AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

111TH CONGRESS
2D SESSION

S. 3495

To promote the deployment of plug-in electric drive vehicles, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 15, 2010

Mr. DORGAN (for himself and Mr. MERKLEY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To promote the deployment of plug-in 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 ''Promoting Electric Vehicles Act of 2010''.

SEC. 2. FINDINGS.

Congress finds that—

(1) the United States is the largest consumer of petroleum in the world, consuming 19,500,000 barrels per day of petroleum products during 2008;

(2) high and volatile international oil prices represent a significant and ongoing threat to the economic and national security of the United States;

(3) many of the nations on which the United States relies for petroleum supplies or that significantly affect the world petroleum market share neither the national interest nor the values of the United States;

(4) the United States imports more than 50 percent of the petroleum needs of the country each day;

(5) in 2008, the net deficit of the United States in petroleum trade amounted to more than $380,000,000,000, or nearly 60 percent of the total trade deficit;

(6) the transportation sector of the United States accounts for over ⅔ of total national petroleum consumption and is 94 percent reliant on petroleum;

(7) the electrification of the transportation sector represents a direct pathway to significant reduction in petroleum dependence, because passenger cars and light trucks account for more than 60 percent of the transportation petroleum demand and

more than 40 percent of total petroleum demand in the United States;

(8) the electrification of the transportation sector promotes national energy security because the electric power sector uses a diverse range of domestic electricity generation sources;

(9) electric drive vehicles, when running on electric power, produce no tailpipe emissions;

(10) the deployment of 700,000 plug-in electric drive vehicles would result in a petroleum savings of approximately 10,000,000 barrels per year compared to the annual petroleum consumption as of the date of enactment of this Act;

(11) in 2030, the United States could feasibly deploy more than 100,000,000 plug-in electric drive vehicles, which would result in a petroleum savings of more than 1,000,000,000 barrels of petroleum per year and greenhouse gas reductions of over 300,000,000 tons of carbon dioxide compared to the annual petroleum consumption and greenhouse gas emissions as of the date of enactment of this Act; and

(12) a targeted deployment program for plug-in electric drive vehicles that is focused on competitively selected deployment communities—

(A) is a critical component of a comprehensive effort to speed plug-in electric drive vehicle penetration rates;

(B) will contribute to the larger national effort to deploy plug-in electric drive vehicles;

(C) will inform best practices for the wide-scale deployment of plug-in electric drive vehicles; and

(D) will substantially reduce the oil consumption of the United States.

SEC. 3. DEFINITIONS.

In this Act:

(1) AGENCY.—The term ''agency'' has the meaning given the term ''Executive agency'' in section 105 of title 5, United States Code.

(2) CHARGING INFRASTRUCTURE.—The term ''charging infrastructure'' means any property (not including a building or the structural components of a building) if the property is used for the recharging of motor vehicles propelled by electricity, including electrical panel upgrades, wiring, conduit, trenching, pedestals, and related equipment.

(3) COMMITTEE.—The term ''Committee'' means the Plug-in Electric Drive Vehicle Technical Advisory Committee established by section 304.

(4) DEPLOYMENT COMMUNITY.—The term ''deployment community'' means a community selected by the Secretary to be part of the targeted plug-in electric drive vehicles deployment communities program under section 106.

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

(6) FEDERAL-AID SYSTEM OF HIGHWAYS.—The term ''Federal-aid system of highways'' means a highway system described in section 103 of title 23, United States Code.

(7) PLUG-IN ELECTRIC DRIVE VEHICLE.—

(A) IN GENERAL.—The term ''plug-in electric drive vehicle'' has the meaning given the term in section 131(a)(5) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011(a)(5)).

(B) INCLUSIONS.—The term ''plug-in electric drive vehicle'' includes—

(i) a low speed plug-in electric drive vehicles that meet the Federal Motor Vehicle Safety Standards described in section

571.500 of title 49, Code of Federal Regulations (or successor regulations); and

(ii) any other motor vehicles that can be recharged from an external source of motive power and that is authorized to travel on the Federal-aid system of highways.

(8) PRIZE.—The term ''Prize'' means the Advanced Batteries for Tomorrow Prize established by section 202.

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

(10) TASK FORCE.—The term ''Task Force'' means the Plug-in Electric Drive Vehicle Interagency Task Force established by section 305.

TITLE I—NATIONAL PLUG-IN ELECTRIC DRIVE VEHICLE DEPLOYMENT PROGRAM.

SEC. 101. NATIONAL PLUG-IN ELECTRIC DRIVE VEHICLE DEPLOYMENT PROGRAM.

(a) IN GENERAL.—There is established within the Department of Energy a national plug-in electric drive vehicle deployment program for the purpose of assisting in the deployment of plug-in electric drive vehicles.

(b) GOALS.—The goals of the national program described in subsection (a) include—

(1) the reduction and displacement of petroleum use by accelerating the deployment of plug-in electric drive vehicles in the United States;

(2) the reduction of greenhouse gas emissions by accelerating the deployment of plug-in electric drive vehicles in the United States;

(3) the facilitation of the rapid deployment of plug-in electric drive vehicles;

(4) the achievement of significant market penetrations by plug-in electric drive vehicles nationally;

(5) the establishment of models for the rapid deployment of plug-in electric drive vehicles nationally, including models for the deployment of residential, private, and publicly available charging infrastructure;

(6) the increase of consumer knowledge and acceptance of plug-in electric drive vehicles;

(7) the encouragement of the innovation and investment necessary to achieve mass market deployment of plug-in electric drive vehicles;

(8) the facilitation of the integration of plug-in electric drive vehicles into electricity distribution sys-

tems and the larger electric grid while maintaining grid system performance and reliability;

(9) the provision of technical assistance to communities across the United States to prepare for plug-in electric drive vehicles; and

(10) the support of workforce training across the United States relating to plug-in electric drive vehicles.

(c) DUTIES.—In carrying out this title, the Secretary shall—

(1) provide technical assistance to State, local, and tribal governments that want to create deployment programs for plug-in electric drive vehicles in the communities over which the governments have jurisdiction;

(2) perform national assessments of the potential deployment of plug-in electric drive vehicles;

(3) synthesize and disseminate data from the deployment of plug-in electric drive vehicles;

(4) develop best practices for the successful deployment of plug-in electric drive vehicles;

(5) carry out workforce training under section 104;

(6) establish the targeted plug-in electric drive vehicle deployment communities program under section 106; and

(7) in conjunction with the Task Force, make recommendations to Congress and the President on methods to reduce the barriers to plug-in electric drive vehicle deployment.

(d) REPORT.—Not later than 1 year after the date of enactment of this Act and biennially thereafter, the Secretary shall submit to the appropriate committees of Congress a report on the progress made in implementing the national program described in subsection (a) that includes—

(1) a description of the progress made by—

(A) the technical assistance program under section 103; and

(B) the workforce training program under section 104; and

(2) any updated recommendations of the Secretary for changes in Federal programs to promote the purposes of this title.

