California Solar Initiative Thermal Program

Quarterly Progress Report

(July 1 – September 30, 2013)

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1. Executive Summary

1.1. Introduction

Southern California Edison Company (SCE), on behalf of the California Solar Initiative (CSI) Thermal (CSI-Thermal) Program Administrators (PAs)[1], submits this Third Quarter (Q3) 2013 Progress Report for the CSI-Thermal Program (Report), in compliance with California Public Utilities Commission (CPUC or Commission) Decision (D.) 10-01-022, which requires the PAs to submit quarterly progress reports to the CPUC Energy Division.[2]

This report provides an overall qualitative and quantitative review of the CSI-Thermal Program from January 1, 2010 through September 30, 2013. It also highlights the program's progress and achievements for the quarter. The report has been divided into several sections covering topics such as program budget, eligibility requirements, incentive structure, program expenditures, market facilitation activities, and regulatory updates.

1.2. Key Report Highlights

The CSI-Thermal Handbook revisions filed on June 26, 2013 in compliance with Ordering Paragraph (OP) 2 of CPUC D.13-02-018, became effective as of July 26, 2013. Some of the program changes include a performance-based incentive (PBI) structure and the incorporation of commercial process heat, space heating and absorption chilling. These enhancements were made available on the statewide database on September 24, 2013.

In addition, the CPUC approved D.13-08-004 to include solar pool heating systems into the CSI Thermal Program on August 15, 2013. In compliance with OP 2 of this Decision, SCG, on behalf of the PAs, filed the CSI-Thermal Program Handbook for the implementation of the solar pool heating component of the CSI-Thermal on September 30, 2013.

2. Introduction

2.1. Program Background

In January 2007, the CPUC launched the CSI, a $2.16 billion ratepayer-funded incentive program with a goal of installing 1,940 megawatts (MW) of new solar generation and creating a sustainable solar industry by 2016.[3] State law allows up to $100.8 million of CSI funds to be used for incentives for solar thermal technologies that displace electricity usage, but the CPUC deferred eligibility for allowing solar water heating (SWH) technologies in the CSI until a pilot program for SWH was

[1] The CSI-Thermal PAs are Pacific Gas and Electric Company (PG&E), California Center for Sustainable Energy (CCSE), Southern California Edison Company (SCE), and Southern California Gas Company (SCG).

[2] D.10-10-022, Ordering Paragraph No. 13 and Appendix A.

[3] Public Utilities Code § 2851, enacted by Senate Bill (SB) 1 (Murray), Chapter 132, Statutes of 2006

conducted in the service territory of San Diego Gas & Electric Company (SDG&E). Starting in July 2007, CCSE administered a $2.59 million pilot program for SWH incentives in SDG&E's service territory (Pilot Program). In D.08-06-029, the Commission extended the Pilot Program until the earlier of December 31, 2009, or when the budget was exhausted.

In 2007, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 1470 (Stats. 2007, ch. 536),[4] which authorized the CPUC to create a $250 million incentive program to promote the installation of 200,000 natural gas-displacing SWH systems on homes and businesses by 2017. AB 1470 required the CPUC to evaluate data from the SWH Pilot Program and determine whether a SWH program was "cost effective for ratepayers and in the public interest" before designing and implementing an incentive program for gas customers.

On January 21, 2010, the CPUC established the CSI-Thermal Program,[5] allocating funds for both natural gas-displacing and electric-displacing SWH and other solar thermal technologies, in the service territories of California's major investor-owned utilities. The CPUC established the incentive structure, the program administration details, and other key CSI-Thermal Program rules. The CPUC designated PG&E, SCG, SCE, and CCSE (for the SDG&E service territory) as the PAs for the CSI-Thermal Program. The PAs launched the single-family residential program in May 2010 and the commercial/multi-family program in October 2010.

On October 13, 2011, the CPUC issued D.11-10-015, effective on October 6, 2011, which authorized the low-income component of the CSI-Thermal Program. The $25 million budget for CSI-Thermal low-income SWH incentives is funded by collections from gas ratepayers pursuant to AB 1470, as previously established in D.10-01-022. The low-income program was launched in March 2012.

On August 6, 2012, the Commission issued D.12-08-008, effective on August 2, 2012, which modified the incentive structure for the single-family and multi-family/commercial mainstream programs. The new rates were incorporated into the program on October 4, 2012, and were retroactive to projects that were in application review as of July 4, 2012.

On March 6, 2013, the CPUC issued D.13-02-018, effective February 28, 2013. This decision modifies the CSI-Thermal Program to provide incentives to process heat applications, solar cooling technologies, space heating technologies and systems that combine multiple applications. In addition, this decision modifies the way rebates are paid to certain systems under the program by creating a performance-based incentive (PBI) system that pays rebates based on actual metered energy delivered to the facility.

[4] Public Utilities Code § 2860-2867

[5] D.10-01-022

2.2. Program Goals

The CSI-Thermal Program is designed to significantly increase the adoption rate of SWH technologies in the California marketplace. The program strategy and design principles address the barriers to growth, namely installation costs, lack of public knowledge about SWH, permitting costs and requirements, and a potential shortage of experienced installers. As established in D.10-01-022, the primary goals of the CSI-Thermal Program include the following:

- Significantly increase the size of the SWH market in California by increasing the adoption rate of SWH technologies, including:
    - The installation of natural gas-displacing systems that displace 585 million therms (equivalent to 200,000 single-family residential systems) over the 25-year life of the systems;
    - The installation of electric-displacing SWH systems that displace 275.7 million kilowatt hours (kWh) per year (equivalent to 100,800 single-family residential systems); and
    - An expansion of the market for other solar thermal technologies that displace natural gas and electricity use, in addition to SWH.
- Support reductions in the cost of SWH systems of at least 16 percent through a program that increases market size and encourages cost reductions through market efficiency and innovation;
- Engage in market facilitation activities to reduce market barriers to SWH adoption, such as high permitting costs, lack of access to information, and lack of trained installers; and
- Increase consumer confidence and understanding of SWH technology and its benefits.

2.3. Program Budget

The total incentive budget (excluding administrative, marketing, and measurement and evaluation budget allocations) for the CSI-Thermal Program is approximately $280.8 million over the life of the program. Of this total, $180 million is allocated to natural gas-displacing SWH systems, as authorized by AB 1470, and up to $100.8 million may be used to fund electric-displacing systems subject to overall CSI budget availability, as authorized by Senate Bill (SB) 1. There is also an additional $25 million incentive budget dedicated to low-income single-family and multi-family residences in the service territories of PG&E, SCG and SDG&E, as established in D.10-01-022.

