

Decision 10-09-046 September 23, 2010

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 06-12-033
REGARDING CALIFORNIA SOLAR INITIATIVE BUDGET**

Summary

This decision modifies the California Solar Initiative (CSI) general market budget, as adopted in Decision 06-12-033, and shifts \$40 million from the program administration budget into the incentive budget. Specifically, \$20 million will be shifted from the Measurement and Evaluation portion of the program administration budget and \$20 million will be shifted from unallocated program administration funds to the CSI incentive budget.

Background

The Commission established the California Solar Initiative (CSI) in early 2006 in Decision (D.) 06-01-024 and implemented it later in 2006 with the issuance of D.06-08-028 and D.06-12-033. The CSI was conceived as a 10-year market transformation program that provides solar incentives to eligible systems, from 2007 through 2016. Later in 2006, the Legislature passed Senate Bill (SB) 1 (Stats. 2006, ch. 132), which directed the Commission and the California Energy Commission (CEC) to implement the CSI given specific

requirements and budget limits. Specifically, SB 1 mandates that the total cost of the CSI program overseen by the Commission shall not exceed \$2,166,800,000.

The Commission established a goal for the general market CSI program to install 1,750 megawatts (MW) of solar energy systems. (D.06-12-033, Appendix B, Table 10.)

In D.06-12-033, the Commission adopted a CSI program budget that included \$1.707 billion allocated for incentives and \$189.71 million allocated for program administration. This \$189.71 million program administration budget is based on 10% of the general market program portion of the CSI budget. The general market program does not include funds for low-income programs, research, development and demonstration (RD&D) programs, and a solar water heating pilot program. The \$189.71 million program administration budget includes costs for incentive administration, marketing and outreach, and program evaluation. It does not include costs to administer the Commission's low-income solar incentive programs, RD&D programs, or solar water heating incentives.

The CSI involves 10 levels of incentives which "step-down" over the course of the program based on the volume of MWs that apply for incentives. (D.06-08-028 at 86 and D.06-12-033, Appendix B, Tables 2 and 3.) Depending on the characteristics of the solar energy system, incentives may be paid up-front in a one time payment for smaller systems (currently systems under 30 kilowatts (kW) are eligible for these incentives) based on an "Expected Performance Based Buydown" (EPBB) calculation, or over a five year period based on actual metered production data, known as "Performance Based Incentives" (PBI). (See D.06-08-028.)

In D.06-08-028, the Commission established the parameters for the five year stream of PBI payments to larger solar projects, initially those 100 kW and larger. In D.06-12-033, the Commission directed that effective January 1, 2010, all systems 30 kW and larger must receive incentives via the PBI mechanism. (D.06-12-033 at 12-13.) One significant characteristic of PBI payments that differentiates them from up-front EPBB incentives is the inclusion of an annual 8% discount rate in the levelized monthly PBI payment. When the Commission established the CSI incentive levels in 2006, it reasoned that the 8% discount rate was needed to ensure that customers receiving PBI incentives would be indifferent to receiving an upfront incentive versus an incentive paid out over five years. The adopted PBI payments, therefore, are expressed in a levelized cents per kilowatt hour (kWh) payment that incorporates the annual 8% discount rate in the monthly payment. For any given project, the PBI incentive rate does not change during the five years it is receiving payments. (D.06-08-028 at 35.) To encourage high performance systems, the Commission also stated that any system, regardless of size, can opt to receive its incentive via PBI, such that a high-performance small system might potentially receive a higher total incentive than taking the up-front EPBB incentive.

Additionally, in D.06-08-028 the Commission adopted higher incentive rates at every incentive step level for tax-exempt entities such as government and non-profit institutions. This incentive differential applies to both EPBB and PBI payments to qualifying government and nonprofit applicants. The Commission reasoned that since government and nonprofit applicants are not eligible for federal tax credits to help offset installation costs, a higher incentive was needed to offset the higher net costs per kWh for tax-exempt entities. (D.06-08-028 at 20-21.) Government and non-profit applicants receive a higher CSI incentive

as long as they certify they are not receiving federal tax benefit through third-party financing arrangements.

The CSI incentives and step down mechanism, as adopted in D.06-08-028 and later modified by D.06-12-033, are as follows:

Table 1: Current CSI Incentive Levels as adopted in D.06-08-028 and modified by D. 06-12-033¹

| Step | Statewide MW in Step | EPBB Payments (per Watt) | | | PBI Payments (per kWh) | | |
|------|----------------------|--------------------------|-----------------|-----------------------|------------------------|-----------------|-----------------------|
| | | Residential | Non-Residential | | Residential | Non-Residential | |
| | | | Commercial | Government/Non-Profit | | Commercial | Government/Non-Profit |
| 1 | 50 | \$2.80 | \$2.80 | \$2.80 | n/a | n/a | n/a |
| 2 | 70 | \$2.50 | \$2.50 | \$3.25 | \$0.39 | \$0.39 | \$0.50 |
| 3 | 100 | \$2.20 | \$2.20 | \$2.95 | \$0.34 | \$0.34 | \$0.46 |
| 4 | 130 | \$1.90 | \$1.90 | \$2.65 | \$0.26 | \$0.26 | \$0.37 |
| 5 | 160 | \$1.55 | \$1.55 | \$2.30 | \$0.22 | \$0.22 | \$0.32 |
| 6 | 190 | \$1.10 | \$1.10 | \$1.85 | \$0.15 | \$0.15 | \$0.26 |
| 7 | 215 | \$0.65 | \$0.65 | \$1.40 | \$0.09 | \$0.09 | \$0.19 |
| 8 | 250 | \$0.35 | \$0.35 | \$1.10 | \$0.05 | \$0.05 | \$0.15 |
| 9 | 285 | \$0.25 | \$0.25 | \$0.90 | \$0.03 | \$0.03 | \$0.12 |
| 10 | 350 | \$0.20 | \$0.20 | \$0.70 | \$0.03 | \$0.03 | \$0.10 |

Proposed Modifications to CSI Incentives and Budget

On July 9, 2010, the assigned Commissioner in this proceeding issued an Assigned Commissioner’s Ruling (ACR) requesting comments on modifications to CSI incentive levels and the CSI budget. Given the high levels of program participation, the rapid pace of incentive steps reduction, and the fact that payments to PBI participants are greater than forecast in D.06-08-028,² the ACR recommended that the Commission again review CSI budget commitments to

¹ The data in this table is compiled from D.06-12-033, Appendix B, Tables 3, 5, and 6.

