

California Solar Initiative Thermal Program

Quarterly Progress Report

(July 1 – September 30, 2016)

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A  Sempra Energy utility



Center for Sustainable Energy[®]



Table of Contents

1. Executive Summary	4
2. Introduction.....	4
2.1. Program Background.....	4
3. Program Expenditures	7
4. Program Progress	9
4.1 Turnaround Times	9
5. Market Facilitation	12
5.1 Statewide Marketing Facilitation Effort	12
5.2 Mandatory CSI-Thermal Program Workshops	13
5.3 PA-Specific Marketing Efforts.....	14
5.3.1 SoCalGas	14
5.3.2 Center for Sustainable Energy	15
5.3.3 Pacific Gas and Electric Company.....	18
5.3.4 Southern California Edison Company.....	19
6. Conclusions.....	20

List of Tables

Table 1: CSI-Thermal Expenditures by PA	7
Table 2: CSI-Thermal Expenditures by PA (Natural Gas).....	8
Table 3: CSI-Thermal Expenditures by PA (Electric/Propane)	8
Table 4: Multifamily/Commercial Application Processing Times by Program Administrator between "Reservation Application Review" and "Reservation Application Approved" Stages.....	10
Table 5: Processing Time from Application Review to Incentive Approval (1- Step – Single-Family Residential).....	11
Table 6: Processing Time from Application Review to Incentive Approval (2- Step - Commercial or Multifamily Residential)	12
Table 7: Mandatory CSI-Thermal Workshops Held by Program Administrator	13

1. Executive Summary

Center for Sustainable Energy® (CSE), on behalf of the California Solar Initiative (CSI) Thermal (CSI-Thermal) Program Administrators (PAs),¹ submits this Third Quarter (Q3) 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.²

This report provides an overall qualitative and quantitative review of the CSI-Thermal Program from July 1, 2010 through September 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 2016.³ State law allows up to \$100.8 million of CSI funds to be used for incentives for solar thermal technologies that displace electricity usage; 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),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.

¹ 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).

² D.10-10-022, Ordering Paragraph 13 and Appendix A.

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

⁴ Public Utilities Code §§2860-2867.

On January 21, 2010, the CPUC established the CSI-Thermal Program,⁵ 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.

⁵ 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 PG&E joined CSE in opening a waitlist for low-income projects, as all three program territories had 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.

On September 26, 2016, in response to industry concerns over a large number of single-family systems sold in SCG service territory with the promise of an increased incentive level, the PAs filed an Advice Letter to update the eligibility criteria for single-family systems. The PAs requested that projects demonstrating a building permit application date on or prior to October 7, 2016, and which met the other timeline criteria in SCG territory, would be eligible for the higher incentive amount even if Step 1 funding were exhausted. The Advice Letter also requested that low-income incentive levels be set at Step 1 for the duration of the program so that the low-income program is not subject to decreased incentive levels if Step 1 general market funding is exhausted. The advice letter was approved as filed and effective October 27, 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.⁶

3. Program Expenditures

From program inception through September 30, 2016, CSI-Thermal Program expenditures totaled \$90,753,734. 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

Natural Gas and Electric/Propane					
CSI-Thermal Program Expenditure Data January 1, 2010 to September 30, 2016					
Expenditure Type	CSE	SCE	PGE	SCG	Total
Administration	\$2,149,216	\$960,179	\$5,640,808	\$3,998,847	\$12,749,050
Market Facilitation	\$2,105,286	\$902,896	\$8,386,656	\$10,826,521*	\$22,221,359
Measurement & Evaluation	\$25,671	\$6,419	\$533,876	\$139,970	\$705,936
Incentives Paid	\$7,421,789	\$62,997	\$18,740,327	\$28,852,276	\$55,077,389
Total	\$11,701,962	\$1,932,491	\$33,301,667	\$43,817,614	\$90,753,734

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

⁶ The CSI-Thermal Handbook is located at http://gosolarcalifornia.org/documents/CSI-Thermal_Handbook.pdf.

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

Natural Gas				
July 1 – September 30, 2016				
Expenditure Type	CSE	PG&E	SCG	Total
Administration	\$38,950	\$171,248	\$170,752	\$380,950
Market Facilitation	\$17,796	\$443,526	\$840,515*	\$1,301,837
Measurement & Evaluation	\$456	\$175,736	\$131,997	\$308,189
Incentives Paid	\$345,093	\$1,931,639	\$3,797,144	\$6,073,876
Total	\$402,295	\$2,722,149	\$4,940,408	\$8,064,852

*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				
July 1 – September 30, 2016				
Expenditure Type	CSE	PG&E	SCE	Total
Administration	\$7,220	\$0	\$8,739	\$15,959
Market Facilitation	\$4,560	\$0	\$87	\$4,647
Measurement & Evaluation	\$113	\$0	\$175	\$288
Incentives Paid	\$0	\$0	\$0	\$0
Total	\$11,893	\$0	\$9,001	\$20,894