In the CSI-Thermal Program, incentive dollars totaling $180 million for natural gas-displacing systems are allocated between two customer classes, single-family residential and multi-family/commercial. In D.12-08-008, the Commission updated the budget allocation as follows:

- 45 percent of the total incentive budget is reserved for single-family residential customer SWH systems; and

- 55 percent of the total incentive budget is reserved for multi-family/commercial SWH systems. Funds may be moved from the multi-family/commercial budget to the single-family residential budget, but not vice versa.

The incentive budget is split proportionately among the PAs based on the size of their respective gas and electric sales.

Table 1 presents the incentive allocation percentage and budget allocated to each PA for the natural gas-displacing SWH systems. Table 2 presents the incentive allocation percentage and budget allocated to each PA for the electric/propane-displacing SWH systems.

The incentive budget for the natural gas-displacing portion of CSI-Thermal Program will operate until the earlier of: (i) allocation of all funds available from the program's incentive budget; or (ii) until January 1, 2018. The incentive budget for the electric/propane-displacing portion of the program is available until the earlier of: (i) the budget caps have been reached; (ii) the CSI General Market Program budget has been exhausted, or (iii) January 1, 2017.

The $25 million natural-gas low-income incentive budget is allocated among CCSE, PG&E, and SCG in the same proportions as the total CSI-Thermal natural gas-displacing program presented in Table 1. Single-family and multi-family projects have no specific low-income incentive allocations. Incentives for low-income projects will be available until the earlier of: (i) the incentive budget is fully expended; or (ii) January 1, 2018. Table 3 displays the incentive allocation percentage and budget for each PA for the low-income natural gas-displacing SWH systems.

Table 1: Incentive Allocation per PA for Natural Gas-Displacing Systems

PA	Budget Allocation	Total Incentive Budget (in millions)
PG&E	39.0%	$70.2
CCSE	10.0%	$18.0
SCG	51.0%	$91.8
Total	**100.0%**	**$180.0**

Table 2: Maximum Incentive Allocation per PA for Electric/Propane-Displacing SWH Systems

PA	Budget Allocation	Maximum Incentive Budget (in millions)
PG&E	43.7%	$44.0
CCSE	10.3%	$10.4
SCE	46.0%	$46.4
Total	**100.0%**	**$100.8**

Table 3: Low-Income Incentive Allocation per PA for Natural Gas-Displacing SWH Systems

PA	Budget Allocation	Maximum Incentive Budget (in millions)
PG&E	39.0%	$9.75
CCSE	10.0%	$2.50
SCG	51.0%	$12.75
Total	**100.0%**	**$25.00**

2.4. Incentive Structure

One of the primary goals of the CSI-Thermal Program is to lower the cost of SWH technology for the System Owner through incentives. Incentive rates decline over the life of the program in four steps to facilitate market transformation.

Natural gas-displacing incentives decline from step to step in each service territory when the total incentive amount reserved is equal to the budget allocation for the given step. If a PA receives applications accounting for more dollars than what is left in the budget allocation for a given step, a lottery may determine which projects receive the higher incentive level. Table 4 presents the dollar amount paid per therm displaced in each step and the total program budget allocation per step excluding the low-income budget as noted in Section 2.3 of this report.

Table 4: Total Natural Gas Budget Allocation per Incentive Step

Effective July 4, 2012

Step	Customer Class	Incentive per annual therm displaced	Maximum Incentive per System
1	Single-Family	$18.59	$2,719
	Commercial/Multi-family	$14.53	$500,000
2	Single-Family	$13.11	$1,919
	Commercial/Multi-family	$9.88	$500,000
3	Single-Family	$7.69	$1,125
	Commercial/Multi-family	$6.55	$500,000
4	Single-Family	$3.23	$474
	Commercial/Multi-family	$3.13	$500,000

As incentives decline under the natural gas-displacing program, a corresponding step reduction occurs in the electric/propane-displacing incentive structure. Table 5 shows the electric- and propane-displacing rates for each of the four steps. Electric- and propane-displacing SWH installations count against the MW trigger in Step 10 of the General Market CSI PV Program. If the Step 10 budget is insufficient, the PAs may use funds from Step 9.

Table 5: Electric/Propane-Displacing System Incentive Steps

Effective July 4, 2012

Step	Customer Class	Electric/Propane-Displacing Incentive ($/kWh)	Maximum Incentive per System
1	Single-Family	0.54	$1,834
	Commercial/Multi-family	0.42	$250,000
2	Single-Family	0.38	$1,311
	Commercial/Multi-family	0.29	$250,000
3	Single-Family	0.22	$752
	Commercial/Multi-family	0.19	$250,000
4	Single-Family	0.10	$329
	Commercial/Multi-family	0.09	$250,000

Incentive step changes move independently in each program territory[6] and for each customer class. Incentives are paid on a first come, first served basis. The most current information on incentive step status per customer class is posted on www.csithermal.com/tracker.

The Low-Income program has a separate incentive step structure from the mainstream program, as shown in Table 6. The current incentive step level is the same as the current incentive step in the natural gas portion of the mainstream CSI-Thermal Program. Currently, the mainstream natural gas single-family program is in Step 1 for all PA territories; therefore, the low-income single-family program is also in Step 1.

Table 6: Low-Income Single-Family and Multi-family Natural Gas Incentive Steps

Step Level	Single-Family Low-income Incentive per therm displaced	Incentive Cap for Single-Family Low-income Projects	Multi-family Low-Income Incentive per therm displaced	Incentive Cap for Multi-family Low-income Projects
1	$25.64	$3,750	$19.23	$500,000
2	$20.52	$3,000	$15.39	$500,000
3	$15.38	$2,250	$11.53	$500,000
4	$9.40	$1,376	$7.05	$500,000

[6] SCE incentive step changes will correspond with SCG gas incentive step changes for each customer class.

2.5. Program Eligibility

Eligibility for the CSI-Thermal Program is described in detail in the CSI-Thermal Program Handbook.[7] A few key eligibility requirements are highlighted below:

- Customer site must be within the service territories of SCG (for natural gas only), PG&E, SCE (for electric only), or SDG&E.
- Single-family residential SWH systems must have a Solar Rating and Certification Corporation (SRCC) or International Association of Plumbing and Mechanical Officials (IAPMO) OG-300 System Certification.[8]
- Solar collectors used in multi-family/commercial water heating must have SRCC OG-100 Collector Certification.
- All components must be new and unused (with exceptions). All systems must have freeze and stagnation protection.
- For single-family projects, all Domestic Hot Water (DHW) end-uses are eligible.[9]
- For multi-family/commercial projects, eligible end uses include domestic hot water, commercial process heat, space heating, and absorption chilling.[10] Rebates are available for qualifying natural gas-and electric-displacing systems that were installed within 24 months after the date on the final signed-off permit. Propane-displacing systems are eligible for a CSI-Thermal Program incentive if a final permit was signed-off after June 14, 2011.
- SWH contractor or self-installer must complete a one-day mandatory training offered by the PAs.
- For specific details regarding low-income eligibility requirements, please see the CSI-Thermal Program Handbook.