² See Appendix A, Tables 1 and 2, which provide estimates of the current CSI budget status.

ensure the capacity of solar energy systems installed through the program is consistent with the program's MW goals. The ACR requested comment on modifications to three aspects of the incentive mechanism to maximize the effectiveness of the remaining CSI program budget. The proposed modifications are: 1) remove the 8% discount rate embedded in the calculation of performance-based incentive (PBI) payments; 2) reduce incentive rates for government and non-profit applicants; and 3) shift \$20 million from the program administration budget to the incentive budget.

The ACR also directed the CSI Program Administrators (PAs), namely Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and the California Center for Sustainable Energy (CCSE), to temporarily postpone issuing confirmed reservations for new applications seeking performance based incentives as well as any new applications seeking government/non-profit incentives pending resolution of this issue via Commission decision. A second ACR, issued on July 29, 2010, rescinded this temporary postponement and allowed the PAs to once again process all incoming CSI applications, including those government/nonprofit and PBI applications held in queue during the postponement. We ratify the temporary postponement in issuing confirmed reservations for new applications for government/non-profit incentives and PBI in the time period between the July 9, 2010 ACR and the July 29, 2010 ACR, which ended the postponement.

The proposed modifications in the July 9, 2010 ACR are intended to help ensure the program achieves its MW goals and address a potential budget shortfall stemming largely from the greater than anticipated impact of PBI payments on the program budget. In particular, in establishing PBI payments,

the Commission sought to ensure equivalency between the EPBB incentives and those paid out on a per kWh basis over five years via PBI. To do so, the Commission assumed an 8% discount rate. This necessarily results in a stream of levelized payments that on a nominal basis (i.e. the sum of the nominal undiscounted payments), exceeds the value of these incentives on a net present value basis. As such the budgetary impact (i.e., cash flow) of PBI payments is greater than the equivalent EPBB incentive. Under the incentives as adopted, on a nominal basis, a system receiving PBI payments has a budgetary impact that is approximately 22% higher than the corresponding EPBB incentive.³ The original budget in D.06-12-033 (Appendix A, Table 13) estimated the incentives dispersed per step using only EPBB incentive costs. The impacts of the difference between EPBB and PBI payments on the budget are significant, and were the program fully subscribed, could result in a budget shortfall of around \$260 million.

The budget cash flow problem is compounded by the inability of the program to use accumulated interest on customer collections. The Commission envisioned in D.06-08-028 that interest earned on customers' collections waiting in interest-earning accounts would augment the funds available to support the program. To ensure adequate funds and payment certainty over the five year PBI payment period, the Commission directed PG&E, SCE and San Diego Gas & Electric Company (SDG&E) to make quarterly projections of the total five years' expected PBI payment amount for all solar projects completed in that quarter, and deposit that amount in an interest earning balancing account (*Id.* at Ordering

³ Appendix A, Table 3, details the methodology used to convert EPBB payments to PBI payments and it shows how PBI payments compare to EPBB payments in nominal dollars.

Paragraph (OP) 7). The subsequent passage of a CSI budget cap in SB 1 means that any interest earned cannot increase the total dollars spent on CSI, but merely lowers total collections required from ratepayers.⁴

Additionally, there are a number of other factors that impact the program's actual budget position, several of which partially offset the adverse impact of the PBI payments. Under the rules of the program, capacity associated with projects that drop out of the program are added back in at whatever step level is current at the time the drop-out occurs. (See D.07-05-007.) To the extent the program in a given service territory has moved into later program steps in the time between when a project was reserved and when it drops out, the incentive cost of those MWs, now subscribed in a later step, will be less costly to the program. The current dropout rate is around 15% of all projects, by capacity. Moreover, relatively lower uptake of the government/non-profit incentives than was assumed for planning purposes when the program was established has also reduced some of the anticipated demand on the budget.⁵ Due to these and other mitigating factors, staff estimates the potential net shortfall is more realistically in

⁴ See Pub. Util. Code § 2851(e) which states: "In implementing the California Solar Initiative, the commission shall ensure that the total cost over the duration of the program does not exceed three billion three hundred fifty million eight hundred thousand dollars (\$3,350,800,000)." Pub. Util. Code § 2851(e)(1) goes on to identify the allocation of this cost to be borne by the customers of SDG&E, SCE, and PG&E establishing a cost cap of \$2.1668 billion.

⁵ In D.06-08-028, the Commission assumed that government/non profit applicants would make up 20% of the program (or 30% of the non-residential sector), residential applicants would make up 33%, and other commercial applicants would make up the remaining 47% of the program participants. (Id. at 104.) The Commission stated that if those assumptions proved invalid, review of incentive levels would occur. (Id. at 105.)

the range of \$170 million. A summary of the projected budget status and potential shortfall is provided in Appendix A.

As explained in the ACR, when the Commission established the CSI, it acknowledged that budgeting for the program was complicated by uncertainty from several sources, including those described above. Other factors that add to budgeting uncertainty include the actual performance of systems receiving PBI incentives⁶, as well as the number of systems that, although eligible for upfront incentives, elect to take performance based incentives. In light of the various sources of uncertainty, the Commission acknowledged that it would need to revisit the incentives at some point and make adjustments accordingly.

