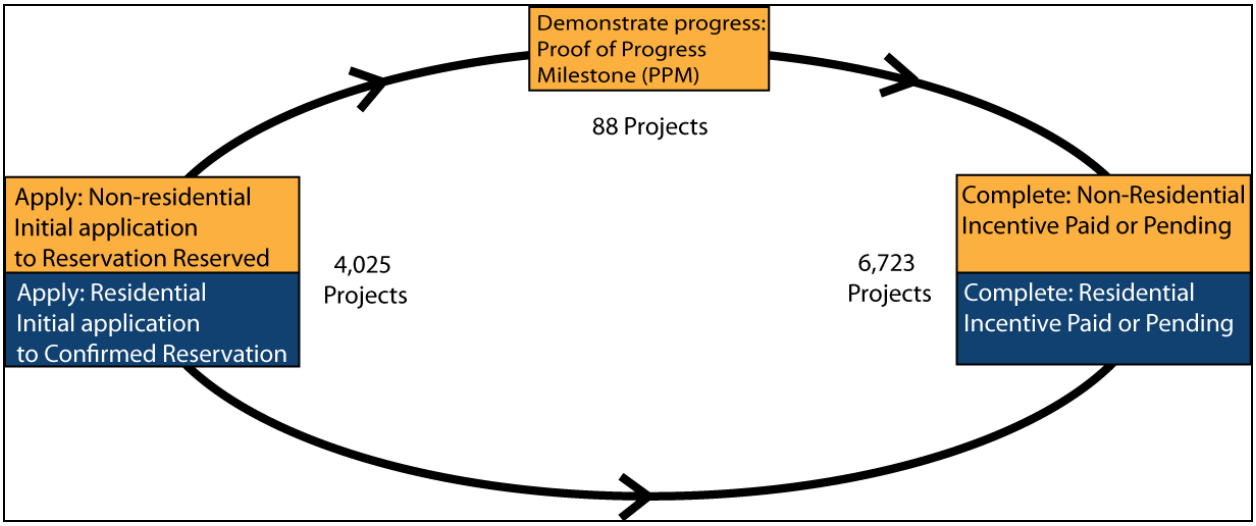
5.3 More Projects are Reaching Completion in 2008

Applications proceed through several stages before payment – from Requested to Reserved to Completed. Residential and small commercial applicants can apply through an abbreviated two-step application process—the first step is to apply and confirm your incentive level and the second step is to submit documentation of an installed system to receive a rebate. Larger commercial projects have an interim application step – a milestone review and confirmed reservation stage, making a three-step process before payment. The final part of the rebate process is triggered when the applicant submits an incentive claim form, signifying that the project is installed and ready for inspection (if applicable), documentation review, and payment. The data in Table 6 below includes all applicants – those with a two-step process as well as those

with a three-step process.

As shown in Table 6, while there are a significant number of applicants in Steps 1 and 2, the majority of applicants have moved to the application Step 3.

Figure 5. Applications Moving Through Application Process



***Source*:** CSI PowerClerk Online Database, Jun. 25, 2008

- There are 4,025 applicants in the application processing Step 1, which includes 3,404 with confirmed reservations. Those projects with confirmed reservations can now begin installation.
- Another 88 applications (all non-residential) are in application processing step 2.
- Once the applicant finishes step 1 (residential) or step 2 if applicable (non-residential), the applicant proceeds with the installation, an inspection if required, and submits the final required paperwork into the Incentive Claim Form (ICF) Package.

As shown in Table 6, the capacity of applications in processing Step 3, which means their Incentive Claim Package has been submitted, has increased from 44.7 MW in Q1 to 78.6 MW in at the end of second quarter.

  - Of those submitted, 6,005 projects are "completed" or, if they are PBI project, are "in payment", valued at 45.1 MW and $114 million.
  - An additional 718 projects are "pending payment" or "incentive claim submitted" (which essentially means under review).
- The number of applications that have been cancelled or withdrawn from the program has increased from 270 to 402, equaling a total 52.9 MW. Of those 402 applications, 165 (24.9 MW) were reserved before dropping out of the program.

Table 6. CSI Application Status, MW and Payments, January 1-June 25, 2008

Handbook Step		Number of Applications				Total		Total Incentive
	Application Status	**CCSE**	**PG&E**	**SCE**	**Totals**	**MW**		**$**
Application Processing Step 1	Reservation Request Review	11	248	146	405	10.1	MW	$ 19,682,422
	Suspended-Reservation Review	17	40	98	155	5.5	MW	$ 11,755,106
	Reservation Reserved	22	52	57	131	40.0	MW	$ 95,302,980
	Confirmed Reservation	286	2,243	805	3,334	85.4	MW	$ 216,415,854
	Total Applications in Step 1	**336**	**2,583**	**1,106**	**4,025**	**141.0**	**MW**	**$ 343,156,362**
Application Processing Step 2 (Only applies to non	Proof of Project Milestone Review	2	64	7	73	22.3	MW	$ 57,826,445
	Suspended-Milestone Review	-	2	8	10	6.4	MW	$ 19,103,428
	Pending RFP	-	5	-	5	3.3	MW	$ 8,656,939
	Total Applications in Step 2	**2**	**71**	**15**	**88**	**31.9**	**MW**	**$ 85,586,812**
Application Processing Step 3 (Step 2 for Residential and Small Commercial)	Incentive Claim Request Review	13	432	111	556	11.1	MW	$ 29,541,040
	Suspended-Incentive Claim Request Review	24	60	177	261	2.3	MW	$ 41,596,095
	Incentive Claim Submitted	30	145	14	189	14.7	MW	$ 6,441,175
	Pending Payment	81	304	144	529	5.4	MW	$ 14,069,766
	Completed	522	4,219	1,219	5,960	39.1	MW	$ 95,568,427
	PBI-In Payment	9	5	31	45	5.9	MW	$ 18,824,673
	Total Applications in Step 3	**679**	**5,165**	**1,696**	**7,540**	**78.6**	**MW**	**$ 206,041,175**
Inactive Projects	System Removed	-	-	1	1	0.1	MW	$ 170,131
	Withdrawn (Reserved projects only)	-	12	5	17	0.9	MW	$ 1,853,165
	Cancelled (Reserved projects only)	15	100	32	147	24.0	MW	$ 57,262,881
	Subtotal: Reserved Inactive Projects	***15***	***112***	***38***	***165***	***24.9***	***MW***	***$ 59,286,178***
	Cancelled (Projects that never reached reservation status)	20	138	75	233	27.9	MW	$ 69,420,462
	Withdrawn (Projects that never reached reservation status)	-	2	2	4	0.0	MW	$ 54,650
	Subtotal: Unreserved Inactive Projects	***20***	***140***	***77***	***237***	***28.0***	***MW***	***$ 69,475,112***
	Total Inactive Projects	**35**	**252**	**115**	**402**	**52.9**	**MW**	**$ 128,761,289**
	All Projects	**1,052**	**8,071**	**2,932**	**12,055**	**304.4**	**MW**	**$ 763,545,638**
	All Active Projects	**1,017**	**7,819**	**2,817**	**11,653**	**251.5**	**MW**	**$ 634,784,349**

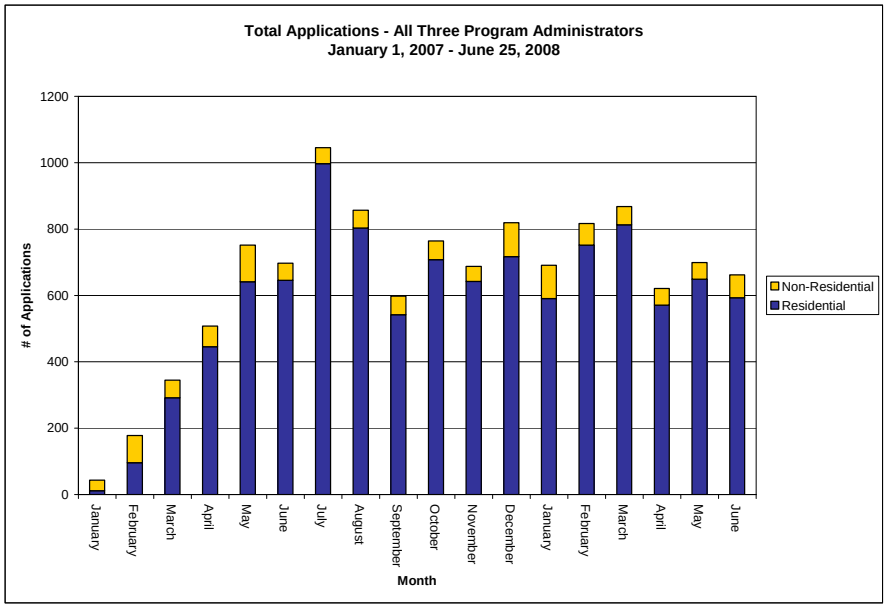
***Source*:** CSI PowerClerk Online Database, June 25, 2008.

Notes: (1) "Reserved Inactive Project are project that have reached "reservation reserved" for commercial, "confirmed reservation status" for residential, and "pending RFP" for government and non-profit entities. (2) A project's system capacity (CEC-PTC rating) may change over the lifetime of a project – for example, an application may be submitted for a 4 kW PV system, but a 4.5 kW system was installed because the installer used less efficient PV system components than were expected in the beginning of the project. The "Total MW" column does not reflect these changes in system capacity throughout a project's lifetime, but only captures the size of the project as currently reflected in the database. This discrepancy accounts for the difference between the "Drop Outs" in Table 6 and Table 16. The latter table is calculated using the Trigger Tracker database which does account for changes in project size over time. In late June 2008, the database was modified to track changes in project size over time. Therefore, future versions of this table should more accurately reflect the changes in system size.

