## REQUEST BY GENERAL ELECTRIC GLOBAL RESEARCH CENTER FOR AN ADVANCE WAIVER OF PATENT RIGHTS TO INVENTIONS MADE UNDER COOPERATIVE AGREEMENT DE-FC26-08NT06560; W(A)-09-026 ; CH-1491

General Electric Global Research Center (GE-GRC), requests an advance waiver of domestic and foreign patent rights for all subject inventions made under the above cooperative agreement for work entitled, "Clean and Efficient Diesel Engine." The purpose of the cooperative agreement is to develop clean and efficient diesel engine technology. The program aims to enhance the efficiency of large displacement (>10 liters/cylinder), medium speed (<1200 rev/min) diesel engines that are used in locomotive, marine, and power generation applications. This waiver is for inventions of GE-GRC only.

The work under this subcontract is expected to take place from October 1, 2008 through September 30, 2009, at a total cost of \$1,230,000. GE-GRC will provide 20% cost share or \$246,000. DOE will provide the remaining 80% or \$984,000.

With respect to its technical competency in the field of diesel engines, in response to questions 4 and 5 of its waiver petition, GE-GRC states it has significant experience in many of the key technologies required to improve the efficiency of large displacement diesel engines and is a world leader in locomotive engine technology. GE further states that this experience will be used to design a new engine architecture capable of significant fuel economy improvements and lists several items of specialized research equipment that will be utilized under the program. GE-GRC has demonstrated its technical corrupteency in the field of diesel engines.

In response to question 10 of its waiver petition (see supplemental response sent via email, attached), GE-GRC states that the technologies to be advanced under this project, such as advanced valve timing, advanced turbo charging, and advanced fuel injection systems, will be developed for locomotive engines. These technologies have previously been developed for adjacent market spaces such as on and off highway vehicular applications. Further, there are many suppliers of these technologies, so it is unlikely that grant of the patent waiver would inhibit competition. Therefore grant of the waiver will have a positive effect on competition and market concentration.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver licensing provisions, and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes the attached U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above condition binding on any assignee, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any 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 invention is suspended until approved in writing by DOE.

Considering the foregoing, it is believed that granting 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 Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

Mark P. Dvorscak Deputy Chief Counsel Intellectual Property Law Division

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Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States 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 cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

## **CONCURRENCE:**

Patrick Davis Office of the FreedomCAR and Vehicle Technologies Program, Office of Energy Efficiency and Renewable Energy, EE-2G

Date

APPROVAL :

Paul A. Gottlieb John T. Lucas, Acting Assistant General Counsel for Technology

Transfer and Intellectual Property, GC-62

Date

## (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.