[7] The CSI-Thermal Handbook is located at http://gosolarcalifornia.org/documents/CSI-Thermal_Handbook.pdf

[8] D.11-11-004 was approved on November 18, 2011 to modify D.10-01-022 regarding certification standards for SWH systems. This decision allows systems certified to the OG-300 standards by IAPMO to be eligible for CSI-Thermal Program incentives along with those certified by SRCC.

[9] DHW is defined as water used, in any type of building, for domestic purposes, principally drinking, food preparation, sanitation and personal hygiene (but not including space heating, space cooling, or swimming pool heating).

[10] Examples of eligible DHW end uses in include: apartment buildings with central DHW systems, convalescent homes, hotels and motels, military bachelor quarters, school dormitories with central DHW systems and prisons. Examples of eligible commercial end uses include: commercial laundries, laundromats, restaurants, food processors, agricultural processes and car washes.

3. Program Expenditures

From program inception through September 30, 2013, CSI-Thermal Program expenditures totaled $32,994,787. Table 7 illustrates the detailed expenditures by PA followed by a breakdown of expenses specific to the natural gas and electric/propane-displacing programs for the reporting period as represented in Table 8 and Table 9.

Program expenditures consist of, but are not limited to, administration activities, such as application processing, continued enhancement of the statewide online database, mandatory contractor and self-installer training, local and statewide marketing efforts, activities related to potential program expansion, and administrative staffing support.

Table 7: CSI-Thermal Expenditures by PA

Natural Gas and Electric/Propane CSI-Thermal Program Expenditure Data January 1, 2010 to September 30, 2013					
Expenditure Type	**CCSE**	**SCE**	**PGE**	**SCG**	**Total**
Administration	$1,345,023	$661,676	$3,019,231	$1,918,379	**$6,944,309**
Market Facilitation	$793,205	$603,804	$4,446,500	$4,555,474*	**$10,398,983**
Measurement & Evaluation	$8,331	$0	$2,543	$0	**$10,874**
Incentives Paid	$3,169,730	$54,079	$8,430,443	$3,986,369	**$15,640,621**
Total	**$5,316,289**	**$1,319,559**	**$15,898,717**	**$10,460,222**	**$32,994,787**

*This amount also includes total Statewide M&O expenses including allocations to be reimbursed by other PAs.

Table 8: CSI-Thermal Expenditures by PA (Natural Gas)

Natural Gas July 1 – Sept 30, 2013				
Expenditure Type	**CCSE**	**PG&E**	**SCG**	**Total**
Administration	$79,615	$209,394	$150,923	**$439,932**
Market Facilitation	$67,617	$222,986	$155,967*	**$446,570**
Measurement & Evaluation	$2,221	$0	$0	**$2,221**
Incentives Paid	$35,017	$1,782,995	$337,618	**$2,155,630**
Total	**$184,470**	**$2,215,375**	**$644,508**	**$3,044,353**

*This amount also includes total Statewide M&O expenses including allocations to be reimbursed by other PAs.

Table 9: CSI-Thermal Expenditures by PA (Electric/Propane)

Electric/Propane July 1 – Sept 30, 2013				
Expenditure Type	**CCSE**	**PG&E**	**SCE**	**Total**
Administration	$19,579	$19,812	$16,071	**$55,462**
Market Facilitation	$18,116	$70,137	$64,295	**$152,548**
Measurement & Evaluation	$496	$0	$0	**$496**
Incentives Paid	$11,440	$0	$6,956	**$18,396**
Total	**$49,631**	**$89,949**	**$87,322**	**$226,902**

4. Program Progress

The PAs spent much of Q3 2013 addressing future expansion of the CSI-Thermal Program to incorporate solar pool heating systems. On September 30, 2013, SCG, on behalf of the PAs, filed proposed modifications for the implementation of the solar pool heating component of the CSI-Thermal Program. Since the solar pool heating program is applicable to natural gas customers of SCG, PG&E and SDG&E, SCE was not required to file the advice letter with the other PAs.

The CSI-Thermal Program began accepting applications for single-family systems and multi-family/commercial systems on May 1, 2010 and October 8, 2010, respectively. Applications for propane-displacing SWH systems were available on February 7, 2012, while the low-income program began on March 29, 2012. In addition, the CPUC approved an increase in the single-family residential and the commercial and multi-family incentive levels effective July 4, 2012. Tables 10, 12, 14, 16 and 18 present the quantities of applications received by each PA in Q3 2013, as well as the corresponding incentives and energy savings for those applications. Tables 11, 13, 15, 17, and 19 show the average costs of systems for completed projects by PA and customer class since program inception.

Table 10: Summary Data: CSI-Thermal Single-Family Applications by Status (Natural Gas)

	CCSE	PG&E	SCG	Total
	Q3	Q3	Q3	
APPLICATIONS RECEIVED				
Application (Number)	3	5	34	**42**
Incentives ($)	$5,903	$11,362	$56,824	**$74,089**
Capacity (First Year Expected Energy Displaced in therms)	328	688	3,449	**4,465**

Table 11: Average Cost per Single-Family Project (Natural Gas)

	CCSE	PG&E	SCG	Overall Average
Average Project Cost per Single-Family Project ($)*	$7,375	$10,400	$9,249	**$9,008**
Average Project Cost per Unit of First Year Energy Displaced ($/therm)*	$67.00	$77.88	$85.96	**$76.95**

*Since program inception

Table 12: Summary Data: CSI-Thermal Single-Family Applications by Status (Electric/Propane)

	CCSE*	PG&E	SCE	Total
	Q3	Q3	Q3	
APPLICATIONS RECEIVED				
Applications (Number)	0	0	4	**4**
Incentives ($)	N/A**	N/A**	$6,720	**$6,720**
Capacity (First Year Expected Energy Displaced in kWh)	0	0	13,975	**13,975**

Legend: Applications Received = All applications that moved to "Application Review" status during the reporting period

* The rebate budget is currently exhausted for single family residential electric systems in the PG&E territory. Single family electric or propane applications submitted in these territories will be placed on a waitlist.

Rebates in CCSE program territory were exhausted in Q3 and applications were placed on a waitlist. The waitlist process has been deactivated and rebates are now available once again as a result of modifications to the budget per D.13-10-026.