5.4 Program Demand remains steady halfway through 2008

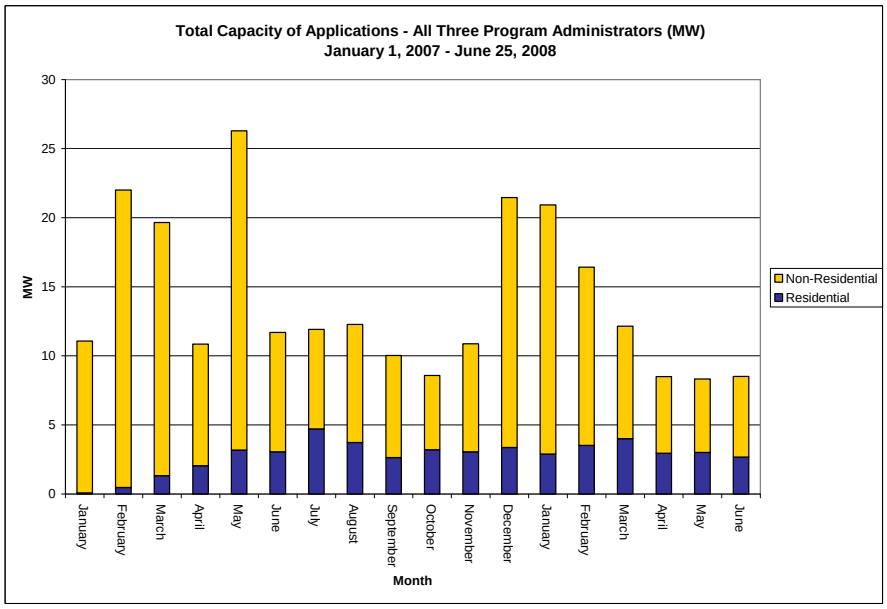
Interest in the CSI Program has remained strong through the beginning of the program's second year. Figure 6 and Figure 7 provide a month by month view of the total number of applications received in the program. This month-by-month view is not "confirmed reservations", but applications received. The decrease in non-residential demand in Q2 2008 is likely related to the fact that PG&E and SCE dropped from Step 5 in March.

Figure 6. Total Applications – By Customer Segment, Jan. 1, 2007 - Jun. 25, 2008



***Source*:** CSI PowerClerk Online Database, June 25, 2008. *Note*: Total **does not include** cancelled or withdrawn projects.

Figure 7. Total Capacity of Applications - By Customer Segment, Jan. 1, 2007 - Jun. 25, 2008



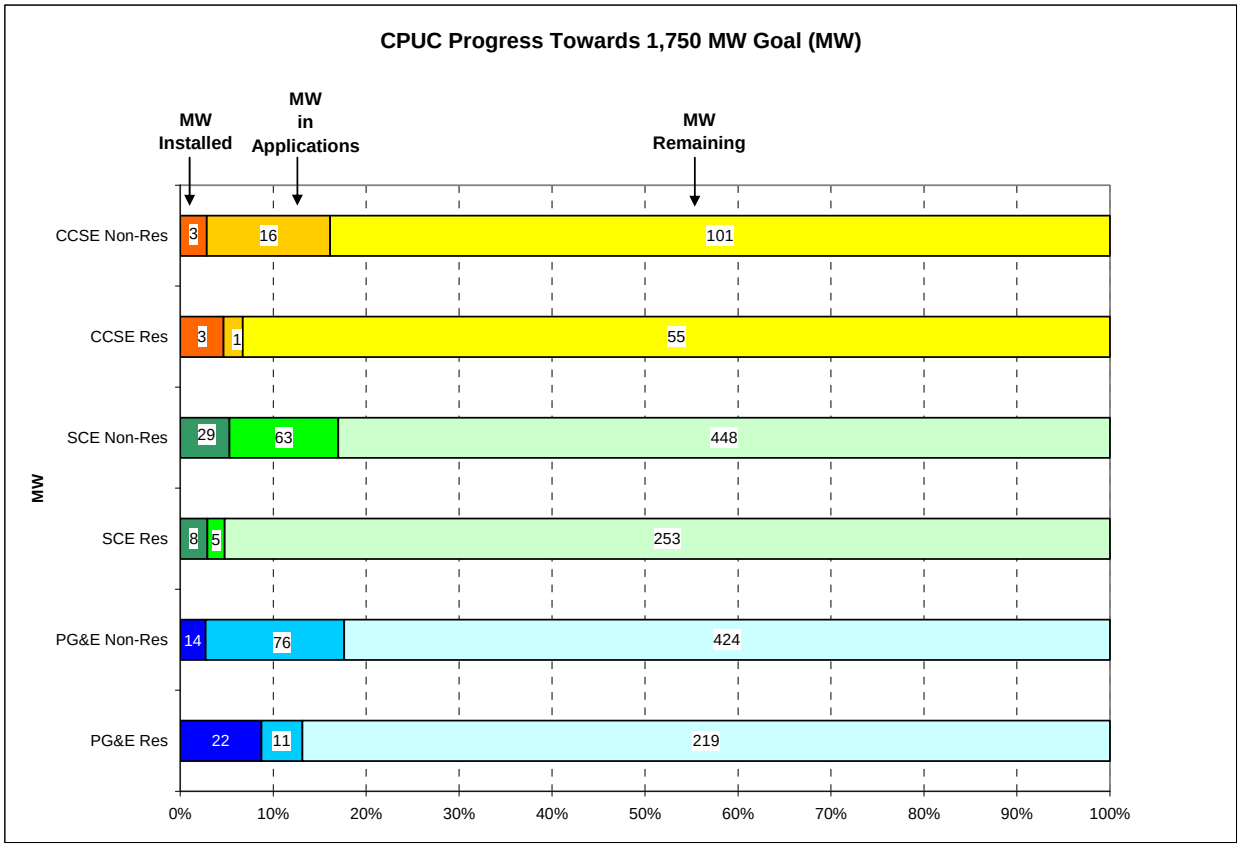
***Source*:** CSI PowerClerk Online Database, June 25, 2008. *Note*: Total **does not include** cancelled or withdrawn projects.

5.5 Program Making Progress to Reach Overall CSI Goals

One goal of the CPUC portion of the CSI Program is to grow solar installations to reach 1,750 MW by 2016. With 252 MW worth of applications, the program would appear to

be on track to meet at least 14% of the program's 10 year goal. In designing the program, the CPUC divided the goals by program administrator and customer segment. Figure 8 shows the current applications in relation to each of the sub goals. Each Program Administrator is making progress towards its portion of the program's MW goals. Figure 8 shows the goals per Program Administrator per sector (residential or non-residential) that are based on Table 4 on Page 13 above. PG&E has met 9% of its residential goals in installed capacity, while CCSE has met 5% of residential goal and SCE has met 3% of its residential goal. SCE has met 5% of its non-residential goals in installed capacity, while PG&E and CCSE have met 3% of their non-residential goals. Figure 8 shows the progress towards the goal based on MWs installed and MWs in applications that are currently in the queue (and does not include drop outs).

Figure 8. CPUC has 250 MW of Applications Towards Ten-Year 1,750 MW Goal



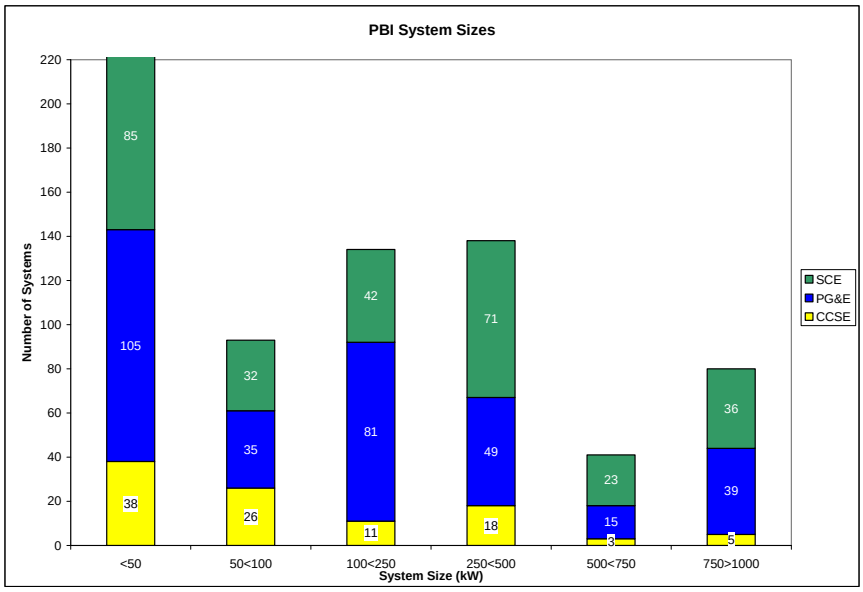
***Source*:** CSI PowerClerk Online Database, June 25, 2008.

5.6 PBI Incentive Demand

The PBI incentive path is required of larger projects in the CSI Program. There are currently 714 PBI projects, that when installed will bring online an estimated 186 MW of new solar PV capacity. The commercial sector dominates PBI projects; there are 141 MW

of commercial projects. The remaining 44 MW of PBI projects include 35 MW of government projects, 9 MW of non-profit projects, and 1 MW of residential projects. Figure 9 shows the number of PBI systems by size and program administrator.

Figure 9. Number of PBI Systems by System Size by Program Administrator, January 1 – June 25, 2008



***Source*:** CSI PowerClerk Online Database, June 25, 2008.

Voluntary Opt-In to PBI System

The CPUC is also monitoring the extent to which customers are taking the PBI incentive payment even if they are not required to do so. This information will help inform the planned phase-down of PBI to 30 kW systems by 2010. The PBI incentive was required of all systems 100 kW and greater in 2007, and it is required of all systems 50 kW and above as of 2008. Customers that opt-in to PBI should be sure to understand the costs and rigor of the PBI monitoring and metering requirements. As shown in Table 7 and Table 8, the PBI incentive path is being taken by about 3% of customers that do not need to take PBI in 2007, and 2% of those customers in 2008.

Table 7. 2007 CSI Projects Below 100 kW that Opt into PBI

System Size	CCSE	PG&E	SCE	Total
<30kW	21	72	31	124
30<50kW	1	9	3	13
50<100kW	14	15	28	57
Total	**36**	**96**	**62**	**194**
# of Systems <100kW	*581*	*5042*	*1380*	*7003*
%of Systems <100kW in PBI	*6.2%*	*1.9%*	*4.5%*	*2.8%*
% of Systems <100kW in EPBB	*93.8%*	*98.1%*	*95.5%*	*97.2%*

***Source*:** CSI PowerClerk Online Database, June 25, 2008.

Table 8. 2008 CSI Projects Below 50 kW that Opt into PBI

System Size	CCSE	PG&E	SCE	Total
<30kW	15	17	49	81
30<50kW	1	7	2	10
Total	**16**	**24**	**51**	**91**
# of Systems <50kW	*385*	*2567*	*1249*	*4201*
%of Systems <50kW in PBI	*4.2%*	*0.9%*	*4.1%*	*2.2%*
% of Systems <50kW in EPBB	*95.8%*	*99.1%*	*95.9%*	*97.8%*

***Source*:** CSI PowerClerk Online Database, June 25, 2008.

5.7 Third Party Owned Projects

Third party ownership is not tracked by the CSI database, but there is a reasonable proxy of this information 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 Power Purchase Agreement (PPA) with the "Host Customer" because that information is not part of the CSI application process. While PPA arrangements do exist as part of third-party owned projects, there could be other financial or management arrangements between the two entities.

Table 9 shows there are just 351 projects where "Host Customer" is different from "System Owner", but these projects have a total capacity of 102.1 MW, representing 41% of the capacity of applications in the CSI program.

