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04-21-08
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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.	Rulemaking 08-03-008 (Filed March 13, 2008)

ASSIGNED COMMISSIONER'S RULING REQUESTING COMMENTS ON PROPOSED ENERGY EFFICIENCY MEASURES FOR THE CALIFORNIA SOLAR INITIATIVE PROGRAM

1. Summary

This ruling solicits comments from interested parties on a proposal to modify the current energy efficiency requirements for existing residential and commercial buildings as a condition of receiving incentive payments for solar installation under the California Solar Initiative (CSI) program. The proposal does not apply to low-income households. The comments will be used to develop the record for this part of the proceeding.

2. Background

In Decision (D.) 06-01-024, the Commission required energy efficiency audits of the existing buildings as a precondition of receiving CSI incentive payments. The Commission also indicated that it was interested in exploring whether it should require energy efficiency improvements in existing buildings as a condition of solar incentive payments. Before the Commission could address this issue, Senate Bill (SB) 1, Stats. 2006, ch. 132, was signed into law, adding Section 2851(a)(2)(C)(3) to the Public Utilities Code. Section 2851(a)(2)(C)(3) provides that:

> By January 1, 2008, the commission, in consultation with the State Energy Resources Conservation and Development Commission, [the CEC] shall require reasonable and cost-effective energy efficiency improvements in existing buildings as a condition of providing incentives for eligible solar energy systems, with appropriate exemptions or limitations to accommodate the limited financial resources of low-income residential housing.

SB 1 also added Section 25782 (b)(3) of the Public Resources Code, directing the CEC to establish appropriate energy efficiency improvements in the new or existing home or commercial projects applying for ratepayer-funded incentives for solar energy systems.

To conform to this new law, the Commission issued D.06-12-033, which established interim audit protocols and requirements for existing buildings as a condition of receiving solar incentives until reasonable and cost-effective energy efficiency improvements and exemptions for low-income residential housing are identified in consultation with the CEC, in compliance with SB 1. To date, the CSI program has used online, telephone, or paper audits offered through the investor-owned utility energy efficiency programs to satisfy this requirement.

On December 19, 2007, the CEC adopted "Guidelines for California's Solar Electric Incentive Programs Pursuant to Senate Bill 1" (hereinafter, CEC Guidelines), which among other things, established minimum energy efficiency requirements for all buildings as a condition of receiving solar incentives, to be met by January 1, 2008, and additional requirements to conform to by January 1, 2009. Specifically, the CEC Guidelines established further details regarding energy audit, information and disclosure requirements, and required benchmarking[1] of energy use intensity (EUI) for existing commercial buildings. The CEC Guidelines also require retro-commissioning[2] and commitments for energy efficiency improvements for commercial buildings that are 100,000 square feet (sq. ft.) or larger, but exempt customers receiving performance-based incentives (PBI) and certain industrial facilities from the retro-commissioning or the benchmarking requirements (see CEC Guidelines, p. 25.).

By a ruling on January 15, 2008, the Commission took official notice of the CEC Guidelines and directed the CSI Program Administrators (CSI PAs) to ensure that as of January 1, 2008, all CSI incentive applicants comply with the minimum requirements of Chapter 2 of the CEC Guidelines. The ruling also directed the CSI PAs to prepare changes to the CSI Program Handbook as necessary to conform to the requirements of CEC Guidelines for January 1, 2009. The ruling notified parties that the Commission intends to engage in further review of energy efficiency requirements as required by SB 1 in a subsequent phase of this proceeding or a successor proceeding.

Given the requirements of Pub. Util. Code § 2851(a)(2)(C)(3) to require cost effective and reasonable energy efficiency measures in existing buildings as a condition of receiving solar incentives, the Commission is soliciting comments on the following proposal as described in more detail below.

- For existing residential buildings and existing commercial buildings under 100,000 sq. ft., two options are offered:

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1 Benchmarking is a process by which the energy use of a building is compared to the energy use of a population of similar buildings.

2 Retro-commissioning is a process to identify how major energy using equipment are being operated and maintained and to identify specific improvements to the performance of those energy using systems.

Option A - Enhanced Audit and Customer Acknowledgement

This option would require CSI applicants to obtain an enhanced energy audit of their buildings and sign a disclosure.

Option B – Enhanced Audit and Efficiency Program

Participation – This option would require CSI applicants to select an energy efficiency measure or measures in addition to the enhanced audit and disclosure process by requiring participation in at least one energy efficiency program.

