

# Energy Division Central Files Document Coversheet

## A. Document Name

Today's Date (Date of Submittal) 8/16/2016

Name:

1. Utility Name(s): **Pacific Gas and Electric Company (PG&E), Center for Sustainable Energy® (CSE), Southern California Edison Company (SCE), and Southern California Gas Company (SCG).**(collectively, the **CSI-Thermal Program Administrators**
2. Document Submission Frequency: **Quarterly**
3. Report Name: **CSI Thermal Program Quarterly Progress Report**
4. Reporting Interval (the date(s) covered by the data): **2016 Q2**
5. Name Suffix:
6. Document File Name (format as 1+2 + 3 + 4 + 5): **CSI-Thermal Program Administrators CSI Thermal Program Quarterly Progress Report 2016 Q2**
7. Identify whether this filing is original or revision to a previous filing.
  - a. If revision, identify date of the original filing: **N/A**

## B. Documents Related to a Proceeding

All submittals should reference both a proceeding and a decision, if applicable. If not applicable, leave blank and fill out Section C.

1. Proceeding Number (starts with R, I, C, A, or P plus 7 numbers): **R.12-11-005**
2. Decision Number (starts with D plus 7 numbers): **D.10-01-022**
3. Ordering Paragraph (OP) Number from the decision: **Ordering Paragraph 13**

## C. Documents Submitted as Requested by Other Requirements

If the document submitted is in compliance with something other than a proceeding, (e.g. Resolution, Ruling, Staff Letter, Public Utilities Code, or sender's own motion), please explain: **N/A**

## D. Document Summary

Provide a Document Summary that explains why this report is being filed with the Energy Division. This information is often contained in the cover letter, introduction, or executive summary, so you may want copy if from there and paste it here.

**SoCalGas (SCG), on behalf of the California Solar Initiative (CSI) Thermal (CSI-Thermal) Program Administrators (PAs), submits this Second Quarter (Q2) 2016 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.**

**This report provides an overall qualitative and quantitative review of the CSI-Thermal Program from July 1, 2010 through June 30, 2016. 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.**

## E. Sender Contact Information

1. Sender Name: **Christopher Stephens**
2. Sender Organization: **Southern California Gas Company**
3. Sender Phone: **(213) 244-2944**
4. Sender Email: **CStephens@SempraUtilities.com**

# Energy Division Central Files Document Coversheet

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a. If Yes, provide an explanation of why confidentiality is claimed and identify the expiration of the confidentiality designation (e.g. Confidential until December 31, 2020.)

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MICHAEL COLVIN, CPUC	REBECCA TSAI-WEI LEE, CPUC
MICHELLE COOKE, CPUC	XIAN MING LI, ORA
NICOLAS L. CHASET, CPUC	TIM G. DREW, ORA

# California Solar Initiative Thermal Program

## Quarterly Progress Report

(April 1 – June 30, 2016)

Published On:  
August 16, 2016



A  Sempra Energy utility



Center for  
Sustainable Energy<sup>®</sup>



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## 1. Executive Summary

SoCalGas (SCG), on behalf of the California Solar Initiative (CSI) Thermal (CSI-Thermal) Program Administrators (PAs),<sup>1</sup> submits this Second Quarter (Q2) 2016 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.<sup>2</sup>

This report provides an overall qualitative and quantitative review of the CSI-Thermal Program from July 1, 2010 through June 30, 2016. 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.

## 2. Introduction

### 2.1. Program Background

In January 2007, the CPUC launched the CSI program, a \$2.16 billion ratepayer-funded incentive initiative with a goal of installing 1,940 megawatts (MW) of new solar generation and creating a sustainable solar industry by 2016.<sup>3</sup> State law allows up to \$100.8 million of CSI funds to be used for incentives for solar thermal technologies that displace electricity usage; however, the CPUC deferred eligibility for solar water heating (SWH) technologies under the CSI until a pilot program for SWH technologies was conducted in the service territory of San Diego Gas & Electric Company (SDG&E). Starting in July 2007, CSE 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),<sup>4</sup> 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.

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<sup>1</sup> The CSI-Thermal PAs are Pacific Gas and Electric Company (PG&E), Center for Sustainable Energy® (CSE), Southern California Edison Company (SCE), and Southern California Gas Company (SCG).

<sup>2</sup> D.10-10-022, Ordering Paragraph 13 and Appendix A.