Table 9. CSI Projects with Different "Host Customer" vs. "System Owner", By Program Administrator

	Program Administrator			
	CCSE	PG&E	SCE	Total
Number of applications with different Host Customer/System Owner	43	171	137	351
Number of applications of all CSI projects	1,017	7,819	2,817	11,653
Total capacity of applications with different Host Customer/System Owner (MW)	11.4	40.5	50.2	102.1
Total capacity of applications of all CSI Projects (MW)	23.5	123.5	104.5	251.5

***Source*:** CSI PowerClerk Online Database, June 25, 2008.

5.8 California Solar Initiative Increases Statewide Grid-Installed Capacity by 40 Percent since Program Inception

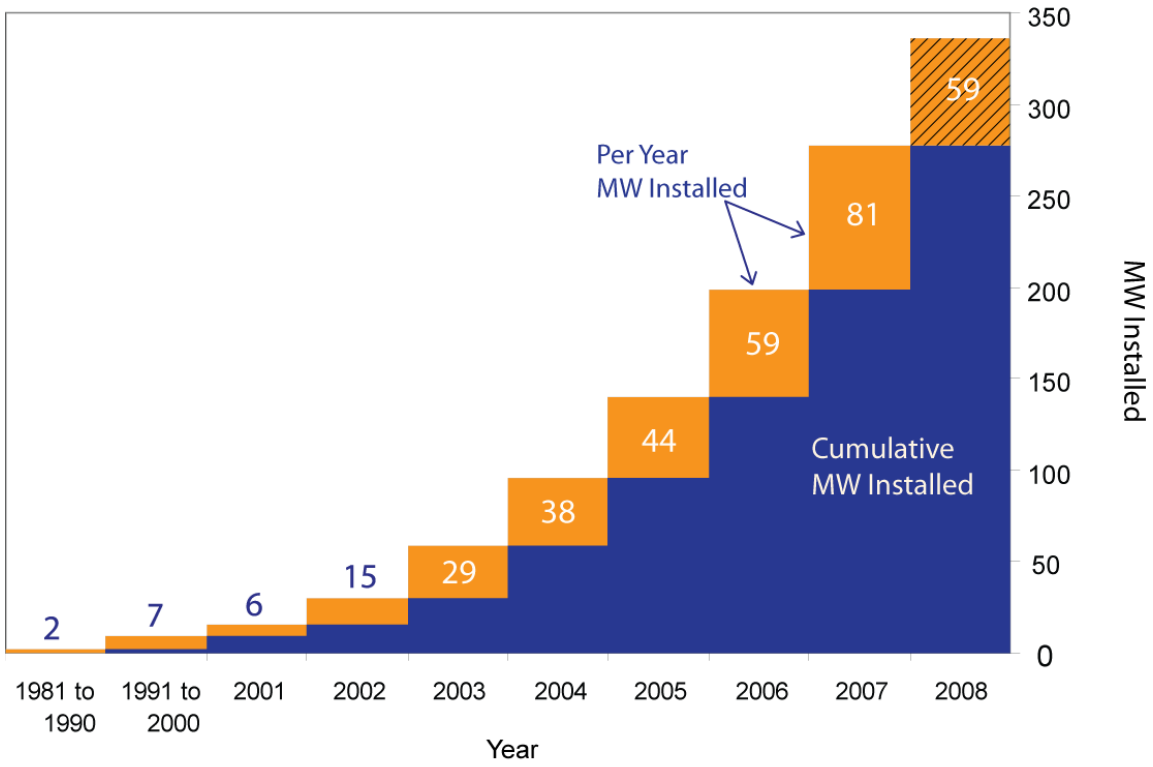
The ultimate metric for the CSI Program will be the amount of installed MW of new grid connected solar in California. The CPUC is closely monitoring the actual installations and the annual growth under CSI.

In less than 18 months, the CSI program has installed a total of 78.6 MW of new solar, increasing rooftop solar PV capacity in California by 40 percent over the total installed capacity that existed at the start of the program. In the first half of 2008 alone, the CSI program has installed 59.4 MW[11] – nearly three quarters of the total rooftop capacity installed in 2007 by all state programs combined. For the purposes of this report, we define installed projects as all projects that have passed the incentive claim submitted status.

The California Energy Commission (CEC) tracks installed MW of grid connected PV since 1981. The most recent version of the CEC's database was published in April 2008, and Figure 10 shows the MW of grid-connected PV systems since 1981 through June 25, 2008. Please note: the data through 2007 includes all PV programs statewide, and the 2008 data below includes the installed capacity of *CSI projects only* through June 25, 2008. The 2008 capacity data of other PV programs is not included in this chart.

[11] The California Energy Commission's *Grid Connected PV Capacity Installed in California*, updated April 1, 2008, reported that 19.2 MW were installed within the CSI program in 2007. The data is available at*:* http://www.energy.ca.gov/renewables/emerging_renewables/GRID_CONNECTED_PV_12-31-07.XLS

Figure 10. Grid-Connected PV Capacity in California, 1981 through 2008 (note: 2008 data is partial year data)



Source: 1981-2007 data from California Energy Commission's *Grid Connected PV Capacity Installed in California*, April 1, 2008. Available at: http://energy.ca.gov/renewables/emerging_renewables/GRID_CONNECTED_PV_12-31-07.XLS. CSI PowerClerk Online Database, June 25, 2008.

6 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 a CPUC data request to the Program Administrators dated June 9th, 2008. The data presented is current through May 31st, 2008, except where noted.

6.1 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 10 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 10 compares processing times from the most recent quarter to average processing times for the 2008 calendar year.

The Program Administrators continue to make progress towards their goal of processing reservations in 30 days or less, particularly for residential projects. For residential applications submitted in the most recent quarter, 81%, 82%, and 90% respectively for PG&E, SCE and CCSE were granted in 30 days or less. Non-residential applications are more complex and require additional processing time. For non-residential applications submitted in the most recent quarter, 15%, 45%, and 67% were granted reservations in 30 days or less for PG&E, SCE and CCSE.

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 10. 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**	
	Mar. - May	*2008*	Mar. - May	*2008*	Mar. - May	*2008*	Mar. - May	*2008*	Mar. - May	*2008*
RESIDENTIAL										
PG&E	22%	*15%*	81%	*67%*	89%	*90%*	3%	*4%*	8%	*6%*
SCE	61%	*60%*	82%	*84%*	83%	*88%*	0%	*0%*	*17%*	*22%*
CCSE	80%	*83%*	90%	*91%*	96%	*96%*	0%	*1%*	*4%*	*3%*
NON-RESIDENTIAL										
PG&E	2%	*2%*	15%	*14%*	44%	*55%*	37%	*32%*	19%	*13%*
SCE	20%	*20%*	45%	*57%*	48%	*77%*	0%	*1%*	*52%*	*22%*
CCSE	67%	*63%*	67%	*63%*	73%	*70%*	0%	*0%*	*27%*	*30%*

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

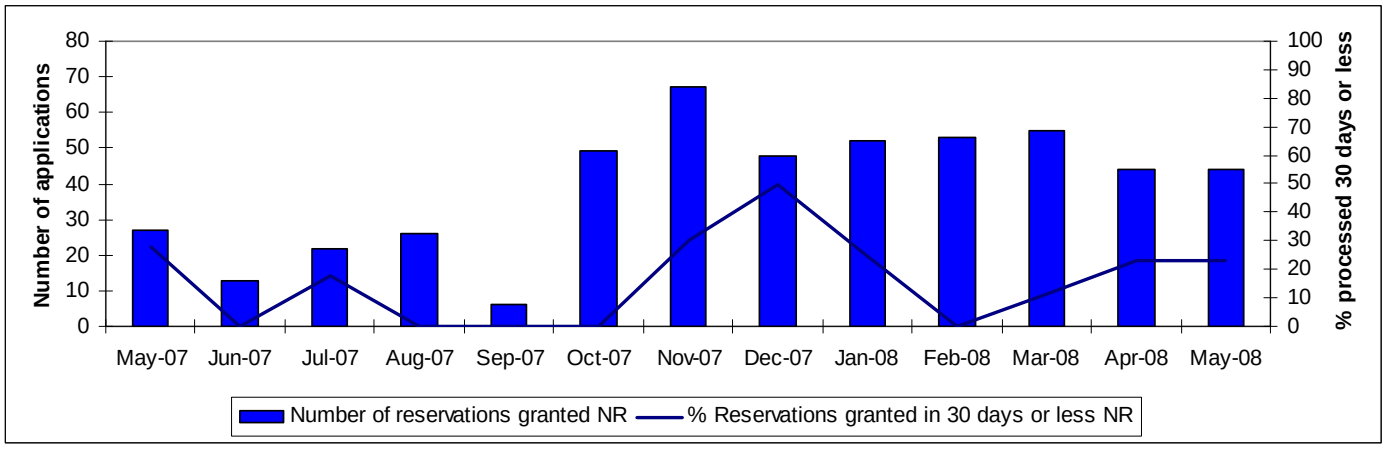
Table Notes: "Mar. – May" includes all applications that were received by the Program Administrators between March 1st, 2008, and May 31st, 2008. "2008" refers to all applications received by Program Administrators between January 1st, 2008, and May 31st, 2008. Please note that columns are additive.

Figures 4 – 9 offer another look at our progress towards achieving administrative processing goals. These charts show both the number of applications granted a reservation each month for the past year, as well as the percent of those reservations that were granted in 30 days or less. The data is separated by Program Administrator and by residential and non-residential applications. 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.

Figure 12 shows that PG&E has largely recovered from the application processing backlog it encountered late in 2007. Figure 14 shows that SCE has maintained relatively consistent application processing times throughout the past year for residential

applications. Figure 16 shows that CCSE has also been able to consistently process a majority of residential applications within the goal time of 30 days or less.

Figure 11. PG&E non-residential reservation processing performance



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Figure Notes: Chart displays both the number of projects granted either confirmed reservation (residential) or reservation reserved (non-residential) status in a particular month, as well as the percentage of those reservations that were granted in 30 calendar days or less from time of receipt by Program Administrator.

