Decision **DRAFT DECISION OF COMMISSIONER PEEVEY AND ALJ MALCOLM (Mailed 12/13/2005)**

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

The California Public Utilities Commission (CPUC or Commission) recently underscored its commitment to solar resources for assuring the reliability of the state's electricity system in Decision (D.) 05-12-___, which increased funding for incentives to solar projects by $300 million in 2006. That order stated our intent to develop additional policies and program elements designed to promote solar development. This order accomplishes that, by making a commitment to provide $2.8 billion of incentives toward solar development over 11 years. We also herein develop complementary policies and rules, set new incentive levels, and address program administration. We refer to the program as the "California Solar Initiative" or CSI.

I. Procedural Background

To explore ways to promote an expanded solar program, the Commission issued two rulings in this proceeding soliciting ideas regarding program design, funding levels and sources, and an implementation schedule. After receiving the comments, the Commission directed CPUC and the California Energy Commission (CEC) staff to "draft a joint report to the Commission on all related issues that will take into account the parties' comments." That report, issued in June 2005, developed an analysis of key issues related to implementing what the staff has called the California Solar Initiative (CSI). In summary, their report proposed 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 one Megawatt (MW), and solar water heaters. The report proposed that initially, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), San Diego Gas & Electric Company (SDG&E), 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 CPUC'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, the Office of Ratepayer Advocates (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., and 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/CPUC 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 was not adopted by the Legislature, although the Governor has stated his commitment to increased incentives for solar energy development.

On December 15, 2005, the Commission issued D.05-12 ____ increasing the budget for solar incentives as part of the Commission's Self-Generation Incentive Program (SGIP). The order modified existing solar incentive levels and directed our staff to provide recommendations on future program elements.

II. Program Background and Summary of Staff Report

Currently, PG&E, SCE, San Diego Gas & Electric Company (SDG&E), and SDREO administer the SGIP, which provides monetary incentives for non-utility parties to install distributed generation, including solar PV technologies with capacity of more than 30 kilowatts (kW). This program, which we adopted in D.01-03-073 in response to AB 970 and subsequently modified to comport with AB 1685, has so far been very successful, encumbering $421 million in rebates to solar projects providing 113 MW of capacity installed or under construction since 2001.

In addition to this Commission's program, the CEC administers the Emerging Renewables Program (ERP), which provides incentives for solar PV projects of 30 kW or less, most of which are installed by or for residential customers. The program, authorized by AB 1890 in l996, 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 in one form or another.

The objectives of these existing programs, and the one we adopt today, are to add clean energy to peak demand resources, to reduce risk by diversifying the state's energy portfolio, and to 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.

Pursuant to our directive in D.05-12-____, Commission staff and CEC staff developed a project proposal, which we attach as Appendix A. The report reflects our policy concerns and describes the type of program which we believe will accomplish our program objectives. We therefore adopt it, with the understanding that our program may require modification as we gain more experience with it and as circumstances change.

Our decision today is informed by our view that a common sense program of monetary incentives, combined with technical assistance, could promote less expensive and more efficient technologies. We also approach our task here with the understanding that solar technologies may not be as cost-effective as other clean alternatives, in particular energy efficiency efforts and certain other renewable distributed generation technologies. We are convinced, however, that a cost-effective and sustainable solar market is unlikely to develop without a commitment for market support. For that reason, we state our intent to monitor the progress in the market place, and to modify the program on the basis of ongoing evaluation.

This order addresses the following issues:

1. Program elements and relationship to existing programs;
2. Funding levels and sources;
3. Structure of incentives and incentive levels, initially and over time;
4. Low-income programs;
5. Interface with energy efficiency programs and activities;
6. Metering;
7. Project evaluation and cost-benefit applications;
8. Program Administration; and
9. Funding for research and development efforts.

In general and consistent with the staff report attached as Appendix A, we adopt a program to provide up to $2.8 billion in incentives for solar project of all types and sizes over 11 years. Our objective is to bring on line or displace 3,000 MW of power. We state our intent to fund the program by directing the utilities to use revenues from gas and electric distribution rates. Incentives are currently set at $2.80 per kW. We state our intent to reduce this level annually or more frequently, according to market conditions. We require 10% of the funds to be used for projects for low-income residential customers and housing projects. We find that third party administration of the program by one or more nonprofit organizations, initially for the residential retrofit market, is most likely to accomplish our objectives and will not compromise utility operations. Finally, we state our intent to explore performance-based incentives, low or no-cost financing for certain projects, and the viability of requiring energy efficiency retrofits on existing buildings as a condition of receiving solar incentives.

III. Program Funding

Consistent with the attached staff report, we adopt a budget for the CSI program in the amount of $2.5 billion over ten years. The utilities may recover associated revenues in applicable ratemaking proceedings. As the staff report suggests, we set annual CSI budgets so that they are relatively high in the early years, and decline in later years as rebate levels fall and, hopefully, as the market's need for financial support decreases. We will also provide for funding flexibility between program years in recognition of actual demand for funding. Table 1 provides a schedule describing the utilities' collection of revenue requirement, although expenditures may be higher or lower in any given year according to number and nature of project proposals.

