#### 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 06-03-004 (Filed March 2, 2006)

## Opening Comments of the San Diego Regional Energy Office regarding the Staff Proposal for Performance Based Incentives and Other Elements of the California Solar Initiative

San Diego Regional Energy Office

May 16, 2006

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#### I. INTRODUCTION

The San Diego Regional Energy Office (SDREO) respectfully submits these opening comments on the Ruling issued April 25, 2006 by Administrative Law Judge Duda entitled, Opening Comments of the San Diego Regional Energy Office regarding the Staff Proposal for PBI and Other Elements of the California Solar Initiative. SDREO addresses the following sections of the staff proposal and May 9th modifications document.

- Section 2.2—Large System Incentives
- Section 2.4—Small System Incentives
- Section 2.5—System Size Adjustment
- Section 3—Incentives for Non-PV Solar Technologies
- Section 4—Incentive Level Trigger
- Section 5—Funding Levels
- Section 6.2—Nonprofit Administration for Small Systems
- Section 7.3—Net Energy Metering
- Section 8—Energy Efficiency Requirements

#### II. SECTION 2.2—LARGE SYSTEM INCENTIVES

SDREO supports the PBI Hybrid Approach. SDREO, as part of the SGIP Working Group Program Administrators, filed joint comments January 3, 2006 that supported shifting to

Performance Based Incentives (PBI) beginning with implementation of a hybrid structure.<sup>1</sup> SDREO continues to believe a transition to a fully performance based incentive will help avoid disruption in the market for large solar installations. The 3-year transition the staff proposes is suitable.

#### III. SECTION 2.4—SMALL SYSTEM INCENTIVES

#### A. Verification for Projects 30-100kW:

The staff proposal states that all systems 30-100kW must have a post-construction inspection to verify the accuracy of installer data submitted in the original application. The EPBB incentive payment will be based on the verified information. The current SGIP inspects all systems prior to incentive payment. SDREO agrees that projects 30kW-100kW that would have been required to receive an inspection through SGIP should continue to be inspected in the CSI program.

In addition to performing the required post-construction inspections, SDREO currently requires that 100% of SGIP systems install a dedicated 15-minute net generation output meter. This has allowed SDREO to provide 100% output data to our M&E consultant. This can also enable the program administrator or state to analyze a wide set of SGIP data for program performance. With regard to SDREO overall administrative costs, the cost of installing net-generation output metering equipment in addition to the required inspections has been minimal. SDREO believes the additional time needed to determine the Verified System Rating using metered data would not add a significant administrative burden.

#### B. Verification for Projects Smaller than 30 kW

For residential projects, SDREO agrees with the Staff Proposal and does not think it is necessary or worth the administrative cost to perform 100% site inspections. We agree with the Staff Proposal idea for random sampling verification. We further support the use of a higher

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<sup>&</sup>lt;sup>1</sup> R.04-03-017. SGIP WG PA Comments on the CSI, Section 11, Jan. 3, 2006.

percentage pool of random inspections for any installers for whom a downward adjustment has to be made based on verified performance. SDREO believes it is essential for consumer confidence that minimum performance standards exist for both solar equipment and installation.

To ensure that a system is installed in accordance with local ordinances and in addition to the random inspections of residential systems, SDREO recommends that the CSI program require both a final building permit and a letter granting permission to operate. With these documents we know that the local permitting agency (City or County) has inspected the system for code compliance and the local utility has authorized the system for interconnection and operation. In other words, we know the system is installed. They may not count modules and check equipment brands, but the possibility of significant fraud is greatly minimized.

SDREO is pleased to see a performance component added to the small system category, similar to what we and the SGIP WG suggested in earlier comments. The EPBB infuses a minimum performance standard to the smaller systems. SDREO would supplement these conditions with two additional stipulations:

- 1- Systems under 30 kW could include metering in order for customers to determine the amount of energy produced by their systems. Many inverters on the market are capable of providing this data; additionally the CEC currently lists a number of performance meters on their website that could be used.
- 2- In order to obtain more robust data on smaller systems, we would suggest that the Commission require CSI participants to allow for collection of 12 months of performance data on the system. The EPBB will still be paid after the first 30 days, but the opportunity to analyze a full year of data for weather, equipment, directional and other attributes would help with future program adjustments needed to ensure CSI goals are being met.