**All applications are in Waitlist status

Table 13: Average Cost per Single-Family Project (Electric/Propane)

	CCSE	PG&E	SCE	Overall Average
Average Project Cost per Single-Family Project ($)*	$7,400	$8,213	$7,800	**$7,804**
Average Project Cost per Unit of First Year Energy Displaced ($/kWh)*	$2.63	$2.95	$2.38	**$2.65**

*Since program inception

Table 14: Summary Data: Multi-family/Commercial (Natural Gas)

	CCSE	PG&E	SCG	Total
	Q3	Q3	Q3	
APPLICATIONS RECEIVED				
Application (Number)	1	4	17	**22**
Incentives ($)	$37,880	$89,046	$962,997	**$1,089,923**
Capacity (First Year Expected Energy Displaced in therms)	2,607	6,322	74,747	**83,676**
UNDER REVIEW Incentive Claims				
Application (Number)	4	11	13	**28**
Incentives ($)	$93,659	$1,092,565	$303,140	**$1,489,364**
Capacity (First Year Expected Energy Displaced in therms)	6,501	97,772	20,863	**125,136**

Applications Received = All applications that moved to "RR Application Review" status during the reporting period
Under Review Incentive Claims = All applications that moved to "ICF Application Review" status during the reporting period

Table 15: Average Cost per Multi-family/Commercial Project (Natural Gas)

	CCSE	PG&E	SCG	Total
Average Project Cost per Multi-family/commercial Project ($)*	$176,229	$99,324	$57,272	**$110,942**
Average Project Cost per Unit of First Year Energy Displaced ($/therm)*	$44.47	$53.75	$38.02	**$45.41**

*Average Project Cost per Multi-family/commercial Project for all completed projects since program inception

Table 16: Summary Data: Multi-family/Commercial (Electric/Propane)

	CCSE Q3	PG&E Q3	SCE Q3	Total
APPLICATIONS RECEIVED				
Application (Number)	N/A	N/A	N/A	N/A
Incentives ($)	N/A	N/A	N/A	N/A
Capacity (First Year Expected Energy Displaced in kWh)	N/A	N/A	N/A	N/A
UNDER REVIEW Incentive Claims				
Application (Number)	N/A	N/A	N/A	N/A
Incentives ($)	N/A	N/A	N/A	N/A
Capacity (First Year Expected Energy Displaced in kWh)	N/A	N/A	N/A	N/A

Applications Received = All applications that moved to "RR Application Review" status during the reporting period
Under Review Incentive Claims = All applications that moved to "ICF Application Review" status during the reporting period

Table 17: Average Cost per Multi-family/Commercial Project (Electric/Propane)

	CCSE	PG&E	SCE	Total
Average Project Cost per Multi-family/commercial Project ($)*	$58,850	$15,065	$7,630	**$27,182**
Average Project Cost per Unit of First Year Energy Displaced ($/kWh)*	$3.05	$1.44	$4.32	**$2.94**

*Average Project Cost per Multi-family/commercial Project for all completed projects since program inception

Table 18: Summary Data: Multi-family Low-income (Natural Gas)

	CCSE Q3	PG&E Q3	SCG Q3	Total
APPLICATIONS RECEIVED				
Application (Number)	13	4	33	**50**
Incentives ($)	$591,631	$200,820	$1,786,349	**$2,578,800**
Capacity (First Year Expected Energy Displaced in therms)	31,332	10,525	93,434	**135,291**
UNDER REVIEW Incentive Claims				
Application (Number)	1	11	17	**29**
Incentives ($)	$44,537	$400,900	$265,449	**$710,886**
Capacity (First Year Expected Energy Displaced in therms)	2,316	21,135	13,804	**37,255**

Applications Received = All applications that moved to "RR Application Review" status during the reporting period
Under Review Incentive Claims = All applications that moved to "ICF Application Review" status during the reporting period

Table 19: Average Cost per Multi-family Low-income (Gas)

	CCSE	PG&E	SCG	Total
Average Project Cost per Multi-family/commercial Project ($)*	$76,659	$66,184	$70,335	**$71,059**
Average Project Cost per Unit of First Year Energy Displaced ($/therm)*	$53.07	$55.95	$55.68	**$54.90**

*Average Project Cost per Multi-family/commercial Project for all completed projects since program inception

4.1 Turnaround Times

The PAs strive to process reservation requests and incentive claim requests within 30 days or less for both single-family residential and multi-family/commercial applications to ensure that projects are moved forward as quickly as possible. Tables 20 through 22 reflect the reporting period from July 1 through September 30, 2013.

Table 20 shows the most recent application processing timeframes (between the "Reservation Application Review" and "Reservation Application Approved" stages) for 2- or 3-step applications. This metric represents the amount of time it took to reserve incentives for a multi-family/commercial project.

Table 21 shows the time from Application Review to Incentive Approval (1-Step – Single-Family Residential). The time measured in the processing time tables includes both PA application processing time and the time taken by the host customer to respond to requests for more information or application corrections.

Table 22 shows the Time from Application to Incentive Approval (2- and 3-Step- Commercial or Multi-Family Residential).

Applications that require the PAs to take more than 60 days to approve typically have outstanding issues that require resolution or input from the Applicant and/or customer. Problems encountered from these applications include, but are not limited to:

- Incorrect project site addresses
- Missing signatures
- Missing or incomplete documentation
- Slow customer/Applicant responsiveness

Table 20: Multi-family/Commercial Application Processing Times by Program Administrator between "Reservation Application Review" and "Reservation Application Approved" Stages

Program Administrator	30 Days or Less	60 Days or Less	Greater than 60 Days	Total
	Q3	Q3	Q3	
Multi-family/ Commercial				
CCSE	58.33%	100.00%	0.00%	12
PG&E	100.00%	100.00%	0.00%	9
SCE	N/A	N/A	N/A	0
SCG	84.62%	97.44%	2.56%	39

Table 21: Processing Time from Application Review to Incentive Approval (1- Step – Single-Family Residential)

Program Administrator	30 Days or Less	60 Days or Less	Greater than 60 Days	Total
	Q3	Q3	Q3	
No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CCSE	100.00%	100.00%	0.00%	2
PG&E	100.00%	100.00%	0.00%	3
SCE	100.00%	100.00%	0.00%	2
SCG	97.73%	100.00%	0.00%	44
Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CCSE	0.00%	100.00%	0.00%	1
PG&E	100.00%	100.00%	0.00%	1
SCE	100.00%	100.00%	0.00%	1
SCG	83.33%	100.00%	0.00%	12
Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.				
CCSE	33.33%	100.00%	0.00%	3
PG&E	80.00%	100.00%	0.00%	5
SCE	100.00%	100.00%	0.00%	4
SCG	96.25%	98.75%	1.25%	80

Table 22: Processing Time from Application Review to Incentive Approval (2-and 3-Step - Commercial or Multi-Family Residential)

Program Administrator	30 Days or Less	60 Days or Less	Greater than 60 Days	Total
No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CCSE	100.00%	100.00%	0.00%	1
PG&E	77.78%	88.89%	11.11%	9
SCE	N/A	N/A	N/A	0
SCG	80.00%	100.00%	0.00%	15
Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CCSE	33.33%	100.00%	0.00%	3
PG&E	50.00%	87.50%	12.50%	8
SCE	N/A	N/A	N/A	0
SCG	5.00%	100.00%	0.00%	20
Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.				
CCSE	33.33%	33.33%	66.67%	3
PG&E	42.86%	76.19%	23.81%	21
SCE	N/A	N/A	N/A	0
SCG	77.78%	94.44%	5.56%	18