(e) NATIONAL INFORMATION CLEARINGHOUSE.—The Secretary shall make available to the public, in a timely manner, information regarding—

(1) the cost, performance, usage data, and technical data regarding plug-in electric drive vehicles and associated infrastructure, including information from the deployment communities established under section 106; and

(2) any other educational information that the Secretary determines to be appropriate.

(f) AUTHORIZATION OF APPROPRIATIONS.—For the period of fiscal years 2011 through 2016, there are authorized to be appropriated $100,000,000 to carry out sections 101 through 103.

SEC. 102. NATIONAL ASSESSMENT AND PLAN.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall carry out a national assessment and develop a national plan for plug-in electric drive vehicle deployment that includes—

(1) an assessment of the maximum feasible deployment of plug-in electric drive vehicles by 2020 and 2030;

(2) the establishment of national goals for market penetration of plug-in electric drive vehicles by 2020 and 2030;

(3) a plan for integrating the successes and barriers to deployment identified by the deployment communities program established under section 106

to prepare communities across the Nation for the rapid deployment of plug-in electric drive vehicles;

(4) a plan for providing technical assistance to communities across the United States to prepare for plug-in electric drive vehicle deployment;

(5) a plan for quantifying the reduction in petroleum consumption and the net impact on greenhouse gas emissions due to the deployment of plug-in electric drive vehicles; and

(6) in consultation with the Task Force, any recommendations to the President and to Congress for changes in Federal programs (including laws, regulations, and guidelines)—

(A) to better promote the deployment of plug-in electric drive vehicles; and

(B) to reduce barriers to the deployment of plug-in electric drive vehicles.

(b) UPDATES.—Not later than 2 years after the date of development of the plan described in subsection (a), and not less frequently than once every 2 years thereafter, the Secretary shall use market data and information from the targeted plug-in electric drive vehicle deployment communities program established under section 106 and other relevant data to update the plan to reflect real world market conditions.

SEC. 103. TECHNICAL ASSISTANCE.

(a) TECHNICAL ASSISTANCE TO STATE, LOCAL, AND TRIBAL GOVERNMENTS.—

(1) IN GENERAL.—In carrying out this title, the Secretary shall provide, at the request of the applicable elected official, technical assistance to State, local, and tribal governments to assist with the deployment of plug-in electric drive vehicles.

(2) REQUIREMENTS.—The technical assistance described in paragraph (1) shall include—

(A) training on codes and standards for building and safety inspectors;

(B) training on best practices for expediting permits and inspections;

(C) education and outreach on frequently asked questions relating to the various types of plug-in electric drive vehicles and associated infrastructure, battery technology, and disposal; and

(D) the dissemination of information regarding best practices for the deployment of plug-in electric drive vehicles.

(3) PRIORITY.—In providing technical assistance under this subsection, the Secretary shall give priority to—

(A) communities that—

(i) applied to participate in the program described in section 106;

(ii) were determined to have strong applications; and

(iii) were not selected to be deployment communities;

(B) communities that demonstrate engaged partnerships among public and private stakeholders, including—

(i) elected and appointed officials from each of the participating State, local, and tribal governments;

(ii) all relevant generators and distributors of electricity;

(iii) public utility commissions;

(iv) departments of public works and transportation;

(v) owners and operators of property that will be essential to the deployment of a sufficient level of publicly available charging infrastructure (including privately owned parking lots or structures and commercial entities with public access locations);

(vi) plug-in electric drive vehicle manufacturers or retailers;

(vii) third-party providers of charging infrastructure or services;

(viii) owners of any major fleet that will participate in the program;

(ix) as appropriate, owners and operators of regional electric power distribution and transmission facilities; and

(x) other existing community coalitions recognized by the Department of Energy;

(C) communities that have best demonstrated that the public is likely to embrace plug-in electric drive vehicles;

(D) communities that have shown a commitment to serving diverse consumer charging infrastructure needs, including the charging infrastructure needs for single- and multi-family housing and public and privately owned commercial infrastructure; and

(E) communities that have established regulatory and educational efforts to facilitate consumer acceptance of electric drive vehicles, including by—

(i) adopting (or being in the process of adopting) streamlined permitting and inspections processes for residential charging infrastructure; and

(ii) providing customer informational resources, including providing plug-in electric drive information on community or other Web sites.

(4) BEST PRACTICES.—The Secretary shall collect and disseminate information to State, local, and tribal governments creating plans to deploy plug-in electric drive vehicles on best practices (including codes and standards) that uses data from—

(A) the program established by section 106; and

(B) the activities carried out by the Task Force.

(5) GRANTS.—

(A) IN GENERAL.—The Secretary shall establish a program to provide grants to State, local, and tribal governments to assist the governments—

(i) in preparing a community deployment plan under section 106; and

(ii) in preparing and implementing programs that support the deployment of plug-in electric drive vehicles.

(B) APPLICATION.—A State, local, or tribal government that seeks to receive a grant under this paragraph shall submit to the Secretary an application for the grant at such time, in such form, and containing such information as the Secretary may prescribe.

(C) USE OF FUNDS.—A State, local, or tribal government receiving a grant under this paragraph shall use the funds—

(i) to develop a community deployment plan that shall be submitted to the next available competition under section 106; and

(ii) to carry out activities that encourage the deployment of plug-in electric drive vehicles including—

(I) planning for and installing charging infrastructure;

(II) updating building, zoning, or parking codes and permitting or inspection processes;

(III) workforce training, including the training of permitting officials;

(IV) public education described in the proposed marketing plan;

(V) shifting State, local, or tribal government fleets to plug-in electric drive vehicles, at a rate in excess of the existing Federal alternative fleet vehicles requirements; and

(VI) any other activities, as determined to be necessary by the Secretary.

(b) UPDATING MODEL BUILDING CODES, PERMITTING AND INSPECTION PROCESSES, AND ZONING OR PARKING RULES.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall develop and publish—

(A) model building codes for the inclusion of separate circuits for charging infrastructure, as appropriate, in new construction and major renovations of private residences, buildings, or other structures that could provide publicly available charging infrastructure;

(B) model construction permitting or inspection processes that allow for the expedited installation of charging infrastructure for purchasers of plug-in electric drive vehicles (including a permitting process that allows a vehicle purchaser to have charging infrastructure installed not later than 1 week after a request); and

(C) model zoning, parking rules, or other local ordinances that—

(i) facilitate the installation of publicly available charging infrastructure, including commercial entities that provide public access to infrastructure; and

(ii) allow for access to publicly available charging infrastructure.

(2) OPTIONAL ADOPTION.—An applicant for selection for technical assistance under this section or as a deployment community under section 106 shall not be required to use the model building codes, permitting and inspection processes, or zoning, parking rules, or other ordinances included in the report under paragraph (1).

(3) SMART GRID INTEGRATION.—In developing the model codes or ordinances described in para-

graph (1), the Secretary shall consider smart grid integration.

SEC. 104. WORKFORCE TRAINING.

