

# California Solar Initiative Thermal Program

## Quarterly Progress Report

(January 1 – March 31, 2015)

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Center for Sustainable Energy™



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# 1. Executive Summary

## 1.1. Introduction

Center for Sustainable Energy® (CSE), on behalf of the California Solar Initiative (CSI) Thermal (CSI-Thermal) Program Administrators (PAs),<sup>1</sup> submits this First Quarter (Q1) 2015 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 January 1, 2010 through March 31, 2015. 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

During the first quarter of 2015, the CPUC issued D.15-01-035, which approves an increase in rebates, reallocates the rebate budget and places a rebate cap of 50% of total system cost for solar pool systems. The Decision also allows the PAs to make future program changes through the filing of a Tier 2 Advice Letter rather than a Petition for Modification. PGE, on behalf of the CSI-Thermal PAs, filed a Tier 2 Advice Letter on February 27, 2015 to incorporate the program changes called for in D.15-01-035 in the CSI-Thermal Program Handbook. Throughout the quarter, the PAs have been working with Energy Solutions to implement the proposed changes in the CSI-Thermal Program database.

# 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

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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

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.

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

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

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

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 allows the PAs to make future program changes through the filing of a Tier 2 Advice Letter rather than a Petition for Modification.

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>

### **3. Program Expenditures**

From program inception through March 31, 2015, CSI-Thermal Program expenditures totaled \$58,329,325. 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.

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.

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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).

**Table 1: CSI-Thermal Expenditures by PA**

<b>Natural Gas and Electric/Propane</b>					
<b>CSI-Thermal Program Expenditure Data January 1, 2010 to March 31, 2015</b>					
<b>Expenditure Type</b>	<b>CSE</b>	<b>SCE</b>	<b>PGE</b>	<b>SCG</b>	<b>Total</b>
<b>Administration</b>	\$1,774,063	\$845,397	\$4,293,000	\$2,983,929	<b>\$9,896,389</b>
<b>Market Facilitation</b>	\$1,838,280	\$901,480	\$6,440,056	\$7,439,880*	<b>\$16,619,696</b>
<b>Measurement &amp; Evaluation</b>	\$19,299	\$1,427	\$8,329	\$0	<b>\$29,055</b>
<b>Incentives Paid</b>	\$5,127,307	\$62,997	\$11,552,752	\$15,041,129	<b>\$31,784,185</b>
<b>Total</b>	<b>\$8,758,949</b>	<b>\$1,811,300</b>	<b>\$22,294,138</b>	<b>\$25,464,938</b>	<b>\$58,329,325</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>January 1 – March 31, 2015</b>				
<b>Expenditure Type</b>	<b>CSE</b>	<b>PG&amp;E</b>	<b>SCG</b>	<b>Total</b>
<b>Administration</b>	\$46,453	\$223,980	\$172,203	<b>\$442,636</b>
<b>Market Facilitation</b>	\$86,584	\$145,332	-\$193,775*	<b>\$38,141</b>
<b>Measurement &amp; Evaluation</b>	\$1,997	\$127	\$0	<b>\$2,124</b>
<b>Incentives Paid</b>	\$146,380	\$1,094,050	\$1,739,428	<b>\$2,979,858</b>
<b>Total</b>	<b>\$281,414</b>	<b>\$1,463,489</b>	<b>\$1,717,856</b>	<b>\$3,462,759</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)**

Electric/Propane				
January 1 – March 31, 2015				
Expenditure Type	CSE	PG&E	SCE	Total
Administration	\$9,419	\$0	\$18,616	\$28,035
Market Facilitation	\$21,646	\$0	\$57,647	\$79,293
Measurement & Evaluation	\$499	\$127	\$0	\$626
Incentives Paid	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$31,564</b>	<b>\$127</b>	<b>\$76,263</b>	<b>\$107,954</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 with 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, Quarterly Series Comparisons, 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 January 1 through March 31, 2015.

