STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL ELECTRIC GLOBAL RESEARCH CENTER (GEGRC) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS TO INVENTIONS MADE UNDER COOPERATIVE AGREEMENT NUMBER DE-FC04-02AL68284, DOE WAIVER NO. W(A) 03-039.

The Petitioner, GEGRC, has requested a waiver of all domestic and foreign patent rights to inventions that may be conceived or first actually reduced to practice in the course of GEGR's work under Cooperative Agreement Number DE-FC04-02AL68284 entitled "21st Century Locomotive" with the U.S. Department of Energy (DOE).

The work to be done will be the design and development of fuel injectors, turbochargers and locomotive systems technologies to increase fuel efficiency and decrease exhaust gases in freight and passenger locomotives. Successful research and development under this agreement will lead to more energy efficient locomotives and reduced fuel consumption—resulting in better air quality and lowered dependence on unstable overseas oil supplies.

The cooperative agreement covers a period from October 1, 2002 through September 30, 2006 at a total cost to DOE of \$4,946,434. GEGRC will provide \$3,475,086 as a cost share (41%) over the life of this agreement. DOE funds to be provided as follows: FY03 -- \$1.64M; FY04 -- \$1.2M; FY05 -- \$1.2M; FY06 -- \$0.81M. The government contribution will be made through Budget & Reporting Codes EE0501, EE0503 and EE0506 sponsored by the FreedomCAR and Vehicle Technologies Program under the Office of Energy Efficiency and Renewable Energy. To date, separate and apart from this cooperative agreement, GEGRC has already expended in excess of \$0.5M in the development of hybrid locomotive technology.

GEGRC is a wholly-owned subsidiary of the General Electric Company (GE). GE is a U.S.-based multinational corporation with a worldwide corporate presence. GEGRC is a global leader in advanced technology research and has 71 existing patents in hybrid and diesel-electric transportation and diesel engine systems. GEGRC, through its sister organization, GE Transportation System, is one of the world's leading suppliers to the railroad industry, and, through its parent company, GE, is one of the world's leading manufacturers of diesel-electric locomotives. Based on the dynamic nature of the technology itself, as well as the research and development being done in this field worldwide, it is not foreseen that the grant of this waiver would decrease competition, cause undesirable market concentration, nor place GEGRC, nor GE, in a dominant market position.

GEGRC has agreed to abide by 35 U.S.C. §§ 202, 203 and 204, as well as the provisions of the Standard Patent Rights clause for an Advance Waiver. Additionally, GEGRC has agreed to the provisions of the attached U.S. Competitiveness Clause, which requires Petitioner to substantially manufacture any products embodying or produced through any

waived invention in the United States, unless Petitioner can convince DOE it is not commercially feasible to do so. Petitioner agrees to make this condition binding on any assignee or licensee. GEGRC will abide by the Export Control laws and will require its licensees, if any, to do the same. GEGRC, through its parent company GE, will expend such sums as may be required to maintain the necessary patent protection and provide incentive for commercial development of the invention. Additionally, GEGRC has affirmatively agreed to the background data rights clause found in 48 CFR 952.227-14, Alternate VI (February 1998) (attached).

Considering Petitioner's status as a world leader in research and development of advanced locomotive technologies, it is concluded that the grant of the requested waiver is most likely to achieve commercialization success and actual implementation of advanced hybrid diesel-electric locomotive engine systems, and increased fuel efficiency, on a national and global scale.

As such, upon evaluation of the Waiver Petition in view of the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver be granted.



Patent Attorney NNSA Service Center

Based on the foregoing Statement of Considerations and the representations of 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 shall not apply to a modification or extension of the cooperative agreement where, through such modification or extension, the purpose, scope or DOE cost of the cooperative agreement have been substantially altered.

CONCURRENCE:

Net and



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Date: 2/12

APPROVAL:

Date: 2-25

Assistant General Counsel for Technology Transfer and Intellectual Property (GC-62)

Paul A. Gottheb

> 2/2/04

DOE Project Manager: Gurpreet Singh