(a) MAINTENANCE AND SUPPORT.—

(1) IN GENERAL.—The Secretary, in consultation with the Committee and the Task Force, shall award grants to institutions of higher education and other qualified training and education institutions for the establishment of programs to provide training and education for vocational workforce development through centers of excellence.

(2) PURPOSE.—Training funded under this subsection shall be intended to ensure that the workforce has the necessary skills needed to work on and maintain plug-in electric drive vehicles and the infrastructure required to support plug-in electric drive vehicles.

(3) SCOPE.—Training funded under this subsection shall include training for—

(A) first responders;

(B) electricians and contractors who will be installing infrastructure;

(C) engineers;

(D) code inspection officials; and

(E) dealers and mechanics.

(b) DESIGN.—The Secretary shall award grants to institutions of higher education and other qualified training and education institutions for the establishment of programs to provide training and education in designing plug-in electric drive vehicles and associated components and infrastructure to ensure that the United States can lead the world in this field.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated $150,000,000 to carry out this section.

SEC. 105. FEDERAL FLEETS.

(a) IN GENERAL.—Electricity consumed by Federal agencies to fuel plug-in electric drive vehicles—

(1) is an alternative fuel (as defined in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13218)); 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 the Program, the Federal Energy Management Program and the General Services Administration, in consultation with the Task Force, shall complete an assessment of Federal Government fleets, including the

Postal Service and the Department of Defense, and submit a report to Congress that describes—

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

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

(3) the estimated cost to the Federal Government for vehicle purchases under paragraph (2); and

(4) a description of any updates to the assessment and plan based on new market data.

(c) INVENTORY AND DATA COLLECTION.—

(1) IN GENERAL.—In carrying out the assessment and report under subsection (b), the Federal Energy Management Program, in consultation with the General Services Administration, shall—

(A) develop an information request for each agency that operates a fleet of at least 20 motor vehicles; and

(B) establish guidelines for each agency to use in developing a plan to deploy plug-in electric drive vehicles.

(2) AGENCY RESPONSES.—Each agency that operates a fleet of at least 20 motor vehicles shall—

(A) collect information on the vehicle fleet of the agency in response to the information request described in paragraph (1); and

(B) develop a plan to deploy plug-in electric drive vehicles.

(3) ANALYSIS OF RESPONSES.—The Federal Energy Management Program shall—

(A) analyze the information submitted by each agency under paragraph (2);

(B) approve or suggest amendments to the plan of each agency to ensure that the plan is consistent with the goals and requirements of this Act; and

(C) submit a plan to Congress and the General Services Administration to be used in developing the pilot program described in subsection (e).

(d) BUDGET REQUEST.—Each agency of the Federal Government shall include plug-in 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.

(e) PILOT PROGRAM TO DEPLOY PLUG-IN ELECTRIC DRIVE VEHICLES IN THE FEDERAL FLEET.—

(1) IN GENERAL.—The Administrator of General Services shall acquire plug-in electric drive vehicles and the requisite charging infrastructure to be deployed in a range of locations in the Federal fleet during the 5-year period beginning on the date of enactment of this Act.

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

(A) the cost, performance, and use of plug-in electric drive vehicles in the Federal fleet;

(B) the deployment and integration of plug-in electric drive vehicles in the Federal fleet; and

(C) the contribution of plug-in electric drive vehicles in the Federal fleet toward reducing the use of fossil fuels and greenhouse gas emissions.

(3) REPORT.—Not later than 6 years after the date of enactment of this Act, the Administrator of General Services shall submit to the appropriate committees of Congress a report that—

(A) describes the status of plug-in electric drive vehicles in the Federal fleet; and

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

(4) PUBLIC WEB SITE.—The Federal Energy Management Program shall maintain and regularly update a publicly available Web site that provides information on the status of plug-in electric drive vehicles in the Federal fleet.

(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated for the Federal Government to pay for incremental costs to purchase or lease plug-in electric drive vehicles and the requisite charging infrastructure for Federal fleets $25,000,000.

SEC. 106. TARGETED PLUG-IN ELECTRIC DRIVE VEHICLE DEPLOYMENT COMMUNITIES PROGRAM.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—There is established within the national plug-in electric drive deployment program established under section 101 a targeted plug-

in electric drive vehicle deployment communities program (referred to in this section as the ''Program'').

(2) PHASE 1.—

(A) IN GENERAL.—The Secretary shall establish a competitive process to select at least 5 and not more than 15 phase 1 deployment communities for the Program.

(B) ELIGIBLE ENTITIES.—In selecting participants for the Program under paragraph (1), the Secretary shall only consider applications submitted by State, tribal, or local government entities (or groups of State, tribal, or local government entities).

(C) SELECTION.—Not later than 1 year after the date of enactment of this Act, the Secretary shall select the phase 1 deployment communities under this paragraph.

(D) TERMINATION.—Phase 1 of the Program shall be carried out for a 5-year period beginning on the date funding under this Act is first provided to the deployment community.

(3) PHASE 2.—Not later than 5 years after the date of enactment of this Act, the Secretary shall submit to Congress a report that analyzes the success of phase I and, if, based on the phase I anal-

ysis, the Secretary determines that a phase II program is warranted, makes recommendations and describes a plan for phase II, including—

(A) recommendations regarding—

(i) the number of additional deployment communities that should be selected;

(ii) the manner in which criteria for selection should be updated;

(iii) the manner in which incentive structures for phase 2 deployment should be changed; and

(iv) whether other forms of onboard energy storage for electric drive vehicles should be included in phase 2; and

(B) a request for appropriations to implement phase 2 of the Program.

(b) GOALS.—The goals of the Program are—

(1) to facilitate the rapid deployment of plug-in electric drive vehicles, including—

(A) the deployment of 700,000 plug-in electric drive vehicles in phase 1 in the deployment communities selected under paragraph (2);

(B) the near-term achievement of significant market penetration in deployment communities; and

(C) the achievement of significant market penetration nationally;

(2) to establish models for the rapid deployment of plug-in electric drive vehicles nationally, including for the deployment of residential and publicly available charging infrastructure;

(3) to increase consumer knowledge and acceptance of plug-in electric drive vehicles;

(4) to encourage the innovation and investment necessary to achieve mass market deployment of plug-in electric drive vehicles;

(5) to demonstrate the integration of plug-in electric drive vehicles into electricity distribution systems and the larger electric grid while maintaining grid system performance and reliability;

(6) to demonstrate protocols and communication standards that facilitate vehicle integration into the grid and provide seamless charging for consumers traveling through multiple utility distribution systems;

(7) to investigate differences among deployment communities and to develop best practices for imple-

menting vehicle electrification in various communities, including best practices for planning for and facilitating the construction of residential and publicly available infrastructure to support plug-in electric drive vehicles;

(8) to collect comprehensive data on the purchase and use of plug-in electric drive vehicles to inform best practices for rapidly deploying plug-in electric drive vehicles in other locations, including for the installation of charging infrastructure; and

(9) to reduce and displace petroleum use and reduce greenhouse gas emissions by accelerating the deployment of plug-in electric drive vehicles in the United States.