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
	Q1	Q1	Q1	
<b>Multifamily-Commercial</b>				
<b>CSE</b>	63.64%	100.00%	0.00%	11
<b>PG&amp;E</b>	61.76%	100.00%	0.00%	34
<b>SCE</b>	0.00%	0.00%	0.00%	0
<b>SCG</b>	59.09%	72.73%	27.27%	22

**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
	Q1	Q1	Q1	
<b>No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	0.00%	0.00%	0.00%	0
PG&E	95.56%	98.89%	1.11%	90
SCE	0.00%	0.00%	0.00%	0
SCG	63.16%	84.21%	15.79%	38
<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	85.71%	100.00%	0.00%	21
SCE	0.00%	0.00%	0.00%	0
SCG	9.09%	81.82%	18.18%	11
<b>Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.</b>				
CSE	0.00%	0.00%	0.00%	0
PG&E	71.30%	95.37%	4.63%	108
SCE	0.00%	0.00%	0.00%	0
SCG	22.45%	61.22%	38.78%	49

**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	33.33%	100.00%	0.00%	3
PG&E	91.67%	100.00%	0.00%	12
SCE	0.00%	0.00%	0.00%	0
SCG	54.69%	100.00%	0.00%	64
<b>Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.</b>				
CSE	10.00%	100.00%	0.00%	10
PG&E	22.22%	66.67%	33.33%	9
SCE	0.00%	0.00%	0.00%	0
SCG	43.40%	90.57%	9.43%	53
<b>Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.</b>				
CSE	12.50%	50.00%	50.00%	8
PG&E	65.38%	76.92%	23.08%	26
SCE	0.00%	0.00%	0.00%	0
SCG	13.46%	74.04%	25.96%	104

## 5. Market Facilitation

### 5.1 Statewide Marketing Facilitation Effort

#### CSI-Thermal Statewide Working Group

The CSI-Thermal Statewide Working Group met in during the first quarter and scheduled monthly meetings to collaborate and exchange ideas for continuing to utilize diverse marketing and outreach channels to promote SWH.

## 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 Q1 2015 and the number of attendees. As of March 30, 2015, there are 572 licensed eligible solar contractors statewide.

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

PA	Q1 2015	
	Number of Workshops	Number of Attendees
CSE	2	13
PG&E <sup>8</sup>	2	26
SCE	0	0
SCG	2	11
<b>Total</b>	<b>6</b>	<b>50</b>

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

<sup>8</sup> PG&E cancelled one scheduled class in Q1 2015 due to lack of enrollment.

## 5.3 PA-Specific Marketing Efforts

### 5.3.1 Southern California Gas Company

In an effort to increase adoption of SWH systems and the number of trained installers, SCG continued collaborating with Alternative Energy Systems Consulting (AESC) to provide mandatory contractor and self-installer training courses. SCG's course was offered at its Energy Resource Center in Downey, California. SCG hosted two workshops with 11 attendees during Q1 2015.

#### Trade Shows and Events

SCG promoted the CSI-Thermal Program as an exhibitor at the following shows and events during Q1. At each venue, brochures and promotional items were distributed.

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

3/30/2015	2015 Insight Conference, Irvine, CA
3/24/2015	Income Property Management Expo, Pasadena, CA
3/21/2015	Flow Expo 2015: Long Beach, CA
3/12/2015	AAOC Rental Housing Roundup: Costa Mesa, CA
1/31/2015	Beaumont Veteran Expo 2015: Beaumont, CA
1/16-17/2015	Asian American Expo: Los Angeles, CA

#### Local Market Facilitation Plan

The 2015 Local Market Facilitation Plan was submitted to the CPUC for approval on October 1, 2014, and was approved on January 20, 2015.

During Q1, SCG finalized its local marketing campaign for the SWH program across the company service territory via cable television, print, digital, mobile, and social media channels.

#### Solar Microsite

SCG and Phelps continued to promote the SCG solar microsite, solarwaterheating101.com. The microsite continues to be a valuable resource for residential and commercial consumers. They can use it to find the latest information on different types of systems and rebates.

#### 2015 CSI Thermal Local Media Plan

For 2015, SCG intends to build upon the local media footprint already established with commercial, industrial, multi-family, and residential customers. SCG intends to focus a majority of its advertising budget towards generating additional B2B awareness.

SCG is working with Phelps to develop a new Experiential Tour Vehicle. The new unit will have a streamlined design and more engaging concept to generate awareness.

SCG also secured a *Dwell* magazine regional partnership. *Dwell* is considered an authority on residential and commercial modern design.

During Q1, SCG secured UCLA as our Solar Business Champion. UCLA will be working throughout 2015 to cross promote our CSI-Thermal Program and its benefits to their network.

