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H. R. 5442

To establish programs to accelerate, provide incentives for, and examine the challenges and opportunities associated with the deployment of electric drive vehicles, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 27, 2010

Mr. MARKEY of Massachusetts (for himself, Mrs. BIGGERT, Mr. MCNERNEY, and Ms. ESHOO) 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, Science and Technology, Ways and Means, and Transportation and Infrastructure, 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 establish programs to accelerate, provide incentives for, and examine the challenges and opportunities associated with the deployment of electric drive vehicles, and for other purposes.

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

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Electric Drive Vehicle Deployment Act of 2010''.

SEC. 2. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) DEPLOYMENT COMMUNITY.—The term ''deployment community'' means an area selected by the Secretary under the program established under section 3(a). Such term may include one or more municipalities, transportation corridors that connect municipalities, or other geographic areas that the Secretary determines appropriate.

(3) ELECTRIC DRIVE VEHICLE.—The term ''electric drive vehicle'' means a vehicle that—

(A)(i) is—

(I) a light-duty vehicle (as that term is defined in section 86.1803–01 of title 40, Code of Federal Regulations, as in effect as of the date of enactment of this Act) that draws motive power from a battery with a capacity of at least 4 kilowatt-hours;

(II) a heavy-duty vehicle (as that term is defined in section 86.1803–01 of title 40, Code of Federal Regulations, as in effect as of the date of en-

actment of this Act) with a gross vehicle weight rating greater than 8,500 pounds and less than 14,000 pounds that draws motive power from a battery with a capacity of at least 10 kilowatt-hours;

(III) a heavy-duty vehicle (as that term is defined in section 86.1803–01 of title 40, Code of Federal Regulations, as in effect as of the date of enactment of this Act) with a gross vehicle weight rating greater than 14,000 pounds but less than 33,000 pounds that draws motive power from a battery with a capacity of at least 15 kilowatt-hours; or

(IV) a heavy duty vehicle (as that term is defined in section 86.1803–01 of title 40, Code of Federal Regulations, as in effect as of the date of enactment of this Act) with a gross vehicle weight rating greater than 33,000 pounds that draws motive power from a battery with a capacity of at least 20 kilowatt-hours; and

(ii) can be recharged from an external source of electricity for motive power; or

(B) is a motor vehicle (as that term is defined in section 216 of the Clean Air Act (42 U.S.C. 7550)) that draws its motive power from a fuel cell (as defined in section 803 of the Spark M. Matsunaga Hydrogen Act of 2005 (42 U.S.C. 16152)).

(4) ELECTRIC UTILITY.—The term ''electric utility'' has the meaning given such term in section 3(4) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(3)).

(5) GROSS VEHICLE WEIGHT RATING.—The term ''gross vehicle weight rating'' has the meaning given such term in section 216(7) of the Clean Air Act (42 U.S.C. 7550(7)).

(6) MUNICIPALITY.—The term ''municipality'' has the meaning given such term in section 302(f) of the Clean Air Act (42 U.S.C. 7602(f)).

(7) QUALIFIED ELECTRIC DRIVE VEHICLE COMPONENTS.—The term ''qualified electric drive vehicle components'' means components the Secretary determines are uniquely needed to produce electric drive vehicles.

(8) QUALIFIED ELECTRIC DRIVE VEHICLE INFRASTRUCTURE.—The term ''qualified electric drive vehicle infrastructure'' means equipment and services that—

(A) support the electric refueling needs of electric drive vehicles and may be located in public or private locations, including street parking, parking garages, parking lots, homes, gas stations, and highway rest stops; and

(B) serve smart grid functions, as defined in section 1306(d) the Energy Independence and Security Act of 2007 (42 U.S.C. 17386), that will optimize the integration of electric drive vehicles into the electric grid.

(9) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

SEC. 3. TARGETED ELECTRIC DRIVE VEHICLES DEPLOYMENT COMMUNITIES PROGRAM.

(a) IN GENERAL.—

(1) ESTABLISHMENT.—The Secretary shall establish a competitive program to provide financial assistance to be used as described under subsection (d), consistent with the goals under subsection (b), for purposes of deploying electric drive vehicles in deployment communities.

