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PROMOTING ELECTRIC VEHICLES ACT

SEPTEMBER 28, 2010.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, submitted the following

R E P O R T

[To accompany S. 3495]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 3495) to promote the deployment of plug-in electric drive vehicles, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

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) if the property is used for the recharging of plug-in electric drive vehicles, 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) 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 electric drive motor vehicle 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 nation- ally, 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 systems 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 under section 102;

(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 18 months 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 2 years 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 pre-

pare 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 green-house 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 Governor, Mayor, county executive, or the designee of such an 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 have established public and private partnerships, including partnerships comprised of—

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

(ii) 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;

(B) communities that, as determined by the Secretary, have best demonstrated that the public is likely to embrace plug-in electric drive vehicles, giving particular consideration to communities that—

(i) have documented waiting lists to purchase plug-in electric drive vehicles;

(ii) have developed projections of the quantity of plug-in electric drive vehicles supplied to dealers; and

(iii) have assessed the quantity of charging infrastructure installed or for which permits have been issued;

(C) 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

(D) communities that have established regulatory and educational efforts to facilitate consumer acceptance of plug-in 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 websites.

(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;

(B) the activities carried out by the Task Force; and

(C) existing academic and industry studies of the factors that contribute to the successful deployment of new technologies, particularly studies relating to alternative fueled vehicles.

(5) GRANTS.—

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

(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, particularly to develop and demonstrate diverse and cost-effective planning, installation, and operations options for deployment of single family and multi-family residential, workplace, and publicly available 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 alternative fueled fleet vehicles acquisition requirements for Federal fleets under section 303(b)(1)(D) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)(1)(D)); and

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

(D) CRITERIA.—The Secretary shall develop and publish criteria for the selection of technical assistance grants, including requirements for the submission of applications under this paragraph.

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

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

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the American Society of Heating, Refrigerating and Air-Conditioning Engineers, the International Code Council, and any other organizations that the Secretary determines to be appropriate, shall develop and publish guidance for—

(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 paragraph (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 every 3 years thereafter, 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 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 Federal Government fleets, which may include the United States Postal Service and the Department of Defense, 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) ACQUISITION PRIORITY.—Section 507(g) of the Energy Policy Act of 1992 (42 U.S.C. 13257(g)) is amended by adding at the end the following:

"(5) PRIORITY.—The Secretary shall, to the maximum extent practicable, prioritize the acquisition of plug-in electric drive vehicles (as defined in section 131(a) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011(a)) over nonelectric alternative fueled vehicles.".

(g) 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) EXISTING ACTIVITIES.—In carrying out the Program, the Secretary shall coordinate and supplement, not supplant, any ongoing plug-in electric drive deployment activities under section 131 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011).

(3) PHASE 1.—

(A) IN GENERAL.—The Secretary shall establish a competitive process to select 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 and not later than 1 year after the date on which any subsequent amounts are appropriated for the Program, 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 3-year period beginning on the date funding under this Act is first provided to the deployment community.

(4) PHASE 2.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to Congress a report that analyzes the lessons learned in phase I and, if, based on the phase I analysis, the Secretary determines that a phase II program is warranted, makes recommendations and describes a plan for phase II, including—

(A) recommendations regarding—

(i) options for 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, such as fuel cells, 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 400,000 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) supporting 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 single-family and multifamily residential, workplace, and publicly available charging infrastructure;

(3) to increase consumer knowledge and acceptance of, and exposure to, 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 or improving 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 implementing vehicle electrification in various communities, including best practices for planning for and facilitating the construction of residential, workplace, 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, including charging profile data at unit and aggregate levels, to inform best practices for rapidly deploying plug-in electric drive vehicles in other locations, including for the installation of charging infrastructure;

(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; and

(10) to increase domestic manufacturing capacity and commercialization in a manner that will establish the United States as a world leader in plug-in electric drive vehicle technologies.

(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 density, demographics, urban and suburban composition, typical commuting patterns, climate, and type of utility (including investor-owned, publicly-owned, cooperatively-owned, distribution-only, 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) grants are of a sufficient amount such that 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, including multiple approaches to the deployment of charging infrastructure;

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

(D) when considering deployment community plans, shall take into account previous Department of Energy and other Federal investments to ensure that the maximum domestic benefit from Federal investments is realized.

(3) CRITERIA.—

(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, and not later than 90 days after the date on which any subsequent amounts are appropriated for the Program, 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 3-year duration of the Program;

(ii) data that demonstrate that—

(I) the public is likely to embrace plug-in electric drive vehicles, which may include—

(aa) the quantity of plug-in electric drive vehicles purchased;

(bb) the number of individuals on a waiting list to purchase a plug-in electric drive vehicle;

(cc) projections of the quantity of plug-in electric drive vehicles supplied to dealers; and

(dd) any assessment of the quantity of charging infrastructure installed or for which permits have been issued; 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 personal vehicles authorized to travel on the United States Federal-aid system of highways, and secondarily, private or public sector plug-in electric drive fleet vehicles, but may also include—

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

(II) 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

(III) 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, workplace, 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, workplace, private, and publicly available charging infrastructure, including—

(i) an assessment of the number of consumers who will have access to private residential charging infrastructure in single-family or multi-family residences;

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

(iii) an assessment of the number of consumers who will have access to workplace charging infrastructure;

(iv) a plan for ensuring that the charging infrastructure or plug-in electric drive vehicle 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;

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

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

(vii) 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 in a timely manner;

(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, in addition to any Federal incentives, consumer benefits 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 and cybersecure information technology upgrades and employee training, 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—

(I) to minimize the effects of charging on peak loads;

(II) to enhance reliability; and

(III) to provide other grid benefits; 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;

(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) APPLICATIONS.—

(A) IN GENERAL.—Not later than 150 days after the date of publication by the Secretary of selection criteria described in subsection (c)(3), any State, tribal, or local government, or group of State, tribal, or local governments may apply to the Secretary to become a deployment community.

