

CALIFORNIA ENERGY COMMISSION

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November 3, 2010

DOCKET

09-SOPR-1

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Robert Raymer
California Building Industry Association
1215 K Street, Ste. 1200
Sacramento, CA 95814

Re: California Building Industry Association (CBIA) comments to "Solar Offset Program Pre-Rulemaking Draft Regulations" (Docket No. 09-SOPR-1)

Dear Mr. Raymer:

The California Energy Commission is in receipt of your letter dated September 29, 2010, regarding comments to the "Solar Offset Program Pre-Rulemaking Draft Regulations." Thank you for your input. We have reviewed your comments and addressed them below.

CBIA Comment:

Homebuyer Solar Option and Solar Offset Program

(Page 1) Section 2700 (3rd paragraph, last sentence): The last sentence concludes with the statement: "...*assuming 20% of the prospective homebuyers would have installed solar energy systems.*" The reference to "*prospective home buyers*" is somewhat confusing, especially the word "prospective." We would suggest deleting the phrase "prospective home buyers" and inserting the phrase "homes in the project" so that the revised sentence would read "...*assuming 20% of the homes in the project would have installed solar energy systems.*"

Energy Commission Response:

The express terms have been amended, and thus, the term "prospective home buyers" no longer appears in Section 2700.

However, as explained below in reference to Section 2703(a), the term "prospective home buyers" was chosen because that phrase is used in SB 1. PRC 25405.5(c) states "... assuming 20 percent of the prospective buyers would have installed solar energy systems." Staff wanted to be consistent with the language in the legislation; as such the term "prospective home buyers" remains in the regulations.

CBIA Comment:

(Page 2) Section 2701(j): The first sentence in the definition for “minimal shading” states: “*Minimal shading means that no existing, **planned, or potential** shading obstructions are closer than a distance of twice the height that the obstruction extends above the nearest point on the PV array.*” It should be clarified that the phrase “planned or potential” refers only to those items under the direct control of the developer/builder prior to the homes purchase. Without this clarification, the phrase, “planned or potential” could be interpreted to cover landscaping and or construction that take place post-purchase and to which the builder has no control.

Energy Commission Response:

Staff agrees with industry on this issue and has adopted industry’s suggestion for clarification of this definition.

CBIA Comment:

Homebuyer Solar Option

(Page 4) Section 2702(a)(1): The seller of production homes offering solar as an option will be required to provide certain information to the homebuyer, including the “*total installed cost*” of the solar energy system. We would respectfully request use of the following alternative language:

(1) *The total offering price of the solar energy system option.*

Energy Commission Response:

PRC 25405(b)(1) specifically states that the seller of a production home must disclose “the total installed cost of the solar energy system option” when making the offer for the solar energy system. Because of state statute, staff has included this language into the regulations.

CBIA Comment:

(Page 4) Section 2702(a)(2)(A): In the first sentence, it should be clarified that “the figures in Table 1 represent a range of expected annual kW and dollar savings from a 1kW solar energy system” **as calculated by the California Energy Commission.**

Energy Commission Response

Staff agrees with industry and has adopted industry’s suggestion on this section.

CBIA Comment:

(Page 4) Section 2702(a)(2)(B): This section does not appear to be regulatory language. Further, the data in Table 1 appear to be curiously high estimates of both kWh savings (which should be "production", not "savings"), and the Annual Dollar Savings are also potentially high, being calculated based on the upper rate-tiers. As such, industry respectfully requests the analysis showing how these numbers were calculated for each of the five utilities.

In addition, this table requires a disclaimer stating that the numbers are estimates based on {*insert description of method used to estimate*}, and that these are best-case values because they were calculated using optimal solar array efficiency, orientation, and tilt. It is important for the consumer to understand that their generation will be lower with different solar equipment and roof orientation and tilt. Further, this section should be clear that kWh savings and utility bill savings are a function of the net of solar production and overall energy use in the home.