<sup>3</sup> Public Utilities Code §2851, enacted by Senate Bill (SB) 1 (Murray), Chapter 132, Statutes of 2006.

<sup>4</sup> Public Utilities Code §§2860-2867.

On January 21, 2010, the CPUC established the CSI-Thermal Program,<sup>5</sup> allocating funds for both natural gas-displacing and electric-displacing SWH systems and other solar thermal technologies, in the service territories of California's major investor-owned utilities. The CPUC established the incentive structure, program administration details, and other key CSI-Thermal Program rules. The CPUC designated PG&E, SCG, SCE, and CSE (for SDG&E's service territory) as the PAs for the CSI-Thermal Program. The PAs launched the single-family residential program in May 2010 and the commercial/multifamily 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 multifamily/commercial mainstream programs. The new rates were incorporated into the program on October 4, 2012, and were applied 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 modified 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 modified the way rebates are paid to certain systems under the program by creating a performance-based incentive system that will pay rebates based on actual metered energy delivered to the facility.

On August 19, 2013, the CPUC issued D.13-08-004, effective August 15, 2013. The Decision modified the CSI-Thermal Program to provide incentives for solar pool heating systems for all applications with the exception of single-family residential systems. The Decision required the PAs to develop a pool calculator based on the TRNSYS Type 344 model and incorporate the solar pool heating program into the existing commercial/multifamily incentive budget.

On January 29, 2015, the CPUC issued D.15-01-035, effective January 29, 2015. The Decision modified the CSI-Thermal Program to raise incentive rates for single-family, multifamily, commercial, and low-income applications. Additionally, it increased the maximum rebate allowed for multifamily/commercial applications; reallocated the incentive budget to 10% single-family, 60% multifamily/commercial and 30% solar pools; placed a 50% incentive cap on solar pool systems; and allowed the PAs to make future program changes through the filing of a Tier 2 Advice Letter rather than a Petition for Modification.

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<sup>5</sup> D.10-01-022.

On August 14, 2015, the PAs submitted an Advice Letter to revise the CSI-Thermal Handbook and update the state agency that oversees Targeted Employment Areas, and include Qualified Census Tracts as an option for a presumed resale restriction. The Handbook also updated the definitions and criteria for onsite field inspection processes, including infractions, failures, probation, suspension, and disqualification from the program. The revised Handbook became effective September 13, 2015.

On October 2, 2015, the CPUC issued D.15-10-004, effective October 1, 2015, modifying D.11-10-015 and allowing for expansion of the CSI-Thermal Low-Income Program to include customers participating in the Low-Income Weatherization Program (LIWP) and Low-Income Home Energy Assistance Program (LIHEAP).

In the fourth quarter of 2015, SCG and PGE joined CSE in opening a waitlist for low-income projects as all three program territories have now received enough low-income applications to reserve all available low-income funds.

On March 17, 2016, the CPUC approved PG&E Advice 3691-G/4800-E / CSE Advice 69 / SCG Advice 4930 to shift \$25 million from all sectors of the CSI-Thermal general market budget to the CSI-Thermal low-income budget, increasing the total low-income budget to \$50 million.

At the request of the CPUC, on April 15, 2016, SCG filed an Advice Letter to modify the CSI-Thermal Program Handbook to reallocate SCG's natural gas budget to encourage an increase in program participation in SCG service territory by the end of 2016. All changes made in this version of the Handbook were temporary and only apply to installations in SCG service territory. These changes entail: (1) reallocating Step 3 and Step 4 SCG single family and multifamily/commercial general market funds to Step 1; (2) increasing the rebate rates in SCG service territory only for general market single family and multifamily commercial applications; and (3) removing the 50% rebate cap for solar pool applications. The Advice Letter was approved as filed and effective as of May 13, 2016.

The CSI-Thermal Program is designed to significantly increase the adoption rate of SWH technologies in the California marketplace. The budget, as noted above, was authorized by AB 1470 and by Senate Bill (SB) 1. One of the primary goals of the CSI-Thermal Program is to lower the cost of SWH technologies for the System Owner through incentives. Incentive rates decline over the life of the program in four steps to facilitate market transformation.

