(1) the use by the Department of Justice of the United States Marshals Service to assist jurisdictions in locating and apprehending sex offenders who fail to comply with sex offender registration requirements, as authorized by this chapter;

(2) the use of section 2250 of title 18 to punish offenders for failure to register;

(3) a detailed explanation of each jurisdiction's compliance with subchapter I of this chapter;

(4) a detailed description of Justice Department efforts to ensure compliance and any funding reductions, the basis for any decision to reduce funding or not to reduce funding under section 16925 of this title; and

(5) the denial or grant of any extensions to comply with subchapter I of this chapter, and the reasons for such denial or grant.

(Pub. L. 109–248, title VI, § 635, July 27, 2006, 120 Stat. 644.)

REFERENCES IN TEXT

This chapter, referred to in par. (1), was in the original ''this Act'', meaning Pub. L. 109–248, July 27, 2006, 120 Stat. 587, known as the Adam Walsh Child Protection and Safety Act of 2006. For complete classification of this Act to the Code, see Short Title note set out under section 16901 of this title and Tables.

Subchapter I of this chapter, referred to in pars. (3) and (5), was in the original ''the Sex Offender Registration and Notification Act'', meaning title I of Pub. L. 109–248, July 27, 2006, 120 Stat. 590. For complete classification of title I to the Code, see Short Title note set out under section 16901 of this title and Tables.

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§ 17001. Definitions

In this Act:

(1) Department

The term ''Department'' means the Department of Energy.

(2) Institution of higher education

The term ''institution of higher education'' has the meaning given the term in section 1001(a) of title 20.

(3) Secretary

The term ''Secretary'' means the Secretary of Energy.

(Pub. L. 110–140, § 2, Dec. 19, 2007, 121 Stat. 1498.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note below and Tables.

EFFECTIVE DATE

Chapter effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as a note under section 1824 of Title 2, The Congress.

SHORT TITLE

Pub. L. 110–140, § 1(a), Dec. 19, 2007, 121 Stat. 1492, provided that: ''This Act [see Tables for classification] may be cited as the 'Energy Independence and Security Act of 2007'.''

Pub. L. 110–140, title VI, § 601, Dec. 19, 2007, 121 Stat. 1674, provided that: ''This subtitle [subtitle A (§§ 601–607) of title VI of Pub. L. 110–140, enacting part A (§ 17171 et seq.) of subchapter V of this chapter] may be cited as the 'Solar Energy Research and Advancement Act of 2007'.''

Pub. L. 110–140, title VI, § 611, Dec. 19, 2007, 121 Stat. 1678, provided that: ''This subtitle [subtitle B (§§ 611–625) of title VI of Pub. L. 110–140, enacting part B (§ 17191 et seq.) of subchapter V of this chapter] may be cited as the 'Advanced Geothermal Energy Research and Development Act of 2007'.''

Pub. L. 110–140, title VI, § 631, Dec. 19, 2007, 121 Stat. 1686, provided that: ''This subtitle [subtitle C (§§ 631–636) of title VI of Pub. L. 110–140, enacting part C (§ 17211 et seq.) of subchapter V of this chapter] may be cited as the 'Marine and Hydrokinetic Renewable Energy Research and Development Act'.''

Pub. L. 110–140, title VII, § 701, Dec. 19, 2007, 121 Stat. 1704, provided that: ''This subtitle [subtitle A (§§ 701–708) of title VII of Pub. L. 110–140, enacting part A (§ 17251 et seq.) of subchapter VI of this chapter and amending section 16293 of this title] may be cited as the 'Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007'.''

§ 17002. Relationship to other law

Except to the extent expressly provided in this Act or an amendment made by this Act, nothing in this Act or an amendment made by this Act supersedes, limits the authority provided or responsibility conferred by, or authorizes any violation of any provision of law (including a regulation), including any energy or environmental law or regulation.

(Pub. L. 110–140, § 3, Dec. 19, 2007, 121 Stat. 1498.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note set out under section 17001 of this title and Tables.