Energy Commission Response:

Staff has altered the cost savings estimate table. Rather than list kWh generation and cost-savings by utility territory, the new table lists the information by climate zone. Staff has added disclaimer language in the table which states that actual solar performance can vary depending on system characteristics and solar insolation, and that cost-savings can vary depending on utility rates and electricity consumption.

Staff has released the analysis showing how the figures in the table were calculated as part of the documents relied upon during the rulemaking process. This information can be located at: www.energy.ca.gov/2010-SOPR-1/documents/index.html.

CBIA Comment:

(Page 4) Section 2702(b)(1): For clarity, it would be useful for the CEC to provide one or more examples of "Identifying information for the development."

Energy Commission Response:

The express terms have been amended such that a seller of production homes is now required to provide the following information:

"Legal description of the proposed subdivision identified on the Tentative Subdivision Map and, where applicable, the legal description of the portion or phase of the total area encompassed by the Tentative Subdivision Map that is covered by any Phased Final Map(s)"

CBIA Comment:

(Page 4) Section 2702(b)(2): With regards to specifying the "total number of planned homes", industry needs to know "over what period of time"? For example, a master planned community may have a 10-15 year build-out plan, and have a great many individual "phases". We suspect the CEC simply wants the related information on a given phase or consecutive phases.

Energy Commission Response:

The express terms have been amended such that a seller of production homes is now required to provide the following information:

"Total number of planned homes identified on the Tentative Subdivision Map and, where applicable, the total number of planned homes identified on the portion or phase of the total area encompassed by the Tentative Subdivision Map that is covered by any Phased Final Map(s)"

CBIA Comment:

(Page 5) Section 2702(b)(6): To be consistent with 2702(b)(1), this reporting requirement should be changed to: Average capacity (in AC kW) and average total option cost of solar energy systems installed in the reported year.

Energy Commission Response:

Staff agrees with industry and has adopted industry's suggestion on this section.

CBIA Comment:

(Page 5) Section 2702(c)(1): The CEC is request [sic] that "*the reported information shall be endorsed by a **principal** or **corporate officer** of the seller's company.*" While industry understands the need to verify this information, such endorsements should be (somewhat) similar to those required for the CF-1R and CF-6R energy efficiency compliance forms. For example, why not include the "sales agent" or "site superintendent"?

Energy Commission Response:

This annual reporting requirement is meant as verification that a seller of production homes is complying with the Homebuyer Solar Option program as specified in these regulations. As such, staff believes it is appropriate for a principal or corporate representative of the company to endorse the report.

CBIA Comment:

(Page 5) Section 2702(c)(2): This section states that *"The "solar as an option" disclosure shall be made available to the prospective home buyers at point of sale and on the seller's website."* Industry finds this language to be unclear as to what is required and when or where it is required to be available to prospective buyers. Industry recommends clarification that this statement refers to sales literature/written information and suggests the following language to replace the first sentence of this section:

Descriptive information regarding the "solar as an option" offer shall be made available to prospective home buyers both in the sales office and on the seller's website.

Energy Commission Response:

Staff agrees with industry and has adopted industry's suggestion on this section.

CBIA Comment:

Solar Offset Program

(Page 6) Section 2703(a): Same comment applies here as was given for Section 2700: In the last sentence, the statement is made "...*assuming 20% of the prospective home buyers would have installed solar energy systems.*" The reference to "prospective home buyers" is somewhat confusing, especially the word "prospective." We would suggest deleting "prospective home buyers" and inserting the phrase "homes in the project" so that the revised sentence would read "...assuming 20% of the homes in the project would have installed solar energy systems."