Table 1: IOU Annual Revenue Requirements for CERB Portion of CSI (in millions of dollars)

Year	PG&E	SCE	SDG&E	SoCalGas	Total
2006[1]	$132	$102	$39	$27	$300
2007	$154	$119	$45.5	$31.5	$350
2008	$154	$119	$45.5	$31.5	$350
2009	$154	$119	$45.5	$31.5	$350
2010	$121	$93.5	$35.75	$24.75	$275
2011	$121	$93.5	$35.75	$24.75	$275
2012	$121	$93.5	$35.75	$24.75	$275
2013	$77	$59.5	$22.75	$15.75	$175
2014	$77	$59.5	$22.75	$15.75	$175
2015	$77	$59.5	$22.75	$15.75	$175
2016	$44	$34	$13	$9	$100
Total[2]	**$1,100**	**$850**	**$325**	**$225**	**$2,500**

If the difference between program expenditures and the amounts the utilities collect in rates is substantial, we will consider adjusting the collection of the revenue requirement. Table 2 illustrates the allocation of total program revenue requirement by utility.

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[1] Funding for 2006 is pending in another draft decision before the CPUC in Rulemaking 04-03-017 (Agenda ID 5104 for December 15, 2005) and is in addition to existing SGIP solar-related budget of approximately $42 million.

[2] Totals do not include 2006 funding.

Table 2: IOU Share of CSI Costs

	% Total budget	Budget (in millions)
PG&E	44%	$1,100
SCE	34%	$850
SDG&E	13%	$325
SoCalGas	9%	$225
Total	100%	$2,500

We also allocate up to 10% of the total budget funding of $2.5 billion to administrative costs, which includes program evaluation, and marketing and outreach efforts. Table 3 illustrates maximum utility administrative budgets.

Table 3: Administrative and Evaluation Budgets by Utility Territory

Utility	**Administrative Budget**
PG&E	$110.0
SCE	$85.0
SDG&E	$32.5
SoCalGas	$22.5
Total	**$250.0**

We herein direct each utility to collect the revenue requirement established in this order according to the schedule we adopt for each of the program years unless a subsequent order modifies this schedule.

IV. Research, Development and Demonstration (RD&D)

Many of the parties to this proceeding observe that solar technologies are not yet cost-effective. We share this concern and adopt the CSI with the objective of supporting the development of an industry that can compete with more conventional technologies and that is robust without government subsidies. We have not addressed here a specific strategy to effect that objective but intend to pursue it in the near future. Accordingly, we intend to allocate up to 5% of each year's adopted budget to RD&D that explores the most promising solar technologies and market development strategies. We will direct our staff to work with the CEC to manage this effort using consultants and existing research institutions.

V. Motions by Golden Sierra Power

In D.04-12-045, the Commission ordered the SGIP Working Group to implement fees in order to discourage applications by projects that were unlikely to be constructed. Such "phantom" projects were, according to the SGIP Working Group, holding up funding for projects that were successful. On April 29, 2005, Golden Sierra Power filed a motion asking the Commission to conduct a workshop to consider the appropriate application fees for prospective SGIP projects. SDG&E, SDREO, PG&E, SCE, and SoCalGas jointly filed an objection to the motion. The ALJ informally denied the motion. Golden Sierra Power subsequently filed a nearly identical motion on September 15, 2005.

This issue has been adequately addressed already in D.04-12-045. We therefore deny the motions of Golden Sierra Power dated April 29, 2005, and September 15, 2005.

VI. Comments on Draft Decision

The draft decision of the Assigned Commissioner and ALJ was issued for comments on December 13, 2005, in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Commission's Rules of Practice and Procedure. Parties filed comments on January 3, 2006, and reply comments on January 9, 2006.

VII. Assignment of Proceeding

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

Findings of Fact

1. Development of solar technologies is consistent with state policy and will 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 attached in Appendix A, will 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. There is no reason to continue the implementation of all or part of the solar incentives in the SGIP if the Commission adopts a CSI program.

4. A ten-year commitment by the state to provide incentives for solar installations may provide a signal to manufacturers and other industry participants that encourages innovation and development.

5. All solar energy technologies have the potential to reduce demand for fossil fuels and investments in more traditional energy resources.

6. SDREO has proposed a way to implement a solar water heating rebate program in our energy efficiency docket and has extensive experience administering the SGIP in the San Diego region.

7. Federal tax credits may affect solar energy investments that may obviate the need for a full CSI rebate for some projects. The record should be augmented to provide adequate information about the likely impact of federal tax credits on decisions to invest in solar projects.

8. Low-income customers are the least likely to be beneficiaries of the CSI program because they are least likely to make investments in solar projects and because solar technology appears to be less cost-effective than other energy resource options.