### 5.3.2 Center for Sustainable Energy

#### Summary

Q1 2015 was an active planning and development quarter for CSE. Among some of the primary M&O-related tasks were communicating CSI-Thermal Program updates and coordinating the production and launch of 2015 campaign components.

#### Training and Education

CSE conducted the following SWH workshops in Q1 2015. A brief description of each workshop follows.

Workshop Title	Date	Attendees
How to Become an Eligible Contractor in the CSI-Thermal Program	1/22/2015	3
Solar Water Heating Basics for Homeowners	2/11/2015	19
How to Become an Eligible Contractor in the CSI-Thermal Program	3/12/2015	10

#### Solar Water Heating Basics for Homeowners

This workshop is for residents seeking to learn more about the advantages and potential benefits of SWH technology.

#### 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 Q1 2015 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 14,500 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 a green-minded audience 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 also began planning our 2015 digital media campaign, which will include paid social media advertising during Q2 2015.

### Marketing Activities by Tactic

#### **Press & Media:**

- 2/19/2015: CSE issued a CSI-Thermal Program press release to announce recent program changes and rebate increases
  - Title: Rebates Increased for Home and Commercial Solar Water Heating
- 3/24/2015: Provided CSI-Thermal Program press release to local Building Industry Association (BIA) chapter for integration into digital newsletter and distribution to association members. Press release was also posted on local San Diego BIA chapter website.

#### **Email:**

- 1/30/2015: Communicated CSI-Thermal Program updates to eligible contractors
  - Subject: CSI-Thermal Program Changes | CPUC Approves Petition to Modify
- 2/5/2015: Sent email blast to all previous Solar Water Heating Basics "no shows" to announce updated rebate amounts and remind them about previously expressed interest in SWH and the opportunity to attend the next scheduled workshop
  - Subject: Still considering solar water heating?
- 3/4/2015: Communicated opening of the CSI Non-Res Waitlist in SDG&E territory to CSI-Thermal Program eligible contractors
  - Subject: CSI Non-Res Moves to Wait List in SDG&E Territory
- 3/25/2015: Reminder email to all previous "no shows" of Solar Water Heating Basics
  - Subject: Join CSE at our next Solar Water Heating workshop - Apr. 8

#### **Survey:**

- Designed and distributed online survey to active CSI-Thermal Program contractors in SDG&E territory to assess:
  - Contractor knowledge and experience with respect to discussing financing options with prospective SWH customers
  - How CSI-Thermal Program marketing efforts could more effectively support local contractor-driven marketing and outreach efforts

**Events:**

- CSE was actively engaged in event planning and coordination efforts during Q1 2015. Many of the events coordinated during Q1 were scheduled to occur during early Q2 including:
  - Building Industry Association: Meet the Builder – 4/15/2015
  - Earth Day in Balboa Park – 4/19/2015
  - Chula Vista Solar Water Heating Workshop – 4/21/2015
  - Built It Green Multifamily Webinar – 4/22/2015
  - San Diego County Apartment Association (SDCAA) 2015 Expo – 4/28/2015

**Collateral:**

- Printed updated SWH brochures for all three audience segments (residential, business and multifamily).

**Paid Advertising:****Homeowners**

CSE has long recognized the challenging economics of SWH adoption within the residential market. As previous marketing efforts have proven unable to overcome the lengthy payback period associated with residential SWH, residential marketing efforts remained relaxed during Q1 2015.

Recognizing that high-income homeowners may be more willing to invest in SWH despite the long-term financial payback, CSE targeted high-income households during Q1 2015 via print ads in two regional luxury home magazines. While CSE has not been able to measure successful ad performance in terms of web traffic as a result of these ads, the residential print advertising strategy remains an effective means to stimulate SWH awareness and recognition among this highly-influential target market segment.

**San Diego Home & Garden – February 2015**

Monthly distribution: 26,714

Monthly readership: 189,560

**Dream Homes – January and March 2015**

Monthly Distribution: 18,000 (print)

**Multifamily**

With nearly half of San Diego County's 3 million residents currently living in rental housing, the multifamily market presents a promising opportunity for SWH adoption in San Diego.

Recognizing increased interest by contractors in the multifamily sector and the potential of recently increased rebates to further enhance the value proposition of SWH among this market segment, CSE has continued to actively engage and conduct targeted advertising to the multifamily market throughout Q1 2015.