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 July 1, 2016 through September 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
	Q3	Q3	Q3	
Multifamily/Commercial				
CSE	80.00%	100.00%	0.00%	5
PG&E	93.94%	96.97%	3.03%	33
SCE	0.00%	0.00%	0.00%	0
SCG	90.74%	96.30%	3.70%	54

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
	Q3	Q3	Q3	
No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CSE	0.00%	0.00%	0.00%	0
PG&E	100.00%	100.00%	0.00%	16
SCE	0.00%	0.00%	0.00%	0
SCG	96.98%	97.49%	2.51%	199
Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CSE	0.00%	100.00%	0.00%	1
PG&E	0.00%	100.00%	0.00%	4
SCE	0.00%	0.00%	0.00%	0
SCG	96.97%	100.00%	0.00%	33
Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.				
CSE	0.00%	0.00%	0.00%	0
PG&E	50.00%	77.27%	22.73%	22
SCE	0.00%	0.00%	0.00%	0
SCG	92.39%	97.46%	2.54%	197

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
No Inspection: Percentage of applications without inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CSE	100.00%	100.00%	0.00%	7
PG&E	100.00%	100.00%	0.00%	24
SCE	0.00%	0.00%	0.00%	0
SCG	96.23%	98.11%	1.89%	53
Inspection: Percentage of applications with inspection with processing time between Incentive: Application Review and Incentive: Approved as described.				
CSE	0.00%	75.00%	25.00%	4
PG&E	28.57%	85.71%	14.29%	7
SCE	0.00%	0.00%	0.00%	0
SCG	77.78%	100.00%	0.00%	18
Percentage of applications with processing time between Incentive: Application Review and Incentive: Paid as described.				
CSE	66.67%	83.33%	16.67%	18
PG&E	37.93%	89.66%	10.34%	29
SCE	0.00%	0.00%	0.00%	0
SCG	84.81%	94.94%	5.06%	79

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 Q3 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.⁷ 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 Q3 2016 and the number of attendees. As of September 30, 2016, there are 615 licensed eligible solar contractors statewide.

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

PA	Q3 2016	
	Number of Workshops	Number of Attendees
CSE	1	2
PG&E	2	3
SCE	0	0
SCG	2	49
Total	5	54

⁷ <http://gosolarcalifornia.org/>.

5.3 PA-Specific Marketing Efforts

5.3.1 SoCalGas

In Q3 2016, SCG continued collaborating with Alternative Energy Systems Consulting (AESC) to provide mandatory contractor and self-installer training courses [2 Course(s) with 49 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 Q3 2016. At each venue, brochures and promotional items were distributed.

Solar co-sponsored with other SCG Programs:

Ontario Home and Backyard Show, July 8 – 10, Ontario

Mid-State Fair, July 22 – 24, Paso Robles

Cal Construction Expo, July 28, Los Angeles

Anaheim Home and Garden Show, August 19, Anaheim

Net Zero – Energy + Water +Waste, August 19, Los Angeles

Eastside Sol, August 20, Los Angeles

UCLA vs. UNLV Pre-Game Festivities, September 10, Pasadena

Ventura Home and Garden Show, September 9 – 11, Ventura

Apartment Association of Southern California, September 15, Long Beach

Santa Barbara Home and Garden Lifestyle, September 24 – 25, Santa Barbara

Local Market Facilitation Plan

Throughout Q3 2016, all of SCG's marketing channels were live in market. The response rate from the increased CSI-Thermal rebates has also contributed to driving more customers to inquire about residential installations.

Solar Microsite

The SCG microsite content has officially been transitioned to SoCalGas.com/Solar. Now customers experience a more consistent experience from the SCG website as a whole. This strategic transition will greatly increase organic search engine traffic to the CSI-Thermal webpages.

2016 CSI-Thermal Local Media Plan

In September, SCG earned a first-place award for "Best Ad Campaign for an Investor-Owned Utility" for its innovative work promoting the solar water heating program from E-Source, a Colorado-based nonprofit that sets the gold standard in utility research and strategy. SCG competed among all electric and gas utilities throughout the United States and Canada to win the award.

5.3.2 Center for Sustainable Energy

Summary

In Q3 2016, CSE continued efforts begun in earlier quarters, including a digital presence targeting homeowners using Google AdWords and an email advertising campaign focusing on multifamily apartment owners. Our workshops for homeowners drew over 150 consumers for a focused learning session on solar technologies in the home. CSE also produced a webinar on how Solar Water Heating can contribute to California's Zero Net Energy Goals, engaging contractors, building officials, and architects.

Training and Education

CSE conducted the following SWH workshops in Q3 2016. A brief description of each workshop follows.

Workshop Title	Date	Attendees
Solar for Homeowners	7/21/2016	11
Solar for Homeowners	8/9/2016	134
How to Become an Eligible Contractor in the CSI-Thermal Program	8/11/2016	2
Solar for Homeowners	9/22/2016	16

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 Q3 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.