Energy Commission Response:

As explained above in reference to Section 2700, the term "prospective home buyers" was chosen because that phrase is used in SB 1. PRC 25405.5(c) states "... assuming 20 percent of the prospective buyers would have installed solar energy systems." Staff wanted to be consistent with the language in the legislation; as such the term "prospective home buyers" remains in the regulations

Further, Section 2703 has been amended to clarify a seller's obligations under the Solar Offset Program as follows:

"(a) To determine the number of homes to use for offset purposes:

- (1) The seller shall assume that "20 percent of prospective homebuyers" of planned homes identified on the Tentative Subdivision Map "would have installed solar energy systems";
- (2) If the Tentative Subdivision Map identifies less than 50 planned homes and the seller intends to file multiple Phased Final Maps, the number of homes

identified on the Tentative Subdivision Map will be aggregated with the number of homes identified on any Phased Final Map(s);

- (3) If the aggregate number of planned homes identified in the Tentative Subdivision Map and Phased Final Map(s) exceeds 50, then the number of planned homes identified on any subsequently filed Phased Final Map(s) will not be aggregated with the number of planned homes identified in the Tentative Subdivision Map or any previously filed Phased Final Map(s)."

CBIA Comment:

(Page 6) Section 2703(b)(3): The CEC is proposing that "offset solar energy systems are not eligible to receive an incentive from any California statewide incentive program or similar POU/IOU program under the California Solar Initiative." Industry does not agree with this proposal, nor do we understand why the CEC would suggest this. As long as the builder of the solar energy system complies with all of the related rules for obtaining the incentive(s), why should they be barred from receiving such funds solely because they are participating in the solar offset program? The financial feasibility of a solar energy project may well depend on the availability of the incentive funding. If that helps the project move forward, isn't that a win-win for all?

Energy Commission Response:

Staff has removed this restriction preventing offset solar energy systems from receiving incentives.

CBIA Comment:

(Page 6) Section 2703(b)(6): This section seems to be both overly complex and goes beyond Industry recall of the discussions and meetings leading to this document. This section specifies the capacity of the system, not annual generation, and is definitely not related to TDV. Industry submits that the required capacity should be 20% of the number of homes (from 2702(b)(2)) times 2kWac. Simply put; if a developer is planning on a 100-unit project, the calculation would be: **(100 homes x 0.20) x 2.0kWac = 40kWac.**

Energy Commission Response:

PRC 25405.5(c) specifically states that the offset solar energy system is required to generate an equal amount of electricity as would have been generated by the installation of solar energy systems on 20% of homes in the development that is being offset. Capacity of a solar energy systems cannot be used for the offset system requirement due to the phrasing "amount of electricity". To be consistent with the valuation of energy in the New Solar Homes Partnership (NSHP) and the Building Energy Efficiency Standards, staff recommends that the offset system requirement continue to be based on expected TDV energy. The use of expected TDV energy was

discussed at the May 20, 2010 Staff Workshop (slide 12, <http://tinyurl.com/2bauxbh>) and in the May 18, 2010 Staff Paper (page 7, <http://tinyurl.com/2834okk>).

CBIA Comment:

(Page 7) Section 2703(b)(9): With regards to the initial reporting requirement, there needs to be some manner of short term allowance that takes into account that these regulations will be approved more than 60 days after the start-up date of July 1, 2010. In addition, Industry finds item C, TDV calculations both irrelevant and onerous. The offset size should be reported in kWac being offset.

Energy Commission Response:

Staff agrees with industry and has made changes to this requirement that will allow for compliance within 60 days of the adoption of the regulations. Item C is discussed below.

CBIA Comment:

(Page 7) Section 2703(c): Industry does not see the need for this section at all and recommends deletion of this entire section. As stated in our recommendations for Section 2703(b), the offset should be in terms of capacity (kWac) not energy. The actual energy produced by homes in a community will be highly dependent on the orientation of roofs of the homes on which the solar systems are installed, the tilt of the roofs, and the type of system installed. It makes no sense to Industry that the offsetting system be required to produce energy equal to that which would come from solar systems with optimal orientation and tilt, and PV panels that are among the most efficient available today.

