

Decision 11-11-005 November 10, 2011

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 10-05-004
(Filed May 6, 2010)

DECISION MODIFYING DECISION 10-01-022 TO ALLOW INCENTIVES TO PROPANE-DISPLACING SOLAR WATER HEATING SYSTEMS IN THE CALIFORNIA SOLAR INITIATIVE THERMAL PROGRAM

Summary

This decision modifies Decision 10-01-022 that established the California Solar Initiative (CSI) Thermal Program to allow payment of incentives to solar water heating systems that displace propane usage. To qualify for incentives, applicants must be an electric customer of Pacific Gas and Electric Company Southern California Edison Company, or San Diego Gas and Electric Company and meet all eligibility requirements that currently apply to CSI Thermal applicants.

Background

In Decision (D.) 10-01-022, the Commission established the California Solar Initiative (CSI) Thermal Program, which pays incentives to solar water heating (SWH) systems that displace gas water heating. The CSI Thermal Program

Administrators¹ (PAs) pay incentives to gas-displacing systems, which are funded by \$250 million collected from natural gas ratepayers. The program also pays incentives to SWH systems that displace electric water heating. Incentives to electric-displacing SWH systems are funded by \$100.8 million collected from electric ratepayers and allocated for solar thermal incentives in the general market budget of the CSI program. Despite these two sources of funding for SWH systems, D.10-01-022 makes no provision for the payment of incentives to SWH systems that displace propane water heating. This stems in part from language in D.06-12-033 which allows funding of solar thermal technologies and solar water heating in the CSI program, but only those that displace electric usage.

On June 14, 2011, the Administrative Law Judge (ALJ) in this proceeding issued a ruling requesting comment from parties on the issue of allowing CSI Thermal incentives to SWH systems that displace propane usage.² An Energy Division Staff Proposal (Staff Proposal) providing background and analysis on the issue was attached to the ruling. Comments were filed by Dr. Barbara Barkovich,³ the California Solar Energy Industries Association (CALSEIA), SCE,

¹ The CSI Thermal PAs are Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas) and the California Center for Sustainable Energy (CCSE) in the San Diego Gas & Electric Company (SDG&E) service territory.

² The ruling proposes modification of D.10-01-022, adopted in Rulemaking (R.) 08-03-008. In opening the successor rulemaking R.10-05-004 in May 2010, the Commission noted that all modifications of prior decisions would occur in the new rulemaking docket. (See R.10-05-004, Ordering Paragraph 3.)

and jointly by the CCSE and PG&E. Joint reply comments were filed by CALSEIA and CCSE.

The Staff Proposal recommends that the Commission modify D.10-01-022 to allow payment of incentives to customers of PG&E, SCE and SDG&E who install SWH systems that displace propane. According to the Staff Proposal, electric ratepayers who use propane for water heating help support the CSI Thermal Program through their rates but cannot access the program's benefits.

The Staff Proposal recommends that customers seeking CSI Thermal incentives for propane-displacing SWH systems meet all of the eligibility requirements that currently apply to electric-displacing CSI Thermal applicants. Furthermore, Staff proposes that incentive levels for systems displacing propane would be set at the same level as the current CSI Thermal incentives to electric-displacing SWH systems. Staff proposes that funding for incentives to propane-displacing SWH systems would come from the \$100.8 million budgeted in the general market CSI program for electric-displacing solar thermal, as adopted in D.10-01-022.

Parties' Comments

Dr. Barkovich, CALSEIA, CCSE, and PG&E support the Staff Proposal. CALSEIA asserts that it is unfair for the CSI Thermal Program to exclude electric ratepayers who may use propane to heat water. CALSEIA asserts that expansion of the program to include propane-displacing systems should decrease fossil fuel combustion and help reduce greenhouse gas emissions, in keeping with

³ Dr. Barkovich frequently participates in Commission proceedings on behalf of clients, but in this rulemaking, she is representing her own interests as an inhabitant of Western Mendocino County where there is no natural gas service.

California policy goals set forth in Assembly Bill (AB) 32. CALSEIA agrees with the Staff recommendation to allow customers who install SWH to use propane as a backup fuel source.

