

Decision 08-06-029 June 26, 2008

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.

Rulemaking 08-03-008
(Filed March 13, 2008)

**DECISION GRANTING IN PART AND OTHERWISE DENYING PETITION
FOR MODIFICATION OF DECISION 06-01-024 REGARDING
SOLAR WATER HEATING PILOT PROGRAM**

Summary

This decision grants in part and otherwise denies a petition for modification jointly filed by the California Center for Sustainable Energy (CCSE, formerly the San Diego Regional Energy Office, or SDREO) and the California Solar Energy Industries Association (CALSEIA) regarding a pilot program for solar water heating incentives, which was originally authorized in Decision (D.) 06-01-024. The request by CCSE and CALSEIA to extend the duration of the pilot is granted, but their request to offer incentives to customers of Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SCE) is denied. The petition is denied in all other respects.

The decision also grants a motion filed by CCSE to expand pilot program eligibility. CCSE may modify its pilot program to offer solar water heating incentives to residential and commercial new construction projects.

Background

In D.06-01-024, the Commission established the California Solar Initiative (CSI) to fund rebates for installation of qualifying solar energy systems for

customers of PG&E, SCE, San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas). As part of that order, the Commission stated its intent to include solar water heating in the CSI program to promote use of that technology and reduce demand for natural gas. The Commission noted mixed results from prior programs to offer incentives for solar water heating, noting the impact of incentives was mainly to increase the cost of the technology. The Commission further stated, “[S]olar water heating may already be cost effective and providing incentives under the circumstances may have the unintended effect of increasing the cost of solar water heaters.” (D.06-01-024, p. 12.)

Given this history, D.06-01-024 allowed a pilot program to test incentives for solar water heaters. The Commission directed SDG&E to offer a contract to SDREO (now CCSE) to administer an eighteen month pilot program for solar water heater incentives offered to residential, commercial and industrial customers in SDG&E’s territory, with rebate levels based on thermal output. (*Id.*, pp. 13-14 and Conclusion of Law 4.) According to D.06-01-024, the details of the program would be set following Commission staff review of a program implementation plan, and the pilot could be funded following an Administrative Law Judge (ALJ) ruling approving the pilot implementation plan.

As part of the pilot concept discussed in D.06-01-024, the Commission specified a plan for evaluating the market impacts of the program, including comparison of solar water heater prices in regions with and without incentives. The Commission required an evaluation of impacts of the pilot on equipment prices, demand, and overall cost-effectiveness, which should begin at the end of the pilot’s 12th month. The Commission stated it would consider extending the

pilot program before its conclusion if preliminary evaluation results suggested positive results. (*Id.*, p. 13.)

In D.06-12-033, the Commission modified CSI to conform to Senate Bill (SB) 1,¹ wherein the Legislature established a budget and other program requirements for CSI. A critical change to CSI following passage of SB 1 was the exclusion of gas ratepayers from funding CSI. Based on this funding limitation, the Commission, in D.06-12-033, adopted the principle that only electric displacing technologies will be funded under CSI because only electric ratepayers are funding the CSI program. However, the Commission granted an exception for the solar water heating pilot in SDG&E territory, and limited the pilot's funding to \$3 million.

In February 2007, the assigned Commissioner and ALJ in R.06-03-004 (the predecessor docket to the above-captioned rulemaking) issued a ruling approving the solar water heating pilot program, with a budget of \$2,590,730, to be administered by SDREO.² Among other things, the ruling directed SDREO to augment its plan for evaluation of the pilot with several specific directives. Further, the ruling dismissed requests to expand the pilot statewide, stating that "the full Commission may consider program expansion after it is able to review program evaluation results." (February 2007 Ruling, p. 13.) In accordance with the ruling, SDREO began the pilot program on July 2, 2007, and it is scheduled to end on December 31, 2008.

¹ Chapter 132, Statutes of 2006.

² See "Assigned Commissioner's and Administrative Law Judge's Ruling Approving Solar Water Heating Pilot Program," R.06-03-004, February 15, 2007 ("February 2007 Ruling").

