October 12, 2007

California Energy Commission Dockets Office Re: Docket No. 07-SB-1 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

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RE: Comments on California's Solar Electric Incentive Programs Pursuant to Senate Bill 1 – Draft Guidelines.

Dear Commissioners:

Open Energy Corporation (OEC) appreciates this opportunity to comment on staff report, California's Solar Electric Incentive Programs Pursuant to Senate Bill 1 – Draft Guidelines.

OEC is San Diego-based a renewable energy company focused on the development and commercialization of a portfolio of technologies capable of delivering low-risk, cost-competitive solar electric power. We specialize in building-integrated photovoltaic (BIPV) roofing materials for commercial, industrial, and residential markets, including roofing membranes, roofing tiles, and custom architectural PV glass.

We believe BIPV products will play an important role in helping California meet its renewable energy objectives, particularly with respect to the New Solar Homes Partnership (NSHP). Products such as residential PV roofing tile that integrates nearly invisibly with conventional roofing tile are becoming increasingly popular with consumers, particularly purchasers of new homes. These innovative BIPV products provide all the benefits of conventional solar panels, but can be seamlessly incorporated into the design of the home, and are more aesthetically pleasing than traditional roof-mounted systems.

We commend the Commission staff for a thorough and thoughtful report outlining its recommendations for implementing the CSI incentive programs. We wish to offer comments with respect to the Installation provisions of the Draft Guidelines, particularly as they pertain to the NSHP program. We believe certain changes to the Guidelines are logical and warranted as they apply to BIPV, and will help to ensure the cost-effectiveness and adoption of these popular and innovative BIPV products, and the overall success of the NSHP program.



Installation of BIPV Roof Tiles by Roofing Contractors

The Draft Report requires that "all eligible systems shall be installed by individuals with a current A, B, C-10 or C-46 license".

The New Solar Homes Partnership (Second Edition) Guidebook, published in July, 2007, states that "Contractors with roofing specific licenses may place PV panels in accordance with limitations of their specific licenses."

We believe the New Solar Homes Partnership (Second Edition) Guidebook, published in July, 2007 correctly acknowledges that roofing contractors are qualified to place many types of PV materials. Solar roofing tiles, for example, must be installed to the Tile Roofing Institute (TRI) standards, and must meet or exceed the TRI's recommended standards and techniques as noted in their "Concrete and Clay Tile Installation Manual", which is the agreed upon standard within the roofing industry.

In fact, improper installation of BIPV products could negatively impact the integrity of the roof and void the warranty, thus leaving the homeowner exposed to damaging and costly roof leaks. In the case of BIPV products such as solar roofing tiles, we believe installation by a qualified roofing contractor should not only be allowed, but is actually preferred, in order to ensure a water-tight roof system.

Interconnection of BIPV Roof Tiles by Roofing Contractors

The Draft Report requires that "all eligible systems shall be installed by individuals with a current A, B, C-10 or C-46 license".

The New Solar Homes Partnership (Second Edition) Guidebook, published in July, 2007, states that "If installed under contract, systems must be installed by an appropriately licensed contractor, in accordance with rules and regulations adopted by the California Contractors State License Board. Installation contractors must have an active A, B, C-10, or C-46 license. Contractors with roofing specific licenses may place PV panels in accordance with limitations of their specific licenses; however, electrical connections must be made by an above-mentioned contractor (emphasis added).

The installation of BIPV roofing tile involves an electrical connection between each tile. The plug connectors used are touch-safe, certified by a nationally recognized testing lab (UL) and require no tools or special training for proper connection. The connectors are not installed under load, i.e. there is no connection to an active inverter or load, and no amperage flowing. The installations of the male to female plug connection are completely safe (similar to plugging a cord into an electrical outlet) and have no inherent potential to harm or cause damage. This connection is made as each tile is placed, and could safely be done by a licensed roofing contractor, thus increasing the installation efficiency and helping to reduce costs to the homeowner.



A licensed A, B, C-10 or C-46 contractor would still perform the final electrical connections. The roofing contractor would leave the last panel unconnected as the "point of entry". The A, B, C-10 or C-46 contractor would then take the wiring from the "point of entry" to any electrical component required per code for the entire system.

We respectfully ask that the Commission consider these revisions to the Guidelines, which we would result in a more efficient installation process, reduced costs to the consumer, and an increase in overall PV adoption. Most importantly, we believe that these changes could be made without compromising the safety or quality of the installation.

Please contact us should you have any additional questions.

Respectfully submitted, David A. Field

President Open Energy Corporation

