

## STATEMENT OF CONSIDERATIONS

REQUEST BY ABENGOA SOLAR INC. (ASI) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE AWARD NO. DE-FC36-08GO18156; W(A) 2011-63

ASI has requested a waiver of domestic and foreign patent rights of the United States of America in all subject inventions arising from its participation under the above referenced cooperative agreement entitled “Reducing the Cost of Thermal Energy Storage for Parabolic Trough Solar Power Plants.”

According to ASI’s petition and the State of Project Objectives, the objectives of the project funded by the cooperative agreement are: (1) to identify opportunities for cost reduction in near-term thermal energy storage (TES) systems; (2) to identify two mid-term TES options with greater opportunities for cost reduction; and (3) to demonstrate the TES options with the best cost reduction potential for parabolic trough plants in the near and mid-term. Several alternatives for potential cost reduction in parabolic troughs will be compared, taking into account capital and operation and maintenance (O&M) costs, and thermal performance.

The cooperative agreement includes three phases. Phases I and II are directed to research and development. Phase III, if approved, will be directed to demonstration. The total anticipated cost of phases I and II is \$2,132,262 with ASI providing a 20% cost share for each of phases I and II (*i.e.*, a total of \$426,850 for phases I and II, see answer to question seven of petition). Phase III has not yet been approved or negotiated. If approved, ASI will be required to provide a cost share of at least 50%. This waiver is contingent upon ASI maintaining the foregoing cost share by phase.

As set forth in its petition, ASI is part of a corporate family<sup>1</sup> that has designed and built solar and conventional power facilities worldwide, including the Solucar Complex, the largest solar complex in Europe. In the U.S., ASI is building two of the largest solar power plants in the world, the Solana Generating Station and the Mojave Solar project. ASI and its corporate family conduct “extensive R&D, conducts demonstrations activities, undertakes project feasibility studies, and builds and operates CSP power plants abroad.” Over the past four years, ASI and its corporate family have invested more than \$125 million in solar research and development activities. This investment has results in numerous research and development accomplishments, publications, and patents related to CSP.

ASI 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. Further, ASI has agreed to the U.S. competitiveness provision as attached to this Statement. In brief, ASI has agreed that products embodying any waived invention or made

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<sup>1</sup> ASI is the U.S. subsidiary of Abengoa Solar, which is a business unit of Abengoa. Abengoa describes itself as “an international company that applies innovative technology solutions for sustainable development in the energy and environment sectors, generating electricity from the sun, producing biofuels, desalinating sea water and recycling industrial waste.” Abengoa’s revenues in 2010 totaled over 5,566 million Euros. Abengoa, including all of its business units, has over 25,000 employees and Abengoa Solar has approximately 450 employees.

this Statement. In brief, ASI has agreed that products embodying any waived invention or made through the use of any waived invention shall be substantially manufactured in the United States, and that ASI will not license, assign, or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Moreover, ASI has demonstrated past and on-going commitments to the U.S. economy. It has invested more than \$300 million in the on-going construction of the Solana Generating Station and the Mojave Solar project in the U.S. These U.S. construction projects are expected to support thousands of jobs U.S. and more than 80% of the equipment and supplies required to build these two plants are being manufactured in the U.S. Its U.S. engineering office employs 127 people.

Referring to item 10 of the waiver petition, in granting this waiver, ASI does not expect that the granting of the waiver will have an anti-competitive effect. If anything, ASI expects it will help keep the market competitive. The market is already quite competitive. Each competitor offers its own technology that should not be impacted by a waiver. However, the waiver should allow ASI to better protect and commercialize its technology and help maintain a competitive marketplace by continuing to offer its unique technology solutions.

Considering the foregoing, it is believed that granting this waiver will provide ASI 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.

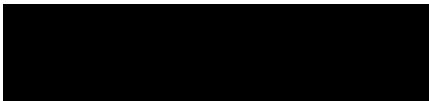
[Redacted Signature]

Glen R. Drysdale  
Patent Attorney  
Golden Field Office

Date: 1/31/12

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 agreement has been substantially altered.

CONCURRENCE:



Minh Le  
Acting Program Manager  
Solar Energy Technologies Programs  
EE-2A

Date: 10-1-12

APPROVAL:


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

Date: 10-2-2012

## **U.S. COMPETITIVENESS**

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in any waived invention is suspended until approved in writing by DOE.