5. Market Facilitation

5.1 Statewide Continuation Plan

Understanding that the completion of the two-year Statewide Market Facilitation Plan did not mark the end of local and statewide marketing efforts for the CSI-Thermal Program, PGE, CCSE and SCG included proportionate share funding for a mutual statewide continuation effort in each of their six-month Local Market Facilitation Extension Plans covering Q3 and Q4 2013. The Plans were submitted to the CPUC for approval on April 2, 2013, and approved by Energy Division effective

May 2, 2013. SCE declined to include funding for statewide expenses in their six-month Local Market Facilitation Plan that was also approved by the Energy Division, but indicated to the other PAs their desire to continue to participate in statewide market facilitation efforts. The continuation program is based on digital marketing focused on extending the program's online presence to further increase awareness and drive more traffic to the WaterHeatedByTheSun.com (WHBTS.com) landing page. Funds in the plan were reallocated to support the optimization and redesign of the landing page.

The PAs decided to postpone marketing of the program's expansion to Q1 2014 due to limited media inventory and premium media costs during the holiday season. Additionally, by postponing, program expansion creative elements will be aligned with the creative and strategic approach of the 2014 statewide market facilitation plan.

5.2 Integrated Marketing Communications Firm

Upon departure of Fraser Communications as agency of record, the PAs jointly appointed Phelps Total Market (PTM), an integrated marketing communications firm, in June 2013, to manage and provide continuity to the existing program based on the campaign's achievements, with the objective of continuing to increase awareness of the program and taking it to completion as originally envisioned in December 2013. In August 2013, the PAs jointly reconfirmed their intent to continue building on the success of the program, engaging PTM to prepare and develop a Statewide Market Facilitation Program for 2014, which was submitted to the CPUC on October 1, 2013 for approval.

5.3 Post-Campaign Awareness Study

One of the elements of the approved Statewide Market Facilitation Plan was to conduct a pre-campaign awareness survey to provide baseline data of the level of awareness and understanding of SWH and the CSI-Thermal Program in the target markets for both residential and business customers on a statewide basis. The data was then compared to a post-campaign survey to help measure the effectiveness and reach of the statewide campaign. During Q2 2013, Fraser Communications oversaw the compilation of online responses for the post-campaign awareness survey to provide data for post-campaign levels of:

- Aided and unaided awareness of SWH
- Current attitudes and familiarity with SWH
- Consideration of installation of SWH
- Awareness of the CSI-Thermal Program

The results were tabulated and presented to the Working Group on July 23, 2013.

5.4 Statewide Market Facilitation Plan for 2014

In August 2013, the PAs jointly reconfirmed their intent to continue building on the success of the program, engaging Phelps Total Market (PTM) to prepare and develop a Statewide Market Facilitation Program for 2014 to be filed as a common statewide component in each of the PA's

2014 Local Market Facilitation Plans. The campaign objective is to continue to increase awareness of the program by providing continuity to the existing program based on the campaign's achievements.

5.5 Other Activities

The M&O representatives provided an update during the CSI Public Forum on September 18, 2013, as well as provided marketing updates to Energy Division staff via conference calls on a regular basis during Q3 2013.

5.6 Mandatory CSI-Thermal Workshops

Contractors and self-installers are required to attend a designated, no-cost CSI-Thermal Program training workshop. The PAs conduct training courses in their respective service territories. The workshops are publicized on each PA's website as well as the GoSolarCalifornia website. As part of the statewide effort, the PAs coordinated this activity and developed a one-day Contractor and Self-installer curriculum for the training workshop.

The CSI-Thermal Program training workshop is intended to familiarize Applicants (contractors and self-installers) with program rules and requirements. The workshop provides an overview of the CSI-Thermal Program Handbook, application process, program requirements, technical requirements, and additional related resources. Upon completion of this mandatory CSI-Thermal Program training workshop and meeting other requirements, Applicants receive a unique alphanumeric key that allows them to register on the web-based, online statewide application database and be eligible to apply for CSI-Thermal Program incentives in any PA territory.

Table 23 shows the number of workshops held in each service territory during Q3 2013 and the number of attendees. As of October 18, 2013, there are 469 licensed eligible solar contractors statewide.

Table 23: Mandatory CSI-Thermal Workshops Held by Program Administrator

	Q3 2013	
PA	Number of Workshops	Number of Attendees
CCSE	2	15
PG&E	3	62
SCE[11]	1	11
SCG[14]	2	64
Total	8	152

5.7 PA-Specific Marketing Efforts

5.7.1 Southern California Gas Company

In an effort to increase adoption of SWH systems and increase the number of trained installers, SCG continued its collaboration with SCE and Alternative Energy Systems Consulting (AESC) to provide mandatory contractor and self-installer training courses. To ensure overlapping SCG and SCE service territories were covered by both utilities, training courses alternated every other month between SCE and SCG training facilities. SCG's course was offered at its Energy Resource Center in Downey, California. SCG hosted two workshops with 64 attendees during Q3 2013.

Trade Shows and Events

The CSI-Thermal Program had a presence at the following shows and events during Q3 2013 at which SCG participated as an Exhibitor. At each venue, the statewide brochures as well as promotional items were distributed.

7/20/13	Alhambra Chamber of Commerce Business Expo	Alhambra
7/26/13	Riviera Village Farmers Market	Redondo Beach
7/27/13	Ocean Friendly Gardens	Carson
7/31/13	City of Beaumont Concert in the Park Day 1	Beaumont

[11] Contractors and self-installers can attend classes offered by either SCE or SCG. SCE and SCG alternate locations each month to cover overlapping service territories. Class scheduled in June 2013 was cancelled due to low enrollment.

