STATEMENT OF CONSIDERATIONS

REQUEST BY HYBRID POWER GENERATION SYSTEMS, LLC, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE CONTRACT NO. DE-AC26-00NT40705; W(A)-03-014, CH-1143

The Petitioner, Hybrid Power Generation Systems, LLC, a wholly owned subsidiary of General Electric Company (GE HPGS), was awarded this contract for the performance of work entitled, "Tape-Calendering Manufacturing Process for Multilayer Thin-Film Solid Oxide Fuel Cells" The purpose of the contract is the development of a manufacturing process based on tape-calendering for making unitized cells. The unitized cell concept places a multilayer ceramic cell in a metallic housing with its own gas manifolds to form a complete cell package. Unitized cells can be operated as single units and can be easily stacked. The multilayer cell contains a thin electrolyte for reduced temperature (<800°C) operation and incorporates integral flow fields, and each cell component may consist of multiple layers for performance enhancements. The work will involve cost analysis of unitized cell production, development and definition of the tape-calendering fabrication process, and characterization of fabricated cells, including electrochemical performance testing, to demonstrate efficient operation under desired conditions.

The total estimated cost of the contract is $1,787,669 with the DOE share being $1,383,636 or 77.4%, while the remaining cost share of 22.6%, or $404,033, will be provided by GE HPGS. The period of performance is thirty-six months from September 22, 2000.

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 calendering fabrication process and high-performance stack designs. This has lead 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 contract 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 contract (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.

[redacted]

Mark P. Dvorscak
Assistant Chief Counsel
Intellectual Property Law Division

Date: June 6, 2005

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:

[redacted]

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

Date: 9/8/03

APPROVAL:

[redacted]

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.