#### IV. SECTION 2.5—SYSTEM SIZE ADJUSTMENT

SDREO agrees with the Commission's recommendation to revise solar system size limit based on 100% of historical annual energy consumption. SDREO would add one caveat to this

restriction regarding imminent future load growth. If a facility has capital improvement plans or other such documentation showing that its load growth will be increasing due to building additions, then SDREO believes that program participant should be able to size their system with their expansion in mind. In the past, SDREO and the other SGIP Program Administrators have required applicants to provide an engineering estimate including building load simulation program reports and/or Applications for Service with corresponding equipment schedules. With regard to non-solar system size issues, SDREO recommends that the Commission address this as part of its larger discussion of non-solar SGIP.

#### V. SECTION 3—INCENTIVES FOR NON-PV SOLAR TECHNOLOGIES

#### A. Solar Water Heating not Included as an Energy Efficiency Measure

Currently, solar water heating is not considered to be an energy efficiency measure by California IOUs. During the Program Advisory Group (PAG) meetings in the San Diego Region, this technology was studied and a report was produced that included solar hot water as a potential measure for reaching energy savings. However, it is our understanding that this technology remains untapped by PGC funded energy efficiency programs at this time.

#### B. Solar Thermal Pilot Program

In the CSI staff proposal workshop held May 4, participants expressed interest in the pilot solar water heating program that SDREO was directed to develop. The January 12, 2006 CPUC Decision 06-01-024 – Interim Order Adopting Policies and Funding for the California Solar Initiative, directed SDREO to file with the Commission a proposed program implementation plan for an 18-month Solar Water Heating (SWH) Program within the SDG&E Service Territory, set to begin January 1, 2007.

The Decision stated that this program may be evaluated after 12 months to determine if it should be continued and expanded statewide. One of SDREO's proposal recommendations is for the CPUC to consider a statewide SWH program. As part of the pilot development, SDREO

held a public workshop on March 21, 2006 in San Diego to outline the program and receive stakeholder input. The proposed program has been distributed for review to workshop participants and other stakeholders that expressed interest, including attendees at the May 4, 2006 CSI workshop in San Francisco. SDREO will submit the SWH Program proposal to the CPUC on May 24, 2006 and we will distribute it to the R.06-03-004 service list that same day.

#### C. Combination renewable/fossil technology systems

It is SDREO's understanding that the CPUC is currently addressing combined solar and non-solar technologies with regard to net energy metering through Advice Letters from each of the IOUs.<sup>2</sup> We are also aware that the City of San Diego filed a protest of these Net Energy Metering Combined Technology (NEM-CT) Tariffs in the Advice Letters.<sup>3</sup> If appropriate, SDREO would recommend that the Energy Division look to the outcome of this protest investigation regarding metering of multiple SGIP technologies at one location.

#### VI. SECTION 4—INCENTIVE LEVEL TRIGGER

SDREO recommends that the CSI apply a rebate reduction trigger that is based on statewide cumulative MWs of Conditional Reservations.

#### A. Administrative Mechanism to Oversee Rebate Adjustments

If in the final Decision, the CPUC approves a 10% (bi)annual trigger reduction at set dates, then SDREO sees no reason for additional administrative measures to enact that change. The CSI Program Administrator can reduce the rebate on set dates as per CPUC decision. The use of a trigger and the predetermined dates should be prevalently displayed on the CSI Program Administrator website and CSI program materials for maximum transparency to applicants.

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<sup>&</sup>lt;sup>2</sup> Net Energy Metering Combined Technology (NEM-CT) Tariffs. SDG&E Advice Letter 1777-E dated Feb. 27, 2006, SCE AL 1979-E dated Feb. 22, 2006, and PG&E AL 2793-E dated Feb. 27, 2006.

<sup>&</sup>lt;sup>3</sup> Office of the City Attorney, City of San Diego, March 13, 2006.

For changes in the rebate level (whether up or down) outside of predetermined dates, we recommend that an ALJ ruling based on staff recommendation and public comment be used. This way a transparent and open process for deliberation is maintained. SDREO also supports providing adequate advanced notice of any unscheduled rebate reductions.

#### B. Solar Program Dropouts and Reduced Incentive Implications

In the additional questions posed May 9, 2006, the Commission asked for comments on measures to reduce the level of project drop outs that tie up funds that can then not be used by others seeking that year's incentive level. The SGIP Program Administrators along with the Commission have grappled with this issue for years in SGIP. In SDREO's opinion, the most successful measure to address program drop outs has been the institution of an application fee. The SGIP requires an Application Fee to ensure Reservation Request received are for projects committed to promptly moving with forward upon receipt of the Conditional Reservation letter. The existing SGIP Application Fee (for PV systems greater than 30 kW) is refunded to the customer once the installation is completed, but is forfeited only if the project receives a Conditional Reservation and then withdraws prior to completion. Currently, the Application Fee is 0.5% of the requested SGIP Incentive Amount. As rebates continue to decline, the application fees will also decline and may no longer serve their purpose to ensure projects are committed. As the rebate declines, the Commission may want to increase the Application Fee.

