## STATEMENT OF CONSIDERATIONS

REQUEST BY MACK TRUCKS, INC FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-05NT42417 W(A)-05-042, CH-1324

The Petitioner, Mack Trucks, Inc. (Mack), was awarded a cooperative agreement for the performance of work entitled, "Demonstration of Air-Power-Assist Engine Technology for Clean Combustion and Direct Energy Recovery in Heavy Duty Applications." The purpose of the cooperative agreement is to demonstrate a minimum of 15% fuel economy improvement with emissions meeting the 2010 EPA regulation. Mack Tracks will be establishing the base engine, developing engine management system for air-power-assist engine and ensuring the conduction of steady-state engine tests. Mack will also evaluate the commercial viability of variable valve actuation and any other related technologies and components at the conclusion of this project. It is teaming with Sturman Industries on this project, but this waiver is only for inventions of Mack made under its cooperative agreement.

The total estimated cost of the cooperative agreement is \$3,614,766 with the DOE share being \$1,807,383 or 50%. The remaining cost-share of \$1,807,383 or 50% will be provided by Mack. The period of performance is from September 1, 2005 through November 30, 2009.

In its response to questions 5 and 6 of the attached waiver petition, Mack has described its technical competence in the field of heavy-duty trucks and major truck components. Mack has world-class expertise in the area of heavy-duty engine design and emissions reduction research. Mack states that the team's background includes experience with studies involving advanced engine technologies, engine and emissions controls, and exhaust after-treatment devices. Mack has attached a report of its company overview dated March 2005. Mack's response demonstrates its technical competency in the field of heavy duty truck and major truck components.

In its response to question 10 of the attached waiver petition, Mack states that the vocational vehicle market, where the hybrid technology will be applied, is a relatively small market. Only about 30% of Mack's truck sales are in the vocational market, and therefore this technology development will not materially affect the size of Mack's market share. 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 Mack 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 Mack agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Mack agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

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 Dec 19, 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:

Edward J. Wall Program Manager FreedomCAR and Vehicle Technologies Program

Energy Efficiency and Renewable

Energy

APPROVAL:

Paul A. Gottleb

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

Date 4-13-06

(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.

## WAIVER ACTION - ABSTRACT

W(A)-05-042 (CH-1324)

Mack Trucks, Inc. Under Cooperative Agreement No. Demonstration of Air-Power-Assist Engine Technology for Clean Combustion and Direct Energy Recovery in Heavy Duty DE-FC26-05NT42417 Applications  50% cost sharing by Cost sharing Applications	REQUESTOR	CONTRACT SCOPE OF WORK	RATIONALE FOR DECISION	DISPOSITION
	under Cooperative Agreement No.	Engine Technology for Clean Combustion and Direct Energy Recovery in Heavy Duty	50% cost sharing	