Additional information regarding program goals, budgets, incentive structures, and eligibility can be found in detail in the CSI-Thermal Program Handbook.<sup>6</sup>

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<sup>6</sup> The CSI-Thermal Handbook is located at [http://gosolarcalifornia.org/documents/CSI-Thermal\\_Handbook.pdf](http://gosolarcalifornia.org/documents/CSI-Thermal_Handbook.pdf).



### 3. Program Expenditures

From program inception through June 30, 2016, CSI-Thermal Program expenditures totaled \$82,667,988. Table 1 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 2 and Table 3, respectively.

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 1: CSI-Thermal Expenditures by PA**

<b>Natural Gas and Electric/Propane</b>					
<b>CSI-Thermal Program Expenditure Data January 1, 2010 to June 30, 2016</b>					
<b>Expenditure Type</b>	<b>CSE</b>	<b>SCE</b>	<b>PGE</b>	<b>SCG</b>	<b>Total</b>
<b>Administration</b>	\$2,103,045	\$951,441	\$5,469,560	\$3,828,095	<b>\$12,352,141</b>
<b>Market Facilitation</b>	\$2,082,930	\$902,809	\$7,943,130	\$9,986,006*	<b>\$20,914,875</b>
<b>Measurement &amp; Evaluation</b>	\$25,102	\$6,244	\$358,140	\$7,974	<b>\$397,460</b>
<b>Incentives Paid</b>	\$7,076,696	\$62,997	\$16,808,688	\$25,055,131	<b>\$49,003,512</b>
<b>Total</b>	<b>\$11,287,773</b>	<b>\$1,923,491</b>	<b>\$30,579,518</b>	<b>\$38,877,206</b>	<b>\$82,667,988</b>

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

**Table 2: CSI-Thermal Expenditures by PA (Natural Gas)**

<b>Natural Gas</b>				
<b>April 1 – June 30, 2016</b>				
<b>Expenditure Type</b>	<b>CSE</b>	<b>PG&amp;E</b>	<b>SCG</b>	<b>Total</b>
<b>Administration</b>	\$41,733	\$237,178	\$189,596	<b>\$468,507</b>
<b>Market Facilitation</b>	\$22,622	\$243,771	\$545,923*	<b>\$812,316</b>
<b>Measurement &amp; Evaluation</b>	\$127	\$311,016	\$3,935	<b>\$315,078</b>
<b>Incentives Paid</b>	\$83,749	\$1,662,464	\$1,611,880	<b>\$3,358,093</b>
<b>Total</b>	<b>\$148,231</b>	<b>\$2,454,429</b>	<b>\$2,351,334</b>	<b>\$4,953,994</b>

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

**Table 3: CSI-Thermal Expenditures by PA (Electric/Propane)**

<b>Electric/Propane</b>				
<b>April 1 – June 30, 2016</b>				
<b>Expenditure Type</b>	<b>CSE</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>Total</b>
<b>Administration</b>	\$8,321	\$0	\$17,438	<b>\$25,759</b>
<b>Market Facilitation</b>	\$5,656	\$0	\$487	<b>\$6,143</b>
<b>Measurement &amp; Evaluation</b>	\$32	\$0	\$881	<b>\$913</b>
<b>Incentives Paid</b>	\$0	\$0	\$0	<b>\$0</b>
<b>Total</b>	<b>\$14,009</b>	<b>\$0</b>	<b>\$18,806</b>	<b>\$32,815</b>

## 4. Program Progress

The CSI-Thermal Program has a solar thermal statistics website, which can be found at <http://csithermalstats.org/>. This website provides vital program statistics in easy-to-read charts and graphs, offers access to the program's master data set, and includes resources for customers to find a local contractor.

When contractors or homeowners apply for incentives from the CSI-Thermal Program, they provide data about their residence or business and the solar thermal system they will install. California Solar Thermal Statistics analyzes selected data expected to be of greatest interest to the public. The data is updated every other week.

The View Solar Thermal Statistics menu provides the following program data: Program Totals; Statistics by Application Status; Statistics by County; Statistics by Climate Zone; Cost by System Size; Applications by Sector; Savings Distribution; Budget Reports; and Data Annex. The dynamic filters on each figure allow you to slice and dice the program data to suit research and evaluation needs.

Data from past quarterly reports can be recreated and tracked with current data using the CSI-Thermal Statistics site, including, but not limited to, program budgets, costing data, and incentive step levels.