Since the implementation of the Application Fee, the SDREO drop out rate has been reduced significantly. Once a Conditional Reservation has been granted, our drop-out rate has been reduced from 30% to 3% for projects that were required to submit Application Fees. The application fee has been an effective measure in reducing project drop out.

#### VII. SECTION 5-FUNDING LEVELS

#### A. Budgets accrued in Each Service Territory Should Stay in Each Service Territory

SDREO believes that the total amount of funds collected in a utility territory to support solar technologies should be spent in that territory. This ensures that the benefits accrue directly for the ratepayers that provided the funding. Further, the current SGIP is funded by distribution charges; since distribution is a local issue, SDREO recommends that funds remain at the local level. The CEC ERP did not make this distinction in funds allocated but we believe the CSI should. That way each region in the state will more fairly reap the benefits of solar.

#### VIII. SECTION 6.2—NONPROFIT ADMINISTRATION FOR SMALL SYSTEMS

The staff proposal states, "In order to limit the potential for conflicts of interest, an appearance for conflicts, and to minimize program costs, the solicitation should require that bidders be certified 501(c)(3) nonprofit or governmental organizations." SDREO agrees with Commission staff that administration of the CSI by a nonprofit, objective, public benefit corporation will result in a more efficient operation that is more closely aligned to customer needs and state sustainable energy goals. We believe that a nonprofit can manage this CSI program in a positive and effective manner, and we suggest a framework that could work for California based on our experiences as a nonprofit manager of local and regional solar, renewable, distributed generation and energy efficiency programs.

Nonprofits typically have positive relationships with the community. Through extensive educational and marketing efforts, programs, and services; nonprofits such as SDREO have developed widespread recognition locally. Additionally, nonprofits such as SDREO have fostered positive relationships with regional and statewide stakeholders including governments, schools, homeowners, businesses and the utilities.

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<sup>&</sup>lt;sup>4</sup> R.06-03-004: CSI Staff Proposal, April 25, 2006, page 45.

Because there is no "profit motive" nor any conflict of interest with various policies and technologies, nonprofits are generally well trusted by consumers. There exist nonprofits across the state including SDREO that are well staffed, experienced and very capable of expanding their activities statewide. Frequently in DG proceeding filings, non-utility commenters have voiced a preference for non-utility administration. Their reasoning has included the desire to ensure the success of the program by having it run by an entity that has a similar mission. We believe that a nonprofit model, with centralized administration, supplemented with a statewide alliance of smaller nonprofits, would be an effective structure for the CSI Small System Incentive Program.

Because SDREO believes that customers benefit from having a local contact, we foresee any nonprofit manager of CSI forming alliances with other nonprofits throughout the state that can provide education, outreach and program assistance in ways unique to a locality. By being closer to the customer, these regional networks can speak to localized issues and provide better customer service and quality review. Familiarity with local permitting processes, local utility requirements, and the availability to conduct local promotional activities; improve overall service to customers. But overall administration of the program should remain centralized to gain the benefits of increased efficiency. The entire CSI administrative system could gain from the combination of centralized and distributed workforce with the added benefit of the trust that a public benefit nonprofit has in the minds of potential consumers.

For full disclosure, we state that SDREO is a 501(c)3 nonprofit public benefit corporation that has administered and implemented energy efficiency and onsite generation programs funded by the CPUC since 2001. In addition, we have managed the US Department of Energy's Million Solar Roofs Initiative for the San Diego region since 1999.

#### A. CSI Program Administrator Selection Process

SDREO supports the Commission's proposed CSI non-IOU administrator selection panel, consisting of one representative each from PG&E and the CEC, and two members from Commission staff. As PG&E is the largest service territory with the largest number of solar

applicants, it is appropriate that they contract with the nonprofit, manage the RFP process, and are part of the final selection in consultation with an advisory panel.

SDREO also supports a proposed contracting method between a nonprofit and PG&E similar to contract existing between SDREO and SDG&E for the current SGIP. We comment on financial administration aspects later in this section.