8/1/13	Wilmington Farmers Market	Redondo Beach
8/3- 8/4/13	LA Waterfront Summer Festival	San Pedro
8/6/13	Torrance Farmers Market	Torrance
8/7-8/8/13	Native American Veterans Assoc. Summit	Long Beach
8/8/13	Carson Farmers Market	Carson
8/9/13	San Pedro Farmers Market	San Pedro
8/10/13	Chinese American Museum	Los Angeles
8/13/13	Cesar Chavez Celebration	Bakersfield
8/17/13	Hawthorne Del Air Farmers Market	Hawthorne
8/21/13	Lawndale Farmers Market	Lawndale
8/22/13	El Segundo Farmers Market	El Segundo
8/23-8/25/13	Anaheim Home and Garden Show	Anaheim
8/27/13	11th Congressional District Senior Fair	Cerritos
8/30 - 9/29/13	Los Angeles County Fair	Pomona
9/7/13	Los Feliz Village Street Fair	Los Angeles
9/10/13	Cerritos Chamber of Commerce Business Expo	Cerritos
9/12/13	Apartment Owner's Association Expo	Montebello
9/16/13	Pollution Prevention Event	Irvine
9/26/13	Association of Energy Engineers Symposium	Downey

Workshops and External Communications

Two traditional informational workshops were presented during Q3 2013:

Solar Water Heating Basics for Single-family Residences
- Santa Monica, California, July 31, 2013
- Held at the Historic Bergamot Station

Solar Water Heating Basics for Commercial Customers
- Santa Monica, California, on July 31, 2013
- Held at the Historic Bergamot Station

The following paid media was deployed in support of the Santa Monica workshop:

- Digital
  - Digital banners (300x250, 300x600 & 160x600 executions)
  - Digital properties included, but were not limited to: sustainableBusiness.com, Earth&Industry.com, santamonicadailypress.com, theAtlantic.com
  - Social Media: Facebook & Twitter

- Email
  - Email newsletter sent to customers within geographic reach of event

- Print Ads
  - Santa Monica Mirror – July 19 and July 26, 2013
  - Santa Monica Daily Press – July 20, July 24, July 27 and July 30, 2013
  - North of Santa Monica – July 25, 2013
  - The Argonaut – July 25, 2013
  - Beverly Hills Courier – July 26, 2013
  - Canyon News – July 28, 2013

- Radio
  - Solar Radio Tags
  - Station: NPR
  - Flight Dates: July 15 – July 31, 2013

Advance registrations were requested and attendees were able to sign-up via e-mail at socalgas.com/solar.

One workshop-booth event was presented during Q3 2013:

Solar Water Heating Basics Workshop Booth Event

- Saturday-Sunday, August 24-25, 2013 at La Cumbre Plaza in Santa Barbara

- Description of Event Execution:
  - Brand ambassadors visited various hot spots to spread the Go Solar message. Some of the hot spots included: Whole Foods Market, Lazy Acres Market, Butterfly Beach and the Santa Barbara Triathlon.
  - At these locations, brand ambassadors engaged qualified homeowners in conversations about the program and gave them information to take home and consider. During the booth event, brand ambassadors were stationed at La Cumbre Plaza, where they worked side by side with SCG representatives.

The following paid media was deployed in support of the Santa Barbara Workshop Booth Event:

- Digital
  - Digital banners (300x250, 300x600 & 160x600 executions)
  - Digital properties included, but were not limited to: EarthTimes.com, vcstar.com, crisprgreen.com,
  - Social Media: Facebook & Twitter

- Email
  - Email newsletter sent to customers within geographic reach of event

- Print Ads
  - The Argonaut – July 25, 2013
  - Santa Barbara News Press – August 14, August 16, August 18, August 20, and August 23, 2013
  - Santa Barbara Independent – August 15 and August 22, 2013
  - Coastal View News – August 15 and August 22, 2013
  - Montecito Journal – August 15 and August 22, 2013
  - Pacific Coast Business Times – August 16 and August 23, 2013
  - CASA Santa Barbara – August 16 and August 23, 2013

- Spot Radio
  - Solar Radio Tags
  - Station: NPR
  - Flight Dates: August 10 – August 25, 2013

Local Customer Research

SCG conducted six local customer focus groups (in English and Spanish) to gauge the possibility of expanding the customer target audience. SCG was seeking to understand the "non-green" consumer views on solar energy and specifically explore consumers' perceptions of SWH. The findings through this research will help SCG establish marketing strategy for 2014.

Local Market Facilitation Plan

During Q3 2013, SCG worked with Phelps Total Market (PTM) to develop the 2014 Local Market Facilitation Plan, which was submitted to the CPUC for approval by the October 1, 2013 deadline.

Website Development

SCG updated the workshop and contractor/installer training session availabilities in its dedicated

CSI-Thermal Program section: http://www.socalgas.com/solar, during Q3, 2013.

5.7.2 California Center for Sustainable Energy

Training and Education

CCSE conducted the following SWH workshops in Q3 2013. A brief description of each workshop follows.

How to Become an Eligible Contractor in the CSI-Thermal Program	8/1/2013
National Solar Trainers (NST) Solar Thermal Installation Training (5 day)	8/19/2013 – 8/23/2013
How to Become an Eligible Contractor in the CSI-Thermal Program	9/19/2013
Skip's Tips	9/24/2013

Solar Water Heating Basics for Homeowners

CCSE continues its Solar Water Heating Basics for Homeowners for residents seeking to learn more about the advantages and potential benefits of SWH technology.

Solar Water Heating Installation Training (5-day)

CCSE continued its partnership with National Solar Trainers (NST) by offering a five-day comprehensive training geared toward preparing participants to become solar thermal installers, designers, sales and marketing professionals or entrepreneurs.

How to become an Eligible Contractor in the CSI-Thermal Program

Attendance at this contractor and self-installer workshop is a prerequisite for becoming an eligible contractor under the CSI-Thermal Program.

Skip's Tips

Led by CCSE's SWH technical expert, Skip Fralick, this workshop covers advanced solar thermal topics and was reintroduced in September after a two-month hiatus. The format of this workshop has been updated to include a spotlight on a different commercial segment each month such as car washes and industrial laundries.

Workshop Promotion and Follow up

CCSE relied on the targeting capabilities and cost-effectiveness of digital direct mail communications to promote workshops and disseminate important news items. By sending customized e-mail reminders and follow-ups to workshop registrants and attendees, CCSE has been

able to entice more people to register for SWH workshops and is also improving the conversion rate between those who register for workshops and actual attendees.

Online Promotion

CCSE utilized a number of in-house resources to help promote SWH and available workshops, including the Roundup Newsletter, CSI's Go Solar, California! Newsletter, as well as CCSE's online calendar and social media channels (Facebook and Twitter).

A brief synopsis of each communication platform follows:

- *Roundup Newsletter*: CCSE publishes a bi-weekly e-mail calendar called the Roundup that features all CCSE workshops offered in the community. This newsletter grew to more than 11,300 subscribers during Q3 2013 and continues to be an effective medium for promoting CSI-Thermal workshops.
- *Go Solar, California! Newsletter*: CCSE leads the production of the Go Solar, California Newsletter and oversees its bi-monthly distribution to approximately 10,500 subscribers. Two articles pertaining to the CSI-Thermal Program were published during Q3 2013 and are briefly summarized below.
    - Technologies Added to Solar Thermal (May – June Newsletter): This article covered the recent expansion of the CSI-Thermal Program and communicated official updates to the CSI-Thermal Handbook.
    - CSI-Thermal Adds Pool Heating (July – August Newsletter): This article communicates the recent CPUC approval of additional rebates for solar pool heating systems at commercial and government facilities, schools, multifamily housing and locations operated by nonprofit organizations.
- *CCSE's online calendar*: Features all of CCSE's events and workshops and is one of the most active pages on CCSE's website
- *Facebook and Twitter*: CCSE has an active presence on both Facebook and Twitter. These social media channels connect CCSE to a green-minded audience and provide a fruitful platform for engaging with the community as well as sharing program updates, promoting workshops and further spreading awareness of SWH.