- For existing commercial buildings above 100,000 sq. ft, no additional requirement beyond CEC Guidelines would be required.

The proposal does not apply to the CSI low-income residential housing, because energy efficiency requirements for such customers are addressed in other parts of the proceeding. In D.07-11-045, the Commission established a single family low income solar program and as part of that program, required specific efficiency requirements for the low-income solar customers. Furthermore, the Commission is in the process of establishing a similar program for multi-family low income CSI applicants and will address the energy efficiency requirements for such customers in that part of the proceeding.

Comments on the proposal (including Option A and B) are due 20 days after the date of this ruling. Reply comments are due 10 days after the comments.

3. Proposed New Energy Efficiency Requirements for Existing Residential and Existing Commercial CSI Applicants

This section describes a proposal for meeting the energy efficiency requirements of Pub. Util. Code § 2851 for existing residential and commercial CSI applicants. The proposal addresses the objectives and guidelines, and sets forth requirements for 1) existing residential and existing commercial buildings under 100,000 sq. ft., and 2) existing commercial buildings greater than 100,000 sq. ft. For existing residential and existing commercial buildings under 100,000 sq. ft., the proposal offers two options. Option A would require an enhanced audit and customer acknowledgement of the audit results. Option B would require an enhanced audit and disclosure as in Option A and would additionally require proof of efficiency program participation. This ruling seeks comments on the proposal, including Option A and B.

A. Objectives and Guidelines: The proposal recommends that the new energy efficiency requirements should:

- comply with Pub. Util. Code § 2851(a)(2)(C)(3), which calls for " reasonable and cost-effective energy efficiency improvements in existing buildings as a condition of providing incentives for eligible solar energy systems, with appropriate exemptions or limitations to accommodate the limited financial resources of low-income residential housing."
- be simple and easy to implement;
- provide clear rules about the CSI and energy efficiency requirements to avoid customer confusion;
- draw on the availability of energy efficiency programs or measures that already exist in the utilities' energy efficiency portfolios to the extent possible;
- allow flexibility to CSI applicants to select the energy efficiency measures that best meet their energy efficiency needs;
- avoid placing unreasonable burden or creating barriers for the applicants and the CSI PAs;
- avoid requiring unreasonable administrative burden for the CSI PAs or the Commission; thus discouraging solar installations.

B. Proposed New Energy Efficiency Requirements for Existing Residential Buildings, and Existing Commercial Buildings under 100,000 sq. ft.

For these buildings, the proposal offers the following two options:

i. Option A - Enhanced Audit and Customer Acknowledgement

Option A requires an enhanced energy audit and disclosure for all existing residential and commercial buildings, and benchmarking for existing commercial buildings. D.06-12-033 established interim audit protocols and audit documentation requirements for existing buildings. Currently, utilities perform an energy audit for all CSI applicants. Customers are responsible for submitting a copy of a completed energy efficiency audit to the CSI PAs with their solar incentive applications. These audits and disclosure reports are not necessarily consistent across utilities. They provide information about the energy usage of the applicants' homes or businesses and identify energy efficiency options that customers may choose to install or implement in their buildings. The CSI PAs also include generic information about energy efficiency options in their CSI program marketing materials. However, it is important to provide more detailed information to customers on how energy efficiency measures could contribute to reduction in the customer's electric load and possibly decrease the size and the cost of the customers' CSI proposed solar system. This type of information and other important data such as customer load profile are missing from the current audits but could be provided to help CSI applicants with CSI system sizing decisions.

Option A would require an enhanced energy audit and disclosure report that would provide customers with estimated net savings and expenses from efficiency improvements and investments along side solar investments, in addition to the disclosure requirements listed on pages 22 and 23 of the CEC

Guidelines. The enhanced audit report also would provide detailed information about utility energy efficiency programs options available to the customer. The enhanced audit and disclosure report would take into account the home or the site's energy characteristics and provide information about utility energy efficiency program options applicable to the customer's circumstances. The disclosure also would provide information on the utilities' energy efficiency and CSI incentives. CSI applicants would be required to sign a statement confirming that they have read the audit reports and are aware of all the reasonable and cost effective energy efficiency measures that could affect the size and cost of their proposed CSI solar system. If Option A is adopted, the CSI PAs would submit an Advice Letter to the Commission for approval of the audit and disclosure forms, including a streamlined and automated method to register CSI applicants who complete the audit, return the signed statement, and meet the program requirement.