(2) PHASE 1.—The Secretary shall, not later than 12 months after the date of enactment of this Act, based upon applications for financial assistance received pursuant to subsection (c), select 5 deployment communities for the first phase of the program established under paragraph (1).

(b) GOALS.—The goals of the program established under subsection (a)(1) shall be—

(1) to facilitate the rapid near-term deployment of electric drive vehicles in deployment communities, deploying at least 700,000 electric drive vehicles total in deployment communities not later than 6 years after the date of enactment of this Act;

(2) to demonstrate the viability of a vehicle-based transportation system that reduces dependence on petroleum-based fuel and contributes to reducing emissions of carbon dioxide;

(3) to facilitate the integration of advanced vehicle technologies into deployment communities while optimizing electric grid system performance and reliability;

(4) to demonstrate the potential—

(A) benefits of coordinated investments in vehicle electrification and infrastructure on personal mobility; and

(B) reduction of emissions of greenhouse gases and criteria air pollutants from vehicle electrification and infrastructure;

(5) to demonstrate protocols and standards that facilitate vehicle integration into the electric grid, including demonstration of the use of qualified electric drive vehicle infrastructure;

(6) to increase understanding of the primary regional differences and varying regulatory environments that impact electric drive vehicle market penetration and establish best practices for addressing deployment barriers to electric drive vehicles; and

(7) to increase understanding of consumers' vehicle charging and other electric drive vehicle infrastructure needs and establish best practices to meet such needs.

(c) APPLICATIONS.—Any State, Indian tribe, or local government (or group of State, Indian tribe, or local governments) may apply to the Secretary for financial assistance to be used as described in subsection (d) in deployment communities. Such applications may be jointly sponsored by electric utilities, automobile manufacturers, technology providers, car sharing companies or organizations, third party electric drive vehicle service providers, or other persons or entities.

(d) USE OF FUNDS.—Pursuant to applications received under subsection (c), the Secretary may make financial assistance under the program established under subsection (a) available to any applicant or joint sponsor of the application to be used for any of the following:

(1) Assisting persons located in the deployment community, consistent with subsections (g) and (h).

(2) Supporting the use of electric drive vehicles by funding projects for any of the following:

(A) Planning and deployment of qualified electric drive vehicle infrastructure.

(B) Updating building codes, inspections related to the installation of electric drive vehicle charging infrastructure, and updating zoning for such infrastructure.

(C) Converting government fleets to electric drive vehicles.

(e) PROGRAM REQUIREMENTS.—The Secretary, in consultation with the Administrator and the Secretary of Transportation, shall, not later than 6 months after the date of enactment of this Act, determine the requirements for the program established under subsection (a), including the following:

(1) Criteria for evaluating applications submitted under subsection (c), consistent with sub-

section (f), including the anticipated ability of applicants to promote deployment and market penetration of electric drive vehicles.

(2) Data regarding deployment communities, and the electric drive vehicles and qualified electric drive vehicle infrastructure in such deployment communities, required for collection, analysis, and evaluation of the challenges and opportunities associated with the widespread deployment of electric drive vehicles.

(3) Metrics of success for deployment communities.

(4) Reporting requirements for entities that receive financial assistance under this section, including a comprehensive set of performance data characterizing the results of the program in the deployment community.

(f) CRITERIA FOR EVALUATING APPLICATIONS.—The Secretary shall require that applications under subsection (c) include the following:

(1) A plan to promote, market, and support the deployment of electric drive vehicles in a deployment community, through the deployment of consumer vehicles, and, as appropriate, private or public fleets.

(2) The role of each stakeholder participating in the deployment of electric drive vehicles in the deployment community, and an indication of how the financial assistance applied for will be used in the deployment community.

(3) The number of electric drive vehicles projected to be deployed in the deployment community during the first phase of the program established under subsection (a).

(4) A strategy for developing program participation among residents of the deployment community and a plan that demonstrates high likelihood that the deployment community will procure and deploy the projected number of electric drive vehicles.

(5) A deployment and financing plan for publicly available electric drive vehicle charging infrastructure that includes a policy on cost sharing, methodology for determining the number and placement of such infrastructure, and ensures use of open, non-proprietary standards that maximize interoperability with Smart Grid technologies.

