

STATEMENT OF CONSIDERATIONS

REQUEST BY HYBRID POWER GENERATION SYSTEMS, LLC, FOR AN ADVANCE
WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE
COOPERATIVE AGREEMENT NO. DE-FC26-01NT40779; W(A)-03-015, CH-1142

The Petitioner, Hybrid Power Generation Systems, LLC, a wholly owned subsidiary of General Electric Company (GE HPGS), was awarded this cooperative agreement for the performance of work entitled, "Solid Oxide Fuel Cell Hybrid System for Distributed Power Generation". The purpose of the cooperative agreement is to develop and demonstrate the feasibility of a highly efficient hybrid system integrating a planar Solid Oxide Fuel Cell (SOFC) and a turbogenerator. The proposed hybrid system is based on planar SOFC and turbogenerator power technologies. The focus of this work is to test a sub-scale SOFC and turbocharger hybrid system that will incorporate all of the components/subsystems required for a full-fledged commercial system. The work consists of three phases and will focus on designing and optimizing a suitable full-scale system concept, conducting experiments to resolve identified technical barriers, performing cost analysis, and testing a sub-scale hybrid system to demonstrate concept feasibility.

The total estimated cost of the cooperative agreement is \$7,123,021 with the DOE share being \$4,993,921, or 70%, while the remaining cost share of 30%, or \$2,129,100 will be provided by GE HPGS. The period of performance is forty-nine months from July 5, 2001.

In its response to question 5 of the attached waiver petition, GE HPGS has described its technical competence in the field of solid oxide fuel cells. GE HPGS states it has been directly involved in the development of SOFCs since 1987. This prior work has permitted the contractor to develop and support the maturation of its tape calendaring fabrication process and high-performance stack designs. This has led to over 30 SOFC related patents, along with more than 40 papers and reports. Table I of GE HPGS' petition lists some representative patents. In addition, GE HPGS is developing solid oxide fuel cell systems for stationary power generation; its current business plan expects production and commercial sales starting in 2010. GE HPGS' response demonstrates its technical competency in the field of solid oxide fuel cells.

In its response to question 10 of the attached waiver petition, GE HPGS states that several companies are developing solid oxide fuel cells and have established their own patent positions. In addition, several companies involved in developing other technologies such as reciprocating engines, gas turbines, as well as other fuel cell technologies such as Molten Carbonate Fuel Cells and Proton Exchange Membrane Fuel Cells are developing these products for similar markets. Acquisition of waiver rights by GE HPGS will not place GE HPGS in a preferred or dominant position in this field, and therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein GE HPGS 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 HPGS agrees to substantial U. S. manufacture of subject inventions (attached hereto). Additionally, GE HPGS agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data.

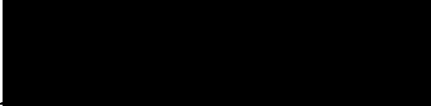
Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable 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
Assistant Chief Counsel
Intellectual Property Law Division

Date: June 6, 2003

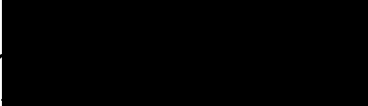
Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not 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:


George Rudins
Deputy Assistant Secretary
Office of Fossil Energy
Coal and Power Systems

Date: 9/5/03

APPROVAL:


Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date: 9-9-03

(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.