STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL ELECTRIC COMPANY, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-03NT41893; W(A)-04-019, CH-1188

The Petitioner, General Electric Company (GE), was awarded this cooperative agreement for the performance of work entitled, "Pre-mixer Design for High Hydrogen Fuels". The purpose of the cooperative agreement is adapt and extend the lean premixed technique to the challenging and unique demands of Integrated Gasification Combined Cycle (IGCC) fuels with high hydrogen content in an effort to achieve low NOx with elimination/reduction of the diluents that are currently required for NOx abatement when combusting IGCC fuels. GE, acting through its GE Energy business division, will bring to bear its experience and design expertise with low source emissions combustors to deliver an analytical design, revolutionary in both its ability to accommodate a fuel with high hydrogen content, and at the same time deliver dramatically reduced emissions with minimum diluent injection. GE Energy will extend validated computational design methodologies and practices to design an IGCC premixed combustor fuel nozzle in preparation for follow-on efforts in which the design can be developed and tested in the GE Energy's world class Gas Turbine Technology Laboratory.

The total estimated cost of the cooperative agreement is $517,697 with the petitioner's cost-share being 40% or $207,079. The DOE share is 60% or $310,618. The period of performance is from January 1, 2004 to June 30, 2005.

In its response to questions 5 and 6 of the attached waiver petition, GE has described its technical competence in the field of energy products and services, particularly power generation and IGCC combustion systems. General Electric is an international leader in energy products and services. GE serves power generation, industrial, marine, oil and gas, and distributed generation markets. GE states that it has a significant number of Technical Patents in related areas of lean premixed Dry Low NOx combustion ststems and sub-systems, IGCC combustion systems and sub-systems. A representative sample of these patents is attached as Exhibit A to the waiver petition. In addition, a large number of technical papers demonstrating GE's experience and technical know-how in the areas of IGCC gas turbine combustion have been published by GE. A representative listing of these publications is attached as Exhibit B to the waiver petition. Exhibit C contains a sample sales brochure supporting GE's commercial position. GE's response demonstrates its technical competency in the field of power generation and the IGCC combustion application.

In its response to questions 9 and 10 of the attached waiver petition, GE states that grant of the waiver will promote the development and commercial utilization of subject inventions by encouraging further development of the technology for final implementation in both retrofit and new product applications; improved cycle efficiency increases; and savings in operational cost. In addition, since multiple competitive awards resulted from the solicitation resulting in this award, grant of the waiver should not hinder competition in the marketplace. 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 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. 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: May 14, 2004

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
FE-20/FORS

Date:

APPROVAL:

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

Date: 6-22-04

(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.