AMENDMENT TO H.R. 2773 OFFERED BY MR. GORDON OF TENNESSEE

Page 2, line 19, insert "and the Assistant Administrator for Research and Development of the Environmental Protection Agency," after "Transportation".

Page 5, line 1, insert "National Laboratories," after "agencies,".

Page 6, line 22, insert ", in consultation with the Secretary of Transportation," after "Secretary".

AMENDMENT TO H.R. 2773 OFFERED BY //r. Hall

Page 1, line 18, strike "and".

Page 1, line 19, redesignate paragraph (3) as paragraph (6).

Page 1, after line 18, insert the following new paragraph:

- 1 (3) biogas collection and production tech-
- 2 nologies suitable for vehicular use;
- 3 (4) cost-effective reforming technologies that
- 4 produce hydrogen fuel from biogas sources;
- 5 (5) biogas production from cellulosic and recy-
- 6 cled organic waste sources and advancement of gas-
- 7 eous storage systems and advancement of gaseous
- 8 storage systems; and

Page 3, after line 25, insert the following new section (and redesignate the subsequent sections accordingly):

9 SEC. 5. BIOGAS.

- Not later than 180 days after the date of enactment
- 11 of this Act, the Secretary shall submit to Congress a re-

- 1 port on any research and development challenges inherent
- in increasing to 5 percent the proportion of gasoline and
- diesel fuel sold in the United States that is biogas or a
- 4 blend of biogas and natural gas.

At the end of the bill, insert the following new section:

SEC. 13. STUDY OF OPTIMIZATION OF BIOGAS USED IN NAT-

- 6 URAL GAS VEHICLES.
- (a) IN GENERAL.—The Secretary of Energy shall 7
- conduct a study of methods of increasing the fuel effi-
- ciency of vehicles using biogas by optimizing natural gas
- vehicle systems that can operate on biogas, including the
- advancement of vehicle fuel systems and the combination
- of hybrid-electric and plug-in hybrid electric drive plat-
- forms with natural gas vehicle systems using biogas.
- (b) REPORT.—Not later than 180 days after the date 14
- of enactment of this Act, the Secretary of Energy shall
- submit to the Committee on Energy and Natural Re-
- sources of the Senate and the Committee on Science and
- Technology of the House of Representatives a report that
- describes the results of the study, including any rec-
- 20 ommendations of the Secretary.

AMENDMENT TO H.R. 2773 OFFERED BY MR. MATHESON OF UTAH

At the end of the bill, insert the following new section:

1 SEC. 13. STANDARDS FOR BIOFUELS DISPENSERS.

- 2 In the absence of appropriate private sector stand-
- 3 ards adopted prior to the date of enactment of this Act,
- 4 and consistent with the National Technology Transfer and
- 5 Advancement Act of 1995, the Secretary of Energy, in
- 6 consultation with the Director of the National Institute
- 7 of Standards and Technology, shall develop standards for
- 8 biofuel dispenser systems in order to promote broader
- 9 biofuels adoption and utilization.

AMENDMENT TO H.R. 2773 OFFERED BY MRS. BIGGERT OF ILLINOIS

Page 4, line 9, insert ", which shall be established for a period of 5 years, after which the grantee may reapply for selection on a competitive basis" after "Defense Districts".

Page 6, line 11, strike "and".

Page 6, line 15, strike the period and insert "; and".

Page 6, after line 15, insert the following new paragraph:

- 1 (4) an evaluation of the life cycle impact of the
- 2 use of the ethanol blends described in subsection (a)
- 3 on carbon dioxide and greenhouse gas emissions.

Page 7, line 8, insert "AND PERFORMANCE" after "DURABILITY".

Page 7, lines 12 and 13, strike "engine durability" and insert "the performance and durability of engines and engine systems".

Page 7, lines 16 through 18, amend paragraph (1) to read as follows:

- 1 (1) an assessment of whether the use of bio-
- 2 diesel lessens the durability and performance of con-
- 3 ventional diesel engines and engine systems; and

Page 8, line 3, strike "1 year" and insert "24 months".

AMENDMENT TO H.R. 2773 OFFERED BY Bartlett and Woolse y

Page 10, line 6, insert "and the Secretary of Agriculture" after "Environmental Protection Agency".

Page 10, line 16, insert "and on the food supply for humans and animals" after "on the environment".

AMENDMENT TO H.R. 2773 OFFERED BY MR. HILL OF INDIANA

Page 5, line 12, strike "subsection" and insert "subsections".

Page 5, after line 17, insert the following new subsection:

- 1 "(h) Retrofit Technologies for the Develop-
- 2 MENT OF ETHANOL FROM CELLULOSIC MATERIALS.—
- 3 The Secretary shall establish a program of research, devel-
- 4 opment, demonstration, and commercial application on
- 5 technologies and processes to enable biorefineries that ex-
- 6 clusively use corn grain or corn starch as a feedstock to
- 7 produce ethanol to be retrofitted to accept a range of bio-
- 8 mass, including lignocellulosic feedstocks.".

AMENDMENT TO H.R. 2773 OFFERED BY MR. BARTLETT OF MARYLAND

Page 3, line 23, strike "5 percent" and insert "2.5 percent".

AMENDMENT TO H.R. 2773 OFFERED BY MR. LAMPSON OF TEXAS

Page 3, line 20, insert "(a) BIODIESEL STUDY.—" before "Not later than".

Page 3, after line 25, insert the following new subsection:

- 1 (b) Materials for the Establishment of
- 2 STANDARDS.—The Director of the National Institute of
- 3 Standards and Technology shall make publicly available
- 4 the physical property data and characterization of bio-
- 5 diesel, as is defined in subsection (a), in order to encour-
- 6 age the establishment of standards that will promote their
- 7 utilization in the transportation and fuel delivery system.

AMENDMENT TO H.R. 2773 OFFERED BY MR. SMITH OF NEBRASKA AND MR. LAMPSON OF TEXAS

At the end of the bill, insert the following new section:

1 SEC. 13. ALGAL BIOMASS.

- Not later than 90 days after the date of enactment
- 3 of this Act, the Secretary shall submit to the Committee
- 4 on Science and Technology of the House of Representa-
- 5 tives and the Committee on Energy and Natural Re-
- 6 sources of the Senate a report on the progress of the re-
- 7 search and development that is being conducted on the
- 8 use of algae as a feedstock for the production of biofuels.
- 9 The report shall identify continuing research and develop-
- 10 ment challenges and any regulatory or other barriers
- 11 found by the Secretary that hinder the use of this re-
- 12 source, as well as recommendations on how to encourage
- 13 and further its development as a viable transportation
- 14 fuel.