

## STATEMENT OF CONSIDERATIONS

REQUEST BY SUNPOWER CORPORATION (“SUNPOWER”) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE GRANT NO. DE-EE0002066; W(A) 2010-055

SUNPOWER has requested a waiver of domestic and foreign patent rights of the United States of America for all subject inventions arising from its participation under the above referenced grant entitled “SMUD PV and Smart Grid Pilot at Anatolia” (“the SMUD grant”). SUNPOWER is a sub-awardee of the Sacramento Municipal Utility District (SMUD) under the SMUD grant. This waiver pertains only to the subject inventions arising from SUNPOWER’s participation under the sub-award to the SMUD grant. GridPoint, National Renewable Energy Laboratory, and Navigant Consulting are the other sub-awardees. To the extent that a patent waiver is needed or desired by one of the other sub-awardees or SMUD for subject inventions arising from their participation under the SMUD grant, the other sub-awardees and SMUD would have to petition for a patent waiver that applies to them. At this time, none of the other sub-awardees or SMUD has requested a patent waiver.

As described in the project summary of the SMUD grant, the grant is funding a demonstration project in a community within SMUD’s service area known as Anatolia III Subdivision. This community is part of SMUD’s SolarSmart Homes program, and is made up of energy efficient homes on which 2 kW grid-tied solar PV systems were installed during home construction. These homes will be receiving new metering as part of SMUD’s deployment of Advanced Metering Infrastructure (AMI), and the metering will allow SMUD to monitor the hourly electricity usage of customers. The primary objective of this project is to examine how the integration of energy storage can be used to enhance the value of distributed PV resources. A second key objective of the project is to monitor the PV and energy storage systems and to give SMUD a better picture of the potential value of distributed energy resources from the utility’s point of view. A key point of this project is to see how well these systems can support SMUD’s “super-peak” from 4 pm to 7 pm, particularly during the period from 5 pm to 7 pm when the output from PV systems tends to drop off.

Two energy storage configurations will be demonstrated. Residential Energy Storage (RES) systems will be connected behind the meter at customer homes and sized to integrate with one home’s PV output and load. Community Energy Storage (CES) systems will be connected to pad-mounted transformers on distribution feeders and will be sized to work with the group of homes fed by each transformer. A control group without energy storage will also be included in the project. Each of the groups will include 15 residential customers who have rooftop PV integrated into the construction of their homes. Each customer will also be part of SMUD’s AMI rollout.

SUNPOWER’s specific scope of work under the SMUD grant is (1) customer recruitment and agreements; (2) RES system procurement, installations and commissioning; (3) system integration; (4) RES monitoring, maintenance, and support; (4) PV/AMI integration; and (5) RES decommissioning and removal.

The total anticipated cost of the SMUD grant is \$6,969,399, with the prime and sub-awardees providing 38% cost share, totaling \$2,662,428. The total anticipated cost of SUNPOWER's work under the SMUD grant is \$707,981 with SUNPOWER providing \$176,995 for a cost share of 25%. This waiver is contingent upon SUNPOWER maintaining, in aggregate, a cost sharing percentage of at least 25% during the course of the SMUD grant. SUNPOWER's work under the SMUD grant is expected to start during the fourth quarter of 2010 through the first quarter of 2012.

As set forth in its petition, SUNPOWER designs, manufactures and delivers high-performance solar electric systems worldwide for residential, commercial and utility-scale power plant customers. It is a well known leader in the industry with unparalleled capabilities and number one market share in key markets around the world. SUNPOWER offers an extensive PV production monitoring system that is included with all installed systems. Overall, SUNPOWER is actively monitoring more than 6,200 residential systems, more than 600 large commercial PV systems, and growing number of large utility-scale PV systems worldwide. SUNPOWER relies on a combination of patents, copyrights, trade secrets, trademarks, and contractual commitments to protect its proprietary technologies, including over 100 patents and patent applications.

SUNPOWER has an on-going annual investment of nearly \$5,000,000 dedicated to developing and improving its monitoring products and technologies, and is supported by a technical staff of more than 23 experts with extensive experience in large scale software and data storage infrastructures scaled to world-class standards. From 2008 to present, SUNPOWER has invested \$10,000,000 in development and commercialization of this technology.

SUNPOWER has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204.

SUNPOWER has not agreed to the standard U.S. competitiveness provision that requires products embodying any waived invention or produced through the use of any waived invention to be substantially manufactured in the United States. According to SUNPOWER, it can not agree to the standard U.S. competitiveness provision because of SUNPOWER's need to have access to low-cost non-U.S. vendors as well as the need to utilize existing manufacturing capabilities outside of the U.S. However, SUNPOWER is willing to make specific commitments to U.S. investment in lieu of the standard U.S. competitiveness provision.

Specifically, in lieu of the standard U.S. competitiveness provision, SUNPOWER agrees to the following commitments.

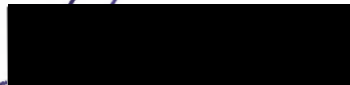
- (1) SUNPOWER will conduct research and development activities in the United States over the course of the SMUD grant, including employing 7 to 9 people in the United States to support such activities at a cost of over \$320,000.
- (2) SUNPOWER will implement the project along with SMUD in the United States. The work by SUNPOWER for the SMUD grant will be done in SUNPOWER's San Jose, California and Richmond, California facilities or on-location within SMUD's service territory in Northern California.

- (3) SUNPOWER will maintain a substantial level of prototype development activity in the United States. Prototype development for the project funded by the SMUD grant will be done in SUNPOWER's San Jose, California and Richmond, California facilities or within SMUD's service territory in Northern California, including the assembly of all systems and components provided by SUNPOWER for use in the project.
- (4) SUNPOWER intends to commercialize all waived inventions in the United States. In the event that SUNPOWER does not commercialize a waived invention within the next 10 years, SUNPOWER will license the waived invention to any interested party, under commercially reasonable terms, who agrees to commercialize the waived invention in the United States.

Referring to item 10 of the waiver petition, SUNPOWER does not believe that the waiver will unfairly place SUNPOWER in a preferred or dominant position. While SUNPOWER is a leader in the solar field, SUNPOWER has many competitors on many levels, both domestic and non-domestic. The solar field is highly competitive, where other companies may be exploring other technical solutions and the waiver should not prevent this from continuing.

Furthermore, any waived subject invention is likely to be an improvement to the already existing proprietary technologies of SUNPOWER. Therefore, SUNPOWER is likely the only entity that could commercialize any subject invention.

Considering the foregoing, it is believed that granting this waiver will provide SUNPOWER with the necessary incentive to invest its resources in commercializing the results of the SMUD grant in a manner that will make the above technology available to the public in the shortest time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

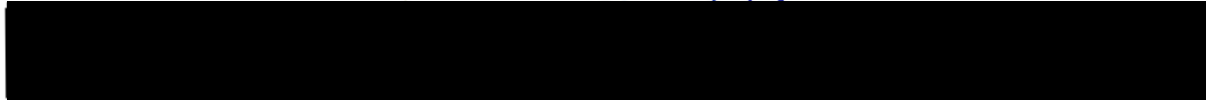
  
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Glen R. Drysdale  
Patent Attorney  
Golden Field Office

Date: 8/21/2012

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope determined above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the SMUD grant, where through such modification or extension, the purpose, scope, or cost of the SMUD grant has been substantially altered.

CONCURRENCE:

APPROVAL:



Minh Le  
Acting Program Manager  
Solar Energy Technologies Program

John T. Lucas  
Acting Assistant General Counsel for  
Technology Transfer and Intellectual  
Property

Date: 8-24-12

Date: 9/7/2012