(6) Verification that building codes within the proposed deployment community appropriately accommodate electric drive vehicle charging infrastructure for new construction and major upgrades or

evidence of a clear plan to update such codes before or during the period of financial assistance.

(7) Verification that zoning, parking rules, or other local ordinances have been updated or will be updated as necessary to facilitate the installation of publicly available electric drive vehicle charging infrastructure, where appropriate.

(8) Mechanisms to increase individual consumer benefits consistent with subsection (h).

(9) The extent to which electric utilities in the deployment community have or plan to update policies—

(A) that—

(i) reflect rate structures that benefit consumers who charge electric drive vehicles off-peak; or

(ii) with respect to any deployment community with a competitive retail regulatory regime, will make electric drive vehicle charging services available to consumers;

(B) that take into account potential impacts to the local electric distribution system or the electric grid from the incremental electric energy used to charge electric drive vehicles;

(C) that utilize information technologies to minimize effects of charging electric drive vehicles on the local electric distribution system or electric grid;

(D) that relate to Smart Grid technologies for electric drive vehicle charging purposes, including those that allow 2-way communication of electric energy movement (to prepare for vehicle-to-grid applications); and

(E) encourage electric energy conservation and reduction in peak demand by making consumer electric energy or charging service price and usage information available to consumers.

(g) PRIORITY.—The Secretary shall give preference to applications for financial assistance under subsection (c) that—

(1) are jointly sponsored by entities that share interest in the deployment of electric drive vehicles;

(2) project the greatest reduction in dependency on petroleum as fuel and carbon dioxide emissions, in proportion to the amount of petroleum used as fuel and carbon dioxide emitted by the proposed deployment community;

(3) for at least one deployment community, include a demonstration of the deployment of heavy-duty electric drive vehicles;

(4) include a plan to provide additional State, Indian tribe, local governmental, or private incentives for the deployment of electric drive vehicles;

(5) best demonstrate the ability of the deployment community to deploy the targeted number of electric drive vehicles;

(6) are most likely to yield information that informs and assists with the large-scale deployment of electric drive vehicles in different regions and regulatory regimes of the United States; and

(7) are submitted for deployment communities that are located in proximity to other areas to which electric drive vehicle deployment could be expanded.

(h) CONSUMER BENEFITS.—As part of the amounts authorized under subsection (k), the Secretary shall ensure that each recipient of financial assistance for a deployment community provides a minimum of $2,000 in benefits to each of the first 100,000 consumers who reside in the deployment community who purchase electric drive vehicles. Such benefits may not be used to offset the costs of any other benefit in effect in the deployment community as of the date of enactment of this Act, and may include—

(1) rebates of portions of the costs of purchasing electric drive vehicles;

(2) rebates of portions of the costs of permitting, purchasing, or installing home electric drive vehicle charging stations;

(3) rebates of State or local sales taxes for purchasing electric drive vehicles;

(4) rebates of the incremental electric energy costs associated with charging electric drive vehicles;

(5) rebates of the costs of State or local toll road access charges;

(6) rebates of the costs of parking electric drive vehicles; and

(7) any other benefit that the Secretary determines is appropriate and likely to incentivize the purchase of electric drive vehicles.

(i) INFORMATION CLEARINGHOUSE.—The Secretary shall, as part of the program established pursuant to subsection (a)(1), collect and, as promptly as practicable, make available to the public information regarding the cost, performance, and other technical data regarding the deployment and integration of electric drive vehicles.

(j) REPORTS.—

(1) PHASE 1 UPDATE AND PHASE 2 PLAN.—Not later than 4 years after the date of enactment of

this Act, the Secretary shall submit to Congress a report—

(A) describing the status of the deployment communities for which financial assistance is provided under the program established under subsection (a)(1);

(B) describing, analyzing, and evaluating the data collected under the first phase of the program established under subsection (a)(1);

(C) assessing the first phase of the program established under subsection (a)(1); and

(D) describing a plan for the second phase of the program established under subsection (a)(1), including—

(i) how many additional deployment communities should be selected for further deployment activities and incentives;

(ii) how criteria for selection of deployment communities should be updated;

(iii) how incentive structures for the deployment of electric drive vehicles should be changed; and

(iv) a request for funding to implement such second phase.