SUBCHAPTER I—IMPROVED VEHICLE TECHNOLOGY

§ 17011. Transportation electrification

(a) Definitions

In this section:

(1) Administrator

The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) Battery

The term ''battery'' means an electrochemical energy storage system powered directly by electrical current.

(3) Electric transportation technology

The term ''electric transportation technology'' means—

(A) technology used in vehicles that use an electric motor for all or part of the motive power of the vehicles, including battery electric, hybrid electric, plug-in hybrid electric, fuel cell, and plug-in fuel cell vehicles, or rail transportation; or

(B) equipment relating to transportation or mobile sources of air pollution that use an electric motor to replace an internal combustion engine for all or part of the work of the equipment, including—

(i) corded electric equipment linked to transportation or mobile sources of air pollution; and

(ii) electrification technologies at airports, ports, truck stops, and material-handling facilities.

(4) Nonroad vehicle

The term ''nonroad vehicle'' means a vehicle—

(A) powered—

(i) by a nonroad engine, as that term is defined in section 7550 of this title; or

(ii) fully or partially by an electric motor powered by a fuel cell, a battery, or an off-board source of electricity; and

(B) that is not a motor vehicle or a vehicle used solely for competition.

(5) Plug-in electric drive vehicle

The term ''plug-in electric drive vehicle'' means a vehicle that—

(A) draws motive power from a battery with a capacity of at least 4 kilowatt-hours;

(B) can be recharged from an external source of electricity for motive power; and

(C) is a light-, medium-, or heavy-duty motor vehicle or nonroad vehicle (as those terms are defined in section 7550 of this title).

(6) Qualified electric transportation project

The term ''qualified electric transportation project'' means an electric transportation technology project that would significantly reduce emissions of criteria pollutants, greenhouse gas emissions, and petroleum, including—

(A) shipside or shoreside electrification for vessels;

(B) truck-stop electrification;

(C) electric truck refrigeration units;

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

(E) electric airport ground support equipment;

(F) electric material and cargo handling equipment;

(G) electric or dual-mode electric rail;

(H) any distribution upgrades needed to supply electricity to the project; and

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

(b) Plug-in electric drive vehicle program

(1) Establishment

The Secretary shall establish a competitive program to provide grants on a cost-shared basis to State governments, local governments, metropolitan transportation authorities, air pollution control districts, private or nonprofit entities, or combinations of those governments, authorities, districts, and entities, to carry out one or more projects to encourage the use of plug-in electric drive vehicles or other emerging electric vehicle technologies, as determined by the Secretary.

(2) Administration

The Secretary shall, in consultation with the Secretary of Transportation and the Administrator, establish requirements for applications for grants under this section, including reporting of data to be summarized for dissemination to grantees and the public, including safety, vehicle, and component performance, and vehicle and component life cycle costs.

(3) Priority

In making awards under this subsection, the Secretary shall—

(A) give priority consideration to applications that—

(i) encourage early widespread use of vehicles described in paragraph (1); and

(ii) are likely to make a significant contribution to the advancement of the production of the vehicles in the United States; and

(B) ensure, to the maximum extent practicable, that the program established under this subsection includes a variety of applications, manufacturers, and end-uses.

(4) Reporting

The Secretary shall require a grant recipient under this subsection to submit to the Secretary, on an annual basis, data relating to safety, vehicle performance, life cycle costs, and emissions of vehicles demonstrated under the grant, including emissions of greenhouse gases.

(5) Cost sharing

Section 16352 of this title shall apply to a grant made under this subsection.

(6) Authorization of appropriations

There is authorized to be appropriated to carry out this subsection $90,000,000 for each of fiscal years 2008 through 2012, of which not less than ⅓ of the total amount appropriated shall be available each fiscal year to make grants to local and municipal governments.

(c) Near-term transportation sector electrification program

(1) In general

Not later than 1 year after December 19, 2007, the Secretary, in consultation with the Secretary of Transportation and the Administrator, shall establish a program to provide grants for the conduct of qualified electric transportation projects.