In addition, to ensure consistency throughout the CSI program, Option A would require the audits be standardized across all utilities and audit options (e.g. online, phone and or paper) , as well as disclosure format.

Existing commercial buildings under 100,000 sq. ft. must still undergo benchmarking as described in the CEC Guidelines.

Administration

The CSI PAs would continue their existing role in ensuring that the CSI applicants receive information about the CSI energy efficiency requirements as a prerequisite for program participation. The CSI PAs would also be required to verify that a CSI applicant has completed the necessary audit and disclosure and submitted it with the application.[3] In any case, the solar installer should not be solely responsible for providing the information to the program participant. Customers may choose to partner with energy installers or third party consultants who utilize the standardized energy efficiency audit. Upon receipt of confirmation by the CSI PAs that the audit and disclosure are complete, CSI applicants would be eligible to advance in the application process.

ii. Option B - Enhanced Audit and Efficiency Program Participation

Option B also requires all CSI applicants to undergo an enhanced energy audit of their facilities, sign a disclosure form, and benchmark all exiting commercial buildings. In addition, Option B would require CSI applicants to commit to participate in at least one utility energy efficiency program. The CSI applicants would be required to choose one or more energy efficiency measures from the respective utility's energy efficiency programs and incorporate the energy efficiency improvements into their buildings.

As expressed in the Energy Action Plan, energy efficiency should be considered as the highest priority resource, even in advance of any investments in distributed generation technologies. Consistent with this policy and Pub. Util.

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[3] The Commission is considering establishing a coordinated marketing, evaluation, and outreach effort across utility territories and consumer demand side options. In D.07-10-032, we directed the utilities and third parties to expand their current efforts to achieve the following goals:

" 1- Coordination of related marketing, education and outreach programs, such as incentives for solar and other distributed generation installations, demand response programs, conservation and low income programs."

This effort may result in additional or different responsibilities for the CSI PAs. Such revisions to CSI PAs role could be addressed later if necessary.

Code § 27851(a)(2)(C)(3), Option B would require energy efficiency investments as a condition of receiving CSI incentives. However, to ensure that this requirement does not create unnecessary barriers to program participation for the CSI applicants, a high degree of flexibility would be applied.

CSI applicants would be required to continue to obtain an enhanced audit of their buildings, and also demonstrate that they participate in one of the electric utilities' energy efficiency programs as a condition of receiving CSI incentives. While Option B does not mandate a particular energy efficiency measure or program, it recommends the CSI applicants rely on the audits in determining what energy efficiency actions to pursue. The audits reveal important information about the energy efficiency potential of a home or a facility, and can be used as tools to educate the CSI applicants of the benefits of installing energy efficiency investments in applicants' buildings. Audits could also help identify the specific energy efficiency measures that would result in energy savings for customers. Under Option B, the CSI PAs are required to provide directions on how to obtain an audit as well as a list of the applicable electric utilities' energy efficiency programs available to all CSI applicants as part of the CSI applications.[4] The list should indicate available measures whose installation and operation would result in a reduction of a customer's energy use. For example, residential CSI customers should receive a list of all utility energy efficiency measures available to the residential customers and similarly, commercial customers should receive a list of all utility energy efficiency measures for commercial customers in the service territory.

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[4] A list of all available energy efficiency programs for each utility is posted on the utilities' web sites.

To provide maximum flexibility to CSI applicants, applicants should be allowed to select one or more of the energy efficiency programs from this list or to undertake an energy efficiency measure identified in the energy audit. However, CSI program information should encourage existing homeowners to give priority to improvements to lighting, refrigerators, and air conditioning which account for most of the energy consumed in California homes. Existing homeowners should also be encouraged to take advantage of utilities' energy efficiency programs such as discounted energy efficiency products or on-line rebates for certain energy efficient products. Information about low-cost efficiency options should be available to CSI applicants through the utility energy efficiency program.

CSI applicants would be encouraged to consider and pursue as many feasible energy efficiency measures as reasonable and practicable to help optimize the energy performance of their homes and buildings. There may be cases where the CSI applicant cannot participate in any of its selected utility energy efficiency programs, because those particular programs may be unavailable or there is no energy efficiency program suitable for that particular home or business. This will likely require that the CSI PAs work with the CSI applicants to choose other existing and available energy efficiency practices.