(c) PHASE 1 DEPLOYMENT COMMUNITY SELECTION CRITERIA.—

(1) IN GENERAL.—The Secretary shall ensure, to the maximum extent practicable, that selected deployment communities in phase 1 serve as models of deployment for various communities across the United States.

(2) SELECTION.—In selecting communities under this section, the Secretary—

(A) shall ensure, to the maximum extent practicable, that—

(i) the combination of selected communities is diverse in population, demographics, urban and suburban composition, typical commuting patterns, climate, and type of utility (including regulated, municipal, cooperative, and vertically integrated utilities);

(ii) the combination of selected communities is diverse in geographic distribution, and at least 1 deployment community is located in each Petroleum Administration for Defense District;

(iii) at least 1 community selected has a population of less than 125,000;

(iv) each deployment community will achieve significant market penetration; and

(v) the deployment communities are representative of other communities across the United States;

(B) is encouraged to select a combination of deployment communities that includes multiple models or approaches for deploying plug-in electric drive vehicles that the Secretary believes are reasonably likely to be effective, in-

cluding multiple approaches to the deployment of charging infrastructure; and

(C) in addition to the criteria described in subparagraph (A), may give preference to applicants proposing a greater non-Federal cost share.

(3) CRITERIA.—

(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Secretary shall publish criteria for the selection of deployment communities that include requirements that applications be submitted by a State, tribal, or local government entity (or groups of State, tribal, or local government entities).

(B) APPLICATION REQUIREMENTS.—The criteria published by the Secretary under subparagraph (A) shall include application requirements that, at a minimum, include—

(i) goals for—

(I) the number of plug-in electric drive vehicles to be deployed in the community;

(II) the expected percentage of light-duty vehicle sales that would be

sales of plug-in electric drive vehicles; and

(III) the adoption of plug-in electric drive vehicles (including medium- or heavy-duty vehicles) in private and public fleets during the 5-year duration of the Program;

(ii) evidence that—

(I) the public is likely to embrace plug-in electric drive vehicles; and

(II) automobile manufacturers and dealers will be able to provide and service the targeted number of plug-in electric drive vehicles in the community for the duration of the program;

(iii) clearly defined geographic boundaries of the proposed deployment area;

(iv) a community deployment plan for the deployment of plug-in electric drive vehicles, charging infrastructure, and services in the deployment community;

(v) assurances that a majority of the vehicle deployments anticipated in the plan will be for personal vehicles authorized to travel on the United States Federal-aid

system of highways, but may also include—

(I) private or public sector plug-in electric drive fleet vehicles;

(II) medium- and heavy-duty plug-in hybrid vehicles;

(III) low speed plug-in electric drive vehicles that meet Federal Motor Vehicle Safety Standards described in section 571.500 of title 49, Code of Federal Regulations; and

(IV) any other plug-in electric drive vehicle authorized to travel on the United States Federal-aid system of highways; and

(vi) any other merit-based criteria, as determined by the Secretary.

(4) COMMUNITY DEPLOYMENT PLANS.—Plans for the deployment of plug-in electric drive vehicles shall include—

(A) a proposed level of cost sharing in accordance with subsection (d)(2)(C);

(B) documentation demonstrating a substantial partnership with relevant stakeholders, including—

(i) a list of stakeholders that includes—

(I) elected and appointed officials from each of the participating State, local, and tribal governments;

(II) all relevant generators and distributors of electricity;

(III) State utility regulatory authorities;

(IV) departments of public works and transportation;

(V) owners and operators of property that will be essential to the deployment of a sufficient level of publicly available charging infrastructure (including privately owned parking lots or structures and commercial entities with public access locations);

(VI) plug-in electric drive vehicle manufacturers or retailers;

(VII) third-party providers of residential, private, and publicly available charging infrastructure or services;

(VIII) owners of any major fleet that will participate in the program;

(IX) as appropriate, owners and operators of regional electric power distribution and transmission facilities; and

(X) as appropriate, other existing community coalitions recognized by the Department of Energy;

(ii) evidence of the commitment of the stakeholders to participate in the partnership;

(iii) a clear description of the role and responsibilities of each stakeholder; and

(iv) a plan for continuing the engagement and participation of the stakeholders, as appropriate, throughout the implementation of the deployment plan;

(C) a description of the number of plug-in electric drive vehicles anticipated to be plug-in electric drive personal vehicles and the number of plug-in electric drive vehicles anticipated to be privately owned fleet or public fleet vehicles;

(D) a plan for deploying residential, private, and publicly available charging infrastructure, including—

(i) an assessment of the number of consumers who will have access to private residential charging infrastructure;

(ii) options for accommodating plug-in electric drive vehicle owners who are not able to charge vehicles at their place of residence;

(iii) a plan for ensuring that the charging infrastructure be able to send and receive the information needed to interact with the grid and be compatible with smart grid technologies to the extent feasible;

(iv) an estimate of the number and dispersion of publicly and privately owned charging stations that will be publicly or commercially available;

(v) an estimate of the quantity of charging infrastructure that will be privately funded or located on private property; and

(vi) a description of equipment to be deployed, including assurances that, to the

maximum extent practicable, equipment to be deployed will meet open, nonproprietary standards for connecting to plug-in electric drive vehicles that are either—

(I) commonly accepted by industry at the time the equipment is being acquired; or

(II) meet the standards developed by the Director of the National Institute of Standards and Technology under section 1305 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17385);

(E) a plan for effective marketing of and consumer education relating to plug-in electric drive vehicles, charging services, and infrastructure;

(F) descriptions of updated building codes (or a plan to update building codes before or during the grant period) to include charging infrastructure or dedicated circuits for charging infrastructure, as appropriate, in new construction and major renovations;

(G) descriptions of updated construction permitting or inspection processes (or a plan to

update construction permitting or inspection processes) to allow for expedited installation of charging infrastructure for purchasers of plug-in electric drive vehicles, including a permitting process that allows a vehicle purchaser to have charging infrastructure installed within 1 week;

(H) descriptions of updated zoning, parking rules, or other local ordinances as are necessary to facilitate the installation of publicly available charging infrastructure and to allow for access to publicly available charging infrastructure, as appropriate;

(I) a plan to ensure that each resident in a deployment community who purchases and registers a new plug-in electric drive vehicle throughout the duration of the deployment community receives a minimum of $2,500 in consumer benefits, in addition to any Federal incentives, that may include—

(i) a rebate of part of the purchase price of the vehicle;

(ii) reductions in sales taxes or registration fees;

(iii) rebates or reductions in the costs of permitting, purchasing, or installing

home plug-in electric drive vehicle charging infrastructure; and

(iv) rebates or reductions in State or local toll road access charges;

(J) additional consumer benefits, such as preferred parking spaces or single-rider access to high-occupancy vehicle lanes for plug-in electric drive vehicles;

(K) a proposed plan for making necessary utility and grid upgrades, including economically sound information technology upgrades and a plan for recovering the cost of the upgrades;

(L) a description of utility, grid operator, or third-party charging service provider, policies and plans for accommodating the deployment of plug-in electric drive vehicles, including—

(i) rate structures or provisions and billing protocols for the charging of plug-in electric drive vehicles;

(ii) analysis of potential impacts to the grid;

(iii) plans for using information technology or third-party aggregators to mini-

mize the effects of charging on peak loads; and

(iv) plans for working with smart grid technologies or third-party aggregators for the purposes of smart charging and for allowing 2-way communication and electricity movement;

(M) a deployment timeline;

(N) a plan for monitoring and evaluating the implementation of the plan, including metrics for assessing the success of the deployment and an approach to updating the plan, as appropriate; and

(O) a description of the manner in which any grant funds applied for under subsection (d) will be used and the proposed local cost share for the funds.