(D.06-08-028 at 106). In July 2008, Commission staff held a workshop to review the status of the CSI budget and how dropouts in the program affected the budget. Analysis by Energy Division staff for that workshop indicated that no program adjustments were necessary at that time, but that periodic review should be conducted. However, as stated, more recent review by Energy Division staff of the incentive dollars currently allocated under the program indicated that obligations for payments to PBI program participants are greater than was budgeted in Table 13 of Appendix B of D.06-12-033. If the incentive levels and corresponding incentive budget are unmodified, the Energy Division believes that the program incentive budget would be depleted well before the program achieves its overall capacity goals. Under current estimates, the program would need an additional \$170 million in order to attain all of the MWs

⁶ In D.06-08-028, the Commission considered whether to cap PBI payments for better budget control, but the Commission rejected a performance cap on PBI projects. (D.06-08-028 at 33.)

in the CSI step table. Since the last two steps of the CSI step table (when incentives are at their lowest) are quite large, the program would be an estimated 500 MW short of its capacity target if the budget is short \$170 million.⁷

Table 2: CSI Step Levels as of September 15, 2010⁸

| | PG&E | SCE | CCSE |
|-----------------|--------|--------|--------|
| Residential | Step 7 | Step 5 | Step 7 |
| Non-Residential | Step 8 | Step 7 | Step 7 |

Comments on the ACR were received from the Association of California Water Agencies (ACWA), the California Solar Energy Industries Association (CALSEIA), the Community College League of California (CCLC), CCSE, City of San Jose, CleanTech San Diego (CleanTech), Solar Alliance, SolFocus, Inc. (SolFocus), PG&E, SCE, and The Utility Reform Network (TURN). Reply comments were received from CALSEIA, CCSE, Michael Kyes, PG&E, Solar Alliance, SolarTech Consortium, and SCE. In addition, the Commission received letters from the general public pertaining to the proposals in the ACR. These letters were placed in the correspondence file and considered as part of today’s decision.

Each proposed modification, and the comments on that specific proposal, is discussed in the appropriate section below.

PBI Discount Rate

The ACR proposed the Commission consider modifying the 8% discount rate built into the PBI incentive payments originally adopted in D.06-08-028. As

⁷ Step 10 was originally estimated to cost \$105 million and attain 350 MW. Step 9 was originally estimated to cost \$108 million and attain 285 MW.

⁸ See www.csi-trigger.com.

noted above, the 8% discount rate was included in the levelized monthly PBI payment to ensure that customers receiving PBI incentives would be indifferent to receiving an upfront incentive versus an incentive paid out over five years. Given changes to the economic climate since 2006, it may no longer be appropriate to employ a discount rate of 8%. To the extent actual interest rates are lower than what had been anticipated when the program was initially established, the net present value of PBI payments is higher than the otherwise applicable EPBB incentive, in conflict with our policy intent of ensuring equivalency between upfront incentives and those received on a performance basis over a five year period.

In comments, no party outright supported this change. The City of San Jose expressed concerns that elimination of the 8% discount rate would increase the cost of energy under third party, power purchase agreement (PPA) arrangements, making these non-viable for local governments to pursue. The Solar Alliance and ACWA suggest that any changes to the incentive schedule would be disruptive to the market and create market uncertainty. PG&E argues that given the various sources of uncertainty, in particular unknowns regarding the number of projects that may drop out in the future, taking action now is premature. CALSEIA makes similar arguments in its comments. Both CALSEIA and TURN argue that insufficient information was provided in the ACR to assess the reasonableness of this proposal given the unclear magnitude of the problem and the extent to which this, and the other proposed modifications contained in the ACR, address the concern. SCE, while supporting the proposal in concept argues that any changes to the incentives should be done so in a manner that preserves equitable treatment of program participants across the various utility service areas.

We determine that in the interests of maintaining incentive levels that reward performance, we will not modify the PBI payments to remove the 8% discount rate at this time. Parties express concern with market disruption and uncertainty caused by making this change at this stage of the CSI program. They also contend that insufficient information was provided regarding the magnitude of any budget shortfall that this change is designed to fix. Commission analysis of the budget status indicates that removing the 8% discount rate for future applicants could provide as much as \$50 million more for the incentive budget. Indeed, we are concerned that payments to PBI systems are significantly higher than payments made on an up-front, or EPBB basis. Nevertheless, we agree that modifying PBI payments at this time will cause some market disruption. Some of the savings we would realize if we lowered PBI payments can be achieved in a combination of other ways, such as by shifting administrative funds and by continued monitoring of applicants that dropout and applying those reserved funds to new applicants. Therefore, we will not change PBI payments at this time.

Furthermore, given the magnitude of this potential shortfall and its implications on the program's ability to achieve the overall capacity goals, we are somewhat disappointed that this issue was not flagged earlier by the PAs as it became apparent. We reiterate that one of the basic functions of the PAs is to monitor the program to ensure it operates within its budgetary constraints while also fulfilling its overall programmatic objectives.

Therefore, we reaffirm that pursuant to statute, the CSI program, inclusive of its various programmatic elements, including the General Market Program, the Single Family Affordable Solar Homes Program, the Multi-Family Affordable Solar Homes Program, the Research, Development and Demonstration Program,

and the Solar Water Heating Pilot Program, is limited to an overall cost cap of \$2.1668 billion. We caution the PAs that they must keep a close and careful watch on the funds reserved for CSI applications to ensure they do not exceed the CSI statutory spending cap of \$2.1668 billion. The PAs must effectively manage the program budgets, including their respective incentive allocations, to ensure that the program's total budget liabilities do not exceed the spending cap. The PAs should ensure they adhere to CSI Handbook project deadline requirements so that incentive funds reserved for inactive and cancelled projects can be made available to other projects before the CSI total spending cap is reached.

Specifically, the PAs must ensure they stop issuing additional incentive reservations to a given customer segment (e.g. residential or commercial) if doing so would result in budget liabilities exceeding the amount of funding authorized and available to support incentives for that customer segment. We will require the PAs, on a weekly basis, to publicly post their remaining incentive budget, including how much funding and how many megawatts remain available in each sector, as well as an estimate of how far the remaining incentive budget will last through the step table. In the case of PBI systems, the PAs have already been directed to set aside funds sufficient to cover the anticipated PBI payment amounts based on estimated performance for each PBI project. We know from experience that these estimates are necessarily imperfect. As such, prudent management of the program suggests the PAs may wish to build in some buffer to account for potential overproduction relative to those estimates. While we do not require the PAs to establish a specific buffer, we remind the PAs to be mindful of this issue, given the overall cost cap to which this program is subject.