Later in 2007, the Legislature passed Assembly Bill (AB) 1470,³ which declares it is in the interest of California to promote solar water heating systems and other technologies that reduce demand for natural gas in homes and businesses, and it is the intent of the Legislature to build a mainstream market for solar water heating systems. The bill states the Commission shall establish a \$250 million, ten year statewide program to promote installation of solar water heating systems if the Commission makes certain determinations following evaluation of the CCSE solar water heating pilot program. The bill adds Pub. Util. Code § 2863⁴ which states, in pertinent part:

(a) The Commission shall evaluate the data from the Solar Water Heating Pilot Project conducted by [CCSE]. If, after a public hearing, the commission determines that a solar water heating program is cost effective for ratepayers and in the public interest, the commission shall do all of the following:

(1) Design and implement a program applicable to the service territories of a gas corporation, to achieve the goal of the Legislature to promote the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

(2) The program shall be administered by gas corporations or third-party administrators, as determined by the commission, and subject to the supervision of the commission.

(3) The commission shall coordinate the program with the Energy Commission's New Solar Homes Partnership to achieve the goal of building zero-energy homes.

³ Chapter 536, Statutes of 2007, also known as the "Solar Water Heating and Efficiency Act of 2007."

⁴ All statutory references are to the Public Utilities Code, unless otherwise noted.

(b) (1) The commission shall fund the program through the use of a surcharge applied to gas customers based upon the amount of natural gas consumed. The surcharge shall be in addition to any other charges for natural gas sold or transported for consumption in this state.

(2) The commission shall impose the surcharge at a level that is necessary to meet the goal of installing 200,000 solar water heating systems, or the equivalent output of 200,000 solar water heating systems, on homes and businesses in California by 2017. Funding for the program established by this article shall not, for the collective service territories of all gas corporations, exceed two hundred fifty million dollars (\$250,000,000) over the course of the 10-year program.

Petition for Modification

On April 3, 2008, CCSE and CALSEIA (“Petitioners”) jointly filed a petition to modify D.06-01-024 to allow expansion of the pilot program to include ratepayers of PG&E and SCE, and an extension of the pilot’s duration for six additional months. Petitioners maintain the extension is needed to avoid gaps in the program during the Commission’s development of a statewide program under AB 1470. Petitioners also request other minor program changes including an increased incentive level and program budget for residential systems, additional funds for administration of the pilot, and allocation of funding responsibility for the pilot between PG&E, SCE, and SDG&E ratepayers through a co-funding agreement.

Petitioners support their request by noting the pilot was designed to help the Commission better understand the market dynamics, technical performance, and cost-effectiveness of solar water heating technologies with a view to including solar water heating within CSI. They contend the adoption of AB 1470 has placed a renewed emphasis on the pilot because the Commission must assess

the pilot's results before designing and implementing a statewide solar water heating program.

Petitioners claim the current design of the pilot, which limits participation to SDG&E ratepayers, leaves unanswered questions such as whether San Diego is representative of the state, and whether there will be stronger markets, more experienced contractors, or greater participation in the program from customers in other parts of the state. Further, they note solar water heating contractors have expressed concern that lack of a statewide program inhibits the solar water heating marketplace. Petitioners allege that expanding the geographic coverage of the pilot will provide valuable information on regional differences, contractor sophistication, and consumer trends across the state. This information will be relevant for Commission consideration of the statewide solar water heating program contemplated under AB 1470.

The petition also contains a progress report on the pilot to date. The pilot began in July 2007 and as of March 30, 2008, has run for nine of its scheduled eighteen months. Petitioners report that the pilot has received 75 applications during that time period, with 25 projects completed or pending payment, far below the 750 residential systems set as a program goal and allowed by the program budget.

According to Rule 16.4(d) of the Commission's Rules of Practice and Procedure, petitions for modification must be filed within one year of a Commission decision. Petitioners request leave to file this petition more than two years after the issuance of D.06-01-024 on January 12, 2006 because the pilot program did not officially commence until July 2, 2007 and the petition could not have been presented within one year of the originating order. Additionally, the issues in the petition have presented themselves during the first nine months of

the pilot program's operation. We find that Petitioners have adequately justified the late filing of their petition because of the start date of the pilot program.

Petitioners request an expedited comment period of 10 days on their petition, based on the scheduled duration of the pilot program and their desire to see any modifications implemented as soon as possible. In response to an e-mail inquiry by the ALJ, the utilities, namely SCE, PG&E, and SDG&E, objected to the shortened comment period. The ALJ set a comment period of 20 days to expedite the petition for modification but allow the utilities adequate time for discovery on the petition.