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

### **SDCAA Advisor Newsletter:**

The SDCAA Advisor newsletter is distributed twice per month to over 4,200 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 33.33% open rate and provides an average of 1,454 impressions per issue.

During Q1 2015, the SDCAA Advisor email newsletter provided a relatively low-cost means to reach the highly desirable multifamily target audience.

### **Digital Banner Ads**

During Q1, CSE ran six (6) ads resulting in 22 clicks to CSE's multifamily landing page for an average click-thru rate of 0.23% and a total of 8,695 impressions. Revised creative was produced in January and again in March of Q1 in response to a "falling off" of ad clicks previously measured during Q4 2014.

### **SDCAA "Rental Owner" Magazine**

CSE submitted an article for appearance in SDCAA's April 2015 Rental Owner magazine distributed to over 2,000 multifamily property owners in San Diego.

Title: Higher Rebates Now Available for Solar Water Heating

## **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 Q1 2015 marketing efforts for commercial solar thermal consisted of furthering exploratory research efforts with the goal of identifying promising target industries in San Diego.

### **Commercial/ Industrial Lead Generation**

The CSI-Thermal Program participated in the development of the Clean Energy Assessment tool, a free online assessment that assists commercial property owners/managers in discovering which clean energy technologies (including solar thermal) are most favorable for their business operations. CSE made multiple UX improvements to this tool during Q1 2015 and plans to more actively promote the tool to facilities managers, property managers and energy engineers in 2015.

### **San Diego Business Journal (SDBJ):**

The CSI-Thermal Program collaborated with other distributed generation (DG) programs at CSE to promote the clean energy assessment via the San Diego Business Journal newspaper and other digital offerings (digital banner ads on

SDBJ.com and email newsletter ads).

Print Ad: The CSI-Thermal Program participated in the production and funding of a half-page print ad which appeared in the January issue of “Sustainable San Diego” – SDBJ’s monthly supplement dedicated to the exploration of business and sustainability.

Headline: Which clean energy solution is right for your business?

Article: The CSI-Thermal Program contributed to the production of an integrated article that explores multiple DG technologies including SWH and is scheduled to appear in the April issue of Sustainable San Diego.

Title: Take Charge of Your Energy with On-Site Power

### Web Development

CSE’s website devotes several pages to CSI-Thermal Program-specific information at [www.energycenter.org/swh](http://www.energycenter.org/swh). These pages are updated frequently to ensure CSE’s CSI-Thermal Program website remains an engaging, accurate and up-to-date resource for local homeowners and businesses who want to learn more about SWH and available rebates.

### **CSE Website Optimization**

In addition to routine updates to CSI-Thermal Program web content (e.g., news, program updates, SEO improvements, etc.), CSE also completed a more comprehensive website optimization effort during Q1 2015.

Web optimizations were guided by past performance insights collected during 2014 and include an improved user experience that more effectively funnels users to highly sought-after content and the critical first step of contacting a contractor.

In order to keep web traffic flowing to the CSI-Thermal Program webpages in the wake of the CSI-Thermal Statewide digital media campaign, CSE has also included the continuation of a digital media campaign effort within its 2015 M&O Plan. Q1 involved planning and development for the 2015 digital campaign effort, which will utilize search engine optimization, digital banner ads and paid search tactics to direct users to the newly revised SWH landing pages on CSE’s website.

### **CSI-T Contractor Search Widget**

During Q1 2015, CSE continued to coordinate and oversee the development of a new CSI-Thermal Program contractor search function. The new contractor search “widget” is designed to facilitate interested customers getting in contact with an eligible CSI-Thermal Program contractor and was launched on [CSIthermal.com](http://CSIthermal.com) in February 2015. The new widget has also been made available to each PA for embedding on their respective website. The embedded widget will enable each PA to keep prospective customers on their own website rather than directing engaged users to a third-party website ([CSIthermal.com](http://CSIthermal.com)) in order to take the next step.