Finally, we will require the PAs to file a report on a quarterly basis in this proceeding or any successor proceeding indicating all dollars encumbered by the program by customer segment (i.e., residential and non-residential), including total incentives paid and reserved. The PAs should also attempt to report incentives paid and reserved by step level, to the extent possible. This report should include the full amount of monies that are anticipated to be required for PBI payments to systems subscribed under the program as well as an estimate of the monies that will be needed for each PA to reach its megawatt program goals. The PAs should coordinate with Energy Division staff on all CSI reports to ensure consistency of format wherever possible. The first report should include data through September 30, 2010 and will be due on October 20, 2010. The reports should be filed quarterly thereafter, 20 days after the end of the quarter on a calendar year basis.

In comments on the proposed decision, PG&E again recommends a specific buffer amount for each PA to help ensure it does not exceed budgeted incentive funds. Moreover, PG&E suggests a public process to discuss and clarify any budget buffer as well as numerous details the PAs will need to engage in as the CSI program nears the end of its incentive funding. We will not specify an exact buffer percentage at this time, but we agree with PG&E that a public process would be useful for discussion of administrative details such as mechanisms to forecast remaining funds, cease processing reservations when funds are no longer available, reallocate funds should they become available due to applicants that drop out, and potentially create a waiting list of applicants. Therefore, we will direct the PAs to coordinate with Energy Division to propose CSI Handbook revisions, to be filed by Advice Letter no later than January 15, 2011, to explain the administrative details described above and any other

mechanisms or processes that need to be considered as the CSI general market program approaches its statutory spending cap.

Government/Nonprofit Incentive Differential

The ACR requested comment on modifying D.06-08-028 to reduce the differential given to government/nonprofit applicants for both EPBB and PBI incentives. According to the ACR proposal, government/nonprofit applicants would still receive higher incentives than commercial customers, but the differential between the two rates would be reduced.

As explained in the ACR, Commission data suggests that many government/non-profit applicants are using third-party financing and are therefore receiving the lower commercial incentive rate because the third-party system owner claims the tax credit, and the government/non-profit applicant does not qualify for the higher incentive. Program records indicate that government/non-profit applicants are the “host customer” in over 33% of the projects, on a capacity basis, but about one-half of these choose a third-party financing mechanism. Thus, it appears that since many government/non-profit applicants are taking advantage of third-party owner financing arrangements, the incentive differential adopted in D.06-08-028 may not be essential to spur installations at these sites. The ACR suggested that if the Commission decreased the differential between commercial and government/non-profit applicants by 50%, it would preserve additional budget dollars to install more MWs in the last steps of the program.

The Table below indicates the current government/nonprofit rates and the ACR’s proposed 50% reduction in the premium paid to non-taxable entities rates on an EPBB and PBI basis.

Table 3: Current Government/NonProfit Rates and Proposed Changes

| Step Level | Current EPBB rate | Current PBI rate | Proposed EPBB rate | Proposed PBI rate ⁹ |
|-----------------|-------------------|------------------|--------------------|--------------------------------|
| 1 ¹⁰ | n/a | n/a | n/a | n/a |
| 2 | \$3.25 | \$0.50 | \$2.88 | \$0.36 |
| 3 | 2.95 | 0.46 | 2.58 | 0.33 |
| 4 | 2.65 | 0.37 | 2.28 | 0.26 |
| 5 | 2.30 | 0.32 | 1.93 | 0.22 |
| 6 | 1.85 | 0.26 | 1.48 | 0.17 |
| 7 | 1.40 | 0.19 | 1.03 | 0.12 |
| 8 | 1.10 | 0.15 | 0.73 | 0.08 |
| 9 | 0.90 | 0.12 | 0.58 | 0.07 |
| 10 | 0.70 | 0.10 | 0.45 | 0.05 |

Similar to the comments on reducing the 8% discount rate included in PBI payments, comments were nearly universally opposed to lowering government/nonprofit incentive rates. The City of San Jose argues that the level of the reduction would fundamentally undermine the ability of municipal governments to move forward with their plans to deploy solar. For San Jose in particular, the planned deployment of up to 15 MW of solar across 40 city facilities would be jeopardized. The proposed modification would also put at risk the ability of municipalities, and California more generally, to take advantage of the Clean Renewable Energy Bonds (CREB) and Qualified Energy Conservation Bonds that have been allocated to California under the American Recovery and Reinvestment Act (ARRA).¹¹ The City of San Jose also observes

⁹ Proposed rates in this column also include 0% discount rate

¹⁰ Step 1 was administered in 2006 through SGIP, rates are shown as “not applicable” to CSI.

¹¹ The CREBs program is administered through the Internal Revenue Service (IRS) as part of the American Recovery and Reinvestment Act of 2009 and provides for public agencies to issue tax-credit bonds that finance renewable energy projects for public

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that the proposed modification to the government/non-profit incentives is much deeper, on a percentage basis, than what has been proposed for commercial systems participating on a PBI basis.

CCSE raises similar concerns, observing that government/non-profit entities are more vulnerable to the adverse impacts of incentive reductions. CCSE voices concerns about the near term opportunities under ARRA-funded bond programs that may be lost if the proposed incentive reduction is implemented. CleanTech expresses concern over the implications of the proposed incentive reductions on the ability of San Diego to take advantage of \$150 million in CREBs allocations and on the state's ability to utilize the \$640 million in CREBs funding it received under ARRA. PG&E echoes this latter concern. ACWA asserts that government/non-profit entities, such as the water and wastewater agencies it represents, need certainty in incentive levels and any disruption of current incentives will lead these agencies to abandon approximately 20 MW in planned installations.

The Solar Alliance notes that the state's budgetary challenges make government/non-profit entities particularly sensitive to incentive reductions. CCLC argues that the proposed changes disproportionately impact government and non-profit entities and that any changes should be done on an equal percent basis so that both taxable and non-taxable entities bear a proportionate share of the change. CCLC also argues that the ability and willingness of government/non-profit entities to pursue third party PPAs as an alternative to owning their own systems is overstated. According to the CCLC, PPAs are

facilities. The public agencies do not have to pay the interest on the bonds because the bondholders receive a tax credit in lieu of an interest payment.

generally viewed as more risky owing to their relatively greater legal complexity which reduces the willingness of community colleges to pursue these arrangements. CCLC maintains that experience with PPA providers suggests that PPAs can be fraught with uncertainty due to PPA provider financing realities, and because PPAs may be less valuable in the long-run than systems that are owned outright by a community college. CALSEIA argues that the adverse impact of the proposed incentive change on the ability of government/non-profit entities to move forward with solar projects far outweighs the limited upside the proposal offers in terms of reducing the projected budget shortfall.