(2) Priority

In providing grants under this subsection, the Secretary shall give priority to large-scale projects and large-scale aggregators of projects.

(3) Cost sharing

Section 16352 of this title shall apply to a grant made under this subsection.

(4) Authorization of appropriations

There is authorized to be appropriated to carry out this subsection $95,000,000 for each of fiscal years 2008 through 2013.

(d) Education program

(1) In general

The Secretary shall develop a nationwide electric drive transportation technology education program under which the Secretary shall provide—

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

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

(2) Electric vehicle competition

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

(3) Engineers

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

(A) plug-in electric drive vehicles; and

(B) other forms of electric drive transportation technology vehicles.

(4) Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary to carry out this subsection.

(Pub. L. 110–140, title I, § 131, Dec. 19, 2007, 121 Stat. 1508.)

§ 17012. Advanced battery loan guarantee program

(a) Establishment of program

The Secretary shall establish a program to provide guarantees of loans by private institutions for the construction of facilities for the manufacture of advanced vehicle batteries and battery systems that are developed and produced in the United States, including advanced lithium ion batteries and hybrid electrical system and component manufacturers and software designers.

(b) Requirements

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

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

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

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

(c) Criteria

In selecting recipients of loan guarantees from among applicants, the Secretary shall give preference to proposals that—

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

(2) are most likely to be successful; and

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

(d) Maturity

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

(e) Terms and conditions

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

(f) Assurance of repayment

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

(g) Guarantee fee

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

(h) Full faith and credit

The full faith and credit of the United States is pledged to the payment of all guarantees made under this section. Any such guarantee made by the Secretary shall be conclusive evidence of the eligibility of the loan for the guarantee with respect to principal and interest. The validity of the guarantee shall be incontestable in the hands of a holder of the guaranteed loan.

(i) Reports

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

(j) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(k) Termination of authority

The authority of the Secretary to issue a loan guarantee under subsection (a) terminates on the date that is 10 years after December 19, 2007.

(Pub. L. 110–140, title I, § 135, Dec. 19, 2007, 121 Stat. 1513.)

§ 17013. Advanced technology vehicles manufacturing incentive program

(a) Definitions

In this section:

(1) Advanced technology vehicle

The term ''advanced technology vehicle'' means an ultra efficient vehicle or a light duty vehicle that meets—

(A) the Bin 5 Tier II emission standard established in regulations issued by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)), or a lower-numbered Bin emission standard;

(B) any new emission standard in effect for fine particulate matter prescribed by the Administrator under that Act (42 U.S.C. 7401 et seq.); and

(C) at least 125 percent of the average base year combined fuel economy for vehicles with substantially similar attributes.

(2) Combined fuel economy

The term ''combined fuel economy'' means—

(A) the combined city/highway miles per gallon values, as reported in accordance with section 32904 of title 49; and

(B) in the case of an electric drive vehicle with the ability to recharge from an off-board source, the reported mileage, as determined in a manner consistent with the Society of Automotive Engineers recommended practice for that configuration or a similar practice recommended by the Secretary.

(3) Engineering integration costs

The term ''engineering integration costs'' includes the cost of engineering tasks relating to—

(A) incorporating qualifying components into the design of advanced technology vehicles; and

(B) designing tooling and equipment and developing manufacturing processes and material suppliers for production facilities that produce qualifying components or advanced technology vehicles.

(4) Qualifying components

The term ''qualifying components'' means components that the Secretary determines to be—

(A) designed for advanced technology vehicles; and

(B) installed for the purpose of meeting the performance requirements of advanced technology vehicles.

(5) Ultra efficient vehicle

The term ''ultra efficient vehicle'' means a fully closed compartment vehicle designed to carry at least 2 adult passengers that achieves—

(A) at least 75 miles per gallon while operating on gasoline or diesel fuel;

(B) at least 75 miles per gallon equivalent while operating as a hybrid electric-gasoline or electric-diesel vehicle; or

(C) at least 75 miles per gallon equivalent while operating as a fully electric vehicle.