Events and Outreach

During Q3 2013, CCSE participated in the following events to help raise awareness of SWH and available CSI-Thermal rebates:

- Intersolar North America Conference 2013
    - Presented in the session "Solar Heating and Cooling : Policy and Markets" about the CSI-Thermal Program and the many program changes in 2013.

- San Diego Renewable Energy Society 13th San Diego Sustainability Tour (formerly the San Diego Solar Tour)
    - CCSE's CSI-Thermal Program sponsored one of the residential tour stops and was on-site to message the benefits of SWH to sustainably-minded homeowners. CCSE also distributed CSI-Thermal Program brochures (i.e. Solar Water Heating for Single-Family Homes and Understanding Rebates) to approximately 500 residential tour attendees.
    - Included CSI-Thermal Program collateral (i.e. Solar Water Heating for Commercial Customers, Solar Water Heating for Multi-Family Dwellings) in tote bags that were provided to all guests on the commercial leg of the tour.

- Industrial Environmental Association of San Diego - Energy Committee Meeting
    - Presented on the CSI-Thermal Program and the benefits of solar thermal to the committee members

- Western Car Wash Association
    - CCSE's CSI-Thermal Program procured a booth presence at the Western Car Wash Association Conference in San Diego (September 11 – 12, 2013)
    - Sponsored roundtable session on the topic of water conservation
    - Submitted CSI-Thermal Program description that was included in an industry news publication and disseminated to all Western Car Wash Association members.
    - Developed hypothetical car wash case study to illustrate potential benefits of SWH for the car wash industry

Web Development

CCSE's website devotes several pages to CSI-Thermal Program-specific information at www.energycenter.org/swh. This landing page is updated frequently to ensure the CSI-Thermal Program pages remain an engaging, accurate and up-to-date resource for local homeowners and businesses who want to learn more about SWH and available rebates.

CCSE launched a new website in Q3 2013 which spurred vast improvements to its CSI-Thermal Program web presence and messaging. Some of the basic improvements and newly created web features are noted below:

- Audience segmentation
    - Visitors can now select the most appropriate audience on CCSE's website to easily locate information that is most relevant to them
    - This update was accompanied by corresponding updates at waterheatedbythesun.com allowing users to identify the appropriate audience from the statewide portal page and continue seamlessly into region and audience-specific messaging on CCSE's website.
- Improved targeting of CSI-Thermal Program content and resources

- Information is now tailored to each of the respective audience segments on all CSI-Thermal Program pages.

- Simplified action path
  - Website now presents a streamlined three step "call to action" that assists users in taking the first step of contacting a contractor

- Developed "Frequently Asked Questions" for both homeowners and commercial customers
  - Created dynamic slideshow images to promote workshops, resources and relevant news items for each of the audience segments.

5.7.3 Pacific Gas and Electric Company

Local Targeting Analysis

In Q3 2013, PG&E continued to creatively market SWH, looking for new methods to increase market penetration. In an effort to drive increased customer awareness and consumer confidence in the technologies, PG&E has embarked on a targeting analysis for both residential and non-residential customers to better understand prospects. This analysis will be used to improve marketing efforts, as well as contractor training and education efforts.

The approaches followed for identifying the best prospects are detailed below:

- Profiling Analysis – identifying the key characteristics of Solar Thermal best prospects and the creation of a profile to determine the target audience.

- Geographical Analysis – mapping the best prospects to determine the cities with the highest penetration of best prospects.

- Contractor Analysis – mapping the contractor base to determine the cities with and without contractor penetration.

CSI-Thermal Workshops

As a core part of PG&E's ongoing efforts, PG&E continues to offer monthly CSI-Thermal Program Workshops for contractors and self-installers throughout the service territory. The workshops are vital in conveying program requirements and ultimately help ensure contractors are better prepared to submit CSI-Thermal Program paperwork. All qualifying technologies are covered, as well as some that do not receive incentives, and contractors are instructed on how to use the CSI Thermal database to submit project paperwork and check status. This workshop is required for anyone looking to become an eligible installer within the CSI-Thermal Program.

CSI Thermal Program workshops offered in Q3 2013:

Date	Location	No. of Attendees
August 15, 2013	Stockton Energy Training Center	30
August 29, 2013	Pacific Energy Center	23
September 26, 2013	Pacific Energy Center	11

The next training is scheduled for November 22, 2013.

Solar Water Heating Informational Courses

PG&E continues to offer customer education and outreach courses online and in-person at our local training centers. Informational and introductory courses provide details on SWH technology, as well as rebate and market information to individuals looking to get into the business or looking to have a system installed on their property. Many of the classes are offered on Saturdays and via the web to ensure optimal access and that attendees do not have to take time off from their jobs to attend.

PG&E has generally conducted three different SWH courses to cover the basics on the program for residential and multi-family/commercial interest:

- **Solar Water Heating Basics:** This course provides an overview of SWH technologies to individuals looking to gain high level information.
- **Solar Water Heating Systems for Homeowners**: This basic class provides an overview of the design, specification, and installation aspects of SWH systems for residential applications.
- **Solar Water Heating** - **Advanced Commercial Systems:** This advanced class focuses on key aspects of large-scale SWH systems for commercial applications.

PG&E conducted the following SWH courses in Q3 2013:

Contractor and Self Installer Workshop	8/15/2013	Stockton
Contractor and Self Installer Workshop	8/29/2013	San Francisco
5-Day Solar Water Heating Workshop	8/26,27,28,29,30/2013	San Francisco
Energy Efficiency and Green Building	9/11/2013	Pleasanton
Solar Water Heating Systems	9/25/2013	San Francisco
Solar Water Heating Systems; Internet	9/25/2013	San Francisco
Contractor and Self Installer Workshop	9/26/2013	San Francisco

The total attendance for all of these courses was approximately 181. PG&E felt there was good statewide coverage from the attendees, including a significant number of contractors who are focusing on the low income residential market throughout the State. This is an underserved market that PGE, with the other utilities and the California State Department of Community Services and Development (CSD), is paying extra attention to going forward. In Q2 2013, CSD approached PG&E about their initiative to offer no-cost solar thermal systems to qualifying low-income customers. In Q3 2013, PGE has compiled lists of qualifying low-income homeowners, and will send out thousands of letters to residents about solar thermal and the offer of a free solar thermal residential system. The other solar thermal and energy efficiency-related classes offered during Q3 2013 included a variety of topics with beginning and advanced students in attendance. The 5-day Workshop was taught by CleantechEdu, and the curriculum was especially well-received by the participants who were invigorated by the course. They were able to physically work with solar thermal equipment, outside, hands-on, and this added a great dimension to their learning. More classes and workshops are scheduled for Q4 2013.