Figure 12. PG&E residential reservation processing performance

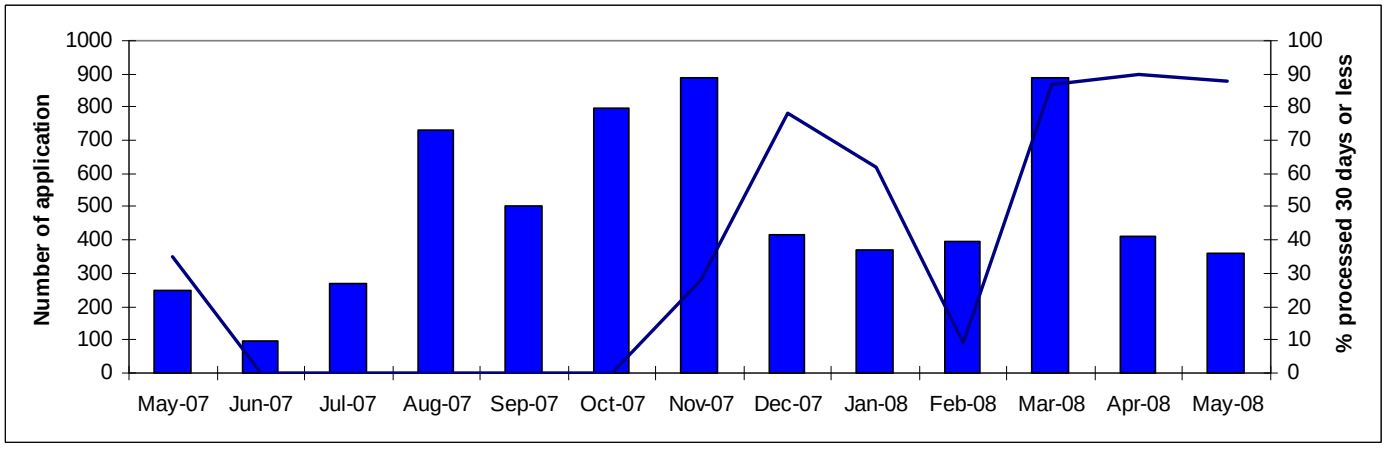
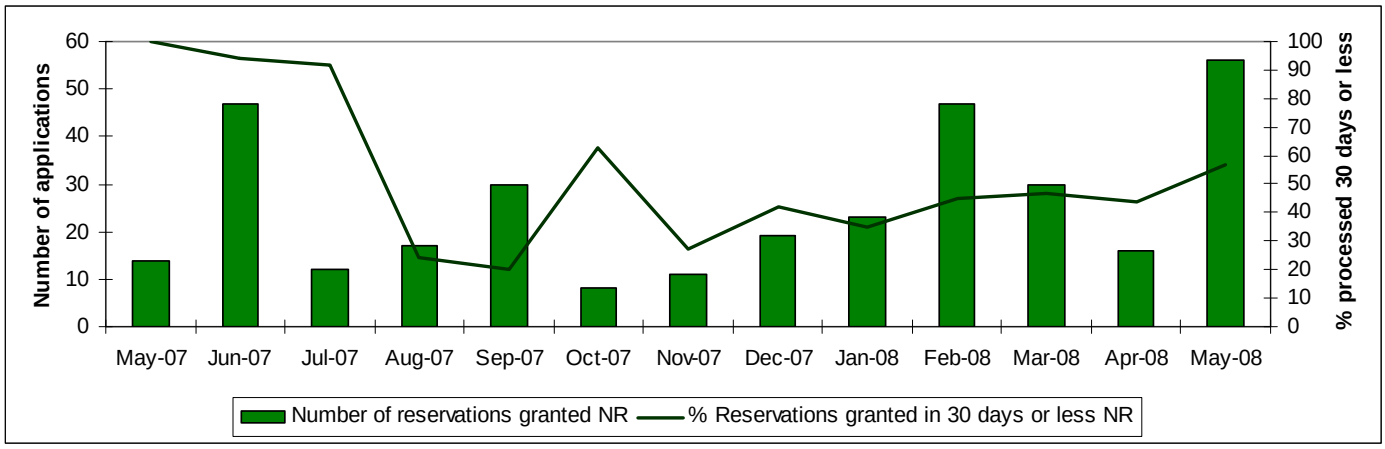


Figure 13. SCE non-residential reservation processing



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Figure Notes: Chart displays both the number of projects granted either confirmed reservation (residential) or reservation reserved (non-residential) status in a particular month, as well as the percentage of those reservations that were granted in 30 calendar days or less from time of receipt by Program Administrator.

Figure 14. SCE residential reservation processing

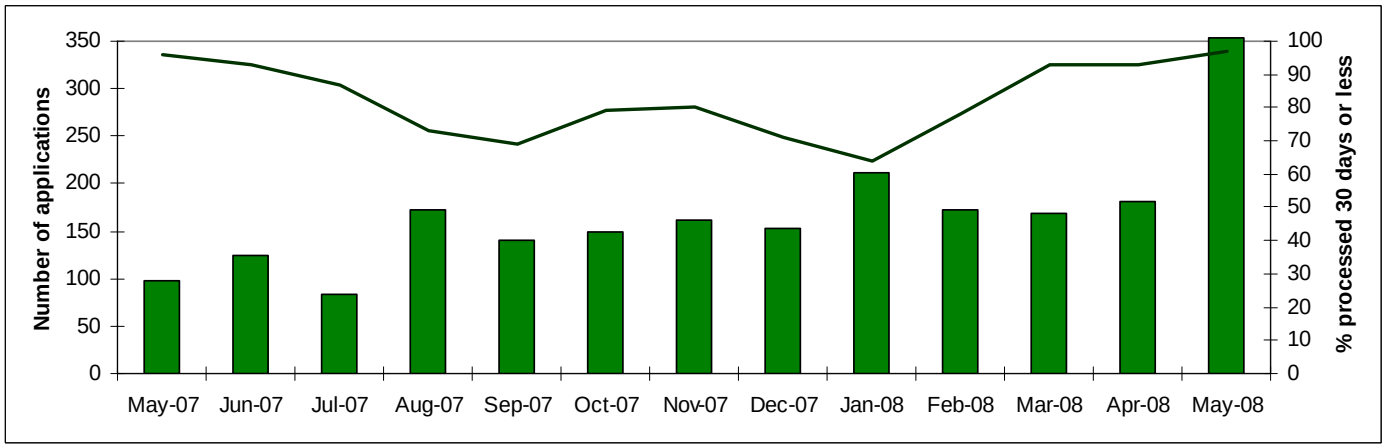
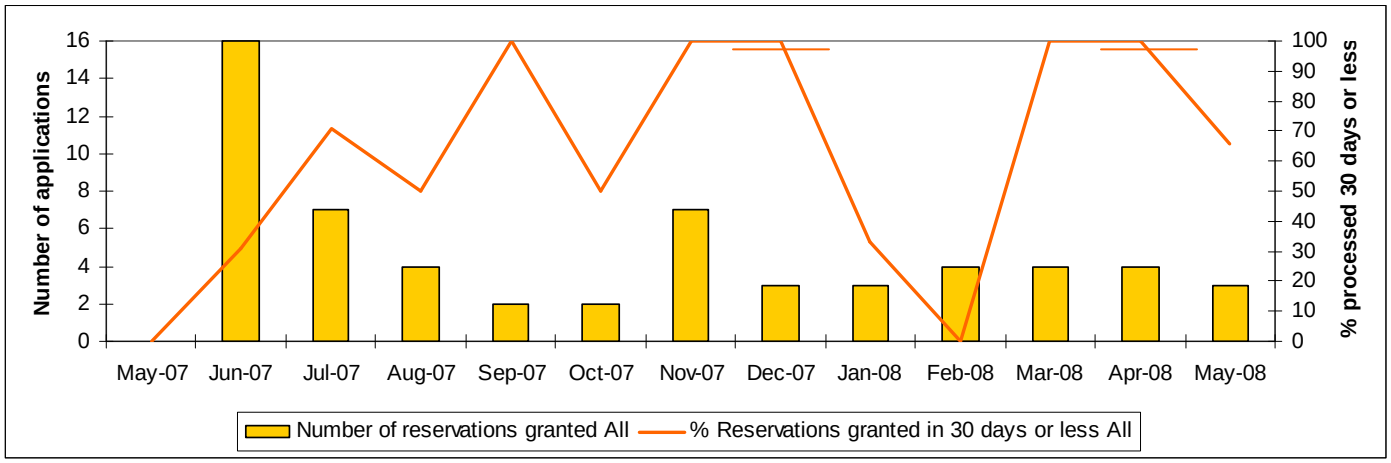


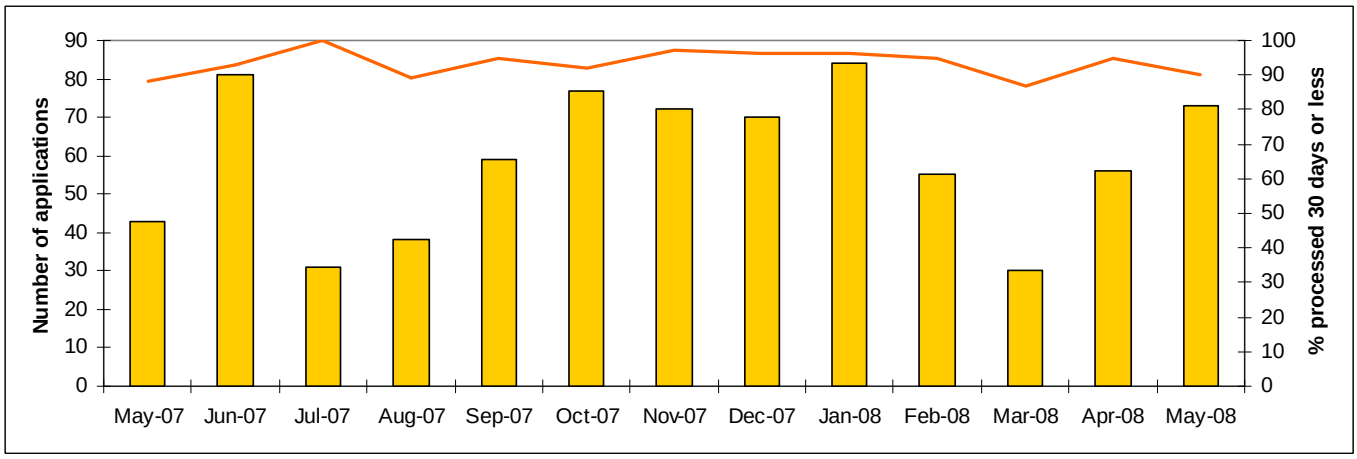
Figure 15. CCSE Non-Residential application processing performance



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Figure Notes: Chart displays both the number of projects granted either confirmed reservation (residential) or reservation reserved (non-residential) status in a particular month, as well as the percentage of those reservations that were granted in 30 calendar days or less from time of receipt by Program Administrator. CCSE processed 100% of non-residential applications in November and December of 2007, and in March and April of 2008.

Figure 16. CCSE Residential application processing performance



6.2 Installation time

The average installation time is determined by the applicant, not the Program Administrator. Residential and commercial applicants have 12 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 11 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 2008.

Table 11. Installation time

	RESIDENTIAL 2008	NONRESIDENTIAL 2008
PG&E	95 days	162 days
SCE	81 days	166 days
CCSE	101 days	160 days

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: "2008" refers to all applications where ICF was received by Program Administrators between January 1st, 2008, and May 31st, 2008. Time is shown in calendar days.