(2) PHASE 1 RESULTS.—Not later than 6 years after the date of enactment of this Act, the Secretary shall submit to Congress a report assessing the first phase of the program established under subsection (a)(1).

(k) AUTHORIZATION.—There are authorized to be appropriated to carry out this section $800,000,000 for each recipient of financial assistance for a deployment community, to be expended within 5 years of the date of the receipt of funds.

SEC. 4. MODIFICATION OF CREDIT FOR ALTERNATIVE FUEL VEHICLE REFUELING PROPERTY FOR VEHICLES POWERED BY ELECTRICITY.

(a) SPECIAL RULES FOR PROPERTY PLACED IN SERVICE BEFORE JANUARY 1, 2017.—Subsection (e) of section 30C of the Internal Revenue Code of 1986 is amended by adding at the end the following new paragraph:

"(7) PROPERTY FOR RECHARGING VEHICLES POWERED BY ELECTRICITY.—In the case of property placed in service after December 31, 2010, and before January 1, 2017, which relates to electricity—

"(A) subsection (a) shall be applied by substituting '50 percent' for '30 percent',

"(B) subsection (b)(1) shall be applied by substituting '$50,000' for '$30,000', and

"(C) subsection (b)(2) shall be applied by substituting '$2,000' for '$1,000'.".

(b) INSTALLATION COSTS.—Subsection (e) of section 30C of such Code, as amended by subsection (a), is amended by adding at the end the following:

"(8) INSTALLATION COSTS.—The cost of any qualified alternative fuel vehicle refueling property which relates to electricity shall include the cost of the original installation of such property.".

(c) TERMINATION OF CREDIT.—Subsection (g) of section 30C of such Code is amended by striking "and" at the end of paragraph (1), by redesignating paragraph (2) as paragraph (3), and by inserting after paragraph (1) the following new paragraph:

"(2) in the case of property relating to electricity, after December 31, 2016, and".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2010.

SEC. 5. ELECTRIC VEHICLE REFUELING PROPERTY TAX CREDIT BONDS.

(a) IN GENERAL.—Paragraph (1) of section 54A(d) of the Internal Revenue Code of 1986 is amended by strik-

ing ''or'' at the end of subparagraph (D), by inserting ''or'' at the end of subparagraph (E), and by inserting after subparagraph (E) the following new subparagraph:

''(F) a qualified electric vehicle refueling property bond,''.

(b) QUALIFIED PURPOSE.—Subparagraph (C) of section 54A(d)(2) of the Internal Revenue Code of 1986 is amended—

(1) by striking ''and'' at the end of clause (iv),

(2) by striking the period at the end of clause (v) and inserting '', and'', and

(3) by adding at the end the following new clause:

''(vi) in the case of a qualified electric vehicle refueling property bond, a purpose specified in section 54G(a)(1).''.

(c) BONDS ALLOWED.—Subpart I of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by adding at the end the following new section:

''SEC. 54G. QUALIFIED ELECTRIC VEHICLE REFUELING PROPERTY BONDS.

''(a) QUALIFIED ELECTRIC VEHICLE REFUELING PROPERTY BOND.—For purposes of this subpart, the

term ‘qualified electric vehicle refueling property bond’ means any bond issued as part of an issue if—

“(1) 100 percent of the available project proceeds of such issue are to be used for capital expenditures incurred by a qualified issuer for 1 or more qualified electric vehicle refueling properties,

“(2) the bond is issued by a qualified issuer, and

“(3) the issuer designates such bond for purposes of this section.

“(b) REDUCED CREDIT AMOUNT.—Notwithstanding paragraph (2) of section 54A(b), the annual credit determined with respect to any qualified electric vehicle refueling property bond is 70 percent of the amount which would (but for this subsection) otherwise be determined under such paragraph with respect to such bond.

“(c) LIMITATION ON AMOUNT OF BONDS DESIGNATED.—The maximum aggregate face amount of bonds which may be designated under subsection (a) by any issuer shall not exceed the limitation amount allocated to such issuer under subsection (e).

“(d) NATIONAL LIMITATION ON AMOUNT OF BONDS DESIGNATED.—There is a national qualified electric vehicle refueling property bond limitation of $100,000,000.

"(e) ALLOCATIONS.—The Secretary shall make allocations of the amount of the national qualified electric vehicle refueling property bond limitation described in subsection (d) among purposes described in subsection (a)(1) in such manner as the Secretary determines appropriate.

"(f) DEFINITIONS.—For purposes of this section—

"(1) QUALIFIED ELECTRIC VEHICLE REFUELING PROPERTY.—The term 'qualified electric vehicle refueling property' means any qualified alternative fuel vehicle refueling property (within the meaning of section 30C) which relates to electricity.

"(2) QUALIFIED ISSUER.—

"(A) IN GENERAL.—The term 'qualified issuer' means a public power provider, a cooperative electric company, or a governmental body.

"(B) GOVERNMENTAL BODY.—The term 'governmental body' means any State or Indian tribal government, or any political subdivision thereof.

"(C) PUBLIC POWER PROVIDER.—The term 'public power provider' means a State utility that has a service obligation to end-users or to a distribution utility (within the meaning of section 217 of the Federal Power Act, as in ef-

fect on the date of the enactment of this section).

"(D) COOPERATIVE ELECTRIC COMPANY.—The term 'cooperative electric company' means a mutual or cooperative electric company described in section 501(c)(12) or an organization described in section 1381(a)(2)(C).".

(d) CLERICAL AMENDMENT.—The table of sections for subpart I of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by adding at the end the following new item:

"Sec. 54G. Qualified electric vehicle refueling property bonds.".

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to obligations issued after the date of the enactment of this Act.

SEC. 6. ELECTRIC DRIVE VEHICLE INFRASTRUCTURE PLANNING.

(a) AMENDMENT OF PURPA.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

"(20) ELECTRIC DRIVE VEHICLE INFRASTRUCTURE.—

"(A) UTILITY PLAN FOR INFRASTRUCTURE.—Each electric utility shall develop a plan to support the use of electric drive vehicles, including heavy-duty electric drive vehicles.

Each such plan shall provide for the deployment of the charging infrastructure or other infrastructure necessary to adequately support the use of electric drive vehicles, and shall provide for, as appropriate, the support needed to enable the competitive installation, operation, or provision of electric drive vehicle charging services. The plan may provide for deployment of electric drive vehicle charging stations in public or private locations, including street parking, parking garages, parking lots, homes, gas stations, and highway rest stops. Any such plan may also include—

"(i) rapid charging infrastructure, including fast charging and battery exchange, and other services;

"(ii) triggers for charging infrastructure deployment based upon market penetration of electric drive vehicles;

"(iii) distribution system upgrades to accommodate requirements of electric drive vehicle charging; and

"(iv) such other elements as the State regulatory authority (in the case of each electric utility for which is has ratemaking

authority) or utility (in the case of a non-regulated utility) determines necessary to support electric drive vehicles.

"(B) SUPPORT REQUIREMENTS.—Each State regulatory authority (in the case of each electric utility for which it has ratemaking authority) and each utility (in the case of a non-regulated utility) shall—

"(i) require that electric drive vehicle charging infrastructure deployed complies with any applicable Federal standard and is interoperable with the applicable products of all auto manufacturers, to the extent possible;

"(ii) consider adopting minimum requirements for deployment of electric drive vehicle charging infrastructure and other appropriate requirements necessary to support the use of electric drive vehicles;

"(iii) consider adopting requirements to ensure the ability of each electric drive vehicle to be identified and billed for electric charging costs individually; and

"(iv) assess the system benefits of widespread deployment of electric drive ve-

hicles associated with predominantly off-peak electric drive vehicle charging.

"(C) COST RECOVERY.—Each State regulatory authority (in the case of each electric utility for which it has ratemaking authority) and each utility (in the case of a nonregulated utility) shall consider whether, and to what extent, to allow cost recovery for plans under subparagraph (A) and implementation of such plans.

"(D) SMART GRID INTEGRATION.—Each State regulatory authority (in the case of each electric utility for which it has ratemaking authority) and each utility (in the case of a nonregulated utility) shall, in accordance with actions taken by the Commission pursuant to section 1305(d) of the Energy Independence and Security Act of 2007—

"(i) establish any appropriate protocols and standards for integrating electric drive vehicles into an electric distribution system, including smart grid systems and devices as described in title XIII of the Energy Independence and Security Act of 2007;

"(ii) provide for, to the extent feasible, the ability for each electric drive vehicle to be identified individually and to be associated with its owner's electric utility account, regardless of the location that the vehicle is plugged in, for purposes of appropriate billing for any electric energy required to charge the vehicle's batteries as well as any crediting for electric energy provided to the electric utility from the vehicle's batteries; and

"(iii) review the determination made in response to paragraph (14) of this subsection in light of this paragraph, including whether time-of-use pricing should be employed to enable the use of electric drive vehicles to contribute to meeting peak-load and ancillary service power needs.

"(E) DEFINITION OF 'ELECTRIC DRIVE VEHICLE'.—For purposes of this paragraph, the term 'electric drive vehicle' has the meaning given such term in section 2(3) of the Electric Drive Vehicle Deployment Act of 2010.".

(b) COMPLIANCE.—

(1) TIME LIMITATIONS.—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding the following at the end thereof:

''(7)(A) Not later than 3 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated utility shall commence the consideration referred to in section 111, or set a hearing date for consideration, with respect to the standards established by paragraph (20) of section 111(d).

''(B) Not later than 4 years after the date of enactment of the this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority), and each nonregulated electric utility, shall complete the consideration, and shall make the determination, referred to in section 111 with respect to the standards established by paragraph (20) of section 111(d).''.

(2) FAILURE TO COMPLY.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended by adding the following at the end: ''In the case of the standards es-

tablished by paragraph (20) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of such paragraph.''.

(3) PRIOR STATE ACTIONS.—Section 112(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(d)) is amended by striking ''(19)'' and inserting ''(20)'' before ''of section 111(d)''.

SEC. 7. TECHNOLOGY DEVELOPMENT.

(a) SECONDARY USE APPLICATIONS AND RECYCLING STUDY.—

(1) IN GENERAL.—The Secretary shall conduct a study on secondary use applications of electric drive vehicle batteries. Such study shall include—

(A) a survey of the uses, challenges, costs, and benefits associated with secondary uses of batteries no longer suitable for use in electric drive vehicles (such as utility regulation services and home storage); and

(B) a survey of technologies, challenges, costs, and benefits associated with the recycling of electric drive vehicle batteries.

(2) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall

submit to Congress a report describing the results of the study conducted pursuant to paragraph (1).

(b) RESEARCH AND DEVELOPMENT PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a competitively awarded, peer reviewed grant program of research, development, demonstration, and commercial application of advanced batteries with vehicle applications, qualified electric drive vehicle components, and qualified electric drive infrastructure.

(2) COORDINATION.—The Secretary shall ensure that the program established under paragraph (1) is coordinated with other applicable advanced battery, qualified electric drive component, and qualified electric drive infrastructure research and development activities conducted by the Department of Energy, with efforts to minimize duplication of such activities.

(3) ELIGIBLE ENTITIES.—The Secretary may award grants to carry out the program established under paragraph (1) to institutions of higher education, national laboratories, and other entities the Secretary determines appropriate.

(4) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out

this subsection $167,000,000 for each of fiscal years 2011 through 2016.

SEC. 8. STUDY ON SUPPLY OF RAW MATERIALS.

(a) STUDY.—The Secretary of the Interior, in consultation with the Secretary, shall conduct a study to—

(1) identify the raw materials needed for the manufacture of electric drive vehicles, qualified electric drive vehicle components, and qualified electric drive vehicle infrastructure;

(2) describe the primary or original sources of raw materials described in paragraph (1) in the United States, as of the date of enactment of this Act, and known reserves and resources of such materials; and

(3) assess the ability of the United States to secure reliable and resilient supplies of raw materials described in paragraph (1) to manufacture, deploy, and maintain a fleet of electric drive vehicles.

