DOCKETED

Docket Number:	15-BSTD-04
Project Title:	Residential and Nonresidential Software and related ACM Reference Manuals
TN #:	205750
Document Title:	SunPower Corporation Comments: Recommendation to Maintain Solar Credit as Currently Proposed for the 2016 Code Period
Description:	N/A
Filer:	System
Organization:	SunPower Corporation/Matt Brost
Submitter Role:	Public
Submission Date:	8/17/2015 8:59:44 AM
Docketed Date:	8/17/2015

Comment Received From: Matt Brost
Submitted On: 8/17/2015
Docket Number: 15-BSTD-04

SunPower Corporation Comments to Docket 15-BSTD-04

Additional submitted attachment is included below.

August 17th, 2015

Commissioner Andrew McAllister
California Energy Commission
RE: Docket #15-BSTD-04

Recommendation to Maintain the Solar Credit as Currently Proposed for the Entire 2016 Code Period

Dear Commissioner McAllister:

SunPower Corporation believes it is critical that the ACM Solar Credit not be altered or diminished in any way. The state of California and California ratepayers have invested heavily in the New Solar Homes Partnership (NSHP) program, and we risk setback and failure if we do not take this important step of giving solar meaningful credit in the 2016 Title 24 standards.

<u>Builders will use both HPA/HPW and the Solar Credit to achieve compliance</u>

The assertion that builders will not incorporate high performance walls (HPW) and high performance attics (HPA) because of the solar credit is misdirected. Builders will choose compliance methods based on a number of different factors (i.e., cost, project location, special requirements, product type, buyer demographics, design, etc.), therefore it is reasonable to believe that certain options will prevail in different situations. SunPower has customers today that build with both HPA and HPW and in some cases they use solar, and in other cases they do not. California builders will choose the options that are best suited to each project and we believe that no single method will dominate over the other. The solar code credit simply gives builders the flexibility and choice to decide, as well as the ability to mature their understanding of both solar and high performance wall and attic construction practices.

<u>Eliminating, sunsetting, or diminishing the solar credit will seriously jeopardize the significant progress made by the solar and building industries</u>

Similar to the tremendous success of the California Solar Initiative (CSI), the NSHP has created a vibrant solar market for residential new construction. Without the program incentives provided to homebuilders, we would estimate less than 1% solar penetration today. The CEC consultant report produced earlier this year reported a 35% solar penetration in single family homes in Southern California, and 8% in northern California. Without the NSHP and the incentives provided to the builders, this sort of market transformation would not be possible. Were we to evaluate the success of the program as of today, we believe the NSHP would be considered a major success story, one with very low free-ridership (if any), and one with measurable spillover effects in and out of California.

One of the primary purposes of ratepayer funded programs like the NHSP is to drive market transformation and bridge emerging technologies to code compliant technologies. The NSHP is in the process of creating lasting market transformation as builders continue to learn, test and adopt solar as a construction practice. However, the NSHP incentives are the primary reason they continue to use the technology, as there is no other driving force (i.e., code, local requirements, consumer demand, etc.) behind their actions.

It is possible that the NSHP funding will be exhausted in late 2016 and the entire program is scheduled to sunset in June 2018. Our concern is that without incentives or a meaningful code credit, builders will largely discontinue their solar programs and the industry (solar and homebuilding) will see a major setback. Some are advocating for a solar credit sunset date, but unfortunately a sunset date results in the same outcome as no credit at all. At some point, builders would no longer be incentivized (code, NSHP or otherwise) to install solar, causing an abrupt halt to industry progress just as we are about to embark upon the net-zero energy code. The industry cannot afford a major interruption to the transformative activities that industry participants are already engaged in at such a critical point in the process.

The solar industry, builders and key market actors require further maturity to deliver net zero in 2020

Through the support of the NSHP, solar companies, builders, builder trade partners (architects, engineers, roofers, electricians, etc.), code officials, realtors, lenders, appraisers, HERS raters, inspectors, and others have together made important learnings about how to deploy solar in new homes. However, much more effort is required to fully transform the residential new construction market to a sustainable net-zero energy environment.