### 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 multifamily/commercial applications to ensure that projects move forward as quickly as possible. Tables 4 through 6 reflect the reporting period from April 1, 2016 through June 30, 2016.

Table 4 shows the most recent application processing timeframes (between the "Reservation Application Review" and "Reservation Application Approved" stages) for 2- or 3-step multifamily/commercial project applications. This metric represents the amount of time it took to reserve incentives for a multifamily/commercial project.

Table 5 shows the time from Application Review to Incentive Approval for 1-step – Single-Family Residential project applications. 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 6 shows the Time from Application to Incentive Approval for 2- and 3-step-multifamily/commercial project applications.

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. Issues encountered from these applications include, but are not limited to:

- Incorrect project site addresses;

- Missing signatures;
- Missing or incomplete documentation; and
- Slow customer/Applicant responsiveness.

**Table 4: Multifamily/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
	Q2	Q2	Q2	
<b>Multifamily/Commercial</b>				
CSE	88.00%	100.00%	0.00%	17
PG&E	57.41%	57.41%	42.59%	54
SCE	0.00%	0.00%	0.00%	0
SCG	68.24%	71.76%	28.24%	85

**Table 5: 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
	Q2	Q2	Q2	
<b>No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	100.00%	100.00%	0.00%	3
PG&E	100.00%	100.00%	0.00%	12
SCE	0.00%	0.00%	0.00%	0
SCG	98.00%	100.00%	0.00%	50
<b>Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	0.00%	0.00%	100.00%	1
PG&E	0.00%	100.00%	0.00%	5
SCE	0.00%	0.00%	0.00%	0
SCG	57.14%	71.43%	28.57%	7
<b>Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.</b>				
CSE	75.00%	75.00%	25.00%	4
PG&E	53.33%	93.33%	6.67%	15
SCE	0.00%	0.00%	0.00%	0
SCG	73.17%	95.12%	4.88%	41

**Table 6: Processing Time from Application Review to Incentive Approval (2- Step - Commercial or Multifamily Residential)**

Program Administrator	30 Days or Less	60 Days or Less	Greater than 60 Days	Total
<b>No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	100.00%	100.00%	0.00%	2
PG&E	100.00%	100.00%	0.00%	17
SCE	0.00%	0.00%	0.00%	0
SCG	97.92%	100.00%	0.00%	48
<b>Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	0.00%	0.00%	0.00%	0
PG&E	16.67%	50.00%	50.00%	6
SCE	0.00%	0.00%	0.00%	0
SCG	61.29%	100.00%	0.00%	31
<b>Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.</b>				
CSE	100.00%	100.00%	0.00%	2
PG&E	26.09%	43.48%	56.52%	23
SCE	0.00%	0.00%	0.00%	0
SCG	70.00%	100.00%	0.00%	70

## 5. Market Facilitation

### 5.1 Statewide Marketing Facilitation Effort

#### CSI-Thermal Statewide Working Group

Though the PAs did maintain a monthly Working Group schedule in Q2 2016, there was no Marketing participation in these meetings.

## 5.2 Mandatory CSI-Thermal Program 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 program territories. The workshops are publicized on each PA's website as well as the GoSolarCalifornia website.<sup>7</sup> 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 7 shows the number of workshops held in each service territory during Q2 2016 and the number of attendees. As of June 30, 2016, there are 615 licensed eligible solar contractors statewide.

**Table 7: Mandatory CSI-Thermal Workshops Held by Program Administrator**

	Q2 2016	
PA	Number of Workshops	Number of Attendees
CSE	1	3
PG&E <sup>8</sup>	1	6
SCE	0	0
SCG	2	24
<b>Total</b>	<b>4</b>	<b>33</b>

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<sup>7</sup> <http://gosolarcalifornia.org/>.

<sup>8</sup> PG&E canceled a second workshop in Q2 2016 due to low event registration

## 5.3 PA-Specific Marketing Efforts

### 5.3.1 SoCalGas

In Q2 2016 SCG continued collaborating with Alternative Energy Systems Consulting (AESC) to provide mandatory contractor and self-installer training courses (2 Course(s) with 24 attendees). SCG's courses were offered at our Energy Resource Center in Downey, California.

#### Trade Shows and Events

SCG promoted the CSI-Thermal Program as an exhibitor at the following shows and events during Q2 2016. At each venue, brochures and promotional items were distributed.