6.3 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 12 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 2008.

Table 12. Interconnection time

	RESIDENTIAL 2008	NONRESIDENTIAL 2008
PG&E	7 days	10 days
SCE	5 days	4 days
CCSE	3 days	3 days

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: "2008" refers to all projects **that were interconnected** between January 1st, 2008, and May 31st, 2008. Time is shown in calendar days.

6.4 Incentive claim processing

For CSI Program participants, incentive claim processing is an extremely important part of the project timeline. Table 13 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 13 are sorted into groups that were or were not inspected. Table 13 compares data from those projects that were identified as "pending payment" in the last quarter to those projects whose claims were processed in 2008. 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 13. 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	
	Mar. - May	2008	Mar. - May	2008	Mar. -May	2008	Mar. -May	2008	Mar. - May	2008
RESIDENTIAL with inspection										
PG&E	5%	6%	70%	55%	90%	79%	0%	20%	10%	1%
SCE	92%	92%	94%	97%	94%	97%	0%	0%	6%	3%
CCSE	43%	35%	72%	67%	86%	88%	0%	0%	14%	12%
RESIDENTIAL without inspection										
PG&E	67%	56%	74%	78%	76%	81%	0%	2%	24%	17%
SCE	63%	73%	65%	75%	65%	75%	0%	0%	35%	25%
CCSE	61%	68%	79%	83%	85%	88%	0%	1%	15%	11%
NON-RESIDENTIAL with inspection										
PG&E	6%	4%	64%	49%	90%	76%	0%	18%	10%	6%
SCE	75%	93%	75%	93%	75%	93%	0%	0%	25%	7%
CCSE	50%	20%	100%	80%	0%	100%	0%	0%	0%	0%
NON-RESIDENTIAL without inspection										
PG&E	66%	55%	74%	77%	75%	81%	0%	2%	25%	17%
SCE	24%	32%	24%	38%	24%	38%	0%	0%	76%	62%
CCSE	67%	70%	67%	70%	78%	80%	0%	0%	22%	20%

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: "Mar. – May" includes all projects where Incentive Claim Form was received by the Program Administrators between March 1st, 2008, and May 31st, 2008. "2008" refers to all projects where Incentive Claim Form was received by Program Administrators between January 1st, 2008, and May 31st, 2008. Please note that columns are additive.

Table 14 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 14. Payment time

	Residential 2008		Non-Residential 2008	
	EPBB	**PBI**	**EPBB**	**PBI**
PG&E				
Avg. number of days	12 days	48 days	20 days	28 days
No. processed	2,028	12	61	10
SCE				
Avg. number of days	78 days	218 days	80 days	152 days
No. processed	670	2	21	25
CCSE				
Avg. number of days	18 days	32 days	23 days	24 days
No. processed	203	6	9	3

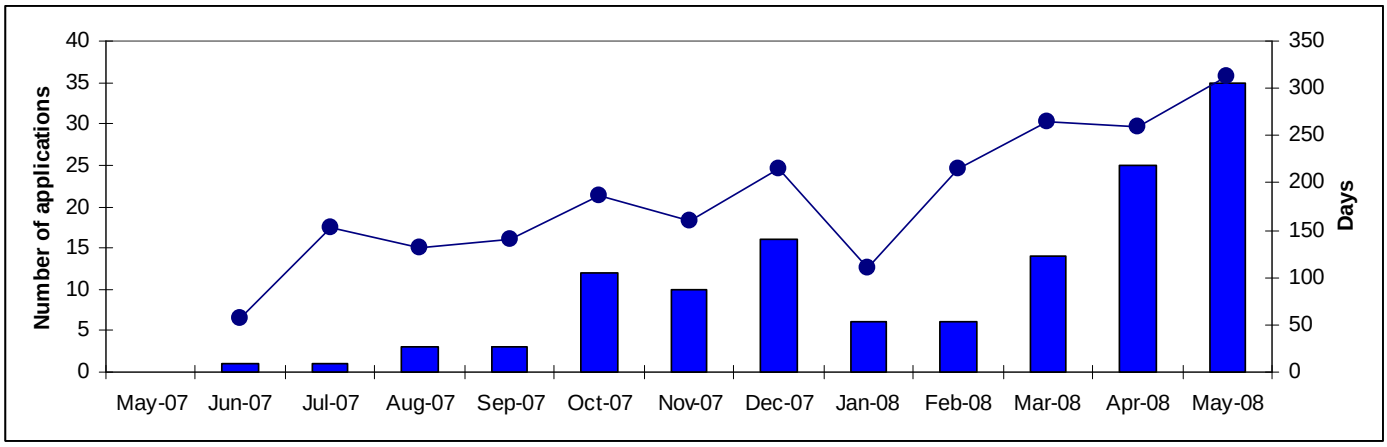
Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: "2008" refers to all projects **where check issue date** is between January 1st, 2008, and May 31st, 2008. Time is shown in calendar days.

6.5 End-to-end project completion times

Figures 10 – 15 show both the number of projects completed and 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.

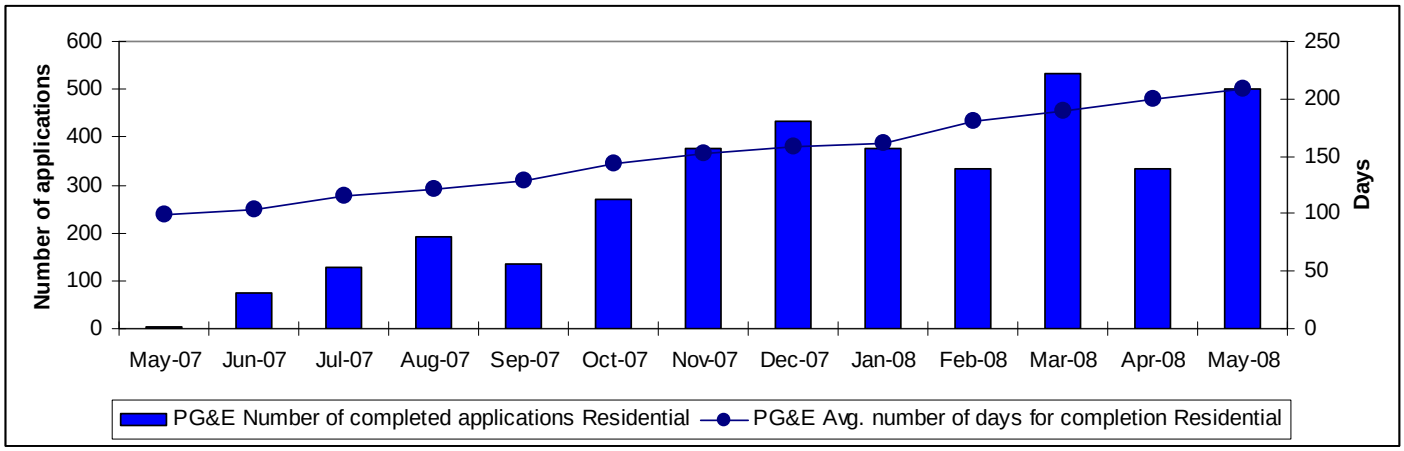
Figure 17. Project completion times for non-residential projects in PG&E territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

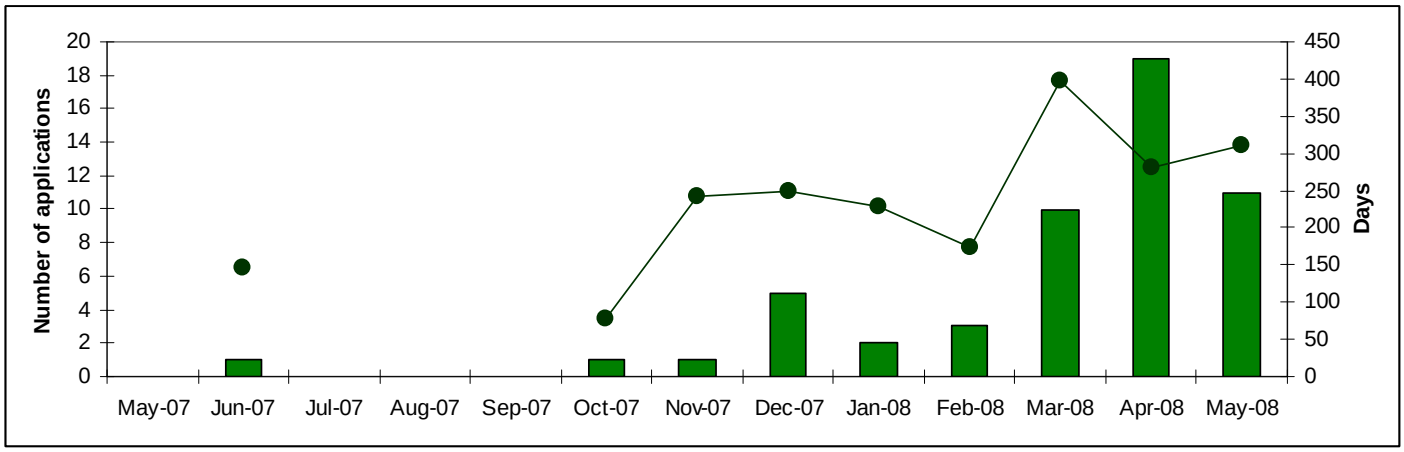
Figure 18. Project completion times for residential projects in PG&E territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

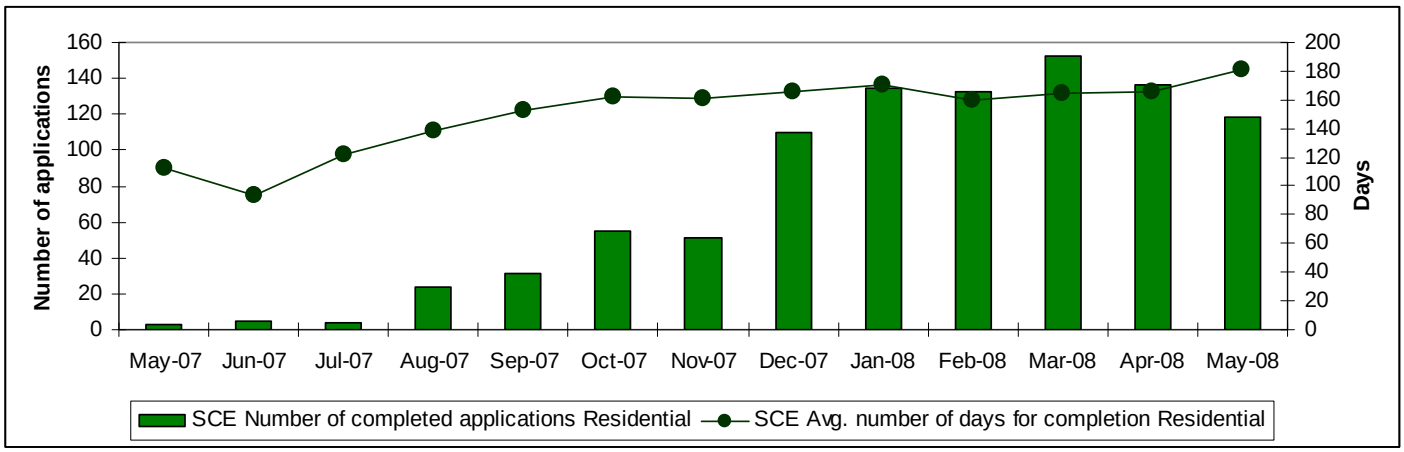
Figure 19. Project completion times for non-residential projects in SCE territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