Comments on Petition

Comments on the petition were filed on April 24, 2008 by the City and County of San Francisco (CCSF), Community Environmental Council (the Council), the Commission's Division of Ratepayer Advocates (DRA), PG&E, SCE, and jointly by SDG&E/SoCalGas.

CCSF and the Council support the petition, with CCSF stating that San Francisco has different solar insulation, climactic, economic and housing stock conditions than the San Diego area, and expanding the pilot statewide could provide an early database of information to ensure sound program design under AB 1470. The Council claims expanding the pilot beyond San Diego could "jump start" solar water heating in California.

The utilities and DRA oppose the petition on several grounds. SCE and SDG&E/SoCalGas contend the request is premature because both D.06-01-024 and the ruling approving the pilot's implementation allude to statewide expansion only after review of pilot program results, with at least 12 months of information. They maintain that absent such a review, the request is premature. SCE argues the pilot's performance to date has been below its goals, indicating

the pilot should be cancelled. PG&E alleges the pilot cannot be extended beyond San Diego because Section 2867.2 does not allow use of CSI funds for solar water heating to displace gas usage except for the pilot program in San Diego.⁵

Instead, PG&E suggests the Commission take the current pilot program results and use them to move directly to development of a program under AB 1470.

SCE and PG&E both request that if the Commission grants the petition and expands the pilot, despite their objections, it should allow SCE and PG&E, who currently administer CSI in their territories, to administer the expanded pilot in their territories as well. SCE opposes any additional funding for the pilot, or increase in residential incentives.

Several parties – namely DRA, PG&E, and SDG&E/SoCalGas – recommend coordination between programs offering solar water heating incentives and the Commission’s energy efficiency and demand response programs.

On May 1, 2008, Petitioners replied to these comments, stating that the statutory constraint raised by PG&E is a legitimate concern that will need Commission interpretation. In addition, they reiterate their reasons why an expanded pilot could provide data to inform a statewide solar water heating program under AB 1470.

⁵ Section 2867.2 states:

“Except for the Solar Water Heating Pilot Program in San Diego, solar water heating technologies shall not be eligible for California Solar Initiative (CSI) funds, pursuant to Section 2851, unless they also displace electricity, in which case only the electricity displacing portion of the technology may be eligible under the CSI program, as determined by the Commission.”

Discussion

We will grant the portion of the motion requesting an extension of the pilot's duration beyond 18 months, but we will deny the remainder of the petition.

We will allow CCSE to continue the pilot program beyond the currently scheduled end-date of December 31, 2008, because applications for solar water heating incentives under the pilot have been lower than anticipated. The low participation rate thus far indicates the program budget of \$2.59 million has not been exhausted. An extension of time for the pilot will allow CCSE and its independent program evaluator to obtain additional data for program review. Therefore, CCSE may extend the pilot until December 31, 2009, or until the pilot program budget is exhausted, whichever occurs first.

We deny Petitioners' request to expand the geographic reach of the pilot based on Section 2867.2, which prohibits use of CSI funds for solar water heating incentives that displace natural gas usage except under the pilot program in San Diego. Given this statute, we cannot allow CCSE to use CSI funds to provide incentives for solar water heating to displace natural gas usage to customers of SCE and PG&E. While AB 1470 allows the Commission to design a statewide solar water heating incentive program, Section 2863(a) clearly states the Commission must first evaluate the pilot program and determine that a solar water heating program is cost effective for ratepayers and in the public interest before it can design a statewide solar water heating program, funded by a surcharge on gas customers.

We agree with PG&E that it will be quicker to begin program design, as contemplated under AB 1470, if we can gather performance data on the pilot thus far and proceed to determining the cost-effectiveness to ratepayers and

public interest of the program, as required by Section 2863. Therefore, we direct our Energy Division to continue to closely monitor the workplan for the interim and final pilot evaluation already underway by CCSE and its independent evaluator, to ensure the evaluation provides the necessary information for the Commission determinations required by Section 2863. CCSE's current evaluation budget is \$200,000, as set forth in the February 2007 ruling approving implementation of the pilot. Energy Division may authorize changes to the evaluation budget, following written request by CCSE, if it determines additional funds are required to ensure a comprehensive and useful evaluation to inform statewide program design considerations. If a budget change is required, CCSE should submit a letter to the Director of Energy Division, with a copy to the service list. Any such request will be resolved by letter from the Energy Division Director, copied to the service list. If the evaluation budget is augmented, the total pilot program budget must remain at or below the \$3 million authorized in D.06-12-033. We also direct Energy Division to hold a workshop on the pilot program evaluation plan, within 60 days of this order, to allow interested parties an opportunity to understand existing plans for program evaluation as well as provide feedback and suggestions for this evaluation.

