



## California Solar Initiative – CSI Passed by CPUC 1/21/10

### Solar Thermal Decision Summary

For more information see \*(scroll down to “Order”):

[http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/112748-16.htm](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/112748-16.htm)

### **Natural Gas Displacing Incentives:**

Step	Incentive for Average Residential Solar Water Heating System	Incentive per Therm Displaced
1 (first \$50M)	\$1,500	\$12.82
2 (next \$45M)	\$1,200	\$10.26
3 (next \$45M)	\$ 900	\$ 7.69
4 (last \$40M)	\$ 550	\$ 4.70

- Incentives are paid up-front based on estimated first year therms displaced.
- Incentives decline in four steps based on program participation.
- Forty percent of the incentive budget is reserved for single-family residential systems; 60 percent for commercial and multifamily systems.

### **Electric Displacing Incentives:**

Step	Electric Displacing Incentive (\$/kWh)	Incentive for Average Residential System
1	0.37	\$1,010
2	0.30	\$ 820
3	0.22	\$ 600
4	0.14	\$ 380

- Incentives paid up-front based on estimated first year kWh displacement.
- Incentives are slightly lower than the natural gas-displacing incentives due to different system economics, but the incentives reduce in four steps to match the natural gas-displacing incentive reductions.

The program will run for 8 years, until December 31, 2017, or until the program funds are exhausted, whichever occurs first (\$180M of rebates for gas, “no more than” \$100.8M for electric).

Administered by PG&E, Edison, SoCalGas, and by the California Center for Sustainable Energy (CCSE) in the SDG&E territory.

Also includes \$25M for gas-displacing, and \$6.25M for electric-displacing market facilitation: Marketing & Outreach, including training, consumer education, and other market facilitation activities such as engaging with permitting offices or financing providers.



\$25M reserved for low-income residential installs.

Rebate Cap is \$1,875 for SFR

Rebate Cap is \$500,000 for Commercial and MFR gas-displacing systems

Rebate Cap is \$250,000 for Commercial and MFR electric-displacing systems

Systems displacing >30 kWth require dedicated meter.

Other Important Notes from Decision:

We expect that market transformation in the SWH market is most likely to occur when solar solutions providers offer their customers options of both solar PV and SWH. In our view, integrating solar technology options into an already long menu of energy efficiency technologies will dilute the message and could impede solar market transformation.

Since both solar PV and SWH systems are commonly installed on rooftops, we think it is important that we foster a market where providers offer both choices and counsel a home or business owner on how to allocate space on their roofs between these two technologies, taking into consideration the relative space needed by each and the economic tradeoffs involved with generating electricity versus heating water.

It makes sense for customers to consider a bundle of water-heating related energy efficiency measures as part of any SWH installation, given that there may be energy efficiency measures that a customer could deploy, at relatively little cost, that would reduce their water heating demand significantly, and thereby reduce the size of SWH system and corresponding incentives. Moreover, we expect that such energy efficiency measures could be easily installed by the SWH system installer at the time of system installation.

We agree with and adopt DRA's recommendation to require an energy audit as a condition of participating in this program, as well as the requirement that customers deploy cost-effective and feasible EE measures that reduce water heating costs and meet our definition of "appropriate energy efficiency improvements" to qualify for incentives. Systems should also be sized taking into consideration the impacts of appropriate energy efficiency improvements. We will not, at this point, require that customers deploy *all* cost-effective and feasible measures, because we are concerned that such a requirement could impede the willingness and ability of customers to install SWH systems.

We direct our Energy Division to hold a workshop within 30 days of this decision to determine what measures meet our definition of "appropriate energy efficiency improvements" and should be required to be installed as a condition of receiving incentives under this program. Following the workshop, the PAs shall jointly develop a list of measures that shall be required as a condition of receiving incentives under this program, as well as how this requirement shall be implemented and enforced, and submit this information in their Program Handbook Advice Letter for Commission approval.