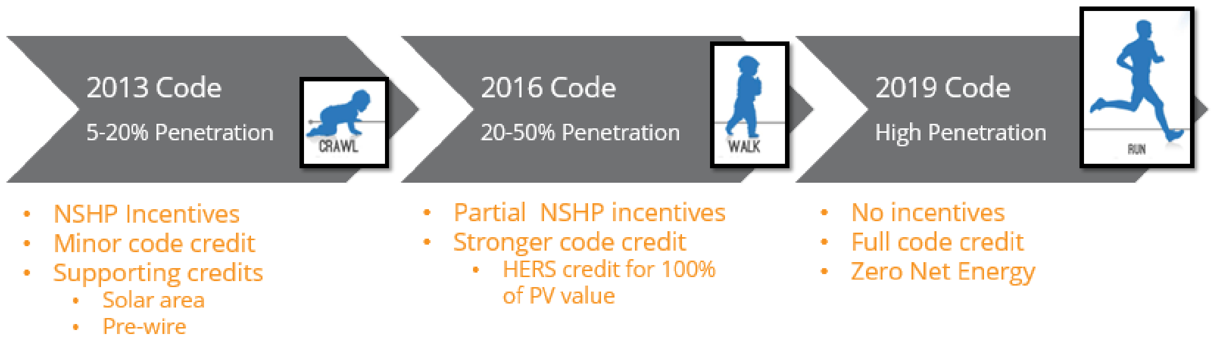
Today, for example, solar installation costs remain high, trained labor is difficult to find, permitting processes are not streamlined, architecture is challenging, inspectors are often confused and builders are still learning. However, real and measurable progress is being made in all of these categories, we simply have much more work to do. This progress can only be maintained by ensuring that builders continue to be motivated to incorporate solar into their forward planning decisions.

Alignment with 2015 International Energy Conservation Code

Although unrelated to California, it is worth noting that the most recent version of the International Energy Conservation Code (IECC), passed earlier this year, also allows solar to be used toward energy compliance. The newly adopted “performance method” gives builders full credit for solar generation to achieve lower HERS compliance scores. As the U.S. leader for energy code and renewables, California’s decisions are important to what happens in the rest of the country. Better alignment between Title 24 and IECC will lead to lower installed costs, lower risk, and faster market transformation. Although independent, alignment of priorities between CA Title 24 and the IECC will serve to strengthen the industry responsible for designing and constructing energy efficient buildings.

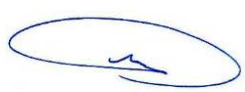
Conclusion

As was presented at the August 10 CEC hearing, the following illustration summarizes the central point. NSHP has been instrumental in allowing the building industry to “crawl” and achieve measurable market penetration by incentivizing the procurement and installation of solar. Although there were some 2013 T24 solar allowances (AC trade-off, roof area, prewire), they are not meaningful enough to drive builders to use solar absent the NSHP incentives. The 2016 T24 code cycle will run from January 1, 2017 to January 1, 2020, during which period the NSHP funding will be exhausted. In order for the industry to “walk”, it will require a meaningful credit, particularly if expected to “run” in 2020.



California has ambitious plans for all residential low-rise homes to be net zero energy by 2020. The NSHP has been tremendously successful in achieving early adoption of solar by builders and laying the groundwork for widespread adoption. However, the NHSP alone cannot carry solar to 2020. Therefore, the Title 24 code needs to provide a meaningful credit to give the building industry the necessary motivation to continue building new solar homes until the 2019 T24 code is implemented. If the credit were to sunset or its value to be diminished, the resulting setback would be painful and lasting, casting a shadow on the ultimate success of NSHP, while putting achievement of 2020 zero net energy out of reach.

Sincerely,



Matt Brost
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