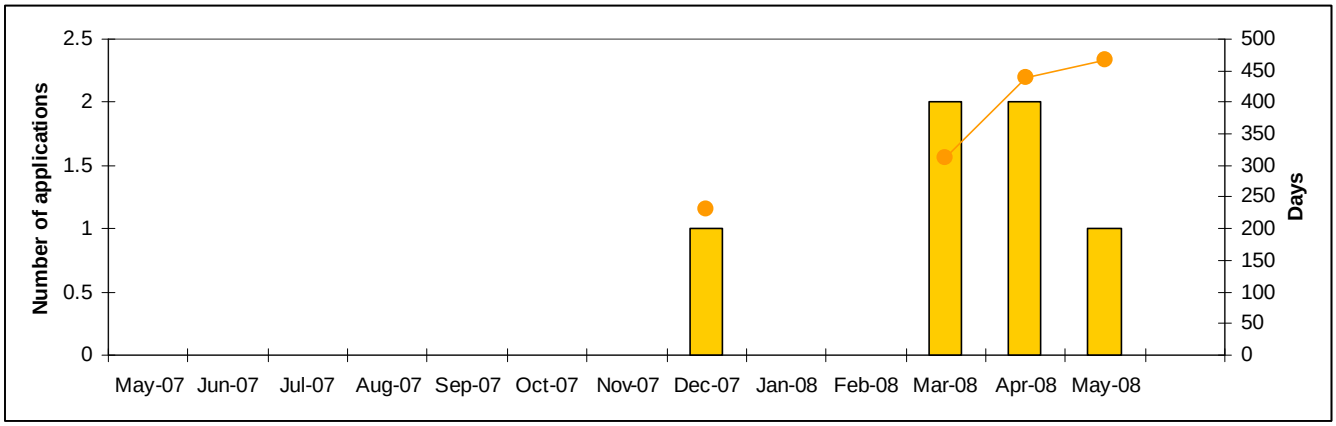
Figure 20. Project completion times for residential projects in SCE territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

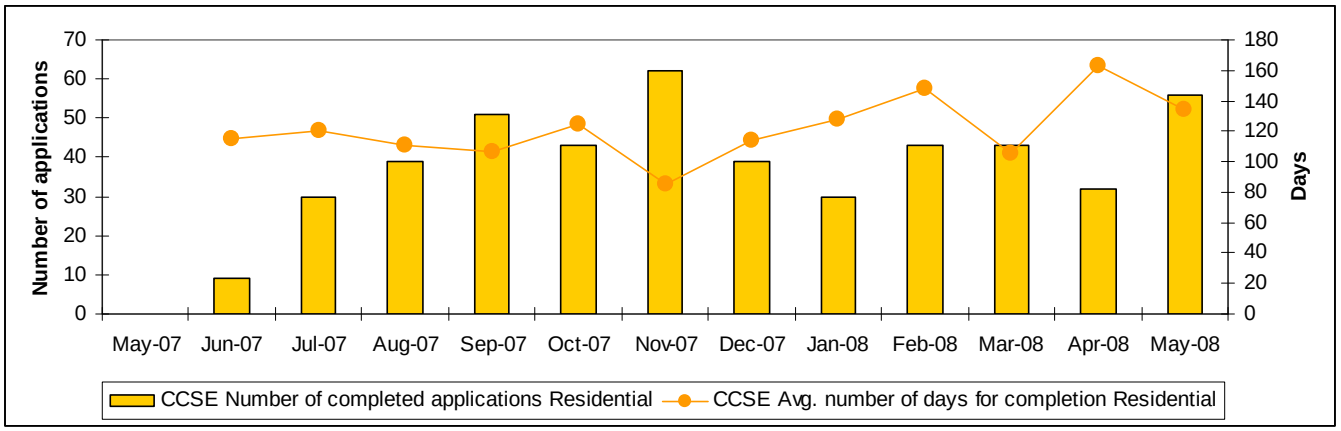
Figure 21. Project completion times for non-residential projects in CCSE territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

Figure 22. Project completion times for residential projects in CCSE territory



Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.

Table Notes: Completion time represents end-to-end processing times, from application first received to incentive claim paid. This includes response times from both the host customer / installer and the utility.

6.6 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. Thus far, the CSI Program has held 33 trainings in 2008 and has trained at least 1,664 attendees.

Table 15. Installer trainings

	Number of CSI Trainings Held in 2008	Number of Attendees at Installer Trainings in 2008
PG&E	19	1,000
SCE	8	394
CCSE	6	270
Total	**33**	**1,664**

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.
Table Notes: "2008" refers to all trainings held between January 1st, 2008, and May 31st, 2008.

PG&E has hosted at least six different training courses at its Pacific Energy Center in San Francisco and elsewhere throughout its service territory. These courses include solar basics and more advanced solar installations trainings with content of interest to residential customers, installers, engineers, architects and other interested groups. For more information on PG&E trainings, call (415)973-2777 or visit www.pge.com/solar.

SCE has added new information on interconnections to its training seminars. 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 offers two primary solar courses, "Solar for Homeowners" and "The Financial Case for Solar". Both workshops include information relevant to installers and homeowners. For more information, visit www.EnergyCenter.org and click "Events & Workshops".

6.7 Program dropouts

As the CSI Program continues, some systems have either dropped out or decreased in overall size (MW). As ordered in Commission decision D.07-05-007, these "dropout" MWs are added in to the current step at the time they drop out. This creates a dollar differential in terms of the incentive scheduled for a certain number of MW. The same number of MWs are incented, but some are shifted to a lower incentive tier, so the direct budget impact is reduced. Staff estimates the current dollar differential from dropouts to be approximately $16.13 million. Table 16 shows the dropout MW for the CSI Program, by Program Administrator. More detailed dropout data is available in the Appendix B of this report.

"MW" represents the number of MW that dropped out from that step and were either added back into their original step or added in to the step in which they dropped out. Step 1 was fully reserved under the SGIP in 2006, and these applications were subject to different programmatic rules. Therefore, Step 1 dropout rates are not directly comparable to the rates for Steps 2 and beyond, and are not included in the totals row at the bottom of Table 16.

Table 17 shows an overall program dropout rate of 8% of all MW that have ever been reserved. For projects that are older than 12 months and should have either reached completion or dropped out, the dropout rate is 9% of all MW, although a significant number of projects and MW remain incomplete in the non-residential sector even though they are past the 12 month marker. The rates are different for residential and commercial projects, with 3% of residential MW dropping out by 12 months and 10% of commercial MW dropping out by 12 months. A summary of completed, active and dropout projects by application, MW and incentive dollars is available in Table 17 in Appendix A. On July 14, 2008, the CPUC hosted a public workshop to further examine the dropout problem and consider what action, if any, should be taken to deter program dropouts.

Table 16. CSI MW dropouts and dollar differentials

Step	PG&E			SCE			CCSE			All		
	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		*16.62*			*7.01*			*6.16*			*29.79*	
2a		*3.10*			*0*			*0*			*3.10*	
2b	0.50	10.07	$5.68	0.07	0.50	$0.54	0.03	0.50	$1.15	0.60	11.07	$7.40
3	5.91	6.96	$2.85	0	2.17	$1.70	0	0.42	$0.63	5.91	9.55	$5.18
4	0.01	18.01	$3.37		2.13	$0.18		1.11	$0	0.01	21.25	$3.55
5		0.11	$0		0	$0					0.11	$0
Totals	6.42	35.04	$11.90	0.07	4.8	$2.42	0.03	2.03	$1.81	6.52	41.87	$16.13

Source: CPUC data request to Program Administrators, dated June 9th, 2008, and covering data through May 31st, 2008.
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 MWs. (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 16. (3) The amount of dropout MWs shown on this chart differs from that shown in Table 6 because this data includes MW changes from system downsizing.

6.8 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.

Appendix A

Additional data graphs of CSI Program demand by month and by Program Administrator are provided in the Appendix.

Figure 23. Total Applications-PG&E, Jan. 1-Jun. 25, 2008[12]