(B) JOINT SPONSORSHIP.—

(i) IN GENERAL.—An application submitted under subparagraph (A) may be jointly sponsored by electric utilities, automobile manufacturers, technology providers, carsharing companies or organizations, third-party plug-in electric drive vehicle service providers, or other appropriate entities.

(ii) DISBURSEMENT OF GRANTS.—A grant provided under this subsection shall only be disbursed to a State, tribal, or local government, or group of State, tribal, or local governments, regardless of whether the application is jointly sponsored under clause (i).

(2) GRANTS.—

(A) IN GENERAL.—In each application, the applicant may request up to $250,000,000 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;

(vi) shifting State, tribal, or local government fleets to plug-in electric drive vehicles, at a rate in excess of the existing alternative fueled fleet vehicle acquisition requirements for Federal fleets under section 303(b)(1)(D) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)(1)(D)); and

(vii) necessary utility and grid upgrades as described in subsection (c)(4)(K).

(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 requirement 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 Secretary may vest title or other property interests acquired under projects funded under this Act in any entity, including the United States.

(3) SELECTION.—Not later than 120 days after an application deadline has been 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;

(B) provide for the protection of consumer privacy, as appropriate; and

(C) develop metrics to evaluate the performance 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 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 $2,000,002,000.

(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 or electric drive components 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;

(C) identifies the infrastructure, technology, and equipment needed to manage the charging activity of the batteries used in stationary sources; and

(D) 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 review 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 AND PRESERVATION OF DATA COLLECTED FROM PLUG-IN ELECTRIC DRIVE VEHICLES.

(a) IN GENERAL.—Not later than 180 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 the collection, storage, and preservation of the data described in paragraph (1)(A).

(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 of penetration and charging scenarios (including charging rates and daily hours of charging) would have on generation, distribution infrastructure, and the operation of the transmission grid; and

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

"(iii) WAIVER.—

"(I) IN GENERAL.—An electric utility that determines that the electric utility will not be impacted by 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.

"(II) APPROVAL.—Approval of a waiver under subclause (I) shall be in the sole discretion of the Secretary.

"(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 respect 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;

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

(D) any other barriers to installing sufficient and appropriate charging infrastructure.

(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.

(a) 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.".

(b) LOAN GUARANTEES FOR CHARGING INFRASTRUCTURE.—Section 1705(a) of the Energy Policy Act of 2005 (42 U.S.C. 16516(a)) is amended by adding at the end the following:

"(4) Charging infrastructure and networks of charging infrastructure for plug-in drive electric vehicles, if the charging infrastructure will be operational prior to December 31, 2016.".

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

(a) DEFINITION OF ADVANCED BATTERY.—

(1) IN GENERAL.—In this section, the term "advanced battery" means a battery that is a secondary (rechargeable) electrochemical energy storage device that has enhanced energy capacity.

(2) EXCLUSIONS.—The term "advanced battery" does not include—

(A) a primary (nonrechargeable) battery; or

(B) a lead-acid battery that is used to start or serve as the principal electrical power source for a plug-in electric drive vehicle.

(b) REQUIREMENT.—An advanced battery from a plug-in electric drive vehicle shall be disposed of in accordance with the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) (commonly known as the "Resource Conservation and Recovery Act of 1976").

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, electric utility, 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—

(1) 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; and

(2) coordinate efforts, to the maximum extent practicable, with all existing independent, departmental, and other advisory Committees, as determined to be appropriate by the Secretary.

(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 result 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).

PURPOSE

The purpose of S. 3495 is to promote the deployment of plug-in electric drive vehicles.

BACKGROUND AND NEED

Plug-in electric drive vehicles generally derive some motive power from electric motors that are powered by stored electricity originally derived from the electric grid. If these vehicles can become a significant part of the nation's overall vehicle fleet, their decreased reliance on oil-derived fuels would dramatically reduce domestic petroleum consumption and green house gas emissions. In addition, electric power is often significantly cheaper per mile than oil-derived fuels, particularly during non-peak hours, providing ongoing economic benefits to consumers. As a result of these projected benefits, the Federal Government has undertaken a number of efforts to promote the development of these vehicles and their adoption by the public at large. However, like most new technologies, electric-drive vehicles are expected to face a variety of market entry challenges, including consumer uncertainty, higher initial manufacturing costs, and lack of supporting infrastructure.

S. 3495 aims to accelerate the introduction of electric cars and trucks throughout the country by creating a National Plug-In Electric Drive Vehicle Deployment Program, which includes technical assistance and grants to state, local, and tribal governments to help facilitate the deployment of electric vehicles; a Targeted Plug-In Electric Drive Vehicle Deployment Communities Program; a robust Research and Development program at the Department of Energy; and related provisions.

LEGISLATIVE HISTORY

S. 3495 was introduced by Senator Dorgan on June 15, 2010. The Committee on Energy and Natural Resources held a hearing on the bill on June 22, 2010. The Committee on Energy and Natural Resources considered the bill and ordered it favorably reported with an amendment in the nature of a substitute on July 21, 2010.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Committee on Energy and Natural Resources, in an open business session on July 21, 2010, by a roll call vote of a quorum present, recommends that the Senate pass S. 3495, if amended as described herein.

The rollcall vote on reporting the measure was 19 yeas, 4 nays, as follows:

YEAS	NAYS
Mr. Bingaman	Mr. Barrasso
Mr. Dorgan	Mr. McCain
Mr. Wyden	Mr. Bunning*
Mr. Johnson*	Mr. Sessions
Ms. Landrieu*	
Ms. Cantwell*	
Mr. Menendez*	
Mrs. Lincoln*	
Mr. Sanders	
Mr. Bayh*	
Ms. Stabenow	
Mr. Udall	
Mrs. Shaheen	

Ms. Murkowski
Mr. Burr
Mr. Brownback
Mr. Risch
Mr. Bennett
Mr. Corker
*Indicates vote by proxy.

