

**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

November 15, 2005

Agenda ID #5104  
Quasi-Legislative

TO: PARTIES OF RECORD IN RULEMAKING 04-03-017

This is the draft decision of Administrative Law Judge (ALJ) Malcolm. It will not appear on the Commission's agenda for at least 30 days after the date it is mailed. The Commission may act then, or it may postpone action until later.

When the Commission acts on the draft decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the draft decision as provided in Article 19 of the Commission's "Rules of Practice and Procedure." These rules are accessible on the Commission's website at <http://www.cpuc.ca.gov>. Pursuant to Rule 77.3 opening comments shall not exceed 15 pages. Finally, comments must be served separately on the ALJ and the assigned Commissioner, and for that purpose I suggest hand delivery, overnight mail, or other expeditious method of service.

/s/ ANGELA K. MINKIN  
Angela K. Minkin, Chief  
Administrative Law Judge

ANG:jva

Attachment



Decision **DRAFT DECISION OF ALJ MALCOLM** (Mailed 11/15/2005)**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 OPINION ADOPTING POLICIES AND  
FUNDING FOR THE CALIFORNIA SOLAR INITIATIVE**

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 increases funding by \$300 million for solar photovoltaic technologies that are currently part of the Self-Generation Incentive Program (SGIP). We also revise the incentive payment to \$2.80/watt. Further, we state our intent to adopt at the earliest opportunity a separate and more elaborate program to provide incentives for the installation of solar energy technologies in California. The program, which we call the "California Solar Initiative" (CSI) responds 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.

## **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 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 Consumers 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 increased funding for solar technology incentives by \$1.8 billion over ten years. The bill did not pass, however.

## **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 more than 30 kilowatts (kW). 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, funding \$421 million in rebates to solar projects providing 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 30 kW or less, most of which are installed by or for residential customers. The program, authorized by AB 1890 in 1996, has allocated \$371 million and has provided incentives to over 50 MW of installed systems since 1998. Both the CEC's and the Commission's solar incentives programs have consistently exhausted their funding allocations, which together have topped almost \$1 billion, all 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;
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 for creating a comprehensive program at this

time. We therefore direct our staff to work with the CEC to provide a more detailed proposal for the CSI, 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 in the existing SGIP and modify the incentive level for 2006 so that it conforms to the CEC's ERP incentive level, and in recognition that the 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 larger than 30 kW. 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 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 report 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.

## **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. At this time, we find no justification for setting initial incentive levels differently according to project size or customer class, although we may eventually be able to justify different incentive levels for different sized projects according to market conditions. Initially, all solar PV projects will be offered the same incentives, whether they are smaller than or larger than 30 MW.

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 the \$3.50 a kW level - 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 for all solar PV, consistent with the CEC's incentive program. 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. We also reduce the incentive level for 2006 to \$2.80/watt. 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 \_\_\_\_\_.

## **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. The record of this proceeding is not adequate to adopt a comprehensive CSI program at this time.

### **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 /kW, consistent with the CEC's ERP incentives.

3. 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 for consideration at the earliest opportunity.

**INTERIM ORDER**

**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 & Electric Company (SDG&E) shall fund the California Solar Initiative (CSI) as set forth herein at a level of \$300 million for 2006 and assume program costs in proportion to their respective annual revenues.

2. PG&E, SCE, SoCalGas, San Diego Regional Energy Office and SDG&E shall modify Self-Generation Incentive Program solar incentive levels to \$2.80 a watt beginning the effective date of this order.

3. 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 \_\_\_\_\_, at San Francisco, California.