#### B. Quarterly Interval for IOU transfer of Funds is Effective

Under the current SGIP program, SDREO receives quarterly forecasted payments from SDG&E to cover anticipated *administrative costs*. If a forecast is high, then SDREO reflects that credit in the following quarter's forecast request. To date, using quarterly forecasts, SDREO estimates have been within 0.67% of actual expenditures. SDREO believes that this is a suitable structure to ensure that a nonprofit administrator has adequate administration funds to meet program participant needs in a timely fashion.

With regard to *incentive payments*, SDREO continues to invoice SDG&E in real-time upon final approval of all incentive claim form documentation and a completed field verification visit. Under this financing structure, SDREO has been able to provide timely turnaround of rebates to program participants. To date, the SDREO turnaround time for all SGIP solar incentive payments averages 22 days. Since the implementation of 2005 SGIP changes, including adopting a straight \$/W incentive calculation and eliminating duplicative SDG&E administration efforts, SDREO's average decreased to 12 days.<sup>5</sup> While these changes have streamlined the incentive payment process, using quarterly forecasts for both *incentive payments* and *administrative costs* could further streamline the process.

SDREO first outlined the use of quarterly forecasted payment structure for SGIP in 2004 in the R.04-03-017 proceeding, and we believe this could be an effective structure between any nonprofit and IOU. In that proceeding, SDREO elaborated on over and under payment issues for forecasted incentive payments and administrative costs, stating how:

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<sup>&</sup>lt;sup>5</sup> R.04-03-017: SDREO Reply Comments on CSI, January 9, 2006, Section 4.

A forecasted quarterly payment arrangement would accurately match the interval payment to expenditures. If unanticipated project payment requests create a surplus of funds at the end of one quarter, SDREO would factor those funds into the estimated quarterly payment for the following quarter. This would minimize the potential for SDREO to retain significant unspent funds. A potential downside to this arrangement is if there were a significant number of projects completed early in a program year, SDREO would not have recovered enough funding to cover the rebates. This could be alleviated by asking applicants for an updated project completion date at proof of project advancement stage. Additionally, monthly reports would reflect early incentive claims. In this case, SDREO could submit a supplemental invoice [to the IOU] to cover these additional costs.<sup>6</sup>

#### C. Tax Implications from Non-Utility Management of a Utility Program

Title 26, Section 136 of the US tax code states that a subsidy can be provided directly or indirectly by a public utility. Funds for CSI and SGIP programs are derived from utility ratepayers and come from a utility. SDREO, a public benefit nonprofit, has been administering PV incentive programs since 2001, and at the time of this filing we have yet to experience any tax disincentives from our management of these energy programs.

SDREO believes that it's appropriate for the CPUC to seek an official determination from the IRS if this will assist in finalizing concerns on the matter. In addition, to address future tax questions, SDREO recommends that the CSI program materials provide links to relevant tax-related information. SDREO's website currently provides links to several reports and fact sheets on tax treatment for solar.

For >30kW projects under the SGIP, the program's "Reservation Confirmation and Incentive Claim Form" used by each administrator (PG&E, SCE, SoCalGas, SDREO) contains the following tax liability stipulation. The language was developed by the SGIP Program Administrators and utility legal teams.

"I understand that the incentives may be taxable and if greater than \$600, may be reported to the IRS unless I am exempt from reporting. The Program Administrator may

<sup>&</sup>lt;sup>6</sup> R.04-03-017: Comments of SDREO in response to ALJ Malcolm's ruling Requesting Comments on Energy Division Recommendations to Improve the SGIP and Implement Assembly Bill 1685, July 23, 2004, Section 2.7, pages 9-12. Additional comments were made in SDREO's November 15, 2004 comments on SGIP.

report such rebate payments on IRS Form 1099 unless I have checked corporation or exempt tax status above. You are urged to consult your tax adviser concerning the taxability of rebates. Program Administrator is not responsible for any taxes that may be imposed on you or your business as a result of your receipt of this rebate."

To date, SDREO has not identified an applicant that might necessitate the issuance of a 1099 form under SGIP. As for the other SGIP Administrators, it is our understanding that they have only issued a 1099 to an applicant if it did not meet the criteria of being tax exempt or a corporation.

SDREO is continuing to review the tax-related questions and has sought expert opinion regarding the issues raised at the May  $4^{th}$  workshop and by the Energy Division. Whatever findings we receive will be shared with the Energy Division.