The sole party supporting the proposal to decrease government/nonprofit incentives was SolFocus, which advocates eliminating sector differentiated incentives altogether. SolFocus argues that higher incentives are not justified because the availability of low cost CREB financing makes up for the inability of government/non profit entities to take advantage of tax credits.

Although we disagree with CALSEIA that the impact on the projected budget shortfall of this modification would be modest,¹² we are sensitive to making changes that preserve budget at the expense of an entire class of program participants. As several parties have noted, the proposed incentive modifications disproportionately impact government/non-profit entities, if measured in terms of the percent reduction from the existing incentives. Parties note that the current financial challenges faced by government entities in particular, make their projects particularly sensitive to incentive reductions and place at risk the

¹² Staff estimates the impact of this change would reduce the shortfall by an estimated \$45 million. See Appendix A.

substantial federal support provided under ARRA via CREB allocations. While SolFocus' arguments that CREBs offset federal tax credits have some merit because CREBs provide an option for many California governmental entities, we are not convinced that all government/nonprofit entities have access to CREBs. Lastly, the arguments presented by CLCC regarding the practical realities of the choice between relying on a PPA as opposed to owning a system are compelling. While it remains true that many government/non-profit entities have deployed solar through third party PPAs, this does not necessarily make PPAs a viable or preferable option in all circumstances.

In light of all of the foregoing, we decline to adopt the ACR's proposal to reduce the differential between the incentives provided to taxable entities and government/non-profit entities. Based on comments, it appears that this modification, while offering substantial budgetary savings, would prove deleterious to the participation rates of government/non-profit entities which we view as important participants in the solar market. Furthermore, the basis for the incentive differential for government/non-profit entities, namely the fact that non-taxable entities are unable to take advantage of federal tax credits, remains true. This further bolsters the concerns expressed by parties that the proposed change would greatly limit the ability of non-taxable entities to deploy solar.

CSI Program Administration Budget

A third proposal in the ACR recommended shifting \$20 million in program administration funds to the incentive budget. As noted above, a CSI general market program administration budget of \$189.71 million was adopted in D.06-12-033, representing 10% of total program funds allocated to the general market CSI program. The program administration budget includes application processing, program evaluation, and marketing and outreach. In D.06-08-028,

the Commission mandated that the PAs spend only half of the 10% of funds set aside for program administration, or 5% of the total budget, in order to preserve funds for program evaluation and marketing and outreach which have not been fully allocated. (D.06-08-028 at 97.) The ACR proposed that \$20 million of those funds reserved for administration be reallocated to cover incentive budget needs. This additional \$20 million would not increase the MW goal in any particular step, but would instead extend the total amount of incentives available from \$1,707 million to \$1,727 million.

The impact of the ACR's proposed modification on the administration and evaluation budgets, as well as the overall CSI general market incentive program budget, is reflected in the tables below.

Table 4: Proposed Administrative and Evaluation Budgets by Utility Territory¹³

| Utility | Administrative Budget CSI General Market Program (\$M) |
|----------------|---|
| PG&E | \$74.16 |
| SCE | \$78.07 |
| SDG&E | \$17.48 |
| Total | \$169.71 |

Note: This table proposes modifications to Table 3 of Appendix A of D.06-12-033.

Table 5: Proposed CSI Budget

| Budget Category | (\$ in millions) |
|--|-------------------------|
| SB 1 CSI Budget | \$2,166.80 |
| Low Income Budget (10%) | 216.68 |
| Research Development and Demonstration (RD&D) Budget | 50.00 |
| SDREO Pilot Budget | 3.00 |
| Budget remaining | 1,897.12 |
| Administration Budget ¹⁴ | 169.71 |
| CSI Budget for Direct Incentives in general market program | \$1,727.41 |

Note: This table proposes modifications to Table 1 of D.06-12-033 (at 28).

¹³ The administrative budget includes funding for evaluation, marketing and outreach, and general administrative functions related to the general market program.

¹⁴ The administration budget of \$169.71 does not include administrative costs for low income programs, RD&D, and solar water heating pilot program. Administrative costs for those programs are incorporated into their total budgets, which shall not exceed the figures in this table.

In comments, parties offered qualified support for shifting funds from other parts of the program to provide additional incentive monies. CCSE and ACWA propose taking funds from sources other than the program administration budget, specifically identifying the CSI RD&D program, the Measurement and Evaluation (M&E) budget, and the unallocated portion of the Marketing and Outreach budget (M&O). CCSE also suggested that the program administrators should be given additional flexibility to shift funds as necessary. The Solar Alliance suggests that in lieu of incentive modifications, the Commission should look to other sources in the program to support the incentive budget, including the M&O budget, and the RD&D program budget. The views of Solar Alliance and CCSE are generally shared by PG&E which offers similar suggestions in its comments. SCE supports the fund shift, but believes the PAs should have discretion regarding what component of the administration budget would be affected. SolFocus supports the proposed shift in administrative funds, arguing that any impacts on program administration can be absorbed through streamlining. TURN specifically advocates shifting funds from the M&O budget on the grounds that, in view of the rapid pace of solar applications, it makes little sense to allocate substantial funding to M&O activities. Solar Alliance argues that we can and should seek to use the interest earned on collected funds. CALSEIA is supportive of shifting funds from the administration budget to the incentive budget, provided the shift doesn't adversely impact the ability of program administrators to process program applications. CALSEIA is also concerned that the proposed transfer of funds would have a disproportionate impact on CCSE's ability to administer the program.