(b) Advanced vehicles manufacturing facility

The Secretary shall provide facility funding awards under this section to automobile manu-

facturers, ultra efficient vehicle manufacturers, and component suppliers to pay not more than 30 percent of the cost of—

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

(A) qualifying advanced technology vehicles;

(B) qualifying components; or

(C) ultra efficient vehicles; and

(2) engineering integration performed in the United States of qualifying vehicles, ultra efficient vehicles, and qualifying components.

(c) Period of availability

An award under subsection (b) shall apply to—

(1) facilities and equipment placed in service before December 30, 2020; and

(2) engineering integration costs incurred during the period beginning on December 19, 2007, and ending on December 30, 2020.

(d) Direct loan program

(1) In general

Not later than 1 year after December 19, 2007, and subject to the availability of appropriated funds, the Secretary shall carry out a program to provide a total of not more than $25,000,000,000 in loans to eligible individuals and entities (as determined by the Secretary) for the costs of activities described in subsection (b). The loans shall be made through the Federal Financing Bank, with the full faith and credit of the United States Government on the principal and interest. The full credit subsidy shall be paid by the Secretary using appropriated funds.

(2) Application

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

(A) all laborers and mechanics employed by contractors or subcontractors during construction, alteration, or repair that is financed, in whole or in part, by a loan under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141–3144, 3146, and 3147 of title 40; and

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

(3) Selection of eligible projects

The Secretary shall select eligible projects to receive loans under this subsection in cases in which, as determined by the Secretary, the award recipient—

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

(B) will provide sufficient information to the Secretary for the Secretary to ensure that the qualified investment is expended efficiently and effectively; and

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

(4) Rates, terms, and repayment of loans

A loan provided under this subsection—

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

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

(i) the projected life, in years, of the eligible project to be carried out using funds from the loan, as determined by the Secretary; and[1]

(ii) 25 years;

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

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

(e) Improvement

Not later than 60 days after September 30, 2008, the Secretary shall promulgate an interim final rule establishing regulations that the Secretary deems necessary to administer this section and any loans made by the Secretary pursuant to this section. Such interim final rule shall require that, in order for an automobile manufacturer to be eligible for an award or loan under this section during a particular year, the adjusted average fuel economy of the manufacturer for light duty vehicles produced by the manufacturer during the most recent year for which data are available shall be not less than the average fuel economy for all light duty vehicles of the manufacturer for model year 2005. In order to determine fuel economy baselines for eligibility of a new manufacturer or a manufacturer that has not produced previously produced equivalent vehicles, the Secretary may substitute industry averages.

(f) Fees

Administrative costs shall be no more than $100,000 or 10 basis point[2] of the loan.

(g) Priority

The Secretary shall, in making awards or loans to those manufacturers that have existing facilities, give priority to those facilities that are oldest or have been in existence for at least 20 years or are utilized primarily for the manufacture of ultra efficient vehicles. Such facilities can currently be sitting idle.

(h) Set aside for small automobile manufacturers and component suppliers

(1) Definition of covered firm

In this subsection, the term ''covered firm'' means a firm that—

(A) employs less than 500 individuals; and

(B) manufactures ultra efficient vehicles, automobiles, or components of automobiles.

[1] So in original. Probably should be ''or''.

[2] So in original. Probably should be ''points''.

(2) Set aside

Of the amount of funds that are used to provide awards for each fiscal year under subsection (b), the Secretary shall use not less than 10 percent to provide awards to covered firms or consortia led by a covered firm.

(i) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2008 through 2012.

(j) Appointment and pay of personnel

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

(2) The rate of pay for a person appointed pursuant to paragraph (1) shall not exceed the maximum rate payable for GS-15 of the General Schedule under chapter 53 such[3] title 5.

(3) The Secretary may retain such consultants as the Secretary deems necessary to the discharge of the functions required by this section, pursuant to section 1901 of title 41.

(Pub. L. 110–140, title I, § 136, Dec. 19, 2007, 121 Stat. 1514; Pub. L. 110–329, div. A, § 129(c), Sept. 30, 2008, 122 Stat. 3578; Pub. L. 111–85, title III, § 312(a), Oct. 28, 2009, 123 Stat. 2874.)