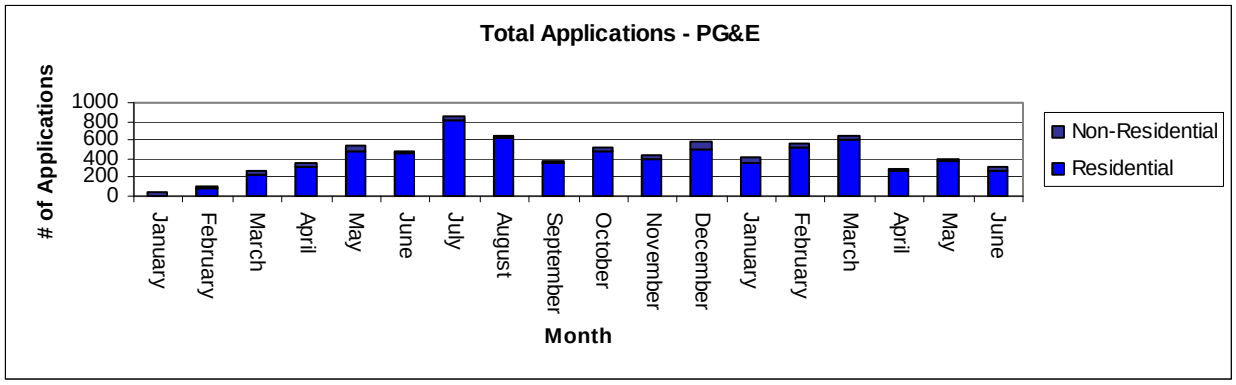


Figure 24. Total Capacity of Applications - PG&E, Jan. 1-Jun. 25, 2008

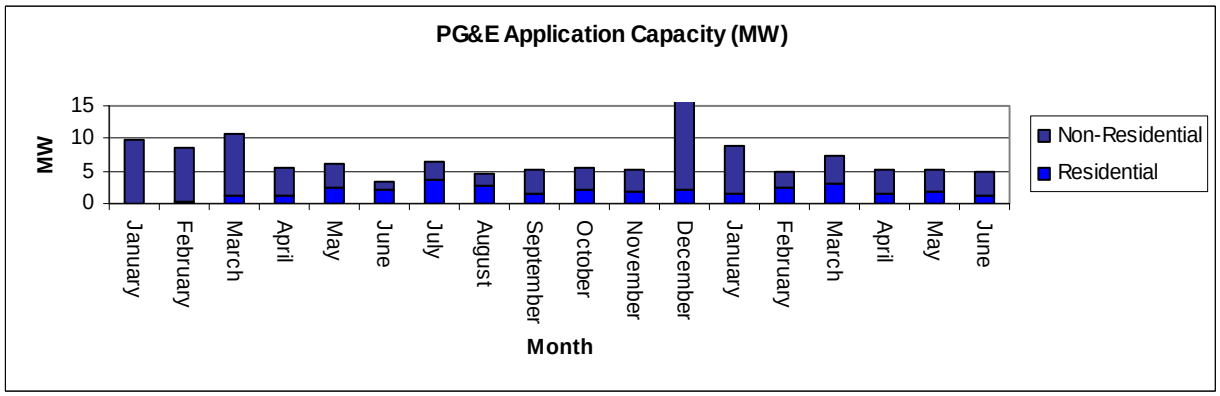
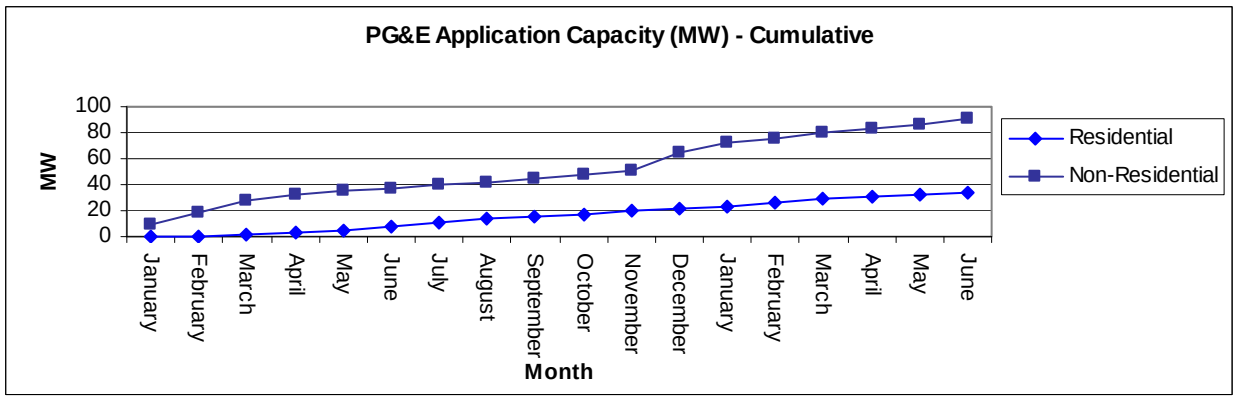


Figure 25. Total Cumulative Application Capacity-PG&E, Jan. 1- Jun. 25, 2008



[12] Sources for Figure 23 through Figure 30 are the CSI PowerClerk Online Database, June 25, 2008.

Figure 26. Total Applications-SCE, Jan. 1- Jun. 25, 2008

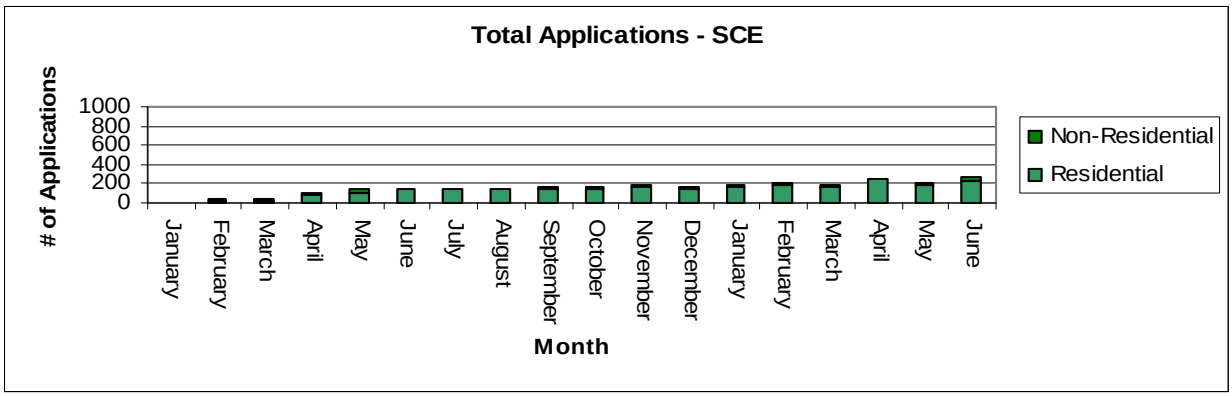


Figure 27. Total Capacity of Applications-SCE, Jan. 1- Jun. 25, 2008

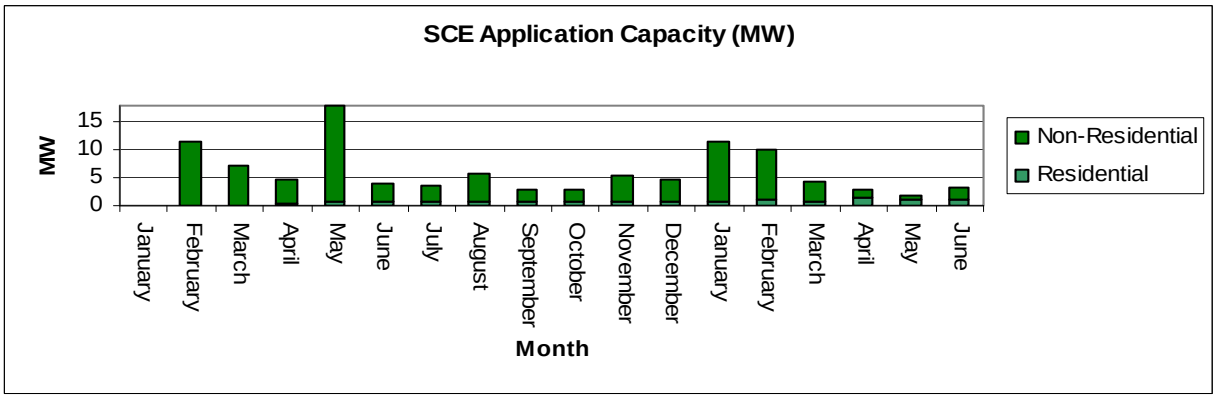
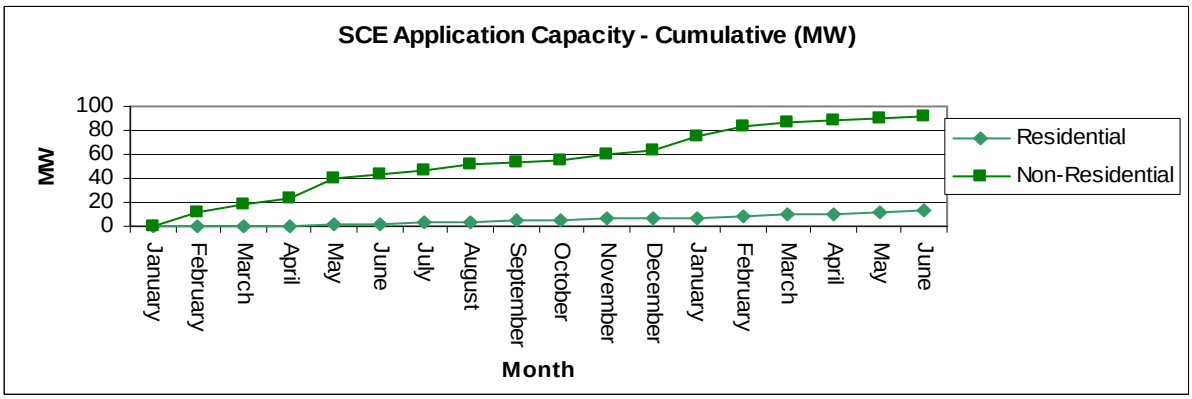


