STATEMENT OF CONSIDERATIONS

ADVANCE WAIVER OF PATENT RIGHTS TO MACK TRUCKS, INC. UNDER NREL SUBCONTRACT NO. ZCI-4-32050, UNDER DOE PRIME CONTRACT NO. DE-AC36-98GO10337 FOR DEVELOPMENT OF THE NEXT GENERATION NATURAL GAS VEHICLE, PHASE II; CH-1182; W(A)-04-012

Mack Trucks, Inc. (Mack) has petitioned for an advance waiver of domestic and foreign patent rights to inventions conceived or first actually reduced to practice under DOE Contract No. NREL-ZCI-4-32050-01. This advance waiver is intended to apply to all subject inventions of Mack's employees and those of its subcontractors, regardless of tier except subcontractors eligible to obtain title pursuant to P.L. 96-517 as amended, and National Laboratories.

As brought out in its waiver petition, the long term objective of this contract is to develop one medium duty compressed natural gas (CGN) prototype engine or one heavy duty liquified natural gas (LNG) prototype engine that will be available for prototype development. These engines will advance heavy duty natural gas engine technology to meet exhaust emission regulations scheduled for 2007.

As indicated in its response to Question 3 in its waiver petition, the total value of this agreement is expected to be about $2,123,503.00, with Mack's cost sharing approximately 27% of the total cost. The performance period for this agreement is expected to be twenty-eight (28) months.

In response to Questions 7 and 8 of the waiver petition, Mack will invest $572,589.00 to the work under this contract as cost share. To date, Mack has invested about 5 million US dollars in natural gas powered engine and vehicle development. Mack is also in the process of arranging a master technical demonstration agreement with one of the lower tier subcontractors that develop the core VVA technology.

As brought out in Questions 5 and 6, Mack has been a leading producer of heavy-duty trucks and major truck components since 1900. Mack is a wholly owned subsidiary of AB Volvo. Mack's team has expertise in the area of NG engine design and emissions reduction research.

The team's background includes experience with studies involving advanced engine technologies, engine and emissions controls and exhaust after-treatment devices.

Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this agreement, at any tier, shall constitute Mack's certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it accepts the terms and conditions of this advance waiver. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver and background data licensing provisions. Those terms include the usual 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 a U.S. Competitiveness clause, (paragraph t), which requires that 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 or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived inventions 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.

The grant of this waiver is not expected to have any adverse effects on competition or market concentration. In response to Question 10, the natural gas powered heavy-duty vehicle market is a relatively small and emerging market. Mack's market share is less than 5 percent. Granting of this waiver will provide Mack with the incentive to promote the development and

commercialization of inventions made under this contract.

Considering the foregoing, and in view of the statutory objectives to be attained and the factors to be considered, it has been determined that this advance waiver of patent rights will best serve the interest of the United States and the general public. Subject to Mack providing at least twenty-seven percent (27%) cost sharing, in aggregate over the term of this, and subsequent phases of the agreement, it is recommended that the waiver be granted.

Thomas G. Anderson
Assistant Chief Counsel
Intellectual Property Law Division

Date: 3/16/04

Joy Alwan
Patent Attorney
Intellectual Property Law Division

Date: 15 March 04

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will be best served by a waiver of the United States and foreign rights as set forth therein, and therefore the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

Phyllis Yoshida for

Edward Wall
Program Manager
Office of the FreedomCAR and
Vehicle Technology Program
EE-2G/FORS

Date: 4-21-04

APPROVAL:

Paul A. Gottleib
Assistant General Counsel for Technology
Transfer and Intellectual Property, GC-62

Date: 4-22-04