REFERENCES IN TEXT

The Clean Air Act, referred to in subsec. (a)(1)(B), is act July 14, 1955, ch. 360, 69 Stat. 322, which is classified generally to chapter 85 (§ 7401 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of this title and Tables.

Reorganization Plan Numbered 14 of 1950, referred to in subsec. (d)(2)(B), is set out in the Appendix to Title 5, Government Organization and Employees.

CODIFICATION

In subsec. (j)(3), ''section 1901 of title 41'' substituted for ''section 31 of the Office of Federal Procurement Policy Act (41 U.S.C. 427)'' on authority of Pub. L. 111–350, § 6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

AMENDMENTS

2009—Subsec. (a)(1). Pub. L. 111–85, § 312(a)(1)(A), inserted ''an ultra efficient vehicle or'' after ''means'' in introductory provisions.

Subsec. (a)(5). Pub. L. 111–85, § 312(a)(1)(B), added par. (5).

Subsec. (b). Pub. L. 111–85, § 312(a)(2)(A), inserted '', ultra efficient vehicle manufacturers,'' after ''automobile manufacturers'' in introductory provisions.

Subsec. (b)(1)(C). Pub. L. 111–85, § 312(a)(2)(B), added subpar. (C).

Subsec. (b)(2). Pub. L. 111–85, § 312(a)(2)(C), inserted '', ultra efficient vehicles,'' after ''qualifying vehicles''.

Subsec. (g). Pub. L. 111–85, § 312(a)(3), inserted ''or are utilized primarily for the manufacture of ultra efficient vehicles'' after ''20 years''.

Subsec. (h)(1)(B). Pub. L. 111–85, § 312(a)(4), substituted ''ultra efficient vehicles, automobiles,'' for ''automobiles''.

2008—Subsec. (d)(1). Pub. L. 110–329, § 129(c)(1), inserted at end ''The loans shall be made through the Federal Financing Bank, with the full faith and credit of the United States Government on the principal and interest. The full credit subsidy shall be paid by the Secretary using appropriated funds.''

Subsec. (e). Pub. L. 110–329, § 129(c)(2), substituted ''Not later than 60 days after September 30, 2008, the Secretary shall promulgate an interim final rule establishing regulations that the Secretary deems necessary to administer this section and any loans made by the Secretary pursuant to this section. Such interim final rule shall require that,'' for ''The Secretary shall issue regulations that require that,''.

Subsec. (j). Pub. L. 110–329, § 129(c)(3), added subsec. (j).

RECONSIDERATION OF PRIOR APPLICATIONS

Pub. L. 111–85, title III, § 312(b), Oct. 28, 2009, 123 Stat. 2875, provided that: ''The Secretary of Energy shall reconsider applications for assistance under section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013) that were—

''(1) timely filed under that section before January 1, 2009;

''(2) rejected on the basis that the vehicles to which the proposal related were not advanced technology vehicles; and

''(3) related to ultra efficient vehicles.''

SUBCHAPTER II—ENERGY SECURITY THROUGH INCREASED PRODUCTION OF BIOFUELS

PART A—RENEWABLE FUEL STANDARD

§ 17021. Biomass-based diesel and biodiesel labeling

(a) In general

Each retail diesel fuel pump shall be labeled in a manner that informs consumers of the percent of biomass-based diesel or biodiesel that is contained in the biomass-based diesel blend or biodiesel blend that is offered for sale, as determined by the Federal Trade Commission.

(b) Labeling requirements

Not later than 180 days after December 19, 2007, the Federal Trade Commission shall promulgate biodiesel labeling requirements as follows:

(1) Biomass-based diesel blends or biodiesel blends that contain less than or equal to 5 percent biomass-based diesel or biodiesel by volume and that meet ASTM D975 diesel specifications shall not require any additional labels.