CSD Partnership

As alluded to above, in order to drive SWH adoption among low-income customers, the California Department of Community Services and Development (CSD) and selected statewide network of weatherization agencies have developed a pilot to install 1,000 SWH systems in qualified households. CSD is partnering with PG&E to identify and target eligible ESA customers to participate in the pilot within certain geographical locations. PG&E will conduct outreach on behalf of this pilot to support enrollment in the CSI-Thermal Program. A letter will be sent to inform low-income customers of their eligibility to participate and encourage them to call CSD to be connected with a contractor.

Digital

PG&E purchased several digital buys to be seen throughout September and October 2013:

- Yahoo – Ads (Size 300x250 and 728x90)
  Geo Targeting: Sonoma County-Northern and Southern
  Interest/ Behavior: Appliances, Issues and Causes/Energy, Weather
- PD.COM, Yahoo ROS, Yahoo, Sonoma County (Size 300x250)
- Sonoma Press Democrat.com (Size 728x90)
  Sliding Billboard

Print

In Q3 2013, PG&E placed a 4-color, full-page print ad in targeted demographics including:

1. MNI Luxury Magazines (July issues) (Including Elle Décor, Food & Wine, O: The Oprah magazine, Real Simple, Travel + Leisure) – Sacramento DMA, including El Dorado Hills

2. Luxury Home Magazine (June/July issues) – Sacramento, including El Dorado Hills

Search

- Search extension in four PG&E markets in July and August 2013 to complement statewide buy

Other marketing efforts in Q3 2013 focused on the customer experience and envisioning a new online interface for interested customers. PG&E's Marketing Department looked at the various solar thermal utility-managed web sites and developed plans to improve them. This will be an ongoing effort through Q4 2013 and into 2014, as will the effort begun in Q3 2013 to better understand the target customer. PG&E anticipates that the learning from the successful marketing research to date will translate into better outreach efforts and higher customer acquisition success rates. Q4 2013 will focus on more sophisticated data-driven marketing, and we will leverage relationships with PG&E's commercial customers to build interest in the benefits of solar thermal in commercial sectors such as food processing, agricultural, laundry, breweries, wineries, fruit/vegetable processors, etc. This group has high energy and hot water demand and incorporating a solar thermal project can have great impact on their bottom line.

5.7.4 Southern California Edison Company

SCE continues its efforts to increase adoption of SWH systems and the number of trained installers by offering the monthly CSI-Thermal Program Contractor and Self-Installer Training.

Because SCE and SCG have overlapping service territories, the two utilities offer the monthly training at their respective energy centers on an alternating basis and cross-promote it on their

respective websites as well as in the *Go Solar, California* newsletter. For this reporting period, SCE scheduled one CSI-Thermal Contractor and Self-Installer Training class at its Energy Education Center in Irwindale for August 13, 2013.

A brief description of SCE's other class/workshop offerings, which are promoted via direct mail, on SCE's Energy Center calendar and website, and on the Go Solar California Website, follows:

CSI Homeowner Solar Class (HSC) — These hour-long classes are non-technical, easy-to-understand, free sessions offered as Webinars to educate customers about the CSI and CSI-Thermal programs, available rebates and how to "go solar."

SCE held six HSC Webinars with a total of 522 attendees in Q3 2013.

Solar Connection Event — These 45-minute-long workshops are non-technical, easy-to-understand free sessions throughout SCE's service territory that educate customers about the CSI and CSI-Thermal Programs, available rebates and how to "go solar," followed by an opportunity to meet with solar contractors to help determine a home's solar potential.

SCE held six Solar Connection Events in with 634 attendees in Q3 2013.

CSI Commercial Solar Workshop — These workshops are designed for SCE commercial, government and non-profit customers, and provide an overview of the CSI and CSI-Thermal Programs. Attendees learn about the CSI and CSI-Thermal Programs, eligibility requirements, the application and funds reservation process, rebates, and how solar can help customers lower operating costs and demonstrate their company's commitment to environmental stewardship.

During Q3 2013, SCE held four Commercial Solar Workshops at its Energy Education Center (EEC) in Irwindale (with a video conference to its EEC in Tulare), and began offering them at the ABC Green Home at The Great Park in Irvine. There were a total of 64 attendees.

Customer Outreach

SCE participates in conferences, tradeshows and community-based events as a means to further educate customers about the CSI-Thermal Program and provide continuing program exposure and increase customer awareness. In many cases, SCE leverages the M&O opportunities provided by the CSI general market program to also promote the CSI-Thermal Program. SCE distributed program fact sheets, bid comparison forms and other related information at the following events:

- Water Conference, SCE Energy Education Center, Irwindale, September 9, 2013
- Hispanic Heritage Celebration, SCE Energy Education Center, Irwindale, September 27, 2013

Local Market Facilitation Plan

SCE's local market facilitation efforts leveraged the statewide efforts and focused on potentially high-reward geographic and market segments in SCE's service territory, incorporating a variety of media while using pre-existing creative (with minor SCE-specific adjustments) to help limit unnecessary expenditures.

The tactics ended in Q3 2013 the week of August 19, 2013.

They include:

- Print (full-page four-color):
  - Apartment Age magazine (San Gabriel Valley, South Bay, Long Beach)
  - Apartment Management Magazine (Orange County, Inland Empire)
  - Apartment News (Orange County)
  - Apartment Owners Association News (San Gabriel Valley, Inland Empire, South Bay, Orange County)
  - Rental Housing Today (Riverside and San Bernardino Counties)
- Google Ad Search
  - Selected SCE service areas

SCE Website

SCE has a section of its SCE.com website dedicated to promoting the CSI-Thermal Program at www.sce.com/solarwaterheating.

The pages include detailed information about the program, recent changes to the program and upcoming Contractor and Self-Installer trainings offered by SCE and SCG.

The recent redesign of SCE.com resulted in separate channels for residential and commercial customers seeking information on the CSI-Thermal Program. With that change, SCE is working closely with SCG (as the lead PA for statewide marketing) to add "radio buttons" on WaterHeatedByTheSun.com for easier channel navigation to SCE.com and expects to have that completed in the very near future.

6. Conclusions

The CSI-Thermal Program continues to see increases in customer participation during Q3 2013 especially in the low-income multi-family and commercial segments. With the expansion of the program to include other thermal technologies such as commercial process heat, space heating, absorption chilling, and multi-family/commercial combination systems, the PAs are encouraged by the interest in these technologies. Although not yet implemented, the solar pool heating system incentives also have a potential to significantly increase participation in the CSI-Thermal Program. Along with the technology expansion, the PAs will also leverage insights gained from the various marketing campaigns to create innovative outreach and messaging strategies and continue to encourage customer participation.