We appreciate Petitioners' initiative in suggesting pilot program modifications, which are designed to ensure the Commission has adequate information to make the findings required by AB 1470 prior to designing a statewide solar water heating incentive program. Although the statute bars us from expanding the pilot at this time, we note that CCSE can supplement the information it obtains from systems installed under the pilot with additional research into the market barriers and other economic or technical factors affecting the solar water heating market. Unspent funds from the pilot can fund

this additional research. We encourage CCSE, and other interested parties, to work with Energy Division as described above to augment the pilot evaluation with additional research into what type of market interventions are needed to drive greater adoption of solar water heating systems in California.

All other requests in the petition are denied. Among other requests, Petitioners want authorization to increase incentive levels and obtain additional funds for administration. In our view, the increase to incentives was not adequately supported and incentive level changes in the middle of the pilot would complicate evaluation efforts. Additional funds for administration are unnecessary given our denial of the pilot expansion beyond SDG&E's territory. In comments on the proposed decision, Petitioners request to implement a two-tiered, streamlined incentive structure even without increased incentives. We prefer to leave pilot program details of this nature to Energy Division to resolve. CCSE may request to modify its program plan by letter to Energy Division. Program details such as this were not set by Commission order, and modification of a decision is not required to allow minor changes to the program plan.

Motion by CCSE

On February 28, 2008, CCSE filed a motion in R.06-03-004, the predecessor docket to this rulemaking, requesting modification of the pilot program implementation plan, as approved in the February 2007 ruling.⁶ The pilot, as initially approved, offered rebates to customers of SDG&E who install solar water heating systems to offset energy used by an *existing* natural gas or electric

⁶ In R.08-03-008, the Commission transferred the record of R.06-03-004 to this docket.

water heater or boiler. CCSE now requests the ability to offer solar water heating incentives to all new construction, not just systems that replace existing water heaters. In the alternative, CCSE requests that it be allowed to offer incentives to survivors of the 2007 San Diego wildfires who are essentially replacing existing natural gas or electric water heaters or boilers. There were no comments on the motion.

We will allow CCSE to modify its program to allow solar water heating incentives to all new construction. However, CCSE must separately monitor and account for this portion of the program, and modify its evaluation plan to track performance data for these systems separately from systems that replace existing water heaters. The systems costs and energy savings for new construction may differ from the costs and savings for existing systems. We will want to review separate data on the system costs and energy savings achieved for solar water heating systems in new construction versus systems that replace older, and likely less efficient water heaters.

Comments on Proposed Decision

The proposed decision of Commissioner Michael R. Peevey in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. The decision was also mailed to the parties in R.04-03-017, in which D.06-01-024 issued, and to the parties in R.06-03-004, in which the petition was originally filed. Comments were filed by Petitioners, PG&E, SCE, and jointly by SDG&E and SoCalGas. Reply comments were filed by Petitioners and SCE. Several parties ask for clarification of the pilot program budget. Petitioners reargue their request for higher solar water heating incentive levels. SCE asks for the ability to comment on any pilot program budget

changes. SDG&E/SoCalGas question whether the Commission can meet the deadlines in AB 1470 (Pub. Util. Code §§ 2866 and 2867.1) if the pilot program is extended.

In response to comments, the decision has been modified to clarify that the Commission allocated a maximum of \$3 million in D.06-12-033 for the pilot program, and the current budget is \$2.59 million, as authorized by ruling. Energy Division may approve pilot program budget changes, not to exceed \$3 million, if that is deemed necessary for proper program evaluation, but CCSE may pursue minor alterations to its pilot program plan with Energy Division. Comments that merely reargued earlier positions were not considered. SCE may comment on the pilot program budget by participating in workshop which this order directs Energy Division to hold on the pilot program evaluation plan. With regard to the concern raised by SDG&E/SoCalGas, we will allow the extension of the pilot, if budget funds allow, to provide program continuity as we comply with the mandates of AB 1470 in designing a statewide program.