(d) PHASE 1 APPLICATIONS AND GRANTS.—

(1) IN GENERAL.—Not later than 120 days after the date of publication by the Secretary of the selection criteria described in subsection (c)(3), any State, tribe, or local government, or group of State, tribe, or local governments may apply to the Secretary to become a deployment community.

(2) GRANTS.—

(A) IN GENERAL.—In each application, the applicant may request up to $500,000,000 in financial assistance from the Secretary to fund projects in the deployment community.

(B) USE OF FUNDS.—Funds provided through a grant under this paragraph may be used to help implement the plan for the deployment of plug-in electric drive vehicles included in the application, including—

(i) planning for and installing charging infrastructure, including offering additional incentives as described in subsection (c)(4)(I);

(ii) updating building codes, zoning or parking rules, or permitting or inspection processes as described in subparagraphs (F), (G), and (H) of subsection (c)(4);

(iii) reducing the cost and increasing the consumer adoption of plug-in electric drive vehicles through incentives as described in subsection (c)(4)(I);

(iv) workforce training, including training of permitting officials;

(v) public education and marketing described in the proposed marketing plan; and

(vi) shifting State, tribal, or local government fleets to plug-in electric drive vehicles, at a rate in excess of the existing Federal alternative fleet vehicle requirements.

(C) COST-SHARING.—

(i) IN GENERAL.—A grant provided under this paragraph shall be subject to a minimum non-Federal cost-sharing requirement of 20 percent.

(ii) NON-FEDERAL SOURCES.—The Secretary shall—

(I) determine the appropriate cost share for each selected applicant; and

(II) require that not less than 20 percent of the cost of an activity funded by a grant under this paragraph be provided by a non-Federal source.

(iii) REDUCTION.—The Secretary may reduce or eliminate the cost-sharing re-

quirement described in clause (i), as the Secretary determines to be necessary.

(iv) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal share under this section, the Secretary—

(I) may include allowable costs in accordance with the applicable cost principles, including—

(aa) cash;

(bb) personnel costs;

(cc) the value of a service, other resource, or third party in-kind contribution determined in accordance with the applicable circular of the Office of Management and Budget;

(dd) indirect costs or facilities and administrative costs; or

(ee) any funds received under the power program of the Tennessee Valley Authority or any Power Marketing Administration (except to the extent that such funds are made available

under an annual appropriation Act);

(II) shall include contributions made by State, tribal, or local government entities and private entities; and

(III) shall not include—

(aa) revenues or royalties from the prospective operation of an activity beyond the time considered in the grant;

(bb) proceeds from the prospective sale of an asset of an activity; or

(cc) other appropriated Federal funds.

(v) REPAYMENT OF FEDERAL SHARE.—The Secretary shall not require repayment of the Federal share of a cost-shared activity under this section as a condition of providing a grant.

(vi) TITLE TO PROPERTY.—The receipt of Federal funds under this section shall not prohibit the purchaser of a vehicle, equipment, or other property from retaining sole, permanent title to the vehicle,

equipment, or property at the conclusion of the program.

(3) SELECTION.—Not later than 120 days after the application deadline established under paragraph (1), the Secretary shall announce the names of the deployment communities selected under this subsection.

(e) REPORTING REQUIREMENTS.—

(1) IN GENERAL.—The Secretary, in consultation with the Committee, shall—

(A) determine what data will be required to be collected by participants in deployment communities and submitted to the Department to allow for analysis of the deployment communities; and

(B) develop metrics to determine the success of the deployment communities.

(2) PROVISION OF DATA.—As a condition of participation in the Program, a deployment community shall provide any data identified by the Secretary under paragraph (1).

(3) REPORTS.—Not later than 3 years after the date of enactment of this Act and again after the completion of the Program, the Secretary shall submit to Congress a report that contains—

(A) a description of the status of—

(i) the deployment communities and the implementation of the deployment plan of each deployment community;

(ii) the rate of vehicle manufacturing deployment and market penetration of plug-in electric drive vehicles; and

(iii) the deployment of residential and publicly available infrastructure;

(B) a description of the challenges experienced and lessons learned from the program to date, including the activities described in subparagraph (A); and

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

(f) PROPRIETARY INFORMATION.—The Secretary shall, as appropriate, provide for the protection of proprietary information and intellectual property rights.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $4,000,000,000.

(h) CONFORMING AMENDMENT.—Section 166(b)(5) of title 23, United States Code, is amended—

(1) in subparagraph (A), by striking ''Before September 30, 2009, the State'' and inserting ''The State''; and

(2) in subparagraph (B), by striking ''Before September 30, 2009, the State'' and inserting ''The State''.

TITLE II—RESEARCH AND DEVELOPMENT

SEC. 201. RESEARCH AND DEVELOPMENT PROGRAM.

(a) RESEARCH AND DEVELOPMENT PROGRAM.—

(1) IN GENERAL.—The Secretary, in consultation with the Committee, shall establish a program to fund research and development in advanced batteries, plug-in electric drive vehicle components, plug-in electric drive infrastructure, and other technologies supporting the development, manufacture, and deployment of plug-in electric drive vehicles and charging infrastructure.

(2) USE OF FUNDS.—The program may include funding for—

(A) the development of low-cost, smart-charging and vehicle-to-grid connectivity technology;

(B) the benchmarking and assessment of open software systems using nationally established evaluation criteria; and

(C) new technologies in electricity storage for vehicles.

(3) REPORT.—Not later than 4 years after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the status of the program described in paragraph (1).

(b) SECONDARY USE APPLICATIONS PROGRAM.—

(1) IN GENERAL.—The Secretary, in consultation with the Committee, shall carry out a research, development, and demonstration program that builds upon any work carried out under section 915 of the Energy Policy Act of 2005 (42 U.S.C. 16195) and—

(A) identifies possible uses of a vehicle battery after the useful life of the battery in a vehicle has been exhausted;

(B) assesses the potential for markets for uses described in subparagraph (A) to develop, as well as any barriers to the development of the markets; and

(C) identifies the potential uses of a vehicle battery—

(i) with the most promise for market development; and

(ii) for which market development would be aided by a demonstration project.

(2) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress an initial report on the findings of the program described in paragraph (1), including recommendations for stationary energy storage and other potential applications for batteries used in plug-in electric drive vehicles.

(c) SECONDARY USE DEMONSTRATION PROJECTS.—

(1) IN GENERAL.—Based on the results of the program described in subsection (b), the Secretary, in consultation with the Committee, shall develop guidelines for projects that demonstrate the secondary uses of vehicle batteries.

(2) PUBLICATION OF GUIDELINES.—Not later than 30 months after the date of enactment of this Act, the Secretary shall—

(A) publish the guidelines described in paragraph (1); and

(B) solicit applications for funding for demonstration projects.

(3) GRANT PROGRAM.—Not later than 38 months after the date of enactment of this Act, the Secretary shall select proposals for grant funding under this section, based on an assessment of which proposals are mostly likely to contribute to the development of a secondary market for batteries.

(d) MATERIALS RECYCLING STUDY.—

(1) IN GENERAL.—The Secretary, in consultation with the Committee, shall carry out a study on the recycling of materials from plug-in electric drive vehicles and the batteries used in plug-in electric drive vehicles.

(2) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress a report on the findings of the study described in paragraph (1).

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $1,535,000,000, including—

(1) $1,500,000,000 for use in conducting the program described in subsection (a) for fiscal years 2011 through 2020;

(2) $5,000,000 for use in conducting the program described in subsection (b) for fiscal years 2011 through 2016;

(3) $25,000,000 for use in providing grants described in subsection (c) for fiscal years 2011 through 2020; and

(4) $5,000,000 for use in conducting the study described in subsection (d) for fiscal years 2011 through 2013.

SEC. 202. ADVANCED BATTERIES FOR TOMORROW PRIZE.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, as part of the program described in section 1008 of the Energy Policy Act of 2005 (42 U.S.C. 16396), the Secretary shall establish the Advanced Batteries for Tomorrow Prize to competitively award cash prizes in accordance with this section to advance the research, development, demonstration, and commercial application of a 500-mile vehicle battery.

(b) BATTERY SPECIFICATIONS.—

(1) IN GENERAL.—To be eligible for the Prize, a battery submitted by an entrant shall be—

(A) able to power a plug-in electric drive vehicle authorized to travel on the United States Federal-aid system of highways for at least 500 miles before recharging;

(B) of a size that would not be cost-prohibitive or create space constraints, if mass-produced; and

(C) cost-effective (measured in cost per kilowatt hour), if mass-produced.

(2) ADDITIONAL REQUIREMENTS.—The Secretary, in consultation with the Committee, shall establish any additional battery specifications that the Secretary and the Committee determine to be necessary.

(c) PRIVATE FUNDS.—

(1) IN GENERAL.—Subject to paragraph (2) and notwithstanding section 3302 of title 31, United States Code, the Secretary may accept, retain, and use funds contributed by any person, government entity, or organization for purposes of carrying out this subsection—

(A) without further appropriation; and

(B) without fiscal year limitation.

(2) RESTRICTION ON PARTICIPATION.—An entity providing private funds for the Prize may not participate in the competition for the Prize.

(d) TECHNICAL REVIEW.—The Secretary, in consultation with the Committee, shall establish a technical review committee composed of non-Federal officers to re-

view data submitted by Prize entrants under this section and determine whether the data meets the prize specifications described in subsection (b).

(e) THIRD PARTY ADMINISTRATION.—The Secretary may select, on a competitive basis, a third party to administer awards provided under this section.

(f) ELIGIBILITY.—To be eligible for an award under this section—

(1) in the case of a private entity, the entity shall be incorporated in and maintain a primary place of business in the United States; and

(2) in the case of an individual (whether participating as a single individual or in a group), the individual shall be a citizen or lawful permanent resident of the United States.

(g) AWARD AMOUNTS.—

(1) IN GENERAL.—Subject to the availability of funds to carry out this section, the amount of the Prize shall be $10,000,000.

(2) BREAKTHROUGH ACHIEVEMENT AWARDS.—In addition to the award described in paragraph (1), the Secretary, in consultation with the technical review committee established under subsection (d), may award cash prizes, in amounts determined by the Secretary, in recognition of breakthrough

achievements in research, development, demonstration, and commercial application of—

(A) activities described in subsection (b); or

(B) advances in battery durability, energy density, and power density.

(h) 500-MILE BATTERY AWARD FUND.—

(1) ESTABLISHMENT.—There is established in the Treasury of the United States a fund to be known as the ''500-mile Battery Fund'' (referred to in this section as the ''Fund''), to be administered by the Secretary, to be available without fiscal year limitation and subject to appropriation, to award amounts under this section.

(2) TRANSFERS TO FUND.—The Fund shall consist of—

(A) such amounts as are appropriated to the Fund under subsection (i); and

(B) such amounts as are described in subsection (c) and that are provided for the Fund.

(3) PROHIBITION.—Amounts in the Fund may not be made available for any purpose other than a purposes described in subsection (a).

(4) ANNUAL REPORTS.—

(A) IN GENERAL.—Not later than 60 days after the end of each fiscal year beginning with fiscal year 2012, the Secretary shall submit a report on the operation of the Fund during the fiscal year to—

(i) the Committees on Appropriations of the House of Representatives and of the Senate;

(ii) the Committee on Energy and Natural Resources of the Senate; and

(iii) the Committee on Energy and Commerce of the House of Representatives.

(B) CONTENTS.—Each report shall include, for the fiscal year covered by the report, the following:

(i) A statement of the amounts deposited into the Fund.

(ii) A description of the expenditures made from the Fund for the fiscal year, including the purpose of the expenditures.

(iii) Recommendations for additional authorities to fulfill the purpose of the Fund.

(iv) A statement of the balance remaining in the Fund at the end of the fiscal year.

(5) SEPARATE APPROPRIATIONS ACCOUNT.—Section 1105(a) of title 31, United States Code, is amended—

(A) by redesignating paragraphs (35) and (36) as paragraphs (36) and (37), respectively;

(B) by redesignating the second paragraph (33) (relating to obligational authority and outlays requested for homeland security) as paragraph (35); and

(C) by adding at the end the following:

''(38) a separate statement for the 500-mile Battery Fund established under section 8(h) of the 'Promoting Electric Vehicles Act of 2010', which shall include the estimated amount of deposits into the Fund, obligations, and outlays from the Fund.''.

(i) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated—

(1) $10,000,000 to carry out subsection (g)(1); and

(2) $1,000,000 to carry out subsection (g)(2).

SEC. 203. STUDY ON THE SUPPLY OF RAW MATERIALS.

