## STATEMENT OF CONSIDERATIONS

REQUEST BY SOLAR TURBINES, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-09NT05873; W(A)-09-058, CH-1524

The Petitioner, Solar Turbines, Incorporated (Solar) was awarded a cooperative agreement for the performance of work entitled, "Development of a Low NOx Medium Sized Industrial Gas Turbine Operating on Hydrogen-Rich Renewable and Opportunity Fuels." According to its response to question 2, Solar states that it will develop technologies that will enable utilization of opportunity fuels. This will be accomplished by characterizing biomass and renewable fuels to evaluate and quantify design requirements; utilizing high hydrogen content biomass and renewable fuels; and, validating these new fuels in a full-scale, multi-injector rig and developing filed testing and a commercialization plan. This waiver is only for inventions of Solar made under the cooperative agreement.

According to its response to questions 2 and 6 of the petition, Solar states that the total estimated cost of the cooperative agreement is \$1,991,587 with Solar providing a 41%% cost-share or about \$821,000. DOE is providing the remaining 59% cost-share of \$1,170,587. The period of performance is from January 21, 2009 through January 20, 2013.

In its response to questions 5 and 7 of the attached waiver petition, Solar has described its technical competence in the field of renewable and opportunity fuels. Solar states it has over twenty (20) years of low emission (SoLoNox) experience, and that it has invested tens of millions of dollars in developing low emission combustion systems. These developmental investments directly pertain to the work of the current project, and Solar's engine and system design experience on high hydrogen fuels and Solar's combustion laboratory testing capabilities will be applied to the work under this project. Solar's response demonstrates its technical competency in the field of renewable and opportunity fuels.

In its response to question 10 of the attached waiver petition, Solar states that grant of the waiver will enhance Solar's position in the highly competitive worldwide gas turbine and turbomachinery equipment market, ensuring that the technological and financial investments made by Solar and the U.S. Government find optimal utilization and appropriate safeguarding of the proprietary know-how. Solar further states that grant of the waiver will enhance its intellectual property and provide possible licensing opportunities. Solar's response suggests that grant of the waiver will balance Solar's rights in intellectual property with the U.S Government's interest in making any new intellectual property available for commercial exploitation. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein GE has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which GE agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, GE agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver

would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, 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, as set forth above, be granted.

Mark P. Dvorscak
Deputy Chief Counsel
Office of Intellectual Property Law

Date Sept 14, 2009

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

**CONCURRENCE:** 

Douglas Kaemp
Program Manager
Industrial Technology Program
Office of Energy Efficiency and
Renewable Energy EE-2F

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APPROVAL:

Paul A. Gottlieb John T. Lucas, Acting Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

Date 5/21/2010

(t) 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 the DOE that it is not commercially feasible to do so. In the event the 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 agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.