

Decision 05-12-044 December 15, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,
Procedures and Incentives for Distributed
Generation and Distributed Energy Resources.

Rulemaking 04-03-017
(Filed March 16, 2004)

**INTERIM ORDER ADOPTING POLICIES AND
FUNDING FOR THE CALIFORNIA SOLAR INITIATIVE**

This order increases funding by \$300 million for solar photovoltaic technologies that are currently part of the Self-Generation Incentive Program (SGIP). This stop-gap funding, together with reduced rebate levels as described in this order should assure program continuity through 2006. We intend to adopt a long-term program to provide incentives for the installation of solar energy technologies in California over the next ten years. The program, which we call the "California Solar Initiative" (CSI) would respond to a policy proclamation by the Governor favoring solar development and strong interest by the State Legislature in an expanded solar incentives program in California.

The California Public Utilities Commission (Commission) and the California Energy Commission (CEC) have consistently expressed support for solar, other renewable resources and clean distributed generation as environmentally sound technologies for assuring the reliability of the state's electricity system. In recognition of the benefits of solar technologies as a viable energy resource alternative to traditional energy technologies, this order expands the state's existing solar program by increasing its budget by \$300 million for

2006. We also herein revise the incentive payment to \$2.80 per watt for new projects and \$3.00 per watt for projects on the waiting list as of December 15, 2005, as further explained below. We direct the program administrators to apply the \$3.00 per watt rebate level to the waiting list, and to refund application fees to projects which elect to withdraw from the list.

I. Procedural Background

As part of this Commission's ongoing exploration of ways to promote renewable technologies in this proceeding, the Commission issued two rulings earlier this year soliciting ideas for program design, funding levels and sources, and an implementation schedule. After receiving the comments, the Commission directed Commission and CEC staff to "draft a joint report to the Commission on all related issues that will take into account the parties' comments." The staff report, issued in June 2005, addressed key issues related to implementing what the staff has called the California Solar Initiative (CSI). In summary, the report proposes to consolidate existing and anticipated residential and commercial solar incentives into one program by June 2006. Eligible technologies would include photovoltaic (PV) and concentrated solar power up to 1 megawatt (MW), and solar water heaters. The report proposes that initially, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and Southern California Gas Company (SoCalGas), and the San Diego Regional Energy Office (SDREO) would administer the CSI. The program would be funded through 2016 using gas and electric distribution rates. Tariff and metering requirements would be coordinated with the Commission's demand response and distributed generation proceedings.

The Assigned Commissioner and Administrative Law Judge (ALJ) subsequently issued a ruling soliciting comments on the staff's report and stated

their intent to work together to propose a decision for the full Commission's consideration. We received comments from PG&E, SCE, SoCalGas, SDREO, ORA, Energy Innovations, Inc., PV Now, Vote Solar, Americans for Solar Power (ASpv), California Large Energy Consumes Association (CLECA), California Manufacturers & Technology Association (CMTA), Southern California Generation Coalition, Environment California, S.O.L.I.D.US, Inc., California Solar Energy Industries Association (CAL SEIA). The CEC has worked collaboratively in this proceeding on all of its aspects, co-authored the staff report on CSI, and consulted with the ALJ and the Assigned Commissioner on the issues resolved in this order.

Although the Commission received comments on the CEC/PUC staff solar report in late July, the Commission delayed action on this matter while the California Legislature considered Senate Bill (SB) 1, which would have established a state program for increased funding for solar technology incentives over ten years. This bill did not pass.

II. Program Background and Overview of Issues

Currently, PG&E, SCE, SDG&E and SDREO administer the SGIP, which provides monetary incentives for non-utility parties to install distributed generation, including solar photovoltaic technologies with capacity of 30 kilowatts (kW) or more. This program, which we adopted in Decision (D.) 01-03-073 in response to Assembly Bill (AB) 970 and modified in accordance with AB 1685, has so far been very successful, and has paid or reserved \$421 million in rebates to solar projects representing 113 MW of power since 2001.