Dr. Barkovich notes in her comments that in the area of California where she resides, propane prices are tied to the price of oil and are two and half times the costs for propane listed in the Staff Proposal. She estimates that the annual cost of heating water with propane is almost \$700 per year, much higher than the cost of heating water with electricity. Thus, if oil prices remain high, it would be cost-effective for her to switch to electric water heating, which runs counter to state policy preferences to reduce electricity consumption.

SCE opposes the Staff Proposal, arguing the Commission has no jurisdiction over propane gas suppliers and the Legislature has only authorized incentives for natural gas and electric-displacing SWH systems. SCE contends that providing incentives to propane-displacing SWH systems does not advance the CSI Thermal Program objectives to reduce or delay electric transmission and distribution system upgrades and reduce peak electricity demand. According to SCE, the CSI Thermal budget should be used solely to offset electricity consumption because it is the most expensive energy resource.

Discussion

As the Staff Proposal explains, the vast majority of California homeowners – around 90% – use natural gas to heat water. Customers who do not have access to natural gas, usually those in rural areas, use either propane or

electricity for water heating. Roughly 5% of California residents heat water with electricity and the remaining 5% heat water with propane.⁴

Although propane use is not widespread among California residents, those residents who heat water with propane constitute a market segment with a high likelihood of converting to SWH. This is because propane is significantly more expensive than natural gas so there is a substantial annual cost savings to switch from propane to SWH.⁵ The Staff Proposal analyzed data from the SWH pilot program in the SDG&E territory and Staff concludes that ratepayer funding buys more systems per dollar when the displaced fuel is more expensive.

Propane is a more expensive way to heat water than natural gas. If we allow the CSI Thermal Program to pay incentives to propane-displacing SWH systems, we can encourage a promising market for SWH in California. Furthermore, if we pay incentives to propane-displacing systems at the same level as electric-displacing systems, which are lower than incentives to gas-displacing systems, the program can install more SWH systems per ratepayer dollar compared with systems displacing natural gas.

The Commission initially limited the CSI Thermal Program to gas and electric-displacing SWH systems for two reasons. First, the portion of the program funded by gas ratepayers is intended for the benefit of those gas

⁴ See California Energy Commission, *2003 California Statewide Residential Appliance Saturation Study, Volume 2, Study Results*, Publication # 300-00-004, prepared by KEMA-XENERGY, Itron, and RoperASW, 2004.

⁵ The Staff Proposal indicates an estimated annual cost for natural gas water heating of \$136 compared to \$283 for propane water heating. (Staff Proposal, Table 1, at 2.)

ratepayers. Section 2863(c) of the Public Utilities Code, as adopted by AB 1470, states that “[f]unds shall be allocated for the benefit of gas customers to promote utilization of [SWH] systems.” Second, for the portion of CSI Thermal funded by \$100.8 million in collections from electric ratepayers pursuant to Pub. Util. Code § 2851(b), the Commission concluded in D.06-12-033 that it should limit use of those funds to solar thermal technologies that displace electricity usage.

(D.06-12-033 at 24.)

We now conclude that it is reasonable to allow electric customers who use propane to heat water to qualify for incentives under the CSI Thermal Program. Customers who heat water with propane are generally electric ratepayers who choose to heat water with propane specifically because they do not have access to cheaper natural gas. We agree with CCSE and CALSEIA that we should provide fair program access to electric ratepayers, particularly when a portion of their electric bill supports the CSI Thermal Program.

Moreover, when we prevent propane-displacing SWH systems from receiving incentives, we create a perverse incentive for these customers to actually increase electric demand. This might occur if a customer who heats water with propane switches back to electricity in order to take advantage of the state rebate for electric-displacing systems. The prohibition on propane-displacing systems also prevents CSI Thermal Program participants from further reducing their electric demand by switching from electricity to propane as a backup fuel at the time they install their SWH system.

We conclude there is a public benefit to providing incentives to propane-displacing SWH systems to decrease fossil fuel combustion and greenhouse gas emissions. Indeed, excluding propane-displacing systems may result in increased electric load. It makes more sense to make propane users eligible to

receive incentives to increase program participation and help facilitate reaching the State's environmental goals, which include reducing greenhouse gas (GHG) emissions. Therefore, we will allow propane-displacing SWH systems to qualify for incentives under the CSI Thermal Program.