Assignment of Proceeding

President Michael R. Peevey is the assigned Commissioner and Dorothy J. Duda is the assigned Administrative Law Judge for this portion of the proceeding.

Findings of Fact

1. In D.06-01-024, the Commission allowed CCSE to administer an 18-month pilot program for solar water heating incentives to customers in SDG&E's territory.

2. The Commission stated in D.06-01-024 that it would consider extending the pilot program before its conclusion if a preliminary evaluation suggested positive results.

3. Section 2863 states the Commission shall establish a statewide program for solar water heating incentives, funded by a surcharge on gas customers, if it evaluates data from the CCSE solar water heating pilot and determines, after a public hearing, that a solar water heating program is cost effective for ratepayers and in the public interest.

4. Section 2867.2 does not allow use of CSI funds for solar water heating to displace gas usage, except for the pilot program in San Diego.

5. The current CCSE pilot program offers rebates to customers of SDG&E who install solar water heating to offset energy by an existing natural gas or electric water heater or boiler.

6. From July 2007 through March 2008, the pilot has received 75 applications, with 25 projects completed or pending payment, which is far below the goal allowed by the pilot program's incentive budget.

7. D.06-12-033 authorized a maximum budget of \$3 million for the pilot program, and a pilot program budget of \$2.59 million was approved in a February 2007 ruling.

Conclusions of Law

1. An extension of the duration of the CCSE solar water heating pilot will allow additional data with which to evaluate the program.

2. We should modify D.06-01-024 and allow CCSE to administer its solar water heating pilot program until December 31, 2009, or until the approved pilot program budget is exhausted, whichever occurs first.

3. Based on Section 2867.2, the CCSE solar water heating pilot cannot be extended at this time to customers of SCE and PG&E.

4. The Commission cannot design a statewide incentive program for solar water heating until it makes certain findings after an evaluation of the CCSE pilot program.

5. Energy Division should closely monitor the workplan for interim and final evaluation of the solar water heating pilot, and, if needed, allow CCSE to augment the evaluation budget, not to exceed the \$3 million total pilot budget allowed by D.06-12-033, to ensure the evaluation provides the necessary information for the Commission determinations required by Section 2863.

6. The petition by CCSE and CALSEIA should be denied except for the extension of the pilot's duration.

7. It is reasonable to allow the pilot program to offer incentives for solar water heating to new construction, as long as CCSE separately monitors and accounts for this portion of the program, and modifies its evaluation plan to track performance data for these systems, including system cost and energy savings, separately from systems that replace existing water heaters.

8. Petitioners have adequately justified the late filing of their petition because the pilot program did not commence until more than one year following D.06-01-024.

O R D E R

IT IS ORDERED that:

1. The petition to modify Decision 06-01-024 filed by the California Center for Sustainable Energy (CCSE) and the California Solar Energy Industries Association (CALSEIA) is granted in part to allow CCSE to extend its solar water heating pilot program offered to customers of San Diego Gas & Electric

Company (SDG&E), until December 31, 2009, or until CCSE exhausts the approved pilot program budget, not to exceed \$3 million, whichever occurs first.

2. The petition by CCSE and CALSEIA is denied in all other respects.

3. The Commission's Energy Division shall closely monitor the workplan for the interim pilot evaluation to ensure the evaluation provides the necessary information for the Commission determinations required by Section 2863.

4. Energy Division may authorize changes to the program evaluation budget for the CCSE solar water heating pilot program, following written request by CCSE, as long as the total pilot program budget does not exceed the \$3 million authorized by D.06-12-033.

5. Energy Division shall hold a workshop on the pilot program evaluation plan, within 60 days of this order, to allow interested parties an opportunity to discuss existing evaluation plans and provide feedback and suggestions for this evaluation.

6. The motion filed by CCSE to offer incentives through the pilot to all new construction is granted. CCSE must separately monitor and account for incentives to new construction, and modify its evaluation plan to track performance data for these systems separately from systems that replace existing water heaters.

7. This decision shall be served on parties to Rulemaking (R.) 04-03-017 and R.06-03-004 in addition to the parties to the current proceeding.

This order is effective today.

Dated June 26, 2008, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners