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110TH CONGRESS
1ST SESSION

H. R. 3239

To promote advanced plug-in hybrid vehicles and vehicle components.

IN THE HOUSE OF REPRESENTATIVES

JULY 31, 2007

Mr. BOUCHER (for himself and Mr. DINGELL) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Oversight and Government Reform and Science and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To promote advanced plug-in hybrid vehicles and vehicle components.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. ADVANCED BATTERY LOAN GUARANTEE PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary of Energy shall establish a program to provide guarantees of loans by private institutions for the construction of facilities for the manufacture of advanced vehicle batteries and battery systems that are developed and produced in

the United States, including advanced lithium ion batteries and hybrid electrical system and component manufacturers and software designers.

(b) REQUIREMENTS.—The Secretary may provide a loan guarantee under subsection (a) to an applicant if—

(1) without a loan guarantee, credit is not available to the applicant under reasonable terms or conditions sufficient to finance the construction of a facility described in subsection (a);

(2) the prospective earning power of the applicant and the character and value of the security pledged provide a reasonable assurance of repayment of the loan to be guaranteed in accordance with the terms of the loan; and

(3) the loan bears interest at a rate determined by the Secretary to be reasonable, taking into account the current average yield on outstanding obligations of the United States with remaining periods of maturity comparable to the maturity of the loan.

(c) CRITERIA.—In selecting recipients of loan guarantees from among applicants, the Secretary shall give preference to proposals that—

(1) meet all applicable Federal and State permitting requirements;

(2) are most likely to be successful; and

(3) are located in local markets that have the greatest need for the facility.

(d) MATURITY.—A loan guaranteed under subsection (a) shall have a maturity of not more than 20 years.

(e) TERMS AND CONDITIONS.—The loan agreement for a loan guaranteed under subsection (a) shall provide that no provision of the loan agreement may be amended or waived without the consent of the Secretary.

(f) ASSURANCE OF REPAYMENT.—The Secretary shall require that an applicant for a loan guarantee under subsection (a) provide an assurance of repayment in the form of a performance bond, insurance, collateral, or other means acceptable to the Secretary in an amount equal to not less than 20 percent of the amount of the loan.

(g) GUARANTEE FEE.—The recipient of a loan guarantee under subsection (a) shall pay the Secretary an amount determined by the Secretary to be sufficient to cover the administrative costs of the Secretary relating to the loan guarantee.

(h) FULL FAITH AND CREDIT.—The full faith and credit of the United States is pledged to the payment of all guarantees made under this section. Any such guarantee made by the Secretary shall be conclusive evidence of the eligibility of the loan for the guarantee with respect to principal and interest. The validity of the guarantee

shall be incontestable in the hands of a holder of the guaranteed loan.

(i) REPORTS.—Until each guaranteed loan under this section has been repaid in full, the Secretary shall annually submit to Congress a report on the activities of the Secretary under this section.

(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

(k) TERMINATION OF AUTHORITY.—The authority of the Secretary to issue a loan guarantee under subsection (a) terminates on the date that is 10 years after the date of enactment of this Act.

SEC. 2. DOMESTIC MANUFACTURING CONVERSION GRANT PROGRAM.

Section 712 of the Energy Policy Act of 2005 (42 U.S.C. 16062) is amended—

(1) in subsection (a)—

(A) by inserting ''and components thereof'' after ''sales of efficient hybrid and advanced diesel vehicles'';

(B) by inserting ''and hybrid component manufacturers'' after ''grants to automobile manufacturers'';

(C) by inserting ", plug-in electric hybrid," after "production of efficient hybrid";

(D) by inserting "and suppliers" after "automobile manufacturers"; and

(E) by adding at the end the following: "Priority shall be given to the refurbishment or retooling of manufacturing facilities that have recently ceased operation or will cease operation in the near future."; and

(2) by striking subsection (b) and inserting the following:

"(b) COORDINATION WITH STATE AND LOCAL PROGRAMS.—The Secretary may coordinate implementation of this section with State and local programs designed to accomplish similar goals, including the retention and retraining of skilled workers from the such manufacturing facilities, including by establishing matching grant arrangements.

"(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this section.".

SEC. 3. PLUG-IN HYBRID VEHICLE PROGRAM.

(a) PLUG-IN ELECTRIC DRIVE VEHICLE PROGRAM.—

(1) ESTABLISHMENT.—The Secretary of Energy (in this section referred to as the ''Secretary'') shall establish a competitive program to provide grants on a cost-shared basis to State governments, local governments, metropolitan transportation authorities, air pollution control districts, private or nonprofit entities or combinations thereof, to carry out a project or projects to encourage the use of plug-in electric drive vehicles or other emerging electric vehicle technologies, as determined by the Secretary.

(2) ADMINISTRATION.—The Secretary shall establish requirements for applications for grants under this section, including reporting of data to be summarized for dissemination to the Department, other grantees, and the public, including vehicle and component performance and vehicle and component life cycle costs.

(3) SELECTION CRITERIA.—

(A) PRIORITY.—When making awards under this subsection, the Secretary shall give priority consideration to applications that encourage early widespread utilization of such vehicles and are likely to make a significant con-

tribution to the advancement of the production of such vehicles in the United States.

(B) SCOPE OF PROGRAMS.—When making awards under this subsection, the Secretary shall ensure that the programs will maximize diversity in applications, manufacturers, end-uses and vehicle control systems.

(4) AUTHORIZATIONS OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out the program under this subsection, such sums as may be necessary.

(5) CERTAIN APPLICANTS.—A battery manufacturer that proposes to supply to an applicant for a grant under this section a battery with a capacity of greater than 1 kilowatt-hour for use in a plug-in electric drive vehicle shall—

(A) ensure that the applicant includes in the application a description of the price of the battery per kilowatt hour;

(B) on approval by the Secretary of the application, publish, or permit the Secretary to publish, the price described in subparagraph (A); and

(C) for any order received by the battery manufacturer for at least 1,000 batteries, offer batteries at that price.

(b) ELECTRIC DRIVE EDUCATION PROGRAM.—

(1) IN GENERAL.—The Secretary shall develop a nationwide electric drive transportation education program under which the Secretary shall provide—

(A) teaching materials to secondary schools and high schools; and

(B) assistance for programs relating to electric drive system and component engineering to institutions of higher education.

(2) ELECTRIC VEHICLE COMPETITION.—The program established under paragraph (1) shall include a plug-in hybrid electric vehicle competition for institutions of higher education, which shall be known as the ''Dr. Andrew Frank Plug-In Hybrid Electric Vehicle Competition''.

(3) ENGINEERS.—In carrying out the program established under paragraph (1), the Secretary shall provide financial assistance to institutions of higher education to create new, or support existing, degree programs to ensure the availability of trained electrical and mechanical engineers with the skills necessary for the advancement of—

(A) plug-in electric drive vehicles; and

(B) other forms of electric drive vehicles.

(4) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this subsection such sums as may be necessary.

SEC. 4. PLUG-IN HYBRID DEMONSTRATION VEHICLES.

(a) IN GENERAL.—The Secretary of Energy shall establish a program to make grants to owners of domestic motor vehicle manufacturing or production facilities for the production of plug-in hybrid electric motors or conversion modules to be used as electricity storage capacity for utilities.

(b) PROGRAMS.—The Secretary of Energy shall establish programs to determine how to best integrate plug-in hybrid vehicles into the electric power grid and into the overall electricity infrastructure. These programs shall be conducted in 5 separate regions across the United States at the discretion of the Secretary.

(c) PILOT PROGRAMS.—The Secretary shall establish during the first 6 months of 2008, with other governmental entities, no less than 5 separate pilot programs to convert at least 1000 vehicles in each program to plug-hybrid electric vehicles.

(d) FEDERAL CONTRIBUTION.—The Department of Energy shall contribute up to 50 percent of the cost of conversion modules.

(e) INSTALLATION.—Installations of electricity storage devices shall be undertaken by trained and certified mechanics.

(f) MONITORING.—The Secretary of Energy shall require the monitoring of reliability, efficiency, breakeven costs, and customer satisfaction for a period of 3 years.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this section.

SEC. 5. INCENTIVE FOR FEDERAL AND STATE FLEETS FOR MEDIUM AND HEAVY DUTY HYBRIDS.

Section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211) is amended—

(1) in paragraph (3), by striking ''or a dual fueled vehicle'' and inserting '', a dual fueled vehicle, or a medium or heavy duty vehicle that is a hybrid vehicle'';

(2) by redesignating paragraphs (11), (12), (13), and (14) as paragraphs (12), (14), (15), and (16), respectively;

(3) by inserting after paragraph (10) the following new paragraph:

''(11) the term 'hybrid vehicle' means a vehicle powered both by a diesel or gasoline engine and an electric motor or hydraulic energy storage device that is recharged as the vehicle operates;''; and

(4) by inserting after paragraph (12) (as so redesignated by paragraph (2) of this section) the following new paragraph:

''(13) the term 'medium or heavy duty vehicle' means a vehicle that—

''(A) in the case of a medium duty vehicle, has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds; and

''(B) in the case of a heavy duty vehicle, has a gross vehicle weight rating of more than 14,000 pounds;''.

SEC. 6. INCLUSION OF ELECTRIC DRIVE IN ENERGY POLICY ACT OF 1992.

Section 508 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is amended—

(1) by striking ''The Secretary'' in subsection (a) and inserting ''(1) The Secretary''; and

(2) by adding at the end of subsection (a) the following:

''(2) Not later than January 31, 2009, the Secretary shall allocate credit in an amount to be determined by the Secretary for acquisition of—

''(A) a hybrid electric vehicle;

''(B) a plug-in hybrid electric vehicle;

''(C) a fuel cell electric vehicle;

''(D) a neighborhood electric vehicle; or

''(E) a medium-duty or heavy-duty electric, hybrid electric, hybrid hydraulic, or plug-in hybrid electric vehicle.''; and

(3) by adding at the end the following:

''(e) DEFINITIONS.—In this section:

''(1) FUEL CELL ELECTRIC VEHICLE.—The term 'fuel cell electric vehicle' means an on-road or nonroad vehicle that uses a fuel cell (as defined in section 803 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 2005 (42 U.S.C. 16152)).

''(2) HYBRID ELECTRIC VEHICLE.—The term 'hybrid electric vehicle' means a new qualified hybrid motor vehicle (as defined in section 30B(d)(3) of the Internal Revenue Code of 1986).

''(3) MEDIUM-DUTY OR HEAVY-DUTY ELECTRIC, HYBRID ELECTRIC, OR PLUG-IN HYBRID ELECTRIC VEHICLE.—The term 'medium-duty or heavy-duty

electric, hybrid electric, or plug-in hybrid electric vehicle' is an electric, hybrid electric, or plug-in hybrid electric motor vehicle greater than 8,501 pounds gross vehicle rating.

''(4) NEIGHBORHOOD ELECTRIC VEHICLE.—The term 'neighborhood electric vehicle' means a 4-wheeled on-road or nonroad vehicle, with a top attainable speed in 1 mile of more than 20 mph and not more than 25 mph on a paved level surface, that is propelled by an electric motor and on board, rechargeable energy storage system that is rechargeable using an off-board source of electricity.

''(5) PLUG-IN HYBRID ELECTRIC VEHICLE.—The term 'plug-in hybrid electric vehicle' means a light-duty, medium-duty, or heavy-duty on-road or nonroad vehicle that is propelled by any combination of—

''(A) an electric motor and on-board, rechargeable energy storage system capable of operating the vehicle in intermittent or continuous all-electric mode and which is rechargeable using an off-board source of electricity; and

''(B) an internal combustion engine or heat engine using any combustible fuel.

''(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as are necessary for each of fiscal years 2008 through 2013.''.

SEC. 7. NEAR-TERM ELECTRIC DRIVE TRANSPORTATION DEPLOYMENT PROGRAM.

(a) REVOLVING LOAN PROGRAM.—

(1) IN GENERAL.—The Secretary shall establish a revolving loan program to provide loans to eligible entities for the conduct of qualified electric transportation projects.

(2) CRITERIA.—The Secretary shall establish criteria for the provision of loans under this subsection.

(b) MARKET ASSESSMENT AND ELECTRICITY USAGE PROGRAM.—

(1) IN GENERAL.—The Administrator of the Environmental Protection Agency, in consultation with the Secretary and private industry, shall carry out a program—

(A) to inventory and analyze existing electric drive transportation technologies and hybrid technologies and markets; and

(B) to identify and implement methods of removing barriers for existing and emerging ap-

plications of electric drive transportation technologies and hybrid transportation technologies.

(2) ELECTRICITY USAGE.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency and private industry, shall carry out a program—

(A) to develop systems and processes—

(i) to enable plug-in electric vehicles to enhance the availability of emergency back-up power for consumers; and

(ii) to study and demonstrate the potential value to the electric grid of using the energy stored in the on-board storage systems to improve the efficiency of the grid generation system; and

(B) to work with utilities and other interested stakeholders to study and demonstrate the implications of the introduction of plug-in electric vehicles and other types of electric transportation on the production of electricity from renewable resources.

(3) OFF-PEAK ELECTRICITY USAGE GRANTS.—In carrying out the program under paragraph (2), the Secretary shall provide grants to assist eligible public and private electric utilities to conduct pro-

grams or activities to encourage owners of electric drive transportation technologies—

(A) to use off-peak electricity; or

(B) to have the load managed by the utility.

(c) DEFINITION OF QUALIFIED ELECTRIC TRANSPORTATION PROJECT.—In this section, the term ''qualified electric transportation project'' includes a project relating to—

(1) ship-side or shore-side electrification for vessels;

(2) truck-stop electrification;

(3) electric truck refrigeration units;

(4) battery-powered auxiliary power units for trucks;

(5) electric airport ground support equipment;

(6) electric material/cargo handling equipment;

(7) electric or dual-mode electric freight rail;

(8) any distribution upgrades needed to supply electricity to the qualified electric transportation projects; and

(9) any ancillary infrastructure, including panel upgrades, battery chargers, in-situ transformer, and trenching.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to carry this section such sums as may be necessary.

SEC. 8. STUDYING THE BENEFITS OF PLUG-IN HYBRID ELECTRIC DRIVE VEHICLES AND ELECTRIC DRIVE TRANSPORTATION.

(a) STUDY.—

(1) CITY CARS.—Not later than 1 year after the date of enactment of this section, the Secretary of Transportation in consultation with the Secretary of Energy and appropriate Federal agencies and interested stakeholders in the public, private and non-profit sectors, shall study and report to Congress on the benefits of and barriers to the widespread use of a potentially new class of vehicles known as city cars with performance capability that exceeds that of low speed vehicles but is less than that of passenger vehicles, and which may be battery electric, fuel cell electric, or plug-in hybrid electric vehicles. Such study shall examine the benefits and issues associated with limiting city cars to a maximum speed of 35 mph, 45 mph, 55 mph, or any other maximum speed, and make a recommendation regarding maximum speed.

(2) AUTHORIZATION OF APPROPRIATIONS.—Such sums as may be necessary are authorized to be appropriated to carry out this subsection.

(b) DEFINITIONS.—In this section—

(1) NONROAD VEHICLE.—The term ''nonroad vehicle'' has the meaning given that term in section 216 of the Clean Air Act (42 U.S.C. 7550), or vehicles of the same classification that are fully or partially powered by an electric motor powered by a fuel cell, a battery, or an off-board source of electricity.

(2) PLUG-IN ELECTRIC DRIVE VEHICLE.—The term ''plug-in electric drive vehicle'' means a means a light-duty, medium-duty, or heavy-duty on-road or nonroad battery electric, hybrid or fuel cell vehicle that can be recharged from an external electricity source for motive power.

(3) PLUG-IN HYBRID ELECTRIC VEHICLE.—The term ''plug-in hybrid electric vehicle'' means a light-duty, medium-duty, or heavy-duty on-road or nonroad vehicle that is propelled by any combination of—

(A) an electric motor and on-board, rechargeable energy storage system capable of operating the vehicle in intermittent or continuous

all-electric mode and which is rechargeable using an off-board source of electricity; and

(B) an internal combustion engine or heat engine using any combustible fuel.

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