In response to SCE's arguments, we find that the Commission does not need jurisdiction over propane gas suppliers to use funds collected from electric ratepayers to promote SWH systems, even those displacing propane usage. Senate Bill (SB) 1 allows the Commission to fund \$100.8 million in solar thermal incentives and it is reasonable to use those funds for many types of SWH systems. AB 1470 finds that SWH systems can help preserve the environment and protect public health by reducing air pollution and global warming gases. (Pub. Util. Code § 2862(h).) When SWH systems reduce propane usage, these systems can help reduce air pollution, fossil fuel consumption, and GHG emissions, a key goal of the statute and AB 32.

SCE further maintains that customers who use propane to heat water do not contribute as much to the CSI Program as they otherwise would if they used electricity to heat water. Therefore, SCE contends these customers should only qualify for incentives if they displace electricity consumption. We agree with CALSEIA that the amount of an electric ratepayer's contribution to the CSI program has never been a criterion for determining participant eligibility.

For all of these reasons, we will modify D.10-01-022 to allow the CSI Thermal PAs to provide incentives to electric customers of PG&E, SDG&E and SCE who install qualifying SWH systems that displace propane - including those that switch to propane backup at the time of SWH installation. Customers seeking rebates for SWH systems that displace propane should meet all of the eligibility requirements that currently apply to electric-displacing customers.

Incentive levels for propane-displacing systems should be set at the same level as incentives to electric-displacing systems. Funding for these incentives shall be on a first-come, first-served basis and shall come from the \$100.8 million allocated in the general market CSI program for electric-displacing solar thermal technologies. Incentive funds used for propane-displacing systems should count against Step 10 of the general market CSI program in the same manner as funds used for electric-displacing SWH installations. (*See* D.10-01-011 at 40.)

CALSEIA requests that funds for CSI Thermal not be limited to the \$100.8 million collected through CSI. Rather, CALSEIA suggests the Commission find new sources of electric ratepayer revenue, such as GHG allowance revenues, to fund an expansion of this program. We decline to consider that suggestion in this rulemaking, as both SB 1 that established the CSI program and AB 1470 that established the gas-displacing CSI Thermal Program contain strict monetary limits on incentive funding.

By this decision, we direct the CSI Thermal PAs who administer the electric-displacing portion of CSI Thermal (namely PG&E, SCE, and CCSE)⁶ to file a Tier 2 advice letter to modify the CSI Thermal Program Handbook within 30 days of the effective date of this decision. The CSI Thermal PAs shall begin accepting applications for SWH systems that displace propane usage no later than 30 days after Energy Division approves the CSI Thermal Handbook changes as set forth in this decision. Systems installed on or after the date the Commission released its proposal regarding incentives to propane-displacing systems, i.e. June 14, 2011, may qualify for incentives.

⁶ We will not require SoCalGas to jointly file this advice letter since these propane-displacing SWH incentives will not apply to its customers.

Comments on Proposed Decision

The proposed decision in this matter was mailed to the parties in accordance with Section 311 and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed by Dr. Barkovich, SCE, and jointly by CCSE and PG&E. Reply comments were filed by CALSEIA. Where the comments suggested minor adjustments or clarifications to the decision, these changes have been incorporated. Where comments reargued or presented new arguments or facts, they were not considered.

A few comments merit discussion. SCE asks the Commission to clarify whether SWH systems that displace propane count toward CSI megawatt goals. SCE cites D.10-01-022 where the Commission stated that CSI Thermal incentives to electric-displacing SWH systems should count against Step 10 of the general market CSI program. The decision has been modified to clarify that incentives to propane-displacing systems should count against Step 10 of the general market CSI program, identical to treatment of electric-displacing incentives in D.10-01-022. It is unclear from SCE's comments how incentives provided to propane-displacing systems would be translated into progress toward CSI MW goals. The Commission's Energy Division should explore with the CSI PAs how to report progress toward CSI MW goals for the funds used for SWH systems.