#### ***Solar co-sponsored with other SCG Programs:***

City of Claremont, Earth Day Celebration, April 23, Claremont, CA  
Upland Lemon Festival, April 30 – May 1, Upland, CA  
LA County Small Business Expo, May 5, Alhambra, CA  
UCLA Ecochella Sustainability Festival, May 6, Los Angeles, CA  
Apartment Owners Association, Million Dollar Trade Show, May 19, Long Beach, CA  
California Strawberry Festival, May 21 – 22, Oxnard, CA  
Orange County Home and Garden Show, May 20 – 21, Anaheim, CA  
Southern California Hotel and Lodging Expo, May 26, Pomona, CA  
Palos Verdes Street Fair and Music Festival, June 12, Rolling Hills Estates, CA  
Dwell on Design, June 24 – 26, Los Angeles, CA

#### Local Market Facilitation Plan

Throughout Q2 2016 SCG implemented the Paid Media portion of the 2016 M&O campaign. The whole campaign officially went into market June 13, 2016.

This year, SCG also executed out-of-home marketing efforts by two distributions of 145,000 door hangers to targeted residential customers.

#### Solar Microsite

The SCG microsite, solarwaterheating101.com, has begun the process of transitioning the content to SoCalGas.com/Solar. Here, visitors will continue to have a valuable resource for residential and commercial customers where they can find the latest information on different types of systems and rebates.

#### 2016 CSI-Thermal Local Media Plan

SCG distributed a press release highlighting the increased rebate incentives on June 22, 2016. The press release Potential audience reached 95.7 million people and was viewed by 31,200. The news outlets of Yahoo! News, Bloomberg, and Market Watch from Down Jones picked up the story on their websites.



### 5.3.2 Center for Sustainable Energy

#### Summary

In Q2 2016, CSE executed several targeted digital marketing and outreach efforts. In April, CSE attended the San Diego County Apartment Association Expo to increase the program's exposure to the multifamily housing market. In addition, CSE launched a digital ad campaign with Dwell to specifically target likely single family SWH adopters in San Diego. As part of the program's digital presence, CSE also continued campaigns with Bing and Google AdWords. Finally, CSE produced a content piece featured in the San Diego Business Journal, which highlighted the value proposition of solar pool heating to multifamily and commercial customers.

#### Training and Education

CSE conducted the following SWH workshops in Q2 2016. A brief description of each workshop follows.

Workshop Title	Date	Attendees
<b>Solar for Homeowners</b>	4/12/2016	77
<b>How to Become an Eligible Contractor in the CSI-Thermal Program</b>	5/12/2016	3
<b>Solar for Homeowners</b>	5/5/2016	14
<b>Solar for Homeowners</b>	6/21/2016	71

#### Solar for Homeowners

This integrated workshop is for residents seeking to learn more about both SWH and solar photovoltaics (PV).

#### 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.

#### Workshop Promotion

CSE leveraged the following in-house communication platforms during Q2 2016 to help promote SWH and available workshops:

- *Roundup Newsletter*: CSE publishes a bi-weekly e-mail calendar that features all CSE-hosted workshops offered in California. This newsletter is sent to over 16,300 subscribers and continues to be an effective medium for promoting CSI-Thermal Program workshops.
- *CSE's online calendar*: Features all of CSE's events and workshops and is one of the most active pages on CSE's website.
- *Facebook, Twitter and LinkedIn*: CSE has an active presence on Facebook, Twitter and LinkedIn. These social media channels connect CSE to an audience interested in renewable

energy technologies and provide a fruitful platform for engaging with the community as well as sharing CSI-Thermal Program updates, promoting workshops, and spreading awareness of SWH. In addition to occasional posting about solar thermal and upcoming workshops, CSE continued pay-per-click digital advertising during Q2 2016.

### Marketing Activities by Tactic

#### **Events:**

In Q2 2016, CSE's CSI-Thermal Program participated in multiple outreach events in what turned out to be a busy April. These events included a booth at the San Diego Earth Fair in an effort to promote SWH technology to homeowners and attendees. In addition to this outreach presence for homeowners, CSE also attended the San Diego Apartment Owners Association Conference and Expo for the third year in a row. CSE's booth on the exhibition floor allowed program staff to interact and share the value proposition of SWH face to face with interested multifamily property owners and managers.