COMMITTEE AMENDMENT

During its consideration of S. 3495, the Committee adopted an amendment in the nature of a substitute. Among other things, the amendment modifies section 103(a)(5)(C), on the use of grant funds for charging infrastructure; amends section 103(a)(3), to allow public-private partnerships to apply for grants; adds an authorization of appropriations in section 103(a)(5)(E); specifically makes the Postal Service and the Department of Defense eligible to participate in the Federal fleet pilot program in section 105(b); amends section 507 of the Energy Policy Act of 1992 to give priority to electric vehicles in Federal fleets; scales back the scope of the deployment communities program in section 106; adds research and development on electric drive components to the list of research activities covered under title II; narrows the scope of issues required to be considered in the National Academy of Sciences study under section 204; amends title XVII of the Energy Policy Act of 2005 to make charging infrastructure eligible for loan guarantees; and requires advanced batteries to be disposed of in accordance with the Resource Conservation and Recovery Act of 1976. The substitute amendment is explained in detail in the section-by-section analysis below.

SECTION-BY-SECTION ANALYSIS

Section 1 provides a short title.
Section 2 makes findings.
Section 3 defines key terms.

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

Section 101(a) establishes within the Department of Energy a national plug-in electric drive vehicle deployment program.

Subsection (b) establishes goals for the program, including reduction of petroleum use and greenhouse gas emissions through deployment of plug-in electric drive vehicles; establishing models for the rapid deployment of plug-in electric drive vehicles; increasing consumer knowledge and acceptance; encouraging innovation and investment; facilitating integration into the electric distribution system; providing technical assistance to communities; and supporting workforce training.

Subsection (c) prescribes the duties of the Secretary of Energy in carrying out the program, including providing technical assistance, performing national assessments, disseminating data, developing best practices, carrying out workforce training, and establishing a deployment communities program.

Subsection (d) requires the Secretary to report progress made in implementing the program to Congress.

Subsection (e) requires the Secretary to make information regarding plug-in electric drive vehicles and associated infrastructure available to the public.

Subsection (f) authorizes the appropriation of $100 million over the period of fiscal years 2011 through 2016 to carry out sections 101 through 103.

Section 102 requires the Secretary to perform a national assessment of opportunities to deploy plug-in electric drive vehicles and create a national plan for deployment.

Subsection (a) requires the plan to include: an assessment of the maximum number of plug-in electric drive vehicles that will be deployed by 2020 and 2030; national goals for market penetration of plug-in electric drive vehicles by 2020 and 2030; a plan for integrating the successes and barriers that are identified by the deployment communities program established under section 106; a plan for providing technical assistance to communities; a plan for quantifying reductions in petroleum consumption and greenhouse gas emissions resulting from the deployment of plug-in electric drive vehicles; and recommendations to promote the deployment of, and reduce barriers to the deployment of, plug-in electric drive vehicles.

Subsection (b) requires the Secretary to update the plan at least once every two years to reflect real world market conditions, using market data and information from the deployment communities program established under section 106.

Section 103(a)(1) requires the Secretary of Energy to provide technical assistance to State, local, and tribal governments to assist with the national deployment of plug-in electric drive vehicles.

Paragraph (2) requires the technical assistance to include: training codes and standards for building and safety inspectors; training on best practices for expediting permits and inspections; education and outreach on the various types of plug-in electric drive vehicles and the associated technology; and dissemination of information on best practices for the deployment of plug-in electric drive vehicles.

Paragraph (3) directs the Secretary to give priority to communities that have established public-private partnerships, demonstrated public support, shown a commitment to meeting consumer charging infrastructure needs, and established regulatory and education efforts to facilitate consumer acceptance.

Paragraph (4) requires the Secretary to collect and disseminate information on best practices.

Paragraph (5) directs the secretary to establish a program to provide grants to State, local, and tribal governments, or to partnerships of government and private entities to assist them in preparing community deployment plans under section 106.

Subsection (b) directs the Secretary of Energy to work with relevant groups to develop and publish guidance for: model building codes for charging infrastructure; model construction permitting or inspection processes that allow for expedited installation of charging infrastructure; and model zoning, parking rules, or other local ordinances that facilitate installation of, and access to, publicly available charging infrastructure.

Section 104 directs the Secretary to award grants to educational institutions to train first responders; electricians and contractors who will install infrastructure; engineers; code inspection officials; and dealers and mechanics in order to ensure that the workforce

has the necessary skills to maintain plug-in electric drive vehicles and their supporting infrastructure.

Subsection (b) directs the Secretary to award grants to educational institutions for programs to provide training in the design of plug-in electric drive vehicles and associated components and infrastructure.

Subsection (c) authorizes $150 million for grants under section 104.

Section 105(a) provides that electricity consumed by Federal agencies to fuel plug-in electric drive vehicles is an alternative fuel within the meaning of section 301 of the Energy Policy Act of 1992, and is to be counted under Federal fleet management reporting requirements rather than Federal building management reporting requirements.

Subsection (b) directs the Federal Energy Management Program and the General Services Administration to compile a report on how many plug-in electric drive vehicles could be deployed in federal fleets based on needed functionality and lifecycle costs and the estimated cost to the Federal Government.

Subsection (c)(1) directs the Federal Energy Management Program, in consultation with the General Services Administration, to develop information requests for each agency and establish guidelines for each agency to use in deploying a plug-in electric drive vehicles. Paragraph (2) requires each Federal agency that operates a fleet of at least 20 motor vehicles to collect the information requested and to develop a plan to deploy plug-in electric drive vehicles.

Subsection (d) directs Federal agencies to provide plug-in electric drive vehicle purchase plans as part of the President's budget request.

Subsection (e) directs the Administrator of the General Services Administration to acquire and deploy plug-in electric drive vehicles to be used in a pilot program in federal fleets and authorizes funds to cover incremental costs.

Subsection (f) directs the Secretary to prioritize the purchase of plug-in electric drive vehicles for the Federal fleet, to the maximum extent practicable.