CCSE and PG&E ask for an additional 30 days beyond approval of their Tier 2 advice letter to fully implement the changes ordered in this decision. This request is reasonable and is adopted.

Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Dorothy J. Duda is the assigned ALJ in this proceeding.

Findings of Fact

1. In D.10-01-022, the Commission established the CSI Thermal Program but limited incentives to SWH systems that displace gas or electricity usage.
2. Section 2851(b) of the Public Utilities Code allows the Commission to fund \$100.8 million for incentives to solar thermal and SWH systems.
3. Electric customers of PG&E, SCE, and SDG&E who use propane to heat water contribute to the CSI Program budget but are unable to access CSI Thermal incentives.
4. Residents who heat water with propane are likely to convert to a SWH system because propane is significantly more expensive than natural gas for water heating.
5. SWH systems that displace propane usage can decrease fossil fuel combustion and greenhouse gas emissions.
6. Preventing propane-displacing SWH systems from receiving CSI Thermal Program rebates creates a perverse incentive for customers to increase electric demand.

Conclusions of Law

1. It is reasonable to allow electric customers who use propane to heat water to qualify for incentives under the CSI Thermal Program.
2. D.10-01-022 should be modified to allow the CSI Thermal PAs to provide incentives to electric customers of PG&E, SDG&E, and SCE who install qualifying SWH systems that displace propane usage.
3. Electric customers seeking rebates for SWH systems that displace propane should meet all of the eligibility requirements that apply to electric-displacing SWH systems.

4. Incentives for propane-displacing SWH systems should be equivalent to incentives to systems that displace electricity.

5. Incentives for propane-displacing SWH systems should be funded on a first-come, first-served basis from the \$100.8 million allocated in the general market CSI Program for electric-displacing solar thermal technologies.

6. Incentive funds used for propane-displacing systems should count against Step 10 of the general market CSI program in the same manner as funds used for electric-displacing SWH installations in D.10-01-022.

O R D E R

IT IS ORDERED that:

1. Decision 10-01-022 establishing the California Solar Initiative Thermal Program is modified as set forth in Appendix A of this decision.

2. Within 30 days of the effective date of this order, the California Solar Initiative Thermal Program Administrators (namely, Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) shall jointly file a Tier 2 advice letter to modify the CSI Thermal Program Handbook incorporating the changes in this decision and summarized in Appendix A.

3. The California Solar Initiative Thermal Program Administrators (namely, Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy) may accept applications from qualifying electric customers of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company for

incentives for solar water heating systems that displace propane usage no later than 30 days after the advice letter in Ordering Paragraph 2 is approved.

4. The Administrative Law Judge may modify the compliance dates set forth in this order for good cause and as needed to ensure effective program implementation.

5. This proceeding remains open for consideration of additional issues as set forth in the Scoping Memo Ruling of November 9, 2010.

This order is effective today.

Dated November 10, 2011, at San Francisco, California.

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
MARK J. FERRON
Commissioners

APPENDIX A

Modifications to Appendix A of Decision (D.) 10-01-022

The following section should be added to the description of the California Solar Initiative (CSI) Thermal Program found in Appendix A of D.10-01-022:

Incentives for Propane-Displacing Solar Water Heating Systems

Applicants who install a solar water heating (SWH) system to displace an existing propane water heating system may be eligible for incentives if:

- The applicant is an electric customer of Pacific Gas and Electric Company, Southern California Edison Company, or San Diego Gas and Electric Company;
- The applicant meets all other eligibility requirements for CSI Thermal incentives for electricity-displacing systems; and
- The system was installed after June 14, 2011.

Propane may be used as a back-up fuel for an applicant's SWH system.

Incentive levels for propane-displacing systems shall be set at the same level as incentives to electric-displacing systems.

The CSI Thermal Program Administrators will pay incentives to qualifying propane-displacing SWH systems on a first-come, first-served basis using the \$100.8 million in funds collected from electric ratepayers for the general market CSI Program. Incentive funds used for propane-displacing systems should count against Step 10 of the general market CSI program in the same manner as funds used for electric-displacing SWH installations in D.10-01-022.

(End of Appendix A)