#### **Paid Advertising:**

##### **Homeowners**

CSE made a push in Q2 2016 to raise awareness for SWH among San Diego homeowners. In addition to direct outreach at the Earth Day Fair, CSE also launched a display ad campaign with Dwell Inc. to further promote SWH in the San Diego DMA. This presence on Dwell was reinforced by continued campaigns in Google AdWords and Bing AdWords. The CSI-Thermal Team made a decision to decrease the overall spend for these two campaigns while evaluating the success of the efforts in Dwell. This resulted in some smaller overall metric totals for these two campaigns as compared to Q1 2016.

- Google AdWords: 13,115 impressions; 123 clicks
  - CTR: 0.97%
  - While the overall impressions and clicks went down, the total click through rate (CTR) increased by 0.34% as a result of more targeted ad messaging.
- Bing Ads: 4,118 impressions; 128 clicks
  - CTR: 3.14%
- Dwell Display Ad Campaign: 200,032 impressions; 115 clicks
  - CTR: 0.06%
  - Though the CTR for the ads on Dwell.com was above average compared to other ads on the site, it was considerably lower than that of the Google AdWords and Bing campaigns.

These display ads represented a significant online advertising presence for San Diego homeowners during Q2 2016.

## **Multifamily**

With nearly half of San Diego County's three million residents currently living in rental housing, the multifamily market remains a promising opportunity for SWH adoption in San Diego.

Recognizing continued interest by contractors in the multifamily sector, CSE has continued to actively engage and conduct targeted advertising to the multifamily market. Efforts in Q2 2016 built on efforts from Q1 to promote solar pool heating systems for multifamily complexes. Our messaging also focused on how SWH in general presents a powerful value proposition for the multifamily sector.

### **San Diego County Apartment Association (SDCAA):**

#### **SDCAA Advisor Newsletter Digital Banner Ads:**

The SDCAA Advisor newsletter is distributed twice per month to over 3,200 members (multifamily apartment owners and managers) in San Diego County. According to Multibriefs, the organization that handles the SDCAA Advisor email distribution, the newsletter generally receives a 38.1% open rate and provides an average of 1,500 impressions per issue.

During Q2 2016, the SDCAA Advisor email newsletter provided a relatively low-cost means to reach the highly desirable multifamily target audience.

During Q2 2016, CSE ran six (6) ads resulting in 24 clicks to CSE's multifamily landing page for an average click-through rate of 0.30% and a total of 7,982 impressions. Creative is refreshed for each release and content alternates between focusing on solar pool heating, domestic hot water heating end uses, and promoting any upcoming events.

## **Commercial**

Almost every business uses hot water, whether it is for hand sinks and showers or high-volume commercial dishwashers, heavy-duty laundries, pools or industrial processes. The focus of CSE's Q2 2016 marketing efforts for commercial solar thermal was a story written for the San Diego Business Journal's "Sustainable San Diego" section. This piece highlighted several municipal, commercial, and multifamily residential customers in San Diego who have recently installed solar pool heating systems and received a rebate. As part of this effort, the program also created digital ads and print ads that were featured on the San Diego Business Journal website, email blasts, and print editions for the month of April.

## **Web Development**

CSE's website devotes several pages to CSI-Thermal Program-specific information at [www.energycenter.org/swh](http://www.energycenter.org/swh). During Q2 2016, CSE completed a full migration of CSI-Thermal content onto a dedicated microsite specifically for CSI-Thermal Program end-users. The new microsite contains much of the same content but benefits from an improved user interface and

navigation experience. This improved UX helps end users of all types connect with an installer or attend a workshop.

### **Contractor Support and Engagement**

Contractors are the critical actors in the SWH market, and in Q2 2016 CSE continued the series of Contractor Quarterly Updates. The goal of this newsletter is to inform contractors of CSE's market facilitation efforts and potential opportunities to co-market their services to customers. This will be distributed every quarter to active contractors in San Diego. Highlights of the Q2 contractor update included updating contractors on the type of permitting documentation that the program is accepting for multifamily pool systems and giving contractors a status update on the legislation proposing a program extension.

### **5.3.3 Pacific Gas and Electric Company**

#### **Summary**

PG&E completed its in-depth Marketing planning and targeting efforts in Q1 of 2016. As part of these efforts, PG&E conducted an analysis of the 2015 program participants and further refined the 2016 target audience for both residential and commercial to further align with past program participants. As such, Q2 2016 was focused on tactical planning for the multi-touch, multi-channel campaigns kicked off in late Q2-early Q3 2016 as well as planning for the industry event.