Given the near universal support for shifting funds from the administration budget, we adopt the proposal in the ACR with some modifications. First, because we are not adopting the ACR's proposal to reduce PBI payments and government/non-profit incentives, the magnitude of the remaining projected budget shortfall is larger than what it would be if we had adopted those modifications. Given the outstanding projected budget gap, we will need to shift more funds from other parts of the program budget. To that end we will shift \$20 million from the M&E budget and an additional \$20 million from the unallocated portion of the overall administrative budget. In addition, the incentive budget is increased by \$400,000 because the \$3 million set aside in D.06-12-033 for the San Diego area Solar Water Heating Pilot Program was later revised downward to \$2.6 million. (*See* R. 06-03-004, Assigned Commissioner's Ruling, 2/15/07.) The revised administrative and incentive budgets for the program as modified by this decision are shown in the tables below, as well as in Tables 1 and 2 of the Appendix to this decision. The PAs shall ensure they adhere to these revised CSI budgets.

Table 6: Revised CSI Budget and Allocation by Utility¹⁵

| | Program Component | Revised Budget | Allocation by Utility | | |
|----|---|------------------------|-----------------------|----------------------|---------------------------|
| | | | PG&E | SCE | SDG&E |
| | | | 43.70% | 46.00% | 10.30% |
| | General Market Program | | | | |
| 1 | General Market Program Incentives | \$1,747,810,000 | \$763,792,970 | \$803,992,600 | \$180,024,430 |
| 2 | Program Administration | \$94,860,000 | \$41,453,820 | \$43,635,600 | \$9,770,580 |
| 3 | Total Measurement & Evaluation (M&E) | 26,700,000 | \$11,667,900 | \$12,282,000 | \$2,750,100 |
| 4 | <u>M&E, except CSI-Thermal Electric M&E</u> | \$25,450,000 | \$11,121,650 | \$11,707,000 | \$2,621,350 |
| 5 | <u>M&E, CSI-Thermal Electric only</u> | \$1,250,000 | \$546,250 | \$575,000 | \$128,750 |
| 6 | Total Marketing and Outreach (M&O) | 21,250,000 | \$7,731,250 | \$7,875,000 | \$5,643,750 |
| 7 | <i>Interim M&O, general market CSI¹⁶</i> | \$15,000,000 | \$5,000,000 | \$5,000,000 | \$5,000,000 |
| 8 | <i>M&O, CSI-Thermal Electric Only</i> | \$6,250,000 | \$2,731,250 | \$2,875,000 | \$643,750 |
| 9 | Unallocated | \$6,900,000 | \$3,015,300 | \$3,174,000 | \$710,700 |
| 10 | Subtotal General Market Program | \$1,897,520,000 | \$827,661,240 | \$870,959,200 | \$198,899,560 |
| 11 | RD&D Program | \$50,000,000 | \$21,850,000 | \$23,000,000 | \$5,150,000 |
| 12 | Low Income Single-family (SASH) Program | \$108,340,000 | \$47,344,580 | \$49,836,400 | \$11,159,020 |
| 13 | Low Income Multifamily (MASH) Program | \$108,340,000 | \$47,344,580 | \$49,836,400 | \$11,159,020 |
| 14 | SWH Pilot Program (SWHPP) in San Diego | \$2,600,000 | \$0 | \$0 | \$2,600,000 ¹⁷ |
| 15 | Total CSI Electric Budget¹⁸ | \$2,166,800,000 | \$944,200,400 | \$993,632,000 | \$228,967,600 |

¹⁵ This table modifies Table 1 of D.06-12-033 (at 28) and Tables 2 and 3 of Appendix A of D.06-12-033.

¹⁶ Row 7 is based on a general market CSI M&O interim budget of \$500,000 per year per PA, as set forth in D.07-05-047, and does not adhere to the spending allocations of 43.7%, 46%, and 10.3% used for the rest of the CSI budget in this table. Adjustments to the general market CSI M&O budget will be addressed in R.10-05-004, and allocations may need to be adjusted downward, particularly for SDG&E.

¹⁷ The SWHPP in San Diego will be paid for exclusively by San Diego ratepayers.

¹⁸ The totals in Row 15 do not match the totals adopted in D.06-12-033 (Appendix A, Table 2), and therefore do not match the revenue requirements being collected by PG&E, SCE, and SDG&E as adopted in Table 3 of D.10-04-017. This minor discrepancy will be addressed in R.10-05-004 as soon as possible.

**Table 7:
CSI Incentives Budget by Utility Territory and Customer Sector
(\$ Millions)**

| | | Non-Residential | Residential | Total |
|------------------|--------------|------------------------|--------------------|--------------|
| PG&E | 43.7% | \$552.165 | \$211.628 | \$763.793 |
| SCE | 46.0% | \$581.226 | \$222.767 | \$803.993 |
| SDG&E | 10.3% | \$130.144 | \$49.880 | \$180.024 |
| Total | | \$1,263.535 | \$484.275 | \$1,747.810 |

With regard to Table 7 above, the \$40 million increase to the CSI incentive budget is allocated between the three CSI utility territories on the same percentage basis as the original CSI budget was allocated between the utilities in D.06-12-033. (See D.06-12-033, Appendix A, Table 2.) In addition, Table 7 indicates a residential and non-residential allocation of the total incentive budget for each utility. The additional \$40 million is allocated to the non-residential customer sector because it is primarily needed to cover PBI payments. Nevertheless, Table 7 establishes a specific residential budget allocation for each utility to preserve our requirement, originally adopted in D.06-08-028, that one third of the total MWs in each incentive step level be reserved for residential solar applicants. (See D.06-08-028 at 99.) We emphasize that our goal is to preserve funds so that one-third of the MWs installed under the general market CSI program come from residential systems, and it should be noted that less than one-third of the total budget is needed to meet this goal. This new allocation of budget dollars between residential and non-residential applicants should ensure that budget funds are preserved to allow installation of 577.5 MWs of residential solar energy systems, which is one-third of the 1750 MW goal for the general market CSI program. (See D.06-12-033, Appendix B, Table 12.) At a future point, if the PAs see the need to modify the non-residential and residential budget

allocations in this decision, they may file a petition to modify this decision specifying the reasons they believe such a budget reallocation is warranted.