### D. Regardless of an Administrator Determination, the Commission can Address Necessary CSI Online Tools and Uniform Statewide Database this Year

SDREO recommends that a statewide online application tool and uniform statewide database be identified and developed with Energy Division guidance during Phase II, regardless of a CSI program administrator determination. SDREO is concerned that under the current timeline for choosing an Administrator (utility, nonprofit or non-utility for-profit) may not allow for sufficient time for an administrator to bid, review and ramp up these essential program tools.

SDREO recommends that the Commission direct Energy Division staff, in consultation with an advisory committee, to seek a bid on a statewide online system concurrently with the second staff proposal timeframe. This would allow for adequate bid and review time for necessary statewide internet and data acquisition measures and provide opportunity for parties to provide input to the process prior to 2007. Regardless of the administrator chosen, the Commission can then direct them to implement the approved statewide data collection and application system.

A properly implemented, Internet accessible, user-friendly statewide database could streamline the application process, administration and data collection activities. Applicants

could use this online tool to download and submit program documents (such as the handbook, reservation request, incentive claims, etc.) as a "one-stop" shop while Program Administrators use the database for project management, monthly reporting and data collection activities. A shift to a statewide database could also provide an opportunity to integrate other program tracking functions like system performance.

#### IX. SECTION 7.3—NET ENERGY METERING

Page 51 of the CSI Staff Proposal states: "Utilities are required to file estimated cost impacts for providing net energy metering to accommodate CSI participants, up to 3,000 MWs." On page 52, the staff proposal continues to state that policymakers require more information regarding the costs and benefits to subsidize up to 3,000 MW through net metering.

SDREO believes that cost impact assessments should be conducted by independent parties as well. For this reason, in April we have submitted an abstract to the CEC to conduct an analysis of cost shift issues related to NEM for solar. Our proposal was specific to the San Diego region, but an independent assessment of costs and benefits would be useful across the state and could further benefit the CPUC's development of cost-benefit methodology.

#### X. SECTION 8—ENERGY EFFICIENCY REQUIREMENTS

SDREO supports the addition of an energy efficiency audit as a hurdle to entering the CSI Program. To assist and educate potential program participants, the CSI website should contain a step-by-step flow chart to entering and maneuvering the CSI application process. As part of this, a section on energy efficiency could be prominently displayed. This section can explain the energy efficiency audit requirement and provide links and contact information to no and low-cost audits as well as rebates/incentives provided through CPUC funded energy efficiency programs. This CSI website section could also serve to educate potential participants on the financial, environmental and energy saving benefits of typical energy efficiency measures. This could include an example calculation of how energy efficiency improvements could offset the equivalent purchase of additional solar panels.

The CPUC and CEC have placed energy efficiency at the top of California's preferred loading order and as such energy efficiency measures should be integrated within state energy programs wherever possible. If a potential CSI participant can first reduce their energy consumption through efficiency, a smaller PV system could be installed. This would reduce their project costs, stretch CSI incentives across more projects, and in the near term free up additional panels, which are currently a scarce commodity, for California projects.

For CSI participants that have performed an energy efficiency audit that was not part of existing CPUC or CEC funded energy efficiency audit programs, SDREO recommends that these participants enter their energy audit results in one of the free online energy efficiency audit tools (to be linked from the CSI website) and have an approved audit form supplied.

We agree with the Commission that applicants that have received an energy audit within 3 years of the CSI application date and can show proof of the assessment should not be required to undergo another audit. We also agree with the Commission that any new building (residential or commercial that had to meet Title 24 requirements within 3 years) should also be considered energy efficient. Special exceptions could also be given to buildings designated Energy Star® or LEED® certified. Residential or commercial buildings that have received these designations within 5 years of the CSI application should not be required to undergo an energy audit.

SDREO recommends that the CPUC and CEC along with CSI Program Administrators assess the energy efficiency audit component of the program after 12 months and determine if any additional measures must be taken to better integrate these program components. The assessment could address cost issues, potential consequences to sites that do not qualify for a no or low cost audit within current energy efficiency programs, and identify if any participants may have been negatively impacted by required audits.

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#### XI. CONCLUSION

SDREO appreciates the opportunity to provide comment on the CSI staff proposal. We look forward to actively participating in the further development of the California Solar Initiative.

SDREO strongly supports the development of a long-term and predictable state solar program.

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R.06-03-004

#### CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of these *Opening Comments of the San Diego*Regional Energy Office regarding the Staff Proposal for Performance Based Incentives and Other
Elements of the California Solar Initiative on all known parties of record in this proceeding by delivering a copy via email to the current service list.

Executed on May 16, 2006.

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