

DOCKETED

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Letter re: revisions to NSHP GuideBook

Additional submitted attachment is included below.

January 20, 2017

Commissioner Hochschild
California Energy Commission
1516 9th St, Sacramento, CA 95814

Commissioner McAllister
California Energy Commission
1516 9th St, Sacramento, CA 95814

RE: New Solar Homes Partnership Guidebook Update

Dear Commissioners Hochschild and McAllister,

The Solar Energy Industries Association (SEIA) and the California Building Industry Association (CBIA) would like to express our sincere support for your pending efforts to update the New Solar Homes Partnership Guidebook. As indicated at the January 6, 2017 Workshop, both of our organizations strongly support the CEC's continued efforts to implement updates to the program which promote simplicity for the end-user and, and with one exception, we strongly support the certification of the changes being considered for this, the 10th edition of the Guidebook.

The one exception relates to the issue raised at the Workshop relating to the amount of solar which can receive incentive funding in those instances where solar is used as part of the design strategy for minimum compliance with California's energy efficiency standards.

Specifically, the 2016 Residential Energy Efficiency Standards requires a minimum 2.0kW size for a PV system when using the newly established PV compliance credit. However, in a great many cases, less than half of the power supplied by that 2.0kW system is actually needed to offset the maximum compliance credit that is allowed.

For example, in CZ 12 (Sacramento), approximately 0.6 kW of the required 2.0 kW PV system will be used for the compliance credit under the 2016 standards. In CZ 13 (Fresno), approximately 0.9 kW of the 2.0 PV system will be used for compliance credit. These two

examples were based on calculations which were done using the compliance budget for a 2,100 sq. ft. CEC prototype home in CZ 12 and CZ 13 and used the percentages and PV generation rates from the CEC ACM Reference Manual.

At the same time, the CEC is proposing to limit use of NSHP incentive funding for only that part of the PV system which exceeds the 2.0 kW minimum required by the 2016 residential energy efficiency standards. We feel it appropriate for the CEC to allow use of the NSHP incentive funding program to apply to that portion of the PV system which is not used to show minimum compliance with the 2016 energy efficiency standards. Use of this funds is particularly important given the remaining funding for this program and limited time within which these funds must be encumbered. One idea that should merit consideration is to extend the 2018 deadline to 2020. This will ensure NSHP dollars carry out its programmatic course, and also serve as a glide path to ZE homes by 2020.

We have included an attachment with this letter that provides further details on system sizing for code compliance and our assessment of the program's progress towards its funds being fully encumbered. It is our sincere hope that the CEC can address this technical disparity and still meet the goal of a March certification of the updated NSHP Guidebook.



Brandon Smithwood
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Solar Energy Industries Association



Robert Raymer
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California Building Industries Association

ATTACHMENT

For example, in CZ 12, approximately 0.6 kW of the required 2kW PV system will be used for compliance credit under the 2016 Standards. In CZ 13, approximately 0.9 kW of a 2kW PV system will be used for compliance credit. These calculations were done using the compliance budget for a 2100 sq. ft. CEC prototype home in CZs 12 and 13, and using the percentages and PV generation rates from the ACM Reference Manual, shown below. The “Maximum PV Credit for Single Family” is the maximum percentage of the TDV budget of the standard home that is allowed to be offset with PV. We believe funding solar investments above these benchmarks is fair and does not impact the NSHP overall budget even if the program extend to year 2020. This is discussed more below.

Table 1: PV Credit Calculation Factors

Climate Zone	PV Generation Rate (kTDV/kWdc)	Maximum PV Credit for Single Family	Maximum PV Credit for Multi Family
01	26762	8.4%	4.7%
02	30021	11.4%	5.3%
03	31137	7.9%	3.4%
04	30935	23.2%	9.9%
05	33490	8.6%	2.7%
06	30081	0.0%	0.0%
07	30701	0.0%	0.0%
08	29254	31.2%	9.0%
09	29889	25.2%	9.8%
10	30200	22.4%	9.1%
11	29693	17.8%	8.1%
12	29328	20.7%	9.0%
13	29553	19.5%	8.6%
14	31651	16.1%	7.7%
15	29177	16.2%	7.1%
16	30930	14.6%	7.4%

The NSHP program has a statutory deadline of June 1, 2018, which leaves 18 months of NSHP reservations left with a budget of ~\$125 Million available for reservations. Using \$0.50/Watt incentive, there would need to ~ 250MW of reservations by June 1, 2018, to encumber the \$125 Million. There are only ~202 MW reserved and installed to date, for the last 10 years. Even if the CEC incentivizes 100% of PV reservations, the CEC will leave unspent dollars on the table by the June 1, 2018, deadline.