Subsection (g) authorizes the appropriation of $25 million for the incremental cost of purchasing or leasing plug-in electric drive vehicles and charging infrastructure for federal fleets.

Section 106(a)(1) establishes a targeted plug-in electric drive vehicle deployment communities program.

Paragraph (2) requires the Secretary to coordinate and supplement, rather than supplant, the plug-in electric drive vehicle deployment activities under section 131 of the Energy Independence and Security Act of 2007.

Paragraph (3)(A) directs the Secretary to establish a competitive process to select phase 1 deployment communities. Subparagraph (B) provides that only State, tribal, or local governments may apply to become a deployment community under phase 1. Subparagraph (C) requires the Secretary to select phase 1 deployment communities within one year after the date of enactment and funds being appropriated for the Program. Subparagraph (D) requires phase 1 to be carried out over the three year period after funds are first provided to the deployment community.

Paragraph (4) requires the Secretary to report to Congress within three years after the date of enactment on the lessons learned from phase 1 and to make recommendations and propose a plan for phase 2, if the Secretary determines that a second phase is warranted.

Subsection (b) establishes goals for the deployment communities program.

Subsection (c) establishes selection criteria for phase 1 deployment communities. Among other things, the Secretary is required to ensure, to the maximum extent practicable, geographic and demographic diversity, and the selection of at least one community that has a population of less than 125,000. The Secretary is also encouraged to select a combination of deployment communities that include multiple models or approaches for deploying plug-in electric drive vehicles.

Subsection (d)(1)(A) permits State, tribal, and local governments, or combinations of such governments, to apply to become a deployment community. Paragraph (1)(B) permits applications to be jointly sponsored by other entities.

Paragraph (2)(A) permits applicants to request up to $250,000,000 in financial assistance from the Secretary to fund projects in the deployment community. Paragraph (2)(B) specifies permissible uses of the funds. Paragraph (2)(C) requires communities to provide at least 20 percent of the funding for their program from non-Federal sources.

Paragraph (3) requires the Secretary to announce the deployment communities selected within 120 days after the application deadline.

Subsection (e) requires deployment communities, as a condition of participation in the Program, to provide any data needed by the Secretary to evaluate their performance. It also requires the Secretary to report to Congress on the Program within three years of enactment of the Act.

Subsection (f) requires the Secretary to protect proprietary information and intellectual property rights.

Subsection (g) authorizes appropriation of $2,000,002,000 for the deployment communities program.

Subsection (h) amends section 166(b)(5) of title 23, United States Code, to reinstate and make permanent the authority for low emission vehicles to use high occupancy vehicle lanes.

TITLE II—RESEARCH AND DEVELOPMENT

Section 201(a) directs the Secretary to establish a research and development program to work on all aspects of the development, production, and deployment of electric vehicles and relevant components.

Subsection (b) directs the Secretary to conduct a research, development, and demonstration program to identify and assess possible uses for vehicle batteries at the end of their useful life in a vehicle.

Subsection (c) directs the Secretary to develop guidelines for projects that demonstrate the secondary uses of vehicle batteries and to provide grants for demonstration projects likely to contribute to the development of a secondary market for batteries.

Subsection (d) directs the Secretary to carry out a study on recycling materials from electric vehicles and batteries and to report to Congress within two years after the date of enactment.

Subsection (e) authorizes the appropriation of $1,535,000,000 to carry out section 201.

Section 202(a) directs the Secretary to establish the Advanced Batteries for Tomorrow Prize to advance the research, development, demonstration, and commercial application of a 500-mile vehicle battery by offering competitively awarded cash prizes.

Subsection (b) specifies eligibility requirements for battery entries and authorizes the Secretary to establish additional requirements.

Subsection (c) authorizes the Secretary to accept, retain, and use private funds for the Prize without further appropriation.

Subsection (d) directs the Secretary to establish a technical review committee to review entries.

Subsection (e) authorizes the Secretary to select a third party to administer awards of the Prize.

Subsection (f) establishes eligibility requirements of entrants.

Subsection (g)(1) provides that the Prize will be $10 million, subject to the availability of funds. Paragraph (2) permits the Secretary to award additional cash prizes, in amounts determined by the Secretary, for breakthrough achievements in research, development, demonstration, and commercial application.

Subsection (h) establishes a 500-mile Battery Fund in the Treasury.

Subsection (i) authorizes the appropriation of $10 million for the 500-mile Battery Prize and $1 million for the breakthrough achievement awards.

Section 203(a) directs the Secretary of the Interior to conduct a study identifying the raw materials needed to manufacture plug-in electric drive vehicles, batteries, and other components; to describe the known sources of these materials and the risks associated with their supply; and to identify ways to secure the supply chain of critical raw materials. Subsection (b) requires the Secretary of the Interior to report the results of the study to Congress within three years after the date of enactment. Subsection (c) authorizes the appropriation of $1.5 million for the study and report.

Section 204(a) directs the Secretary of Energy to enter into an agreement with the National Academy of Sciences to conduct a study to identify the data that may be collected from electric vehicles, (such as location, charging patterns and usage of electric vehicles) and analyze and provide recommendations on procedures, technologies, and rules relating to the collection, storage, and preservation of this data. Subsection (b) requires the National Academy to report the results of the study to Congress within 15 months after entering into the agreement with the Secretary. Subsection (c) authorizes the appropriation of $1 million for the study and report.

TITLE III—MISCELLANEOUS

Section 301(a)(1) amends section 111(d) of the Public Utility Regulatory Policies Act of 1978 to require state regulatory authorities to consider adopting a plan to support the deployment of plug-in electric drive vehicles. This plan requires electric utilities to consider the potential levels of plug-in penetration that they might ex-

pect to see on their systems in the near term, investigate the potential impacts on their transmission and distribution infrastructure, and plan for the deployment of electric vehicles in their service area. Any utility that does not anticipate meaningful electric vehicle penetration on their system can request that this requirement be waived.

Subsection (a)(2) makes technical and conforming amendments to section 112(c) of the Public Utility Regulatory Policies Act of 1978.

Subsection (a)(3) makes a further conforming amendment to section 112(d) of the Public Utility Regulatory Policies Act of 1978.

Subsection (b) requires the Secretary to convene a group of stakeholders from utilities, charging infrastructure companies, and others to investigate potential models for billing, smart grid integration, and future vehicle to grid opportunities.

Section 302 provides loan guarantees for eligible entities that purchase more than 200 qualified automotive batteries in a calendar year for use in nonautomotive applications. This provision is designed to help attract battery manufacturing facilities to the U.S. while plug-in electric drive vehicle production is still ramping up.

Section 303 requires that batteries from plug-in electric drive motor vehicles be disposed of in accordance with the Solid Waste Disposal Act.

Section 304 establishes a technical advisory committee to advise the Secretary of Energy on matters relating to plug-in electric drive vehicles. The committee is to coordinate with the Hydrogen and Fuel Cells Technical Advisory Committee and the Biomass Research and Development Technical Advisory Committee.

Section 305 establishes an Interagency Task Force, chaired by the Secretary of Energy, to coordinate federal actions related to plug-in electric drive vehicles and infrastructure.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office.

S. 3495—Promoting Electric Vehicles Act of 2010

Summary: S. 3495 would authorize appropriations for activities aimed at promoting the development of plug-in, electric-drive vehicles and related infrastructure. Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 3495 would cost about $4 billion over the 2011–2015 period. Enacting S. 3495 would not affect direct spending or receipts; therefore, pay-as-you-go procedures do not apply.

S. 3495 would impose an intergovernmental and private-sector mandate, as defined in the Unfunded Mandates Reform Act (UMRA), on state regulatory authorities and electric utilities. CBO estimates that the costs of complying with that mandate would fall well below the annual thresholds established in UMRA for intergovernmental or private-sector mandates ($70 million and $141 million in 2010, respectively, adjusted annually for inflation).

Estimated cost to the Federal Government: The estimated budgetary impact of S. 3495 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

	By fiscal year, in millions of dollars—					
	2011	2012	2013	2014	2015	2011–2015
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Level	3,874	100	100	100	100	4,274
Estimated Outlays	732	1,188	933	750	427	4,030

Basis of estimate: S. 3495 would direct the Department of Energy (DOE) to carry out research and development programs and undertake a variety of related efforts to promote the development of plug-in electric vehicles and related infrastructure. For fiscal year 2010, DOE received a total of just over $100 million for programs to develop batteries and technologies related to electric-drive vehicles. S. 3495 would specifically authorize appropriations totaling nearly $4.3 billion over the 2011–2015 period to greatly expand existing programs and establish new initiatives. That amount includes:

- $2 billion to make competitive grants of up to $250 million each to state, local, or tribal governments to implement plans to develop necessary infrastructure and related systems to support up to 400,000 electric-drive vehicles;
- $1.5 billion for research and development related to advanced batteries and related technologies;
- $500 million to provide technical assistance to state and local governments to develop necessary systems and infrastructure to support widespread deployment of plug-in, electric-drive vehicles;
- $150 million for grants to institutions of higher education and other qualified entities that offer vocational training related to plug-in, electric-drive vehicles and related infrastructure;
- $50 million to cover the cost of federal loan guarantees to support bulk purchases by certain entities of electric-drive vehicle batteries for nonautomotive use;
- $25 million to procure plug-in, electric-drive vehicles for federal agencies; and
- $14 million for other studies, reports, and activities.

Based on historical spending patterns for DOE programs related to research and development of vehicle technologies, CBO estimates that implementing S. 3495 would cost about $4 billion over the 2011–2015 period, with additional spending (of about $0.2 billion) occurring in later years. That estimate assumes that S. 3495 will be enacted in 2010 and that appropriations will be provided as specified by the bill.

Pay-As-You-Go considerations: None.

Intergovernmental and private-sector impact: S. 3495 would impose an intergovernmental and private-sector mandate, as defined in UMRA, requiring state regulatory authorities and electric utilities to consider developing a standard for electric-vehicle planning. Because those entities would not be required to implement those standards, CBO estimates that the annual costs of the mandate would fall well below the thresholds established in UMRA for intergovernmental and private-sector mandates ($70 million and $141 million in 2010, respectively, adjusted annually for inflation).

The bill would authorize grants to state, local, and tribal governments for programs to support the deployment of plug-in electric vehicles. The bill also would authorize grants to institutions of higher education to provide training relating to electric vehicle maintenance. Any costs to those entities would be incurred voluntarily as a condition of federal assistance.

Estimate prepared by: Federal costs: Megan Carroll; Impact on state, local, and tribal governments: Ryan Miller; Impact on the private sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUTION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 3495.

The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional regulatory paperwork would result from the enactment of S. 3495, as ordered reported, except to the extent that state regulatory authorities adopt the plug-in electric drive vehicle planning standard under section 301.

CONGRESSIONALLY DIRECTED SPENDING

S. 3495, as ordered reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

EXECUTIVE COMMUNICATIONS

The testimony provided by the Department of Energy at the June 22, 2010 Full Committee hearing on S. 3495 follows:

STATEMENT OF DAVID B. SANDALOW, ASSISTANT SECRETARY, POLICY AND INTERNATIONAL AFFAIRS, DEPARTMENT OF ENERGY

INTRODUCTION

Chairman Bingaman, Ranking Member Murkowski, and other Members of the Committee, thank you for the opportunity to appear before you today to discuss electric drive vehicles.

The Department of Energy shares the Committee's goals for accelerating electric drive vehicle deployment as a way to address two critical challenges facing our nation—reducing our dependence on petroleum and mitigating greenhouse gas emissions.

Nowhere are these priorities more challenging than in the transportation sector, which accounts for two-thirds of our petroleum consumption and about a third of our green-

house gas emissions.[1] Electric drive will play a key role in meeting these challenges. Simply put, drivetrain electrification can dramatically reduce both petroleum use and greenhouse gas emissions—whether we're talking about hybrids or plug-ins that use biofuel and renewable electricity, full electric vehicles recharged with renewable electricity, or fuel cell vehicles that use renewable hydrogen.