(b) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary of the Interior shall submit to Congress a report describing the results of the study conducted pursuant to subsection (a).

SEC. 9. FEDERAL FLEETS.

(a) IN GENERAL.—For purposes of this section, electric energy consumed by agencies of the Federal Government to fuel electric drive vehicles—

(1) is alternative fuel (as defined in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211)); and

(2) shall be accounted for under Federal fleet management reporting requirements, not under Federal building management reporting requirements.

(b) ASSESSMENT AND REPORT.—Not later than 180 days after the date of enactment of this Act and at the completion of phase I of the program established under section 3(a)(1), the Federal Energy Management Program and the General Services Administration shall complete an assessment of motor vehicle fleets operated by agencies of the Federal Government and submit a report to Congress that describes—

(1) for each agency of the Federal Government, the types of vehicles the agency uses that may or may not be suitable for near-term and medium-term conversion to electric drive vehicles, taking into account the types of vehicles for which electric drive vehicles could provide comparable functionality and lifecycle costs;

(2) how many electric drive vehicles could be deployed by each agency of the Federal Government in 5 years and in 10 years, assuming that electric drive vehicles are available and are purchased when new vehicles are needed or existing vehicles are replaced; and

(3) the estimated cost to the Federal Government for vehicle purchases pursuant to paragraph (2) for each fiscal year.

(c) BUDGET REQUEST.—For each fiscal year that begins after one year after the date of enactment of this Act, each agency of the Federal Government shall include electric drive vehicle purchases identified in the report under subsection (b) in the budget of the agency to be included in the budget of the United States Government submitted by the President under section 1105 of title 31, United States Code.

(d) PILOT PROGRAM TO DEPLOY ELECTRIC DRIVE VEHICLES IN THE FEDERAL FLEET.—

(1) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Administrator of General Services shall acquire 1,000 electric drive vehicles to be deployed in a range of locations in motor vehicle fleets operated by Federal agencies.

(2) DATA COLLECTION.—The Administrator of General Services shall collect data regarding—

(A) the cost, performance, and use of electric drive vehicles in motor vehicle fleets operated by Federal agencies;

(B) the deployment and integration of electric drive vehicles in motor vehicle fleets operated by Federal agencies; and

(C) the contribution of electric drive vehicles in motor vehicle fleets operated by Federal agencies toward reducing the use of fossil fuels and greenhouse gas emissions.

(3) REPORT.—Not later than 5 years after the date of enactment of this Act, the Administrator of General Services shall submit to Congress a report that—

(A) describes the status of electric drive vehicles in motor vehicle fleets operated by Federal agencies; and

(B) includes an analysis of the data collected under this subsection.

SEC. 10. ELECTRIC DRIVE COMPONENT AND INFRASTRUCTURE MANUFACTURING LOAN PROGRAM.

(a) DIRECT LOAN PROGRAM.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and subject to the availability of appropriated funds, the Secretary shall carry out a program to provide a total of not more than $5,000,000,000 in loans to eligible individuals and entities (as determined by the Secretary and including qualified electric drive vehicle component suppliers and qualified electric drive vehicle infrastructure suppliers) for the costs of activities described in subsection (b). The loans shall be made through the Federal Financing Bank, with the full faith and credit of the United States Government on the principal and interest. The full credit subsidy shall be paid by the Secretary using appropriated funds.

(2) APPLICATION.—An applicant for a loan under this subsection shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including a written assurance that—

(A) all laborers and mechanics employed by contractors or subcontractors during construction, alteration, or repair that is financed, in whole or in part, by a loan under this section shall be paid wages at rates not less than those

prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code; and

(B) the Secretary of Labor shall, with respect to the labor standards described in this paragraph, have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

(3) SELECTION OF ELIGIBLE PROJECTS.—The Secretary shall select eligible projects to receive loans under this subsection in cases in which, as determined by the Secretary, the loan recipient—

(A) is financially viable without the receipt of additional Federal funding associated with the proposed project;

(B) will provide sufficient information to the Secretary for the Secretary to ensure that the funds are expended efficiently and effectively; and

(C) has met such other criteria as may be established and published by the Secretary.