In addition to this Commission's program, the CEC administers the Emerging Renewables Program (ERP), which provides incentives for solar

photovoltaic projects of less than 30 kW, most of which are installed by or for residential customers. The program, authorized by AB 1890 in 1996, and modified by SB 90 in 1997, SB 1194 in 1999, SB 1038 in 2002, and SB 135 in 2004; has allocated \$371 million and has provided incentives to over 50 MW of installed systems since 1998. Since the 2000-2001 energy crisis, both the CEC's and the Commission's solar incentives programs have consistently encumbered their expected funding allocations, requiring additional funds to be transferred to the programs. Together, these programs have allocated almost \$1 billion in solar incentives, funded through utility rates.

The complementary objectives of these existing programs are to add clean energy to peak demand resources, to reduce risk by diversifying the state's energy portfolio, and reduce the demand for transmission and distribution system additions. Significantly, the benefits of solar technologies also motivate us to transform the existing market in a way that makes solar products cost-effective without incentives. The Energy Action Plan, signed by members of the Commission and the CEC, recognizes the benefits of solar technologies for meeting California's energy needs in the future and anticipates additional incentives for solar development.

The parties who commented on the CSI proposal generally expressed strong support for solar project development, for an explicit preference for solar projects that complement other energy strategies, and for a commitment to program performance and cost-effectiveness.

III. Summary of the CEC/PUC Staff Report

The staff report titled "Joint Staff Recommendations to Implement Governor Schwarzenegger's One Million Solar Roofs Program," (Staff report) provides an overview of existing programs in California, Japan, Germany and

Spain. Assuming the program reaches the goal of adding 3,000 MW of power (or reduced demand for power) in ten years, as the Governor proposes, the staff report estimates benefits from the CSI program would be just over \$1 billion. It makes several recommendations about how to implement the CSI:

1. Consolidate residential and commercial solar incentives program into one program by June 2006;
2. Apply incentives to photovoltaic projects, solar-thermal electric projects, and solar hot water heaters;
3. Limit incentives to those projects with capacity of 1 MW or less;
4. Have the program administered by PG&E, SCE, SoCalGas and SDREO;
5. Fund the program at a level between \$1.1 billion and \$1.8 billion;
6. Consider a performance-based incentive program rather than incentives based on installed capacity;
7. Provide 125% of incentives to new structures that exceed energy efficiency standards by 10% or more;
8. Require existing structures receiving incentive payments to conduct an energy efficiency audit; and
9. Provide 125% of incentive payments to affordable housing projects.

The parties' comments address these recommendations and the assumptions used to reach them. In general, the utilities caution that the program be designed in a way that is cost-effective. They raise questions about how the staff report would justify a goal of 3,000 MW and the suggested spending levels. Solar industry members and large consumer groups are

encouraged by the proposal but want to know more about the details of the program and how it will be funded.

IV. The Prospects for an Expanded Solar Incentive Program

Overall, we are encouraged by the parties' expressions of support for an expanded program to motivate solar development. Because we believe solar technologies hold some promise of becoming a cost-effective, reliable source of energy in California, we state our intent to adopt a solar incentive program that builds on the existing SGIP program and the CEC's ERP program.

In designing the CSI, we must consider a variety of program and policy issues, some of which were raised in the staff report:

- Relationship of the CSI to existing solar incentive programs
- CSI Program capacity goals
- CSI Program duration
- Incentive levels and methods for modifying them over time
- Qualifying technologies
- Project size and ownership requirements
- Education, Marketing and Research
- Metering
- Program administration and oversight
- Program Evaluation
- Treatment of federal tax credits
- Funding levels and sources
- Rate design

- Performance-based incentives
- Financing program options
- Incentives for complementary energy efficiency improvements
- Incentives for low income and affordable housing projects

The staff report provides some assessment of each of these issue areas and the parties' comments provide additional insights. We find, however, that we do not have adequate information to craft the details of a comprehensive, long-term program at this time. We therefore direct our staff to work with the CEC to provide a more detailed proposal for the CSI by the end of the year, building on the information it has already collected and evaluated, for a final decision early in 2006.

In the meantime, we increase funding for solar technologies by \$300 million, which will be administered as part of the existing SGIP for the time being. We also modify the incentive level for 2006 to \$2.80 per watt for new projects so that it more closely conforms to the CEC's expected ERP incentive level. Projects on the SGIP waiting list as of December 15, 2005 will receive \$3.00 per watt. The stop-gap funding and reduced rebate levels are in recognition that the SGIP program has been oversubscribed at the current levels.

