STATEMENT OF CONSIDERATIONS

REQUEST BY SUNPOWER CORPORATION FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE SOLICIATION NO. DE-PS36-06GO96034; W(A)-07-021

The Petitioner, SunPower, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement proposal entitled "Grid-Competitive Residential and Commercial Fully Automated PV Systems Technology," which is part of DOE's Solar America Initiative (SAI) program.

The objective of the cooperative agreement is to develop turn-key, high-efficiency residential and commercial systems that are cost-effective in delivering electricity at grid parity. Key program objectives are to decrease the levelized cost of energy (LCOE) values to 9-12 cents/kWh and 13-18 cents/kWh, respectively for the commercial and residential markets. Target LCOE values for the commercial ground, commercial roof, and residential markets are 10, 11, and 13 cents/kWh, respectively. These reduced costs will be accomplished through the development of 20% efficient modules and reduced system development and installation time.

The total anticipated cost of the cooperative agreement is $24.7M with SunPower providing a minimum 50% cost share of the total costs for the award. In addition, SunPower will separately carry out internal research and development activities that are not funded by the SAI program but that may provide some tangential benefit to the work carried out under the SAI program. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

As noted in its waiver petition, SunPower supplies the world's highest performance solar modules commercially available. SunPower produces solar cells at a rate over 75 MW per year and is now among the largest U.S.-owned photovoltaic companies. SunPower is headquartered in San Jose, California and employs over 300 people in California. Its headquarters houses a workforce involved with corporate sales and marketing, research and development, and administration. The facilities include about 3,000 square feet for solar module development, testing, and reliability laboratories. A solar cell fabrication laboratory of 2200 square feet became operational in Spring 2007. SunPower employs an R&D team of 50 scientists, engineers, and technicians, including 12 holding Ph.D. degrees. Total R&D spending in 2006 was $8.9 million and is projected to grow to $13 million in 2007.

SunPower maintains a 200,000 square foot solar cell manufacturing facility in the Philippines that is currently producing about 75 MW of cells per year. SunPower has recently commissioned the fourth and final line in this building, bringing its capacity to 115 MW per year. It recently broke ground on its second cell factory in the Philippines, which will be a 400,000 square foot facility that will be capable of producing more than 300 MW per year when fully built out.

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

202-204. Petitioner has requested a waiver from the U.S. competitiveness provisions as set forth in paragraph (t), and commits to certain U.S. manufacturing and other commitments that will benefit the U.S. economy as set forth below. Petitioner will not license, assign, or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

SunPower requests a waiver from the U.S. Competitiveness provision because it exclusively performs wafer and cell processing at its plant in the Philippines, for worldwide distribution. Given SunPower's economic and technical investment in its manufacturing facilities in the Philippines, these processes could not be implemented in the United States in an economically feasible manner.

In consideration for the waiver from the U.S. Competitiveness provision, SunPower agrees to the following legal commitments:

- SunPower will develop and deploy two module production lines in the United States, which will employ approximately 75-150 people, and will report on progress toward this deployment as part of its reporting requirements under the cooperative agreement. The milestones for deployment of these lines include production line design (approximately 24 months after the agreement is signed), and deployment of the production line (approximately 36 months after the agreement is signed).
- SunPower will implement its first laminate and unitary product lines in the United States This "Cells-to-Systems" factory will serve as a platform for regional deployment of manufacturing capabilities in the United States. The lower cost, higher efficiency cells from the Philippines will serve as critical inputs to this manufacturing model. These regional manufacturing hubs will reduce transportation, deployment, and module fabrication costs, thus enabling U.S. manufacture of modules and unitary products. The milestones for the cells-to-systems product lines include:
  - Commercial Ground: Implementation of systems-level manufacturing processes and equipment at a U.S. manufacturing facility (12 months)
  - Commercial Roof: Prototype of high-volume manufacturing approach of next-generation rooftop system for constrained roofs (12 months)
  - Residential: Manufacturing plan for next generation BIPV (BIPV-V2) and next generation retrofit products (12 months)
  - Commercial Ground: Release of updated manufacturing equipment and processes (24 months)
  - Commercial Roof: Implementation of pilot production line for unitary commercial roof product (24 months)
  - Residential: Prototype of high-volume manufacturing approach for residential products (24 months)
  - Commercial Roof/Residential: Integration of system manufacturing into module manufacturing lines (36 months)

- SunPower agrees to maintain a substantial level of unitary-product manufacturing capacity in the U.S. For a period of five years after the agreement is complete, SunPower will maintain at least 25 MW of manufacturing capacity in the U.S. The five-year time horizon is based on the standard depreciation schedule for manufacturing equipment,

after which time, the equipment technology may be obsolete and new technology may need to be developed. This commitment applies to one or more of the following technologies (or any combination thereof), where cells are imported from abroad into a U.S.-based manufacturing facility that would convert such cells into solar panels. The panels will be integrated into mounting hardware. The integrated mounting hardware and panel is the "unitary product."

- SunPower will also conduct installations of its hardware in the United States. Domestic installations require U.S.-based labor to assemble, construct, install, and commission each solar system. Based on an audit of a current commercial installation, approximately 29 full-time-equivalent employees are required to support a 1-MW solar system installation through external subcontracts, while approximately 6 full-time-equivalent internal employees support the project from design through commissioning. This does not account for indirect labor support. In keeping with the cost reduction goals as outlined in the SOPO, SunPower anticipates significant improvements in product design and deployment that will decrease required labor per watt. However, for all installations a significant amount of local labor will be required to install the systems.

Furthermore, the project includes the development and implementation of specialized manufacturing equipment. SunPower currently has 22 process steps for the cell production process; each step requires a specialized piece of equipment. SunPower is currently exploring the joint development of such equipment with vendors, both domestic and foreign. Should such collaborations be carried out as part of the SAI program, SunPower will endeavor to partner with and license to firms that are likely to manufacture products embodying subject inventions substantially in the United States. If SunPower makes a showing that it has made reasonable but unsuccessful efforts to grant such licenses to likely U.S. manufacturers, or that under the circumstances, domestic manufacture is not commercially feasible, it may request a waiver from the U.S. preference provision of 35 U.S.C. 204.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Further, the success of Petitioner, under this cooperative agreement, can be expected to stimulate further investment and competition in this technology.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in commercializing the results of the cooperative agreement 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.

[redacted]

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Date: 30 August 2007

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 cooperative agreement, where through such modification or extension, the purpose, scope, or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

[redacted]

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