The American Recovery and Reinvestment Act (P.L. 111–5) supported an unprecedented investment in our nation's manufacturing capacity and infrastructure for electric drive vehicles. With Recovery Act funds, U.S. manufacturers are building the capacity to produce 50,000 Plug-in Hybrid Electric Vehicle (PHEV) batteries annually by the end of 2011 and 500,000 PHEV batteries annually by December 2014. As you know—with more than 95 percent of today's lithium-ion batteries for consumer electronics made in Asia—this commitment to building U.S. manufacturing capacity is significant and provides us an opportunity to lead the world in advanced lithium-ion battery technology.

Recovery Act funds are also supporting the largest-ever coordinated deployment of nearly 7,000 electric vehicles and more than 16,000 electric charging points. The detailed operational data we collect through this deployment will provide important insights about vehicle usage, charging patterns, and potential impacts on our nation's electrical grid necessary for accelerating broader, long-term deployment of vehicles and infrastructure. I will also add Recovery Act funds are supporting a number of programs to educate code officials, first responders, technicians, and engineers who are critical components of the human infrastructure needed for the successful transition to electrified transportation, both in terms of consumer acceptance and public safety. All together, this $2.4 billion investment through the Recovery Act supports 48 competitively-selected and cost-shared electric drive vehicle projects in more than 20 states that will directly result in the creation of tens of thousands of jobs in the U.S. battery and auto industries.

With that as a foundation, I am pleased to offer the Department's perspective on the Promoting Electric Vehicles Act of 2010 (S. 3495).

COMMENTS ON THE PROMOTING ELECTRIC VEHICLES ACT OF 2010

The Promoting Electric Vehicles Act of 2010 includes several important provisions to promote near-term deployment of plug-in electric drive vehicles, which complement and supplement the Department's ongoing activities, funded both through the Recovery Act and annual appropriations.

The Department recognizes the potential benefits of activities such as those proposed by the National Plug-in

[1] Transportation Energy Data Book: Edition 28, calculated from data in Table 1.13 and Table 1.16

Electric Drive Vehicle Deployment Program, including technical assistance, workforce training, and a targeted communities program to facilitate the rapid deployment of plug-in vehicles. We believe that such an effort will create models, and facilitate the local leadership necessary for faster EV adoption across the country, and would be a natural extension of the activities being undertaken through our Office of Energy Efficiency and Renewable Energy, Vehicle Technologies Program's Outreach, Deployment & Analysis (VT/ODA) activities, such as Clean Cities. The targeted deployment program would offer communities of different sizes in various parts of the country an opportunity to execute various deployment approaches and develop best practices that can be shared nationwide to address critical questions about planning and managing vehicle and charging infrastructure deployment.

The Department appreciates that the community selection criteria includes an emphasis on diversity of climate and type of electric utility. Such diversity in pilot programs, particularly across electricity-generation sources, will be crucial for estimating the environmental impacts of expanded adoption of plug-in electric drive vehicles.

We also agree with the Committee's decision to limit the number of targeted deployment communities to no more than 15, initially. Starting with a smaller number would allow us to focus resources and build a team of experts that can support a more widespread rollout through communication of best practices and lessons learned to other cities nationwide. We are already examining ways to work more closely with communities on vehicle electrification and infrastructure deployment, particularly in connection with our Clean Cities Program. The coalitions that comprise the Clean Cities network bring together state and local governments, early adopter fleets, local utilities, infrastructure developers, and other key stakeholders in a community to advance the deployment of alternative fuel vehicles. These public private partnerships are proven and effective resources for sharing information at the local level and are primed to support the rollout of electric drive vehicles and infrastructure. Through Clean Cities, we are planning a workshop, now scheduled for July 22, to engage key stakeholders in a discussion of critical issues such as codes, standards, and permitting of electric charging infrastructure and electric vehicle deployment best practices. Our goal is to better understand how the Department can support local community efforts to deploy EVs and infrastructure.

To maximize the effectiveness of the targeted communities program, the Department would seek to coordinate this effort with related ongoing projects to deploy electric drive vehicles and infrastructure. Our Recovery Act projects for transportation electrification are building critical expertise through large-scale vehicle and infrastructure deployment, collecting data on vehicle-grid interaction and producing valuable lessons learned that can support

and help to accelerate future deployments in other communities. In addition, we appreciate the thoroughness and detail of the deployment community selection criteria as outlined in the legislation, which would help to ensure the selected communities stand up as models for deployment across the country.

Regarding the specified 120 days for applicants to submit proposals, we are concerned about asking communities to complete a significant amount of groundwork and coordination with multiple stakeholders prior to submitting their applications—much more than they're used to accomplishing. We believe 120 days may not provide enough time to complete that important work effectively. We ask that the Committee consider providing DOE the flexibility to establish the proposal deadline following some research to better understand community needs in this regard as long as we work within the specified 360-day timeframe for announcement of community selections.

The Department thanks the Committee for recognizing the importance of workforce training to the successful deployment and market penetration of electric drive vehicles, and including a specific provision in the proposed national plug-in program. The grant program for training first responders, code inspection officials, dealers and mechanics, and electricians responsible for charging point installation will complement and supplement Recovery Act projects and ongoing VT/ODA activities focused on these critical needs. Our recently-initiated Recovery Act efforts will provide valuable lessons learned and build a body of expertise to support implementation of the workforce training provision in this bill.

We also believe that the technical assistance component of the proposed national deployment program is vital to the successful rollout of electric drive vehicles. The Department is well positioned to disseminate information and provide training and technical assistance to communities seeking to accelerate EV deployment. As an example, and as noted earlier, the Clean Cities network is primed to share best practices and lessons learned about permitting and inspection processes, as well as other local ordinances and opportunities for code official and first responder training. I would like to note, however, that the Department plays a supporting role in the development of model codes and standards. In regard to this provision, we can bring value to the process because of our extensive experience working with code development organizations (CDOs) and standards development organizations (SDOs) to facilitate consensus around the development and adoption of vehicle- and infrastructure-related codes and standards. We are also working to enable the harmonization of codes and standards at an international level.