9. Performance-based incentives may motivate better investments in and maintenance of solar projects than capacity-based incentives, although the record in this proceeding should be developed to design a sensible performance-based incentive program.

10. The Commission's method for changing incentive levels under the SGIP has not been consistently responsive to changing markets.

11. The SGIP has consistently received more applications for rebates than there has been funding available at its previous incentive levels and at the 2005 level of $3.50/kW.

12. Where the demand for rebates exceeds supply, it is reasonable to assume the incentive levels are higher than they need to be to motivate investment.

13. Application fees may reduce the number of project applications that are ultimately not pursued, and thereby reduce administrative costs and the waiting lists for project rebates.

14. Some projects may need smaller rebates or none if they are provided with financing at low cost or no cost. The record of this proceeding, however, does not yet provide adequate information about whether financing is needed and how a financing program should be designed.

15. Motivating solar investments in affordable housing and by low-income customers may require higher incentive payments than those adopted for other types of customers.

16. Energy efficiency improvements tend to be more cost-effective than solar installations. The record in this proceeding is not adequate to adopt a rule that would require energy efficiency retrofits as a condition of receiving solar incentive payments.

17. Making an energy efficiency audit a condition of receiving incentive payments for solar projects installed on existing buildings may motivate some energy efficiency improvements at those sites.

18. Additional metering requirements for solar installations may permit rate design that improves cost-effectiveness and appropriately recognizes the value of solar electricity production. The record in this proceeding does not permit the adoption of additional metering requirements at this time.

19. Education, marketing and outreach will improve the number and nature of solar investments in California.

20. Program evaluation and monitoring for the CSI program, including the pilot solar water heating program, should be overseen by the CEC and/or the Commission staff. The utilities shall issue a request for proposal (RFP) for program evaluation consulting and should contract with consultants selected by the CEC and/or Commission staff, who will be responsible for all other contract decision-making and management.

21. The SGIP Working Group would not be an appropriate agent for overseeing the CSI.

22. The SGIP manual provides a reasonable foundation for articulating the rules and requirements of the CSI program.

23. RD&D may assist in tailoring the CSI to promote the development of a robust, self-sustaining solar industry.

Conclusions of Law

1. The Commission has no authority to delegate program decision-making to the CEC.

2. The CSI should provide incentives to all types and sizes of qualifying solar installations. The CSI program should be separate from the SGIP and all solar elements of the existing SGIP should be incorporated into the CSI.

3. The CSI should offer incentives to any solar technology with a capacity rating of less than one MW. Solar water heating incentives should be provided only as part of a closely monitored pilot program as set forth herein.

4. SDG&E should be ordered to invite SDREO to administer a pilot program providing rebates for investments in solar water heating in SDG&E's territory, as set forth herein.

5. Allocation of CSI program costs should be decided in ratemaking proceedings that resolve cost allocation issues.

6. Initial CSI incentive levels for solar PV and concentrated solar should be set at $2.80 per kilowatt in 2006, and should be scheduled to be reduced every 12 months or when certain MW targets are met, consistent with the recommendations in Appendix A.

7. The ALJ, in consultation with the Assigned Commissioner and staff, should have the authority to modify incentive payments by up to 10% a year and

to bifurcate rebate levels according to project size and type following a showing by CEC and/or Commission staff to justify such changes, as set forth herein.

8. In cases where funding is or would be exhausted before the end of the funding cycle and following consultation with the CEC and Commission staff, the ALJ, in consultation with the Assigned Commissioner, should have the authority to order the utilities to fund the CSI in the current period with up to 15% of the budget allocated to the subsequent funding period.

9. To motivate solar investments by low-income customers and affordable housing projects, 10% of the annual funding should be set aside for their use. The Commission should also consider augmented incentives for such projects.

10. Incentive payments for solar installations in new structures should be contingent on the builder having met energy efficiency standards and structures with energy efficiency metrics that exceed 10% of standards should qualify for augmented incentives to be determined later in this proceeding.

11. Incentive payments for solar installations in existing structures should be contingent on the completion of an energy efficiency audit.

12. The Commission staff and the CEC staff should oversee the development of a CSI program manual that is based on the SGIP manual with the program modifications we adopt herein.

13. 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 Appendix A.

14. The Commission should allocate up to 5% of total annual program budgets to RD&D.

INTERIM ORDER

IT IS ORDERED that:

1. The staff report attached as Appendix A to this decision is adopted as set forth herein.

2. Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas), and Southern California Edison Company (SCE) shall implement the program described in the staff report and adopted herein.

3. The assigned administrative law judge, in consultation with the Assigned Commissioner, shall proceed to develop a record and propose resolution of all outstanding issues identified in the staff report in Appendix A.

4. PG&E, SCE, SDG&E, and SoCalGas shall allocate the funds adopted herein to the California Solar Initiative and collect those funds in distribution rates in appropriate ratemaking proceedings.

This order is effective today.

Dated ______________________________, at San Francisco, California.