We will not mandate the exact market facilitation activities at this time, as we prefer to allow further comment and consideration of these activities through the advice letter process set forth in the Staff Proposal. We expect that the PAs will jointly market the CSI Thermal Program with the general market CSI Program, including incorporating the CSI Thermal Program into the Go Solar California website and related outreach efforts. The specific marketing activities and annual authorized funding will be determined upon submittal, review, and approval of an Annual Market Facilitation Plan by each program administrator by advice letter. The Annual Market Facilitation Plans should address each of the potential activities identified in Appendix A, as well as propose



additional activities in response to market conditions. In addition, we consider the initial two years of the program as critical and we demand careful crafting of marketing and outreach strategies and tactics, with input from knowledgeable solar industry, marketing and training experts, who may not necessarily be parties to this proceeding. We direct the PAs to hold at least one public workshop in advance of their advice letter filing to obtain input from such key industry and expert sources.

#### TIMELINE:

Within 60 days from the effective date of this decision, Energy Division shall hold workshops to assist the PAs in developing siting, installation, freeze protection and system sizing requirements to guard against oversizing of systems, appropriate energy efficiency improvements that meet the criteria specified in this decision, and an incentive calculation tool.

- By April 1, 2010, the PAs shall complete development of the on-line incentive calculation tool and provide it to Energy Division for review prior to program implementation.
- By April, 2010, the PAs shall complete drafting of the single-family residential customer portion of the CSI Thermal Program Handbook, which shall be a subset of the general market CSI Handbook, containing program rules and specifications applicable to residential customers, and submit it through an Advice Letter, with the goal of accepting applications from single-family residential customers on May 1, 2010.
- By April 1, 2010, each PA shall submit a separate Advice Letter that includes: a) a detailed estimate of its program budget for the first year of program implementation, indicating direct and indirect expenses, labor and non-labor, for incentives, administration, market facilitation, and measurement and evaluation; and b) its proposed market facilitation strategic plan and detailed budget for the first two years of program implementation.
- By May 1, 2010, the PAs shall complete drafting of the commercial/multifamily portion of the CSI Thermal Program Handbook, which shall be a subset of the general market CSI Handbook, and submit it as an Advice Letter, with the goal of accepting applications from these customers on June 1, 2010.
- Within 180 days from the effective date of this decision, Energy Division shall hold a workshop on the issue of the eligibility of non-solar water heating solar thermal technologies that displace gas usage and meet all other program requirements. The workshop should address how to estimate these technologies thermal displacement for incentive calculation purposes and whether performance-based incentives might be appropriate for these technologies. Following the workshop, Energy Division should provide a workshop report to the service list of this proceeding, or its successor proceeding, and the Administrative Law Judge.
- Within 90 days of this decision, PG&E, SCE, SDG&E and SoCalGas shall each file an advice letter to amend their preliminary statements and establish a memorandum account to track actual annual expenditures for the gas-displacing CSI Thermal program, beginning on the effective date of this decision through December 31, 2017.
- On an ongoing basis, in response to program experience and evaluation, or when a Commission decision or statutory change requires handbook updates, the PAs shall submit CSI Thermal Program Handbook changes through the advice letter process.

Although applications will not be accepted until May 2010 for single-family residential customers and June 1, 2010 for commercial customers, we hope to reduce any potential disruption in the SWH market by adopting staff's proposal to allow systems installed after the July 15, 2009



release of the Staff Proposal to be eligible for incentives if they meet all program eligibility requirements set forth in this decision. CALSEIA requests clarification that a system installed in 2009 could qualify if it meets all program eligibility criteria and obtained a building permit after July 15, 2009. We agree with this clarification and will adopt it.

Customers may not receive SWH incentives from both a utility energy efficiency program and CSI Thermal for the same SWH system.

The gas-displacing program budget should be allocated across the utilities based on the percentages used to collect the natural gas Public Goods Charge.