V. Funding Levels and Sources

In 2005, the SGIP provided \$42 million in incentive payments to solar projects with capacity of 30 kW or more. The SGIP program administrators have had to move funds from non-solar technology program elements to keep pace with demand for solar project incentives. Currently, there are no remaining 2005 funds in the SGIP for solar incentives and a large number of projects are on a

waiting list for incentives. SDREO comments that its own program has stalled because it has funding for only half of pending incentive requests.

SB 1 would have funded solar project incentives at a level of \$1.1 to \$1.8 billion over ten years, an amount which our staff report uses as a basis for analyzing the CSI program. The parties who filed comments on the staff generally propose funding at levels between \$1.2 billion and \$3 billion. Annual funding may be inferred from those ten-year funding proposals.

Neither the staff report nor the record in this proceeding analyzes an appropriate level of CSI funding. The staff report naturally takes its cue from the Governor's proposal and SB 1. Because we are deferring action on the adoption of the CSI and therefore a longer term and more elaborate solar incentive program, we also defer our resolution of the issue of a total long term-budget. We do, however, find an urgent need to increase funding for the solar element of the SGIP in recognition of the exhaustion of SGIP funds and our commitment to continue to promote solar development. Our decision also recognizes that projects on the SGIP waiting list seek a total of more than \$200 million in funds.

Recognizing that we cannot divine an optimal funding level - and that we may change funding levels in the future to correspond to market conditions, the structure of the future program or other circumstances - we increase funding for the 2006 SGIP solar program element by \$300 million.

The \$300 million in additional funding should be allocated to each utility in the same manner as the current SGIP program funds are recovered: 44% by PG&E, 34% by SCE, 13% by SDG&E, and 9% by SoCalGas. These percentages correspond to the following funding levels: \$132 million for PG&E, \$102 million for SCE, \$39 million for SDG&E, and \$27 million for SoCalGas. Administrative

costs associated with these budget amounts will be handled in a subsequent order.

The utilities express concerns that they be permitted to recover program expenses without undue delay. PG&E comments that it has incurred SGIP costs totaling over \$135 million and states recovery of program costs has lagged behind spending substantially. PG&E asks the Commission to authorize cost recovery in each utility's next rate change. For PG&E, the next rate change occurs January 1, 2006. We agree that the utilities should not have to wait long periods to recover program costs. We will, as PG&E suggests, authorize each utility to include its share of the amount authorized for the SGIP in 2006 in the utility's next gas and electric rate change following the effective date of this decision. We will, however, reserve our prerogative to audit or otherwise review related accounts at any time.

VI. Incentive levels for 2006

In 2005, incentive payments for SGIP solar projects were \$3.50 and are scheduled to fall to \$3.00 in January 2006. ERP solar incentives are currently set at \$2.80. The staff report also observes that both the ERP and SGIP have borrowed funds from future years or transferred funds from other program categories to meet demand for solar incentives. As discussed previously, each program has experienced periods when funding was not available because the demand for funding exceeded available resources.

We are presented with the difficult task of setting an incentive level that is high enough to motivate cost-effective solar investments and yet not so high that ratepayers are subsidizing projects that would be built without lower incentives. Fortunately, we have some experience with incentives offered by the ERP and SGIP that provides guidance in this regard. The fact that the SGIP has

consistently experienced funding shortfalls suggests rebates have been higher than they need to be to motivate investment. Considering the large number of applications the SGIP administrators have received for incentives at \$3.50 per watt - and our wish to use limited funds in the most cost-effective way possible -- we believe it prudent to set the initial incentive payment at \$2.80 per watt for all solar PV in the SGIP, moving in the direction of the level established by the CEC's incentive program. This new incentive would be applied to all project applications received by program administrators after December 15, 2005. Projects already on the waiting list as of that date would receive \$3.00 per watt. We defer a decision on how the incentive levels should change over time until we have additional analysis from the Commission and CEC staff. We also defer resolution of the staff report's proposal to use a future period's budget to support a current period's demand when bona fide applications seek incentives that exhaust the current period's funds.