(4) RATES, TERMS, AND REPAYMENT OF LOANS.—A loan provided under this subsection—

(A) shall have an interest rate that, as of the date on which the loan is made, is equal to the cost of funds to the Department of the Treasury for obligations of comparable maturity;

(B) shall have a term equal to the lesser of—

(i) the projected life, in years, of the eligible project to be carried out using funds from the loan, as determined by the Secretary; or

(ii) 25 years;

(C) may be subject to a deferral in repayment for not more than 5 years after the date on which the eligible project carried out using funds from the loan first begins operations, as determined by the Secretary; and

(D) shall be made by the Federal Financing Bank.

(b) USE OF FUNDS.—A loan provided under subsection (a) may be used by the loan recipient to pay the costs of—

(1) reequipping, expanding, or establishing a manufacturing facility in the United States to produce—

(A) qualified electric drive vehicle infrastructure; or

(B) qualified electric drive vehicle components; and

(2) engineering integration performed in the United States of qualified electric drive vehicle components.

(c) FEES.—Administrative costs shall be no more than $100,000 or 10 basis points of the loan.

(d) PRIORITY.—

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

(A) are most likely to be successful; and

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

(2) EXISTING FACILITIES.—The Secretary shall, in making loans to manufacturers that have existing facilities, give priority to those facilities that are oldest or have been in existence for at least 20 years. Such facilities may currently be sitting idle.

(e) SET ASIDE FOR SMALL MANUFACTURERS AND COMPONENT SUPPLIERS.—

(1) DEFINITION OF COVERED FIRM.—In this subsection, the term ''covered firm'' means a firm that—

(A) employs less than 500 individuals; and

(B) manufactures qualified electric drive vehicle infrastructure or qualified electric drive vehicle components.

(2) SET ASIDE.—Of the amount of funds that are used to make loans for each fiscal year under subsection (a), the Secretary shall use not less than 25 percent to make loans to covered firms or consortia led by a covered firm.

(f) APPOINTMENT AND PAY OF PERSONNEL.—

(1) The Secretary may use direct hiring authority pursuant to section 3304(a)(3) of title 5, United States Code, to appoint such professional and administrative personnel as the Secretary determines necessary to the discharge of the Secretary's functions under this section.

(2) The rate of pay for a person appointed pursuant to paragraph (1) shall not exceed the maximum rate payable for GS–15 of the General Schedule under chapter 53 of such title.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2011 through 2016.

SEC. 11. LOAN GUARANTEES FOR ADVANCED BATTERY PURCHASES FOR USE IN STATIONARY APPLICATIONS.

Subtitle B of title I of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011 et seq.) is amended by adding at the end the following:

"SEC. 137. LOAN GUARANTEES FOR ADVANCED BATTERY PURCHASES.

"(a) DEFINITIONS.—In this section:

"(1) QUALIFIED AUTOMOTIVE BATTERY.—The term 'qualified automotive battery' means a battery that—

"(A) has at least 5 kilowatt-hours of traction battery capacity; and

"(B) is designed for use in electric drive vehicles but is purchased for nonautomotive and dual-purpose applications.

"(2) ELIGIBLE ENTITY.—The term 'eligible entity' means—

"(A) an original equipment manufacturer;

"(B) an electric utility;

"(C) any provider of qualified electric drive vehicle infrastructure (as such term is defined in section 2(8) of the Electric Drive Vehicle Deployment Act of 2010); or

"(D) any other qualified entity, as determined by the Secretary.

"(b) LOAN GUARANTEES.—The Secretary shall establish a program to provide guarantees of loans made to eligible entities by private institutions for the purchase, by such an eligible entity, of at least 500 qualified automotive batteries in a calendar year that use advanced battery technology.

"(c) REQUIREMENTS.—The Secretary may provide a loan guarantee under subsection (b) 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 purchase of qualified automotive batteries described in subsection (b);

"(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.

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

"(e) TERMS AND CONDITIONS.—The loan agreement for a loan guaranteed under subsection (b) 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 (b) 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 (b) 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) REGULATIONS.—The Secretary shall promulgate such regulations as are necessary to carry out this section.

"(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $300,000,000 for fiscal years 2011 through 2016.".

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