Installation Requirements

To maximize the benefits of energy efficiency investments, the energy efficiency measure savings must be incorporated in the sizing of the solar system (adjusted for energy savings resulting from the energy efficiency measure), and installed prior to solar installations. However, this strategy may not be practical in all cases. Some energy efficiency measures may require a longer time to implement or may have a future effective date. So as not to be disadvantaged by the additional time required to install some energy efficiency measures, the proposal would dictate that the CSI applicants receive 90% of the CSI incentive payments for their solar system until their selected energy efficiency system improvements are fully installed and are operable. The CSI applicants should have one year from the installation of their solar systems to incorporate the energy efficiency measures into their homes and businesses and become eligible to receive full incentives payments. The one year implementation would allow additional time for the installation of energy efficiency measures and enable customers to receive substantial CSI incentives while the energy efficiency measures are being installed in their properties.

Administration

The CSI PAs would continue their existing roles in ensuring that CSI applicants receive information about the CSI energy efficiency requirements and utility energy efficiency programs with their CSI applications. The CSI PAs would also ensure that all necessary paperwork is received before the CSI applicant would be eligible for full incentive payments.[5] The paperwork would

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[5] The Commission is considering establishing a coordinated marketing, evaluation, and outreach effort across utility territories and consumer demand side options. In D.07-10-032, we directed the utilities and third parties to expand their current efforts to achieve the following goals:

" 1- Coordination of related marketing, education and outreach programs, such as incentives for solar and other distributed generation installations, demand response programs, conservation and low income programs."

This effort may result in additional or different responsibilities for the CSI PAs. Such revisions to CSI PAs role could be addressed later if necessary.

require the CSI applicant to demonstrate participation in an energy efficiency program or installation of an energy efficiency measure.

Under Option B, solar installers who have an existing business relationship with the CSI applicants would assist the applicants in implementing the energy efficiency requirement measures. Although installers may not have direct experience with delivering energy efficiency measures, they would be in the best position to perform or otherwise arrange for this task, because they are the most familiar with the applicants' solar projects and the CSI program itself, and can coordinate with the CSI PAs as necessary. This would provide a single point of contact for the CSI applicants for both the solar and the energy efficiency needs, and achieve added efficiency in the process. Solar installers would submit proof of installation of energy efficiency measures to the CSI PAs upon completion of the energy efficiency improvements in the CSI customer's property. Upon receipt of confirmation by PAs, CSI applicants would be eligible to receive the remaining 10% of the CSI incentive payments. The handbook and the CSI applications would also be revised to indicate this process.

Cost Effectiveness

The Commission would deem all energy efficiency measures from utilities' programs that are obtained in accordance with this proposal cost effective, because the energy efficiency measures selected by the CSI applicants are part of the utilities' existing energy efficiency portfolios that must meet a dual cost effectiveness test for compliance. In addition, employing any energy efficiency measure reduces the customer's electric load and may result in a better-matched solar system size, which enhances the economics of the energy efficiency investment and contributes to its overall cost effectiveness.

C. Proposed New Energy Efficiency Requirements for Existing Commercial Buildings above 100,000 sq. ft.

The CEC Guidelines require existing commercial buildings greater than 100,000 sq. ft. with a benchmark rating of less than 75 to undergo retro-commissioning. Because implementing this requirement would necessitate employing equipment adjustment, repairs or the installation of energy efficiency measures to move a building's rating towards a 75 rating, no additional energy efficiency measures would be required of these particular CSI applicants.

D. Questions

Parties should comment on the following questions:

General Questions:

1. Which option best meets the requirement of Pub. Util. Code § 27851(a)(2)(C)(3) and why?
2. Which option do you prefer and why?
3. To what extent do solar installers currently advise, encourage, or otherwise facilitate the deployment of energy efficiency in existing buildings?
4. What type of information should be included in the enhanced audit and disclosure report to help CSI customers with their CSI system selection?
5. Would the enhanced audit and disclosure require substantial additional costs? If so, how should the Commission address that?

Questions on Option A:

1. Is Option A reasonable in terms of administering the CSI program?
2. What information should be tracked and examined in order to evaluate the effectiveness of the energy audit tool and disclosure report? (see examples below)
   a) What constitutes as "reasonable and cost-effective" by the majority of consumers?

b) What specific energy efficiency improvements consumers make?

c) What size solar systems consumers purchase (broken down by their disclosure reports)?

d) The relationship between information-sharing and consumer behavior.

e) If existing energy efficiency programs meet CSI consumers needs.

f) The duration of time needed for energy efficiency improvements and how that relates to the timeline for installing solar.

g) Energy efficiency savings achieved from measures installed as a result of the CSI program.