### Find Contractors

Find eligible solar water heating contractors in your area

92103 Proximity (miles) 15

Only show contractors who have installed projects within the past year

**Project Type:**

Residential  Commercial/Multifamily  Pools

**Sort by:**

Name  Number of Projects  Proximity

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### 7 Contractor Search Results

**CALIFORNIA SOLAR THERMAL INC**  
<http://www.californiasolarthermal.com/>  
 888-867-2611  
 3 Residential Projects

**CLEANTECH ENERGY SOLUTIONS INC**  
<http://www.go-cleantech.com/>  
 760-744-1001  
 12 Residential Projects

**SOLAR - TEC SYSTEMS INC**  
<http://www.solar-tec.com/>

### Project Locations

### 5.3.3 Pacific Gas and Electric Company

During Q1 2015, PG&E has been focused on generating awareness of the newly approved incentives and gearing up for the 2015 marketing and outreach campaign. The primary goal continues to be increased adoption of SWH in the service territory. To help increase participation in the CSI-Thermal Program, PG&E has been focused on providing rich information—what SWH is, its benefits and its applicability for customers—through direct to customer initiatives. By providing this key information during the initial consideration stage, it will drive customers further along the purchasing process and facilitate the connection to a contractor.

#### CSI-Thermal Program Workshops

PG&E’s CSI-Thermal Program held two Contractors and Self Installers Workshops in Q1 2015 – a third scheduled Workshop was cancelled due to lack of enrollment. The workshops were administered by the PG&E Program Administrator and the lead partnering Professional Engineer. 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 5.3. The workshops are vital 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.

- 1/12/2015 – Pacific Energy Center, San Francisco – 10 attendees
- 3/26/2015 – NextSpace, Santa Cruz – 16 attendees

### 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 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.

### **Customer Research**

PG&E would like to build on the success of the 2014 campaign where the primary messaging of the creative was to demystify SWH technology with a call to action that took a two prong approach: 1) to learn more by requesting a SWH kit; and 2) find a contractor. This same creative concept was used for all audiences (i.e., Residential, Multifamily and Commercial) and given the new program changes with higher incentives, PG&E conducted customer focus groups to determine the best creative approach and messaging for each audience.

PG&E developed additional creative with messaging and positioning of SWH that is more geared toward customers' motivators and focused on the benefits (financial and environment) vs. the technology. The new concepts were also tailored to the specific needs of the three major customer segments—residential, multifamily and commercial with heavy hot water use. The qualitative research focused on gathering directional insights on the following key objectives:

- Optimal creative approach for each audience
- Overall impressions of each concept

- Concept strengths/drawbacks
- Effectiveness of the messaging.

The findings will be used to make changes to the creative before launching in 2015 to ensure the right message is being served to customers in a manner that will generate interest and encourage prospects to take the next step of finding a contractor.

### **Business Content Marketing**

PG&E has deployed content marketing to attract customers by consistently creating and curating relevant and valuable content on SWH with the intention of encouraging customers to learn more. There have been three informational articles on different aspects on SWH, including financing, the end-to-end process, and the history of the technology. These articles are part of PG&E’s overall business strategy for engaging customers on energy management and live on the main Business Resource Center on pge.com, which serves as a blog with multiple energy-related articles. Customers are driven to the blogs through search, paid media and the monthly Business newsletters.

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

SCE continues its efforts to increase adoption of SWH systems. Because SCE and SCG have overlapping service territories, we are directing interested contractors and self-installers to SCG’s monthly training center. Since CSI-Thermal Program rebates are no longer available in our territory, there is low to no interest for training.

#### Customer Outreach

SCE participates in conferences, tradeshow, 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:

•	1/26–28/2015	VerdeXchange Conference, Los Angeles
•	2/4/2015	IDSMT Summit, Pomona
•	2/4–5/2015	Solar Power Gen, San Diego
•	2/9–13/2015	World Ag Expo, Tulare
•	3/6/2015	Community Forum, EEC-Irwindale
•	3/12/2015	Apartment Assoc. of Orange County Trade Show, Costa Mesa**
•	3/24/2015	Income Property Management Expo, Pasadena**

### 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.

### 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**

Through Q1 2015, the CSI-Thermal Program has demonstrated a commitment towards improvement and balancing the complex needs of ratepayers, customers, industry, and the marketplace. The 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, more than 2,500 projects have been completed, accounting for over \$31 million in statewide incentive payments.

On January 29, 2015, the CPUC issued a Decision approving revisions to the CSI-Thermal Program rebates. The PAs have been working throughout Q1 to implement these changes. The PAs anticipate that with these enhancements, the program will continue to see an increase in program participation.