(a) IN GENERAL.—The Secretary of the Interior, in consultation with the Secretary and the Task Force, shall conduct a study that—

(1) identifies the raw materials needed for the manufacture of plug-in electric drive vehicles, batteries, and other components for plug-in electric drive vehicles, and for the infrastructure needed to support plug-in electric drive vehicles;

(2) describes the primary or original sources and known reserves and resources of those raw materials;

(3) assesses, in consultation with the National Academy of Sciences, the degree of risk to the manufacture, maintenance, deployment, and use of plug-in electric drive vehicles associated with the supply of those raw materials; and

(4) identifies pathways to securing reliable and resilient supplies of those raw materials.

(b) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary of the Interior shall submit to Congress a report that describes the results of the study.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection $1,500,000.

SEC. 204. STUDY ON THE COLLECTION, PRESERVATION, AND ACCESS TO DATA COLLECTED FROM PLUG-IN ELECTRIC DRIVE VEHICLES.

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the Committee, shall enter into an agreement with the National Academy of Sciences under which the Academy shall conduct a study that—

(1) identifies—

(A) the data that may be collected from plug-in electric drive vehicles, including data on the location, charging patterns, and usage of plug-in electric drive vehicles;

(B) the scientific, economic, commercial, security, and historic potential of the data described in subparagraph (A); and

(C) any laws or regulations that relate to the data described in subparagraph (A); and

(2) analyzes and provides recommendations on matters that include procedures, technologies, and rules relating to—

(A) the collection, storage, and preservation of the data described in paragraph (1)(A);

(B) ownership of the data described in paragraph (1)(A);

(C) access to the data described in paragraph (1)(A); and

(D) informed consent and privacy protections for owners and users of plug-in electric drive vehicles.

(b) REPORT.—Not later than 15 months after the date of an agreement between the Secretary and the Academy under subsection (a), the National Academy of Sciences shall submit to the appropriate committees of Congress a report that describes the results of the study under subsection (a).

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $1,000,000.

TITLE III—MISCELLANEOUS

SEC. 301. UTILITY PLANNING FOR PLUG-IN ELECTRIC DRIVE VEHICLES.

(a) IN GENERAL.—The Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is amended—

(1) in section 111(d) (16 U.S.C. 2621(d)), by adding at the end the following:

''(20) PLUG-IN ELECTRIC DRIVE VEHICLE PLANNING.—

''(A) UTILITY PLAN FOR PLUG-IN ELECTRIC DRIVE VEHICLES.—

''(i) IN GENERAL.—Not later than 2 years after the date of enactment of this paragraph, each electric utility shall develop a plan to support the use of plug-in electric drive vehicles, including medium- and heavy-duty hybrid electric vehicles in the service area of the electric utility.

''(ii) REQUIREMENTS.—A plan under clause (i) shall investigate—

''(I) various levels of potential penetration of plug-in electric drive vehicles in the utility service area;

''(II) the potential impacts that the various levels would have on distribution infrastructure and on the operation of the transmission grid; and

''(III) the role of third parties in providing reliable and economical charging services.

''(iii) WAIVER.—An electric utility that determines that the electric utility will have no meaningful penetration of plug-in

electric drive vehicles during the 5-year period beginning on the date of enactment of this paragraph may petition the Secretary to waive clause (i) for 5 years.

"(iv) UPDATES.—

"(I) IN GENERAL.—Each electric utility shall update the plan of the electric utility every 5 years.

"(II) RESUBMISSION OF WAIVER.—An electric utility that received a waiver under clause (iii) and wants the waiver to continue after the expiration of the waiver shall be required to resubmit the waiver.

"(v) EXEMPTION.—If the Secretary determines that a plan required by a State regulatory authority meets the requirements of this paragraph, the Secretary may accept that plan and exempt the electric utility submitting the plan from the requirements of clause (i).

"(B) SUPPORT REQUIREMENTS.—Each State regulatory authority (in the case of each electric utility for which the authority has rate-

making authority) and each municipal and cooperative utility shall—

"(i) participate in any local plan for the deployment of recharging infrastructure in communities located in the footprint of the authority or utility;

"(ii) require that charging infrastructure deployed is interoperable with products of all auto manufacturers to the maximum extent practicable; and

"(iii) consider adopting minimum requirements for deployment of electrical charging infrastructure and other appropriate requirements necessary to support the use of plug-in electric drive vehicles.

"(C) COST RECOVERY.—Each State regulatory authority (in the case of each electric utility for which the authority has ratemaking authority) and each municipal and cooperative utility may consider whether, and to what extent, to allow cost recovery for plans and implementation of plans.

"(D) DETERMINATION.—Not later than 3 years after the date of enactment of this paragraph, each State regulatory authority (with re-

spect to each electric utility for which the authority has ratemaking authority), and each municipal and cooperative electric utility, shall complete the consideration, and shall make the determination, referred to in subsection (a) with respect to the standard established by this paragraph.'';

(2) in section 112(c) (16 U.S.C. 2622(c))—

(A) in the first sentence, by striking ''Each State'' and inserting the following:

''(1) IN GENERAL.—Each State'';

(B) in the second sentence, by striking ''In the case'' and inserting the following:

''(2) SPECIFIC STANDARDS.—

''(A) NET METERING AND FOSSIL FUEL GENERATION EFFICIENCY.—In the case'';

(C) in the third sentence, by striking ''In the case'' and inserting the following:

''(B) TIME-BASED METERING AND COMMUNICATIONS.—In the case'';

(D) in the fourth sentence—

(i) by striking ''In the case'' and inserting the following:

''(C) INTERCONNECTION.—In the case''; and

(ii) by striking ''paragraph (15)'' and inserting ''paragraph (15) of section 111(d)'';

(E) in the fifth sentence, by striking ''In the case'' and inserting the following:

''(D) INTEGRATED RESOURCE PLANNING, RATE DESIGN MODIFICATIONS, SMART GRID INVESTMENTS, SMART GRID INFORMATION.—In the case''; and

(F) by adding at the end the following:

''(E) PLUG-IN ELECTRIC DRIVE VEHICLE PLANNING.—In the case of the standards established 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 that paragraph.''; and

(3) in section 112(d) (16 U.S.C. 2622(d)), in the matter preceding paragraph (1), by striking ''(19)'' and inserting ''(20)''.

(b) REPORT.—

(1) IN GENERAL.—The Secretary, in consultation with the Technical Advisory Committee, shall convene a group of utility stakeholders, charging infrastructure providers, third party aggregators, and

others, as appropriate, to discuss and determine the potential models for the technically and logistically challenging issues involved in using electricity as a fuel for vehicles, including—

(A) accommodation for billing for charging a plug-in electric drive vehicle, both at home and at publicly available charging infrastructure;

(B) plans for anticipating vehicle to grid applications that will allow batteries in cars as well as banks of batteries to be used for grid storage, ancillary services provision, and backup power; and

(C) integration of plug-in electric drive vehicles with smart grid, including protocols and standards, necessary equipment, and information technology systems.

(2) REPORT.—Not later than 2 years after the date of enactment of this Act and biennially thereafter, the Secretary shall submit to the appropriate committees of Congress a report that includes—

(A) the issues and model solutions described in paragraph (1); and

(B) any other issues that the Task Force and Secretary determine to be appropriate.