If, for some reason it is deemed necessary to develop a representative system, it should reflect the fact that roofs in communities have different orientations and tilts, and that the systems installed in different communities are not always going to be the most efficient panels available. In fact, these issues are contained in the definition section:

2701(p); "Reference Solar Energy System means a fictitious solar energy system representing the average solar energy system potentially installed under Homebuyer Solar Option ... "

The reference solar system in section 2703(c) does not reflect an "average solar energy system potentially installed under Homebuyer Solar Option. Rather, it reflects an optimal system installed on all of the 20% of homes. Further, it seems totally inappropriate to reference a specific manufacturers' products (solar cells and inverter) in this document. This has the appearance of recommendation of this product by the Commission.

As recommended for Section 2703(b)(6), the offsetting system should be rated by capacity not energy production, and the minimum capacity should be 20% of the number of homes (from 2702(b)(2) times 2kWac, and thus Section 2703(c) is unnecessary and should be deleted, and the reference to it in Section 2703(b)(6) should also be deleted.

Energy Commission Response:

As noted previously, PRC 25405.5(c) requires the offset equivalency calculation to be in terms of energy. In order to make the required equivalency calculation, assumptions must be made about the solar energy systems that would have been installed on the 20% of the homes in the development that is being offset. These assumptions are detailed in the section that CBIA suggests deleting. As discussed at the May 20, 2010 Staff Workshop (slides 12 and 13, <http://tinyurl.com/2bauxbh>) and in the May 18, 2010 Staff Paper (page 7, <http://tinyurl.com/2834okk>) these assumptions would mirror the NSHP California Flexible Installation criteria and use the PV modules and inverters that have been most commonly used in NSHP. Staff recommends continued use of these criteria, PV modules, and inverters for the offset equivalency calculation. Staff agrees that this might not represent the "average" solar energy system and will remove "average" from the definition of Reference Solar Energy System.

CBIA Comment:

(Page 9) Section 2703(d): Given that this section is in regards to Banking Offset Credits, requiring items #7, #8, #9, #10, #11, and #12 may be inappropriate since this information will probably not be known at the time the offset solar energy system is installed. These items should be clearly identified as optional inputs at registration of the system being banked, to be filled in as the banked credits are used. In addition items #13, #14, and #15 are extraneous and should be deleted (see comments above regarding Sections 2703(b)(6), and 2703(c).

Energy Commission Response:

Staff has re-organized the banking section of the regulations. The banking section is now divided into separate headings covering deposits, withdrawals, and calculations. Items 7 through 12, which industry mentioned, have been moved into a section covering withdrawals, specifying that the information is only required to be submitted when a withdrawal request is made.

With regards to items 13 through 15, staff has kept these reporting requirements, and the reasoning is explained above.

CBIA Comment:

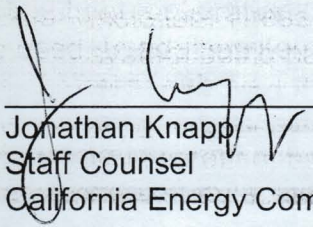
(Page 10) Section 2703(e): Industry does not see how this reporting requirement relates to the intent of SB1 and the Solar Offset concept and mechanics. This reporting requirement is an extra burden on the entity banking the solar credits and should be eliminated.

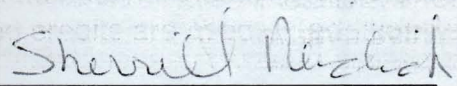
Energy Commission Response:

This section is intended to have the seller/developer show that the banked system is still in operation. If a offset solar energy system still has a positive balance in the solar offset bank, this requirement will show the Energy Commission that the system is indeed still in operation and is producing electricity relatively close to what it is expected to produce.

The proposed regulations have been submitted to the Office of Administrative Law and were published in the California Regulatory Notice Register on October 22, 2010, starting the 45-Day comment period. You can view the Notice of Proposed Action, Express Terms (45-Day Language) and the Initial Statement of Reasons, along with additional documentation regarding this rulemaking on the Energy Commission's website at: www.energy.ca.gov/2010-SOPR-1/index.html.

Again, thank you for your comments.


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California Energy Commission


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