The Promoting Electric Vehicles Act includes several other significant provisions in addition to the National Plug-in Electric Drive Deployment Program; I will briefly comment on several of them here.

• The bill authorizes a R&D program focused on advanced batteries, electric drive components, and other technologies supporting the manufacture and deployment of electric drive vehicles and charging infrastructure. These priorities are aligned closely with ongoing activities in the Vehicle Technologies Program—specifically, our Batteries and Electric Drive Technology subprogram, which includes advanced battery R&D and advanced power electronics and electric machines, as well as our Vehicle and Systems Simulation and Testing subprogram, which includes work to examine vehicle and infrastructure interface issues through testing and evaluation.

• As for prizes, we support the concept of the "Advanced Batteries for Tomorrow Prize." We also appreciate the Committee's inclusion of criteria to address battery size and cost as well as range. Understanding that the prize seeks to push the envelope for state-of-the-art plug-in hybrid battery technology, we would like to note that today's vehicles do not require a 500-mile range and that based on input from our industry partners, we expect a 300- to 400-mile range to meet consumers' vehicle performance demands.

• We also understand and appreciate the Committee's interest in a technical advisory committee focused on plug-in hybrid vehicles. We place great value in independent reviews and external input to our program. You may be aware that the National Academy of Sciences National Research Council conducts independent biennial reviews of both our light-duty and heavy-duty vehicle research programs. We would like to suggest to the Committee that any new review functions be coordinated with other ongoing and planned review activities.

To conclude, the Department of Energy thanks the Committee for the opportunity to comment on this legislation and our ongoing related Recovery Act activities. We look forward to working with Congress to continue to implement these programs. They will accelerate the deployment of electric drive vehicles and infrastructure and help us achieve our national objectives for reducing petroleum use and greenhouse gas pollution.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 3495, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

ENERGY POLICY ACT OF 1992

(Public Law 102–486, as amended)

AN ACT To provide for improved energy efficiency.

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TITLE V—AVAILABILITY AND USE OF REPLACEMENT FUELS, ALTERNATIVE FUELS, AND ALTERNATIVE FUELED PRIVATE VEHICLES

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SEC. 507. FLEET REQUIREMENT PROGRAM.

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(a) FLEET PROGRAM PURCHASE GOALS.—(1) Except as provided in paragraph (2), the following percentages of new light duty motor vehicles acquired in each model year for a fleet, other than a Federal fleet, State fleet, or fleet owned, operated, leased, or otherwise controlled by a covered person subject to section 501, shall be alternative fueled vehicles:

* * * * * * *

(g) FLEET REQUIREMENT PROGRAM.—(1) If the Secretary determines under subsection (e) that a fleet requirement program is necessary, the Secretary shall, by January 1, 2000, by rule require that, except as provided in paragraph (2), of the total number of new light duty motor vehicles acquired for a fleet, other than a Federal fleet, State fleet, or fleet owned, operated, leased, or otherwise controlled by a covered person under section 501—

* * * * * * *

(4) A vehicle operating only on gasoline that complies with applicable requirements of the Clean Air Act shall not be considered an alternative fueled vehicle under subsection (b) or this subsection, except that the Secretary, as part of the rule under subsection (b) or this subsection, may determine that such vehicle should be treated as an alternative fueled vehicle for purposes of this section, for fleets subject to part C of title II of the Clean Air Act, taking into consideration the impact on energy security and the goals stated in section 502(a).

(5) PRIORITY.—The Secretary shall, to the maximum extent practicable, prioritize the acquisition of plug-in electric drive vehicles (as defined in section 131(a) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011(a)) over nonelectric alternative fueled vehicles.

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UNITED STATES CODE

TITLE 23—HIGHWAYS

CHAPTER 1—FEDERAL-AID HIGHWAYS

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§166. HOV facilities

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(b) EXCEPTIONS.—

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(5) LOW EMISSION AND ENERGY-EFFICIENT VEHICLES.—

(A) INHERENTLY LOW EMISSION VEHICLE.—[Before September 30, 2009, the State] *The State* agency may allow vehicles that are certified as inherently low-emission vehicles pursuant to section 88.311–93 of title 40, Code of Federal Regulations (or successor regulations), and are labeled in accordance with section 88.312–93 of such title (or successor regulations), to use the HOV facility if the agency establishes procedures for enforcing the restrictions on the use of the facility by the vehicles.

(B) OTHER LOW EMISSION AND ENERGY-EFFICIENT VEHICLES.—[Before September 30, 2009, the State] *The State* agency may allow vehicles certified as low emission and energy-efficient vehicles under subsection (e), and labeled in accordance with subsection (e), to use the HOV facility if the operators of the vehicles pay a toll charged by the agency for use of the facility and the agency—

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TITLE 31—MONEY AND FINANCE

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Subtitle II—The Budget Process

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CHAPTER 11—THE BUDGET AND FISCAL, BUDGET, AND PROGRAM INFORMATION

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§ 1105. Budget contents and submission to Congress

(a) On or after the first Monday in January but not later than the first Monday in February of each year, the President shall submit a budget of the United States Government for the following fiscal year. Each budget shall include a budget message and summary and supporting information. The President shall include in each budget the following:

(1) information on activities and functions of the Government.

* * * * * * *

(34) with respect to the amount of appropriations requested for use by the Export-Import Bank of the United States, a separate statement of the amount requested for its program budget, the amount requested for its administrative expenses, and of the amount requested for its administrative expenses, the amount requested for technology expenses.