We decline to adopt the proposal made by various parties to allow the PAs the discretion to shift administrative funds within the three subcategories of administration. The Commission has previously adopted specific CSI administrative budgets based on its determination regarding program priorities and the anticipated budgetary needs to achieve those objectives. It is appropriate for the Commission to determine how to modify these CSI budgets in light of the projected budgetary shortfall. Recognizing the continued uncertainty of the cash flow demands on incentive payments, we will, however, allow the assigned Commissioner, after appropriate notice to the parties and an opportunity for comment, to shift program administrative budget dollars between program administration subcategories and/or from program administration activities to the incentive budget, but not vice versa.

We also disagree with Solar Alliance's arguments that the Commission can augment the total CSI budget with the interest accumulated on previously collected funds. The current statute prohibits us from doing so because Pub. Util. Code § 2851(e)(1) specifies that the total cost for the portion of the CSI program supported by the customers of SDG&E, SCE, and PG&E shall not exceed \$2.1668 billion. Therefore, the statute caps total program spending. Any interest earned and spent counts toward the total spending cap, and thus, can only serve to reduce future collections under the program, not expand the overall budget.

Other Issues

In comments, parties raised a number of additional issues, which we address below.

CALSEIA makes a number of proposals regarding the ongoing review of the program budget and also offers some suggestions to ensure that projects that have subscribed under the program are viable and will result in installed capacity. We appreciate CALSEIA's suggestions and while many of these may have merit, we do not believe this decision is the appropriate vehicle to address them. A ruling issued on July 26, 2010 in this proceeding includes a staff proposal for CSI modifications which addresses a number of programmatic issues and potential reforms. We believe the staff proposal and subsequent proceeding addressing that proposal provides a more appropriate forum for consideration of the various proposals put forward by CALSEIA.

TURN also made a number of suggestions regarding the incentives and potential changes thereto. In particular, TURN suggests that the incentives offered should be reevaluated to be reflective of the opportunity various entities may have to take advantage of tax credits and financing benefits. TURN is incorrect in its implied assertion that the current incentives do not incorporate the differential ability of entities to take advantage of tax credits. For example, in D.06-08-028, the higher incentive offered to government and non-profit entities was expressly adopted to account for the inability of these entities to take advantage of tax credits. Further, the tax status of the system owner, not the host customer, is used in determining the incentive type available to participants.

Several parties, including Solar Alliance, PG&E, SolFocus, and TURN argue that the Commission should not be overly fixated on the capacity goals of the program. These parties offer various suggestions to eliminate later steps of the program altogether or measure progress in MWh rather than on a capacity basis. We agree that the Commission should not take actions intended to preserve program budget and overall capacity targets at the cost of substantial

market disruption. However, we also believe that prudent management of the program requires us to take some action to address the projected budget shortfall given its magnitude and the fact that we believe the changes adopted herein will have limited impacts on the solar industry. That said, we agree that it is useful to track the total amount of energy delivered by CSI supported systems, and direct the PAs to work in consultation with staff to ensure that this metric is continued to be reported alongside other metrics used to assess the performance of the CSI program.¹⁹

Lastly, a number of parties, including CCSE, CALSEIA, the Solar Alliance, and SolFocus also take a longer term view of the future of support for solar in the state, and make various suggestions regarding other ways in which the state can provide for the long-term viability of a solar industry. These suggestions include encouraging the Commission to implement a feed-in tariff for solar, authorizing the use of tradable renewable energy certificates for compliance with the Renewables Portfolio Standard program, leveraging of smart-meter infrastructure, and extending or expanding tariffs that are favorable to solar. We appreciate the parties' thoughtful comments on these issues. However, the suggestions raised go well beyond the scope of this decision. With regard to the specific suggestion regarding the extension of tariffs that are favorable to solar, we strongly encourage solar industry stakeholders to actively participate in General Rate Cases where tariff design issues are addressed. We also note that on July 26, 2010, the Staff Proposal in this proceeding raised a number of issues

¹⁹ See CSI 2009 Impact Evaluation Report at Section 5 for more information about the energy and capacity impact of CSI solar systems.
<http://www.cpuc.ca.gov/PUC/energy/Solar/eval09.htm>.

specifically related to solar tariffs, such as Net Energy Metering and Virtual Net Metering. We plan to address those issues in a later phase of this proceeding.

Categorization and Need for Hearing

This proceeding was preliminarily categorized as quasi-legislative and we affirm that categorization here. Hearings were not necessary on this portion of the proceeding.

Comments on Proposed Decision

The proposed decision of the assigned Commissioner in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed by CALSEIA, CCSE, PG&E, SCE, and the Solar Alliance. Reply comments were filed by CCSE and PG&E. Where the comments suggested minor adjustments or clarifications to the decision or the appendix, these changes have been incorporated throughout.

One comment by PG&E merits some discussion. PG&E asks the Commission to clarify that the \$100.8 million for electric-displacing solar thermal technologies, as adopted in D.10-01-022, is available on a first-come, first-served basis the same as solar photovoltaic applicants for general market CSI incentives. PG&E also seeks clarification that this \$100.8 million is not a set-aside but rather a maximum total incentive amount allowed for these system types. We agree and provide this clarification. In addition, we will not specify a split of this \$100.8 million between residential and non-residential sectors. Funding to electric-displacing solar thermal technologies can be split between residential and non-residential sectors according to the applications received. We remind the PAs that, as set forth in D.06-12-033, they shall track incentive commitments

to solar thermal and administer funds up to each PA's pro-rata share of the \$100.8 million limit. (D.06-12-033 at 26.)

Assignment of Proceeding

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

Findings of Fact

1. The California Solar Initiative offers both upfront incentives and performance based incentives to qualifying solar systems.
2. The California Solar Initiative is characterized by ten "incentive steps" reflecting progressively lower incentives as the total amount of capacity subscribed under the program increases.
3. The performance based incentives are paid out on a per kWh basis to qualifying systems over a five year period.
4. The performance based incentives were calculated to ensure equivalency on a net present value basis with the upfront incentives through the incorporation of an annual 8% discount rate.
5. In D.06-08-028, the Commission adopted higher incentive rates at every incentive step level for tax-exempt entities such as government and non-profit institutions because government and nonprofit applicants are not eligible for federal tax credits to help offset installation costs.
6. The budgetary impact of PBI payments is greater than the equivalent EPBB incentive and was not anticipated in the incentive steps and MW allocations adopted in D.06-08-028 and D.06-12-033. PBI payments have a budget impact that is approximately 22% higher than the corresponding EPBB incentive on a nominal basis.

