

## STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY GENERAL ELECTRIC COMPANY, UNDER DOE AWARD NO. DE-FE0023965; W(A)-2015-001, CH-1727

Petitioner, the General Electric Company (GE), has requested a waiver of: (a) domestic and foreign patent rights for all subject inventions conceived solely by GE and (b) GE's undivided interest, based on its employee's contributions, to joint domestic and foreign patent rights for all subject inventions conceived, arising under the above referenced award.

The objective of Petitioner's award is to further develop low-NOx combustion architectures for advanced gas turbines that are capable of 65% or greater efficiency in combined cycle applications.

The total anticipated cost of the award is \$970,988.00 including the Petitioner's contribution of \$291,296.00, or about thirty percent (30%) of the total cost of the work under the award. This waiver is contingent upon Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the award. The period of performance is from 1 January 2015 to 30 June 2016.

Referring to items 5-9 of the waiver petition, Petitioner has experience in the design of heavy-duty gas turbines as well as progressing those designs through commercialization, with approximately 7,000 currently in service worldwide. Additionally, Petitioner has advanced research in fuel staging and combustion systems themselves, having developed systems which achieve 15 ppm NOx emissions without the use of pilots. With respect to investments, Petitioner has a significant history working in cost-share programs, contributing funds amounting to the hundreds of millions of dollars. Considering Petitioner's technical expertise and significant investment in this technology including cost sharing in this award, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this award.


Petitioner has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision (paragraph (t)). The contractor agrees to the attached revised paragraph (h) to submit annual reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by Petitioner and any of its licensee or assignees. Petitioner agrees to submit the annual reports for (10) ten years following the completion of the project period or until the patent is allowed to lapse or expire, whichever comes first. If sold or transferred this reporting obligation will pass on to the buyer or transferee for completion of the ten year period of time.

Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so.


Petitioner has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived inventions, including subsequent assignees and licensees. Should Petitioner or other such entity receiving rights in a waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. Numerous companies market and develop competitive gas-turbines and the fuel systems for those turbines for the power generation market. Granting the Petition will not hinder competition in the field; rather, the success of this award can be expected to stimulate further investment and competition in this technology.

Considering the foregoing, it is believed that grant this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the technology available to the public in the shortest practicable 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.

  
Jacob A. Heafner  
Patent Attorney  
Intellectual Property Law Division

Date: 2/27/15

  
Brian J. Lally  
Deputy Chief Counsel  
Intellectual Property Division


Date: 3/11/15

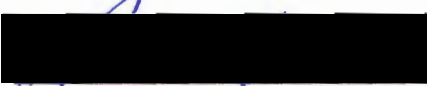


Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

CONCURRENCE:

APPROVAL:

  
Angelos Kokkinos  
Director  
Office of Advanced Fossil Technology Systems  
Fossil Energy

  
Brian Lally  
Assistant General Counsel for Technology  
Transfer and Intellectual Property, GC-62

Date: 3/23/17

Date: 4/3/17