Figure 28. Total Cumulative Applications-SCE, Jan. 1- Jun. 25, 2008



Total Applications-CCSE, Jan. 1-Jun 25, 2008

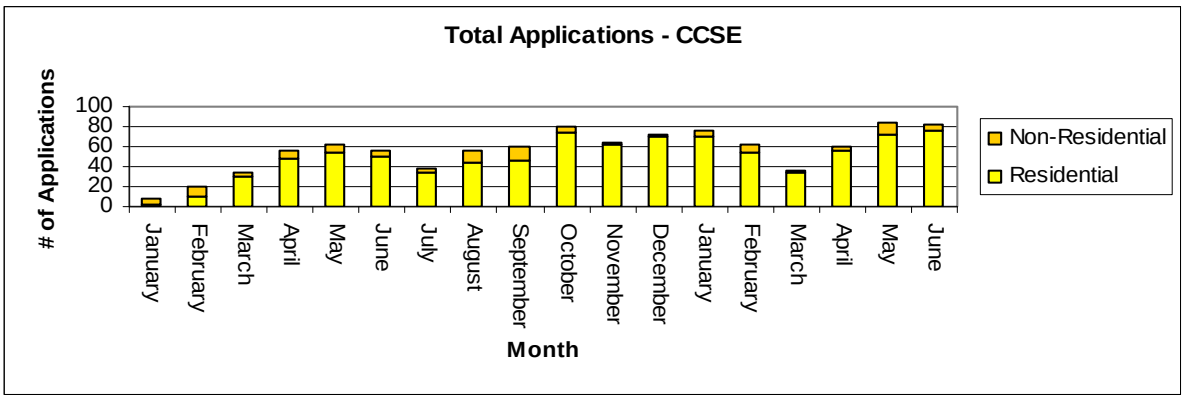


Figure 29. Total Applications by Capacity-CCSE, Jan. 1-Jun. 25, 2008

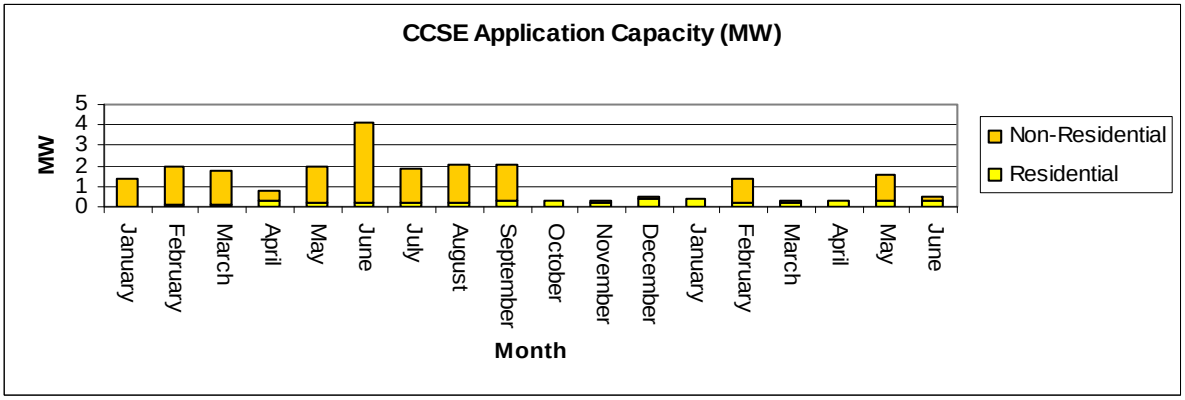
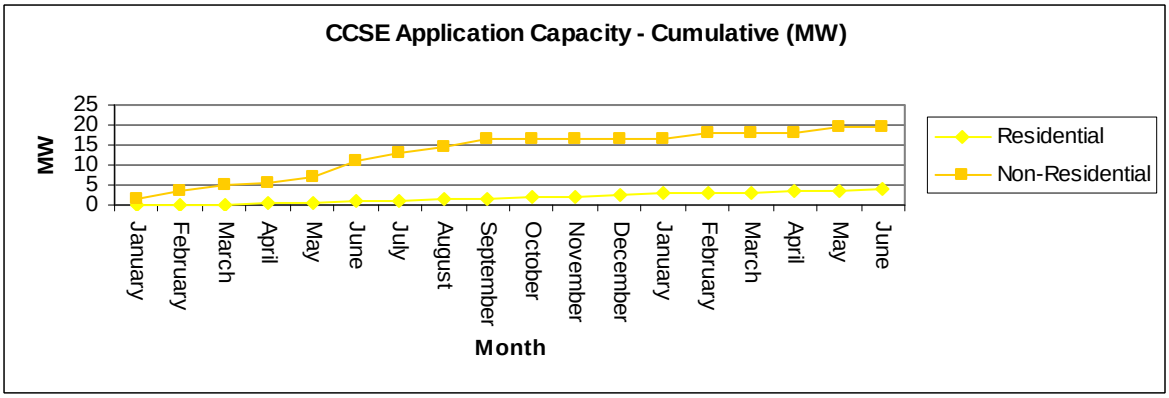


Figure 30. Total Cumulative Applications-CCSE, Jan. 1- Jun. 25, 2008



Appendix B

Table 17. Summary of completed, active and cancelled projects (Powerclerk data as of June 18, 2008)

Status	All Reserved (= A+B)				Projects >12 mo (A)				Projects <12 mo (B)			
	Res	Commerc	G / NP	(total)	Res	Commerc	G/NP	(total)	Res	Commerc	G/NP	(total)
Completed or Pending Payment (X)												
Applications	6117	98	17	6232	1018	66	10	1094	5099	32	7	5138
%	*61.2*	*16.8*	*10.0*	*58.0*	*93.0*	*28.8*	*20.8*	*79.7*	*57.3*	*9.1*	*5.7*	*54.8*
MW	26.3	19.12	1.52	46.94	4.6	16.14	0.45	21.19	21.7	2.98	1.07	25.75
%	*58.3*	*11.4*	*4.0*	*18.7*	*91.6*	*22.5*	*3.5*	*23.6*	*54.1*	*3.1*	*4.3*	*16.0*
Incentive ($)	63.9	56.8	3.84	124.54	11.6	50.2	1.35	63.15	52.3	6.6	2.49	61.39
%	*59.6*	*14.1*	*2.8*	*19.3*	*91.4*	*23.6*	*2.7*	*22.9*	*55.3*	*3.5*	*2.9*	*16.6*
Active (Y)												
Applications	3808	415	145	4368	52	140	32	224	3756	275	113	4144
%	*38.1*	*71.3*	*85.3*	*40.6*	*4.7*	*61.1*	*66.7*	*16.3*	*42.2*	*77.9*	*92.6*	*44.2*
MW	18.43	129.27	34.81	182.51	0.28	48.77	11.46	60.51	18.15	80.5	23.35	122
%	*40.8*	*77.3*	*91.6*	*72.9*	*5.6*	*67.9*	*88.0*	*67.3*	*45.2*	*84.3*	*93.4*	*76.0*
Incentive ($)	42.36	300.19	125.93	468.48	0.75	143.09	44.2	188.04	41.61	157.1	81.73	280.44
%	*39.5*	*74.4*	*93.0*	*72.5*	*5.9*	*67.2*	*89.0*	*68.3*	*44.0*	*82.4*	*95.4*	*75.6*
Canceled and Withdrawn												
Applications	75	69	8	152	25	23	6	54	50	46	2	98
%	*0.8*	*11.9*	*4.7*	*1.4*	*2.3*	*10.0*	*12.5*	*3.9*	*0.6*	*13.0*	*1.6*	*1.0*
MW	0.42	18.9	1.69	21.01	0.14	6.9	1.11	8.15	0.28	12	0.58	12.86
%	*0.9*	*11.3*	*4.4*	*8.4*	*2.8*	*9.6*	*8.5*	*9.1*	*0.7*	*12.6*	*2.3*	*8.0*
Incentive ($)	1.04	46.49	5.58	53.11	0.34	19.64	4.1	24.08	0.7	26.85	1.48	29.03
%	*1.0*	*11.5*	*4.1*	*8.2*	*2.7*	*9.2*	*8.3*	*8.7*	*0.7*	*14.1*	*1.7*	*7.8*
Total (=X+Y+Z)												
Applications	10000	582	170	10752	1095	229	48	1372	8905	353	122	9380
MW	45.15	167.29	38.02	250.46	5.02	71.81	13.02	89.85	40.13	95.48	25	160.61
Incentive $	107.3	403.48	135.35	646.13	12.69	212.93	49.65	275.27	94.61	190.55	85.7	370.86

Table 18. PG&E Dropout Data

Step	MW Originally Allocated	Incentive $ Reserved	Total MW Dropout to date**	Incentive $ Left Unreserved from Dropouts	MW added to Step 1	MW added to Step 2	MW added to Step 3	MW added to Step 4
Residential								
1						3.042	0.187	0.067
2	10.1	$25,200,000	0.50	$153,600		0.128	0.234	0.14
3	14.4	$31,680,000	5.91	$22,200			5.831	0.074
4	18.7	$6,550,000	0.01	$0				0.01
Non-Residential (Commercial and Government)								
1	27.8	$77,840,000	13.32		0.301	12.42	0.41	0.10
2	20.5	$51,250,000	13.13	$6,540,000		0.77	4.13	7.11
3	29.3	$64,460,000	6.96	$2,830,000			0.32	4.26
4	38.1	$72,390,000	18.01	$3,370,000				8.40
5	46.8	$18,580,000	0.11	$0				
Total Unreserved				*$11,900,000*				

Source: CPUC data request to Program Administrators, dated June 9, 2008. Data current as of May 31, 2008.

Table 19. CCSE Dropout Data

Step	MW Originally Allocated	Incentive $ Reserved	Total MW Dropout to date**	Incentive $ Left Unreserved from Dropouts	MW added to Step 1	MW added to Step 2	MW added to Step 3	MW added to Step 4
Residential								
1								
2	2.4	$6,092,000	0.031	$26,000		0.020	0.10	
3	3.4	$2,705,000	0	$0				
Non-Residential (Commercial and Government)								
1	6.42		6.16		0.000167	5.30	0.86	
2	4.80	$34,480,000	0.50	$1,150,000		.04	0.09	0.37
3	6.90	$18,710,000	0.42	$632,500			0.13	0.29
4	9.00	$6,780,000	1.11	0				1.11
Total Unreserved			31.42	*$1,810,000*				

Source: CPUC data request to Program Administrators, dated June 9, 2008. Data current as of May 31, 2008.

Table 20. SCE Dropout Data

Step	MW Originally Allocated	Incentive $ Reserved	Total MW Dropout to date**	Incentive $ Left Unreserved from Dropouts	MW added to Step 1	MW added to Step 2	MW added to Step 3	MW added to Step 4
Residential								
1	0.07		0.07			0.07		
2	10.6	$26,680,000	0.07	$340		0.07		
3	15.2	$1,790,000	0	$0				
Non-Residential (Commercial and Government)								
1	12.39		6.94			4.78	0.51	1.65
2	21.6	$67,970,000	3.67	$1,560,000			3.41	
3	30.8	$93,710,000	2.17	$1,700,000				0.99
4	40.1	$99,900,000	2.13	$181,000				1.38
5	49.3	$1,180,000	0	$0				
Total Unreserved				*$2,420,000*				

Source: CPUC data request to Program Administrators, dated June 9, 2008. Data current as of May 31, 2008.

List of Common Solar Acronyms

ASES	American Solar Energy Society
BIPV	Building-Integrated Photovoltaic
CCSE	California Center for Sustainable Energy
CEC	California Energy Commission
CPUC	California Public Utilities Commission
CSI	California Solar Initiative
EPBB	Expected Performance-Based Incentive
ERP	Emerging Renewables Program
M&O	Marketing and Outreach
Non-PV	Non-Photovoltaics (Solar that is not PV, e.g. Solar Thermal)
NSHP	New Solar Homes Program
PBI	Performance Based Incentives
PDP	Performance Data Provider
PG&E	Pacific Gas and Electric Company
PMRS	Performance Monitoring and Reporting Service
POU	Publically-Owned Utility
PV	Photovoltaic (also called Solar Electric)
RD&D	Research, Development and Demonstration
REC	Renewable Energy Credit
SB1	Senate Bill 1, the legislation authorizing the California Solar Initiative
SCE	Sothern California Edison
SGIP	Self-Generation Incentive Program
SHW	Solar Hot Water
TOU	Time of Use Rates

California Solar Initiative Contact Information

For statewide consumer information about solar rebates and programs, visit:
www.gosolarcalifornia.ca.gov

For Solar Customers with Program Questions, contact your Program Administrator:

PG&E Customers:	www.pge.com/solar PG&E Solar Hotline: 1-415-973-3480
SCE Customers:	www.sce.com/csi SCE Solar Hotline: 866-584-7436
SDG&E Customers:	California Center for Sustainable Energy www.energycenter.org CCSE Solar Hotline: 858-244-1177

For press inquiries about the CPUC portion of the California Solar Initiative, contact:

Terrie Prosper, Press Office
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102-3298
Email: **tdp@cpuc.ca.gov or 415-703-2160**

For policy or program development 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