VII. Conclusion

We herein increase funding for the solar element of the existing SGIP program by \$300 million for 2006. This amount is in addition to the preexisting SGIP funds already authorized. We also reduce the incentive level for 2006 to \$2.80 per watt for project applications received after December 15, 2005. Projects already on the waiting list as of December 15, 2005 will receive a \$3.00 per watt incentive level. We defer consideration of all other issues in this proceeding until we have received a report from Commission and CEC staff that proposes a detailed CSI program.

VIII. Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Kim Malcolm is the assigned ALJ in this proceeding.

IX. Comments on Draft Decision

The draft decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed December 5, 2005 and reply comments were filed on December 12, 2005. The Commission made minor edits to the proposed decision in response to the comments mainly to clarify its intent. In addition, the Commission specified that the \$3.00 per watt incentive will apply to projects on the existing waiting list as of December 15, 2005 in response to comments from numerous parties about the importance of project sponsors already having made financial commitments to install solar.

Findings of Fact

1. Development of solar technologies is consistent with state policy and could provide California with a clean and reliable source of disbursed energy. Because the industry and related markets are still not well-developed, an incentive payment program, such as the one envisioned by SB 1, the Governor and the staff report, would benefit California.

2. The existing CEC and Commission solar incentive programs, the ERP and the SGIP, are similar except that they provide incentives to different sized projects and are funded by different utility rates.

3. Increasing SGIP funding for solar projects by \$300 million recognizes the current demand for incentives and the need to spur additional solar development.

4. The 2005 level of SGIP incentives for solar projects of \$3.50/watt has motivated substantial demand for solar incentive funds. The number of SGIP applications for solar incentives is evidence that the 2005 incentive level is higher than necessary to motivate investment.

5. Recovery of costs incurred for the SGIP program has lagged behind spending for some utilities.

Conclusions of Law

1. The Commission should increase SGIP funding for solar projects by \$300 million for 2006.

2. Initial CSI incentive levels for solar PV and concentrated solar should be set at \$2.80 per watt, consistent with the CEC's ERP incentives, an amount that should be applied to project applications received after December 15, 2005.

3. For project applications already on the existing SGIP waiting, a rebate amount of \$3.00 per watt should be offered.

4. Projects on the existing SGIP waiting list that wish to drop off of the list with the application of the new \$3.00 per watt incentive level should be allowed to do so, with full return of their application fee.

5. The Commission staff and the CEC staff should develop a comprehensive CSI program proposal in a report to the Commission that should be filed as part of a ruling and served on all parties no later than December 15, 2005. The assigned ALJ and the staff of the Commission and the CEC should work cooperatively to develop a record on the outstanding program issues identified in this order.

6. The utilities should be permitted to recover SGIP program costs in their next rate change proceeding, subject to review and audit of program costs at any time.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas) and San Diego

Gas & Electric Company (SDG&E) shall increase funding for the California Solar Initiative (CSI) as set forth herein by \$300 million for 2006 and assume program costs in the same proportion as their contribution to the existing SGIP program.

2. PG&E shall fund \$132 million, SCE shall fund \$102 million, SDG&E shall fund \$39 million, and SoCalGas shall fund \$27 million. Each utility may recover its share of the amount authorized for the SGIP in the utility's next gas and electric rate change following the issuance of a final decision, subject to review of program costs at any time.

3. PG&E, SCE, SoCalGas, SDREO and SDG&E shall offer projects on the 2005 waiting list an incentive of \$2.80 per watt for project applications received after December 15, 2005. For projects already on the SGIP waiting list as of December 15, 2005, those projects shall be offered \$3.00 per watt, and the program administrators shall refund application fees to applicants who elect to withdraw their applications.

4. The Commission's Executive Director shall direct Commission staff to propose a comprehensive program proposal for the California Solar Initiative in a report that shall be filed in this proceeding as part of an Administrative Law Judge ruling no later than December 15, 2005 and to conduct the proceeding in such a manner as to develop a record on related issues for the Commission's consideration at the first possible opportunity.

This order is effective today.

Dated December 15, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
Commissioners

R.03-04-017 ALJ/KLM/jva

Commissioner John A. Bohn recused himself from this agenda item and was not part of the quorum in its consideration.