SEC. 302. 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 4 kilowatt hours of battery capacity; and

''(B) is designed for use in qualified plug-in electric drive motor vehicles but is purchased for nonautomotive applications.

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

''(A) an original equipment manufacturer;

''(B) an electric utility;

''(C) any provider of range extension infrastructure; or

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

''(b) LOAN GUARANTEES.—

''(1) IN GENERAL.—The Secretary shall guarantee loans made to eligible entities for the aggregate purchase of not less than 200 qualified automotive batteries in a calendar year that have a total minimum power rating of 1 megawatt and use advanced battery technology.

''(2) RESTRICTION.—As a condition of receiving a loan guarantee under this section, an entity purchasing qualified automotive batteries with loan funds guaranteed under this section shall comply with the provisions of the Buy American Act (41 U.S.C. 10a et seq.).

''(c) REGULATIONS.—The Secretary shall promulgate such regulations as are necessary to carry out this section.

''(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $50,000,000.''.

SEC. 303. PROHIBITION ON DISPOSING OF ADVANCED BATTERIES IN LANDFILLS.

An advanced battery from a plug-in electric drive vehicle shall be disposed of in accordance with the Mercury-Containing and Rechargeable Battery Management Act (42 U.S.C. 14301 et seq.).

SEC. 304. PLUG-IN ELECTRIC DRIVE VEHICLE TECHNICAL ADVISORY COMMITTEE.

(a) IN GENERAL.—There is established the Plug-in Electric Drive Vehicle Technical Advisory Committee to advise the Secretary on the programs and activities under this Act.

(b) MISSION.—The mission of the Committee shall be to advise the Secretary on technical matters, including—

(1) the priorities for research and development;

(2) means of accelerating the deployment of safe, economical, and efficient plug-in electric drive vehicles for mass market adoption;

(3) the development and deployment of charging infrastructure;

(4) the development of uniform codes, standards, and safety protocols for plug-in electric drive vehicles and charging infrastructure; and

(5) reporting on the competitiveness of the United States in plug-in electric drive vehicle and infrastructure research, manufacturing, and deployment.

(c) MEMBERSHIP.—

(1) MEMBERS.—

(A) IN GENERAL.—The Committee shall consist of not less than 12, but not more than 25, members.

(B) REPRESENTATION.—The Secretary shall appoint the members to Committee from among representatives of—

(i) domestic industry;

(ii) institutions of higher education;

(iii) professional societies;

(iv) Federal, State, and local governmental agencies (including the National Laboratories); and

(v) financial, transportation, labor, environmental, or other appropriate organizations or individuals with direct experience in deploying and marketing plug-in electric drive vehicles, as the Secretary determines to be necessary.

(2) TERMS.—

(A) IN GENERAL.—The term of a Committee member shall not be longer than 3 years.

(B) STAGGERED TERMS.—The Secretary may appoint members to the Committee for differing term lengths to ensure continuity in the functioning of the Committee.

(C) REAPPOINTMENTS.—A member of the Committee whose term is expiring may be reappointed.

(3) CHAIRPERSON.—The Committee shall have a chairperson, who shall be elected by and from the members.

(d) REVIEW.—The Committee shall review and make recommendations to the Secretary on the implementation of programs and activities under this Act.

(e) RESPONSE.—

(1) IN GENERAL.—The Secretary shall consider and may adopt any recommendation of the Committee under subsection (c).

(2) BIENNIAL REPORT.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act and every 2 years thereafter, the Secretary shall submit to the appropriate committees of Congress a report describing any new recommendations of the Committee.

(B) CONTENTS.—The report shall include—

(i) a description of the manner in which the Secretary has implemented or

plans to implement the recommendations of the Committee; or

(ii) an explanation of the reason that a recommendation of the Committee has not been implemented.

(C) TIMING.—The report described in this paragraph shall be submitted by the Secretary at the same time the President submits the budget proposal for the Department of Energy to Congress.

(f) COORDINATION.—The Committee shall hold joint annual meetings with the Hydrogen and Fuel Cell Technical Advisory Committee established by section 807 of the Energy Policy Act of 2005 (42 U.S.C. 16156) to help coordinate the work and recommendations of the Committees.

(g) SUPPORT.—The Secretary shall provide to the Committee the resources necessary to carry out this section, as determined to be necessary by the Secretary.

SEC. 305. PLUG-IN ELECTRIC DRIVE VEHICLE INTERAGENCY TASK FORCE.

(a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the President shall establish the Plug-in Electric Drive Vehicle Interagency Task

Force, to be chaired by the Secretary and which shall consist of at least 1 representative from each of—

(1) the Office of Science and Technology Policy;

(2) the Council on Environmental Quality;

(3) the Department of Energy;

(4) the Department of Transportation;

(5) the Department of Defense;

(6) the Department of Commerce (including the National Institute of Standards and Technology);

(7) the Environmental Protection Agency;

(8) the General Services Administration; and

(9) any other Federal agencies that the President determines to be appropriate.

(b) MISSION.—The mission of the Task Force shall be to ensure awareness, coordination, and integration of the activities of the Federal Government relating to plug-in electric drive vehicles, including—

(1) plug-in electric drive vehicle research and development (including necessary components);

(2) the development of widely accepted smart-grid standards and protocols for charging infrastructure;

(3) the relationship of plug-in electric drive vehicle charging practices to electric utility regulation;

(4) the relationship of plug-in electric drive vehicle deployment to system reliability and security;

(5) the general deployment of plug-in electric drive vehicles in the Federal, State, and local governments and for private use;

(6) the development of uniform codes, standards, and safety protocols for plug-in electric drive vehicles and charging infrastructure; and

(7) the alignment of international plug-in electric drive vehicle standards.

(c) ACTIVITIES.—

(1) IN GENERAL.—In carrying out this section, the Task Force may—

(A) organize workshops and conferences;

(B) issue publications; and

(C) create databases.

(2) MANDATORY ACTIVITIES.—In carrying out this section, the Task Force shall—

(A) foster the exchange of generic, nonproprietary information and technology among industry, academia, and the Federal Government;

(B) integrate and disseminate technical and other information made available as a re-

sult of the programs and activities under this Act;

(C) support education about plug-in electric drive vehicles;

(D) monitor, analyze, and report on the effects of plug-in electric drive vehicle deployment on the environment and public health, including air emissions from vehicles and electricity generating units; and

(E) review and report on—

(i) opportunities to use Federal programs (including laws, regulations, and guidelines) to promote the deployment of plug-in electric drive vehicles; and

(ii) any barriers to the deployment of plug-in electric drive vehicles, including barriers that are attributable to Federal programs (including laws, regulations, and guidelines).

(d) AGENCY COOPERATION.—A Federal agency—

(1) shall cooperate with the Task Force; and

(2) provide, on request of the Task Force, appropriate assistance in carrying out this section, in

accordance with applicable Federal laws (including regulations).

○