#### **Residential Marketing**

PG&E spent the first half of Q2 planning and developing the tactical efforts for residential marketing and outreach. These efforts included updating the creative components of the campaign to better reflect and address customers' motivations and interests. In late Q2, PG&E launched a multi-touch, multi-channel campaign. The campaign tactics included direct-to-customer emails, complemented with digital media as well as an updated website landing page inclusive of a new video and updated e-book for downloading. Our results to date are as follows:

- Unique Open Rate: 30.0%
- Unique Click Rate: 2%
- Approximately 500 downloads of the e-Book

#### **Business Marketing**

Similarly as mentioned in the residential section, PG&E spent much of Q2 2016 planning and developing the creative to align with the targeting refinements. A multi-touch, multi-channel campaign will launch in Q3 2016 with the inclusion of an article in the small-business focused digital newsletter and be followed by both awareness tactics such as print advertising as well as direct-to-customer emails driving customers to our new website landing page and an updated e-book for download. PG&E will also utilize telemarketing as a follow up tactic to the email campaign. In addition, PG&E launched a concerted internal promotional program, leveraging PG&E's Account

Managers, to drive enhanced awareness of and better engagement with the program to key targeted large commercial customers.

### Multifamily

PG&E spent Q2 2016 developing a strategy and plan to reach multifamily customers and determined two key avenues. First, PG&E will be leveraging multifamily customers who have already participated in energy efficiency programs, through either PG&E or the Bay Area Regional Energy Networks (BayREN). PG&E will work on the tactical executions of the plans in Q3 2016. Secondly, PG&E also included multifamily customers as a targeted segment within the business marketing efforts detailed above.

### Events/Conferences

PG&E also utilized time in Q2 2016 to plan and execute its presence at the International InterSolar conference held in San Francisco, July 12-14. PG&E had a 10 x 10 booth space, including a video monitor showcasing both Residential and Commercial customer case studies in a continuous loop. While the booth presence was engaging and an enhancement from previous years, the conference audience was primarily focused on general market solar versus SWH. PG&E is assessing its participation going forward.

### Contractor Outreach

On behalf of the statewide administrators, PG&E deployed a contractor email requesting that CSI-Thermal certified contractors review the contact information listed and update as necessary. Since many of the marketing activities drive to customers to the “Find a Contractor” search tool, the intent of the email was to ensure customers would find accurate contact information for contractors. Based on reporting there was an 11.6% increase of activity on the site during the last month, and 45 contractors updated their mailing addresses.

### CSI-Thermal Program Workshops

PG&E’s CSI-Thermal Program held one Contractors and Self-Installers Workshop in Q2 2016. The Workshop was administered by the PG&E Program Administrator and the lead partnering Professional Engineer, leveraging the facilities of the Pacific Energy Center in San Francisco. All qualifying technologies are covered, in detail, and contractors were instructed how to access and properly use the CSI-Thermal Program tools, as previously outlined in section 5.2. The Workshops continue to be important elements to convey program requirements and to ensure all installers are well-prepared to engage successfully with the CSI-Thermal Program. Licensed contractors, self-installers and interested members of local governments have leveraged our Workshops, and the format continues to be an important tool for education, outreach and engagement with the solar community as a whole.

## 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 of the CSI-Thermal Program for residential and multifamily/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.

### **5.3.4 Southern California Edison Company**

Because SCE and SCG have overlapping service territories, we are directing interested contractors and self-installers to SCG's monthly training center. Because CSI-Thermal Program rebates are no longer available in SCE territory, there is low to no interest for training.

#### SCE Website

SCE has a dedicated section of its SCE.com website to promoting the CSI-Thermal Program at [www.sce.com/solarwaterheating](http://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 SCG.

## **6. Conclusions**

Throughout Q2 2016, the CSI-Thermal Program has demonstrated a commitment towards improvement and balancing the complex needs of ratepayers, customers, industry, and the marketplace. The CSI-Thermal PAs continue to advance the tools of the Program, implementing changes when and where appropriate and when scientific or market-based reasons to do so exist. Since program inception, 3,544 projects have been completed as of June 30, 2016, accounting for

\$50 million in statewide incentive payments and annual savings in excess of 3.61MM therms and 931 MWh.