(2) Biomass-based diesel blends or biodiesel blends that contain more than 5 percent biomass-based diesel or biodiesel by volume but not more than 20 percent by volume shall be labeled ''contains biomass-based diesel or biodiesel in quantities between 5 percent and 20 percent''.

(3) Biomass-based diesel or biodiesel blends that contain more than 20 percent biomass based or biodiesel by volume shall be labeled ''contains more than 20 percent biomass-based diesel or biodiesel''.

(c) Definitions

In this section:

(1) ASTM

The term ''ASTM'' means the American Society of Testing and Materials.

(2) Biomass-based diesel

The term ''biomass-based diesel'' means biodiesel as defined in section 13220(f) of this title.

[3] So in original. Probably should be ''of such''.

(3) Biodiesel

The term ''biodiesel'' means the monoalkyl esters of long chain fatty acids derived from plant or animal matter that meet—

(A) the registration requirements for fuels and fuel additives under this section; and

(B) the requirements of ASTM standard D6751.

(4) Biomass-based diesel and biodiesel blends

The terms ''biomass-based diesel blend'' and ''biodiesel blend'' means a blend of ''biomass-based diesel'' or ''biodiesel'' fuel that is blended with petroleum-based diesel fuel.

(Pub. L. 110–140, title II, § 205, Dec. 19, 2007, 121 Stat. 1529.)

§ 17022. Grants for production of advanced biofuels

(a) In general

The Secretary of Energy shall establish a grant program to encourage the production of advanced biofuels.

(b) Requirements and priority

In making grants under this section, the Secretary—

(1) shall make awards to the proposals for advanced biofuels with the greatest reduction in lifecycle greenhouse gas emissions compared to the comparable motor vehicle fuel lifecycle emissions during calendar year 2005; and

(2) shall not make an award to a project that does not achieve at least an 80 percent reduction in such lifecycle greenhouse gas emissions.

(c) Authorization of appropriations

There is authorized to be appropriated to carry out this section $500,000,000 for the period of fiscal years 2008 through 2015.

(Pub. L. 110–140, title II, § 207, Dec. 19, 2007, 121 Stat. 1531.)

PART B—BIOFUELS RESEARCH AND DEVELOPMENT

§ 17031. Biodiesel

(a) Biodiesel study

Not later than 180 days after December 19, 2007, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall submit to Congress a report on any research and development challenges inherent in increasing the proportion of diesel fuel sold in the United States that is biodiesel.

(b) Material for the establishment of standards

The Director of the National Institute of Standards and Technology, in consultation with the Secretary, shall make publicly available the physical property data and characterization of biodiesel and other biofuels as appropriate.

(Pub. L. 110–140, title II, § 221, Dec. 19, 2007, 121 Stat. 1533.)

§ 17032. Grants for biofuel production research and development in certain States

(a) In general

The Secretary shall provide grants to eligible entities for research, development, demonstration, and commercial application of biofuel production technologies in States with low rates of ethanol production, including low rates of production of cellulosic biomass ethanol, as determined by the Secretary.

(b) Eligibility

To be eligible to receive a grant under this section, an entity shall—

(1)(A) be an institution of higher education (as defined in section 15801 of this title), including tribally controlled colleges or universities, located in a State described in subsection (a); or

(B) be a consortium including at least 1 such institution of higher education and industry, State agencies, Indian tribal agencies, National Laboratories, or local government agencies located in the State; and

(2) have proven experience and capabilities with relevant technologies.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $25,000,000 for each of fiscal years 2008 through 2010.

(Pub. L. 110–140, title II, § 223, Dec. 19, 2007, 121 Stat. 1533.)

§ 17033. Biofuels and biorefinery information center

(a) In general

The Secretary, in cooperation with the Secretary of Agriculture, shall establish a biofuels and biorefinery information center to make available to interested parties information on—

(1) renewable fuel feedstocks, including the varieties of fuel capable of being produced from various feedstocks;

(2) biorefinery processing techniques related to various renewable fuel feedstocks;

(3) the distribution, blending, storage, and retail dispensing infrastructure necessary for the transport and use of renewable fuels;

(4) Federal and State laws and incentives related to renewable fuel production and use;

(5) renewable fuel research and development advancements;

(6) renewable fuel development and biorefinery processes and technologies;

(7) renewable fuel resources, including information on programs and incentives for renewable fuels;

(8) renewable fuel producers;

(9) renewable fuel users; and

(10) potential renewable fuel users.