[(33)]*(35)*(A)(i) a detailed, separate analysis, by budget function, by agency, and by initiative area (as determined by the administration) for the prior fiscal year, the current fiscal year, the fiscal years for which the budget is submitted, and the ensuing fiscal year identifying the amounts of gross and net appropriations or obligational authority and outlays that con-

tribute to homeland security, with separate displays for mandatory and discretionary amounts, including—

(I) summaries of the total amount of such appropriations or new obligational authority and outlays requested for homeland security;

* * * * * * *

[(35)]*(36)* as supplementary materials, a separate analysis of the budgetary effects for all prior fiscal years, the current fiscal year, the fiscal year for which the budget is submitted, and ensuing fiscal years of the actions the Secretary of the Treasury has taken or plans to take using any authority provided in the Emergency Economic Stabilization Act of 2008, including—

(A) an estimate of the current value of all assets purchased, sold, and guaranteed under the authority provided in the Emergency Economic Stabilization Act of 2008 using methodology required by the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.) and section 5232 of Title 12;

* * * * * * *

[(36)]*(37)* information on estimates of appropriations for the fiscal year following the fiscal year for which the budget is submitted for the following medical care accounts of the Veterans Health Administration, Department of Veterans Affairs account:

(A) Medical Services.

(B) Medical Support and Compliance.

(C) Medical Facilities.

(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.

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PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978

(Public Law 95–617, as amended)

AN ACT To suspend until the close of June 30, 1980, the duty on certain doxorubicin hydrochloride antibiotics.

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TITLE I—RETAIL REGULATORY POLICIES FOR ELECTRIC UTILITIES

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Subtitle B—Standards for Electric Utilities

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SEC. 111. CONSIDERATION AND DETERMINATION RESPECTING CERTAIN RATEMAKING STANDARDS.

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(d) ESTABLISHMENT.—The following Federal standards are hereby established:

(1) COST OF SERVICE.—Rates charged by any electric utility for providing electric service to each class of electric consumers shall be designed, to the maximum extent practicable, to reflect the cost of providing electric service to such class, as determined under section 115(a).

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(19) SMART GRID INFORMATION.—

(A) STANDARD.—All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).

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(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 of penetration and charging scenarios (including charging rates and daily hours of charging) would have on generation, distribution infrastructure, and the operation of the transmission grid; and

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

(iii) WAIVER.—

(I) IN GENERAL.—An electric utility that determines that the electric utility will not be impacted by 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.

(II) APPROVAL.—Approval of a waiver under subclause (I) shall be in the sole discretion of the Secretary.

(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 foot print 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 respect 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.

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SEC. 112. OBLIGATIONS TO CONSIDER AND DETERMINE.

(a) REQUEST FOR CONSIDERATION AND DETERMINATION.—Each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated electric utility may undertake the consideration and make the determination referred to in section 111 with respect to any standard established by section 111(d) in any proceeding respecting the rates of the electric utility. Any participant or intervenor (including an intervenor referred to in section 121) in such a proceeding may request, and shall obtain, such consideration and determination in such proceeding. In undertaking such consideration and making such determination in any such proceeding with respect to the application to any electric utility of any standard established by section 111(d), a State regulatory authority (with respect to an electric utility for which it has ratemaking authority) or nonregulated electric utility may take into account in such proceeding—

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(c) FAILURE TO COMPLY.—**[**Each State**]** *(1) IN GENERAL.—Each State* regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated electric utility shall undertake the consideration, and make the determination, referred to in section 111 with respect to each standard established by section 111(d) in the first rate proceeding commenced

after the date three years after the date of enactment of this Act respecting the rates of such utility if such State regulatory authority or nonregulated electric utility has not, before such date, complied with subsection (b)(2) with respect to such standard. [In the case]

(2) *SPECIFIC STANDARDS.—(A) NET METERING AND FOSSIL FUEL GENERATION EFFICIENCY.—In the case* of each standard established by paragraphs (11) through (13) 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 paragraphs (11) through (13). [In the case]

(B) TIME-BASED METERING AND COMMUNICATIONS.—In the case of the standard established by paragraph (14) 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 (14). [In the case]

(C) INTERCONNECTION—In the case of the standard established by [paragraph (15)] *paragraph (15) 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 paragraph (15). [In the case]

(*D*) *INTEGRATED RESOURCE PLANNING, RATE DESIGN MODIFICATIONS, SMART GRID INVESTMENTS, SMART GRID INFORMATION.—In the case* of the standards established by paragraphs (16) through (19) 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 paragraphs.

(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.

(d) PRIOR STATE ACTIONS.—Subsections (b) and (c) of this section shall not apply to the standards established by paragraphs (11) through (13) and paragraphs (16) through [(19)] *(20)* of section 111(d) in the case of any electric utility in a State if, before the enactment of this subsection—

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ENERGY POLICY ACT OF 2005

(Public Law 109–58, as amended)

AN ACT To ensure jobs for our future with security, affordable, and reliable energy.

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TITLE XVII—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

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SEC. 1705. TEMPORARY PROGRAM FOR RAPID DEPLOYMENT OF RENEWABLE ENERGY AND ELECTRIC POWER TRANSMISSION PROJECTS.

(a) IN GENERAL.—Notwithstanding section 1703, the Secretary may make guarantees under this section only for the following categories of projects that commence construction not later than September 30, 2011:

(1) Renewable energy systems, including incremental hydropower, that generate electricity or thermal energy, and facilities that manufacture related components.

(2) Electric power transmission systems, including upgrading and reconductoring projects.

(3) Leading edge biofuel projects that will use technologies performing at the pilot or demonstration scale that the Secretary determines are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels.

(4) Charging infrastructure and networks of charging infrastructure for plug-in drive electric vehicles, if the charging infrastructure will be operational prior to December 31, 2016.

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ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

(Public Law 110–140, as amended)

AN ACT To move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes.

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TITLE I—ENERGY SECURITY THROUGH IMPROVED VEHICLE FUEL ECONOMY

Subtitle B—Improved Vehicle Technology

SEC. 131. TRANSPORTATION ELECTRIFICATION.

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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.

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