Marketing Activities by Tactic

Events:

In Q3 2016, CSE's CSI-Thermal program had a relatively light events schedule. CSE staff attended a gathering of the San Diego Hotel Motel Association to co-promote SWH and Combined Heat and Power (CHP) technologies to the large hospitality industry in San Diego. CSE plans to continue these types of co-promotions in coming months to better leverage the organization's expertise across technologies.

Paid Advertising:

Homeowners

CSE's digital push to promote SWH to San Diego homeowners in Q3 2016 continued on Bing and Google AdWords. One change that was implemented was to experiment with increasing the total daily spends in Google AdWords while pausing the Bing Ads. This resulted in some larger overall metric totals for these two campaigns as compared to Q2 2016.

- Google AdWords: 19,048 impressions; 245 clicks
 - CTR: 1.23%
 - Overall impressions went up for Google AdWords as the result of a higher daily spend limit. In addition, the total click through rate (CTR) went from 0.97% to 1.23%, and the total number of impressions nearly doubled.
- Bing Ads: 967 impressions; 25 clicks
 - CTR: 2.58%
 - These numbers represent a significant drop off compared to previous quarters, which is a direct result shifting more resources into the Google AdWords campaign.

These display ads represented a significant online advertising presence to San Diego homeowners during Q3 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 Q3 2016 built on efforts from Q2 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 Q3 2016, the SDCAA Advisor email newsletter provided a relatively low-cost means to reach the highly desirable multifamily target audience.

During Q3 2016, CSE ran six (6) ads resulting in 19 clicks to CSE's multifamily landing page for an average click-through rate of 0.23% and a total of 8,110 impressions. Creative 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 Q3 2016 marketing efforts for commercial solar thermal came as a webinar that was part of a series CSE put on to promote how different clean energy technologies, including SWH, can be used to meet California's Zero Net Energy (ZNE) goals.

Web Development

CSE's website devotes several pages to CSI-Thermal Program-specific information at www.energycenter.org/swh. During Q3 2016, CSE launched a new corporate webpage to better promote its efforts across the clean energy spectrum. This included a new webpage housing all of the programs that CSE manages including CSI-Thermal. This is an improvement over the previous website where visitors to the site had to know specifically how to navigate to the program webpages from the corporate site.

Contractor Support and Engagement

Contractors are the critical actors in the SWH market, and in Q3 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. The update provided contractors with important information regarding the temporary rebates available in SCG program territory and the Advice Letter filed in September to alleviate pressure on the single-family market within that program territory.

5.3.3 Pacific Gas and Electric Company

Summary

In Q2 2016 PG&E was focused on tactical planning for the multi-touch, multi-channel campaigns; as such Q3 concentrated on launching the campaigns. The campaigns included email and digital media for the Residential market and email, direct mail, digital media, telemarketing and print advertising for the Business market. In Q3, PG&E also reviewed 2016 campaign results to date to guide the 2017 marketing plan.

Residential Marketing

In the first part of Q3, PG&E launched a multi-touch, multi-channel campaign, including direct-to-customer emails complemented with digital media. PG&E also updated the SWH website landing page and digital e-book to provide additional program details for interested customers. Campaign results to date are as follows:

- Landing page visits Q3: 37,734
- Direct campaign contribution (landing page visits) Q3: 29%
- Downloads of the e-Book Q3: 1,516

Business Marketing

PG&E also launched a multi-touch, multi-channel campaign to Business customers in Q3. The campaign began with targeted email and direct mail followed up with telemarketing. These tactics increased e-book downloads 73% for a total of 221 e-books downloaded; the telemarketing campaign yielded 475 leads inclusive of 28 qualified leads.

In addition, PG&E placed advertisements in an executive hotel publication, print and online, with a circulation of over 60,000 readers. The results of this effort will be provided in the Q4 progress report.

In other business marketing, PG&E launched a Pilot Incentive program to field account managers for large commercial accounts. Initial response to the program has been positive. The program is expected to run through December 15.

Multifamily

In Q3 PG&E executed a partnership with Bay Area Regional Energy Network (BayREN). As a key element of the partnership, PG&E created and delivered SWH program materials to be utilized at the BayREN customer workshops for multi-family property owners.

Events/Conferences

To also support the multifamily audience, PG&E worked with TRC Solutions to create a booth presence at the National Non-Profit Housing Conference in San Francisco during Q3. PG&E staffed the booth and supplied materials to educate the multi-family property owners on SWH.

CSI-Thermal Program Workshops

PG&E's CSI-Thermal Program held two Contractors and Self-Installers Workshop in Q3 2016. The Workshops were administered by the PG&E Program Administrator and the lead partnering Professional Engineer and held at 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.

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 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 SCG.

6. Conclusions

Throughout Q3 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, 3,833 projects have been completed as of September 30, 2016, accounting for \$55 million in statewide incentive payments and annual savings in excess of 4.98MM therms and 941 MWh.