7. When the CSI was adopted, the Commission expected it would be able to use accumulated interest on customer collections to increase the funds available for the program.

8. There are various sources of uncertainty that impact the program's budget position including the number of systems receiving PBI payments, the performance of systems receiving PBI payments, the number of program drop-outs, and the relative participation of projects receiving government/non-profit incentives.

9. Collectively, staff estimates that considering both those factors that reduce the program's budget liabilities and those factors that increase the program's budget liabilities, could result in a potential budget shortfall of approximately \$170 million if the program continues as is.

10. Reducing the differential offered to government/non-profit applicants by 50% could reduce the anticipated budget liability by an estimated \$45 million.

11. The state has received a \$640 million allocation of Clean Renewable Energy Bonds, which provide government entities with access to low interest financing for qualifying renewable energy facilities including solar.

12. Third party PPAs may not be a viable or reasonable option for all government/non-profit entities that may be interested in solar.

13. Pub. Util. Code § 2851(e)(1) states that the CSI program cannot exceed \$2.1668 billion in total spending.

14. Interest earned on customer collections for CSI counts toward the total spending cap pursuant to Pub. Util. Code § 2851(e).

15. In D.06-12-033, the Commission adopted a CSI program administration budget of \$189.71 million and an incentive budget of \$1,707.41 million.

16. In D.06-08-028, the Commission required that one-third of the MWs in each incentive step be reserved for residential applications.

17. The \$100.8 million set forth in D.10-01-022 for electric-displacing solar thermal incentives is available on a first-come, first-served basis to applicants, and represents the maximum available for these solar thermal incentives rather than a set-aside.

Conclusions of Law

1. In order to continue to reward solar system performance, the Commission should not reduce PBI payments at this time.

2. The CSI PAs must adhere to CSI Handbook project deadline requirements so that incentive funds reserved for inactive and cancelled projects can be made available to other projects before the total spending cap is reached. The CSI PAs should effectively manage their program budgets to ensure they do not exceed the CSI statutory spending cap of \$2.1668 billion.

3. The CSI PAs must stop issuing additional incentive reservations to a given customer segment (i.e. residential or commercial) if doing so will result in budget liabilities exceeding the amount available for incentives for that customer segment, as shown in Table 7.

4. Reducing CSI incentive levels to government/non-profit entities would jeopardize participation by these entities that are already vulnerable given the current budgetary challenges faced by the state.

5. It is reasonable to shift \$20 million from the M&E budget and \$20 million from the unallocated portion of the overall administrative budget to the incentive budget.

6. An allocation of the CSI incentive budget between residential and non-residential applicants is necessary to preserve budget funds so that one-third of total MWs installed are residential.

O R D E R

IT IS ORDERED that:

1. The California Solar Initiative program administration budget adopted in Decision 06-12-033 is reduced from \$189.71 million to \$149.71 million, and the incentive budget adopted in Decision 06-12-033 is increased from \$1,707.41 million to \$1747.81 million.

2. The California Solar Initiative Program Administrators, namely Pacific Gas and Electric Company, Southern California Edison Company, and the California Center for Sustainable Energy, will collectively shift \$20 million from their measurement and evaluation budgets, and \$20 million from the unallocated portion of the administration budget into the incentive budget as detailed in Table 6 of this decision.

3. The California Solar Initiative Program Administrators shall effectively manage their program budgets as set forth in Tables 6 and 7 of this decision, and Tables 1 and 2 of the Appendix, to ensure they do not exceed the statutory spending cap of \$2.1668 billion in Pub. Util. Code § 2851(e)(1).

4. The California Solar Initiative Program Administrators shall stop issuing additional incentive reservations to a given customer segment (i.e. residential or commercial) if doing so will result in budget liabilities exceeding the amount available for incentives for that customer segment.

5. Within 90 days of the effective date of this decision, the California Solar Initiative Program Administrators shall on a weekly basis post and make

publicly available information on their remaining incentive budget, including how much funding and how many megawatts remain available in each sector, and an estimate of how far the remaining budget will last through the step table.

6. On a quarterly basis commencing October 20, 2010, the California Solar Initiative Program Administrators shall file in this or any successor proceeding a report indicating all dollars encumbered by the program by residential and non-residential customer segments, including total incentives paid and reserved. This report should include the full amount of monies that are anticipated to be required for performance-based incentive payments to systems subscribed under the program as well as an estimate of the monies that will be needed for that Program Administrator to reach its megawatt program goals. The report should include incentives paid and reserved by step level to the extent possible. The first report should include data through September 30, 2010. The report should be filed quarterly thereafter. The California Solar Initiative Program Administrators shall coordinate with Energy Division to ensure consistency in report formatting.

7. The California Solar Initiative (CSI) Program Administrators, working in consultation with Energy Division staff, shall submit an Advice Letter no later than January 15, 2011, containing proposed CSI Handbook revisions regarding administrative details including but not limited to mechanisms to forecast remaining budget funds, cease processing reservations when funds are no longer available, reallocate funds from applications that drop out, and create a waiting list of applicants should additional funds become available.

8. The California Solar Initiative (CSI) Program Administrators, working in consultation with Energy Division staff, shall ensure that the energy output of

systems supported by the CSI is included alongside other metrics used to report on the CSI program's progress and achievements.

9. The assigned Commissioner may, after appropriate notice to the parties and an opportunity for comment, shift program administrative budget dollars between program administration subcategories and/or from program administration activities to the incentive budget, but not vice versa.

10. The temporary postponement in issuing confirmed reservations (which is now rescinded) for new government/non-profit and performance-based incentive applicants in the time period between the July 9, 2010 and the July 29, 2010 Assigned Commissioner Ruling is ratified.

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

This order is effective today.

Dated September 23, 2010, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
TIMOTHY ALAN SIMON
NANCY E. RYAN
Commissioners

Commissioner John A. Bohn, being necessarily absent, did not participate.