3. How can the enhanced audit and disclosure best provide customers with information to properly size their solar system without unnecessarily delaying the CSI application process?

4. Can an enhanced audit and disclosure program be standardized across all utilities and audit formats?

5. Would it be reasonable to adjust the maximum system size for which an applicant is eligible to receive CSI incentives based on an estimate of the load impacts of some of the energy efficiency measures identified through the audit process (currently historical load is used to size maximum eligible system size)?

Questions on Option B:

1. Is Option B reasonable in terms of administrating the CSI program?

2. Is one year an appropriate amount of time for the installation of the selected energy efficiency measures?

3. Is it appropriate to pay 90% of the CSI incentive payments until energy efficiency measures are fully installed and operable?

4. What energy efficiency measures should be required if CSI applicants cannot participate in the utility energy efficiency

programs of their choice because the programs are unavailable or not feasible?

5. Should the Commission require that the energy efficiency measures be limited to those in the utilities' energy efficiency programs or should the Commission allow applicants to choose other individually-preferred actions?
6. Should the Commission consider developing a list of highly cost effective measures, for example, from the Database for Energy Efficient Resources (DEER)[6] and mandating that CSI applicants choose an energy efficiency measure from that list without having to participate in a utility energy efficiency program?
7. How should the Commission address cost effectiveness in questions number 4, 5, and 6 above?
8. Is it reasonable to have the installers provide assistance on and provide proof of energy efficiency measure installation? If not, what alternatives are there?
9. Should the Commission require a field check or inspection of energy efficiency measure installations? Who should perform this verification inspection?
10. Should the Commission impose a penalty or take other action if it finds that the selected energy efficiency measures were never installed in Option B?
11. Should the Commission allow energy efficiency measures that were installed in the applicants' property prior to the applicant's CSI request be counted toward meeting the energy efficiency requirements of Option B? If so, how far back can the installation have occurred and still count toward the requirement?

[6] DEER is a database developed jointly by this Commission and the CEC, and funded by ratepayers.

12. Should the Commission exempt buildings that have complied with Title 24 within the past three years from the energy efficiency requirements under Option B?

Accordingly, **IT IS RULED** that:

1. No later than 20 days from the date of the ruling, parties may file comments on the above energy efficiency proposal, including Option A and B. Replies will be due 10 days after the comments.

2. The Commission's process office shall serve a copy of this ruling on the service list for Rulemaking (R.) 08-03-008 and the energy efficiency rulemaking R.06-04-010.

3. All further action on the topics of this ruling will occur in R.08-03-008. Those who are not parties to R.08-03-008, but wish to file comments on this ruling, shall request to become a party to R.08-03-008 prior to filing comments. Requests for party status shall be made as follows:

a. Attend the prehearing conference on April 22, 2008, OR by writing a letter or e-mail to the California Public Utilities Commission's Process Office (process_office@cpuc.ca.gov).

   CPUC - Process Office
   505 Van Ness Avenue
   San Francisco, CA 94102

b. Indicate Rulemaking 08-03-008 in subject line, and whether you intend to participate ("party") or monitor ("information only") – if you fail to specify, you will be considered "information only". Send a copy of your request to ALJ Dorothy Duda (dot@cpuc.ca.gov) and ALJ Maryam Ebke (meb@cpuc.ca.gov). Provide the following in your request:

   Organization Name
   Representative Name (only one representative per organization -- others from the same organization can request to be added as information only)
   Address (including city/state/zip)

Phone Number
e-mail address

c. Anyone who is granted party status but does not actively participate in the proceeding by providing comments, or attending workshops or hearings, may be moved to the "information only" category.

Dated April 21, 2008, at San Francisco, California.

/s/ MICHAEL R. PEEVEY
Michael R. Peevey
Assigned Commissioner

INFORMATION REGARDING SERVICE

I have provided notification of filing to the electronic mail addresses on service lists R.08-03-008 and R.06-04-010.

Upon confirmation of this document's acceptance for filing, I will cause a Notice of Availability of the filed document to be served upon the service list to this proceeding by U.S. mail. The service list I will use to serve the Notice of Availability of the filed document is current as of today's date.

Dated April 21, 2008, at San Francisco, California.

/s/ MICHAEL J. OLIVEROS
Michael J. Oliveros