(b) Administration

In administering the biofuels and biorefinery information center, the Secretary shall—

(1) continually update information provided by the center;

(2) make information available relating to processes and technologies for renewable fuel production;

(3) make information available to interested parties on the process for establishing a biorefinery; and

(4) make information and assistance provided by the center available through a toll-free telephone number and website.

(c) Coordination and nonduplication

To the maximum extent practicable, the Secretary shall ensure that the activities under this section are coordinated with, and do not duplicate the efforts of, centers at other government agencies.

(d) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title II, § 229, Dec. 19, 2007, 121 Stat. 1535.)

§ 17034. Cellulosic ethanol and biofuels research

(a) Definition of eligible entity

In this section, the term ''eligible entity'' means—

(1) an 1890 Institution (as defined in section 7601 of title 7);

(2) a part B institution (as defined in section 1061 of title 20) (commonly referred to as ''Historically Black Colleges and Universities'');

(3) a tribal college or university (as defined in section 1059c(b) of title 20); or

(4) a Hispanic-serving institution (as defined in section 1101a(a) of title 20).

(b) Grants

The Secretary shall make cellulosic ethanol and biofuels research and development grants to 10 eligible entities selected by the Secretary to receive a grant under this section through a peer-reviewed competitive process.

(c) Collaboration

An eligible entity that is selected to receive a grant under subsection (b) shall collaborate with 1 of the Bioenergy Research Centers of the Office of Science of the Department.

(d) Authorization of appropriations

There is authorized to be appropriated to the Secretary to make grants described in subsection (b) $50,000,000 for fiscal year 2008, to remain available until expended.

(Pub. L. 110–140, title II, § 230, Dec. 19, 2007, 121 Stat. 1536.)

§ 17035. University based research and development grant program

(a) Establishment

The Secretary shall establish a competitive grant program, in a geographically diverse manner, for projects submitted for consideration by institutions of higher education to conduct research and development of renewable energy technologies. Each grant made shall not exceed $2,000,000.

(b) Eligibility

Priority shall be given to institutions of higher education with—

(1) established programs of research in renewable energy;

(2) locations that are low income or outside of an urbanized area;

(3) a joint venture with an Indian tribe; and

(4) proximity to trees dying of disease or insect infestation as a source of woody biomass.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary $25,000,000 for carrying out this section.

(d) Definitions

In this section:

(1) Indian tribe

The term ''Indian tribe'' has the meaning as defined in section 15823(c) of this title.

(2) Renewable energy

The term ''renewable energy'' has the meaning as defined in section 16181 of this title.

(3) Urbanized area

The term ''urbanized area'' has the meaning as defined by the U.S. Bureau of the Census.

(Pub. L. 110–140, title II, § 234, Dec. 19, 2007, 121 Stat. 1538.)

PART C—BIOFUELS INFRASTRUCTURE

§ 17051. Renewable fuel dispenser requirements

(a) Market penetration reports

The Secretary, in consultation with the Secretary of Transportation, shall determine and report to Congress annually on the market penetration for flexible-fuel vehicles in use within geographic regions to be established by the Secretary.

(b) Dispenser feasibility study

Not later than 24 months after December 19, 2007, the Secretary, in consultation with the Department of Transportation, shall report to the Congress on the feasibility of requiring motor fuel retailers to install E–85 compatible dispensers and related systems at retail fuel facilities in regions where flexible-fuel vehicle market penetration has reached 15 percent of motor vehicles. In conducting such study, the Secretary shall consider and report on the following factors:

(1) The commercial availability of E–85 fuel and the number of competing E–85 wholesale suppliers in a given region.

(2) The level of financial assistance provided on an annual basis by the Federal Government, State governments, and nonprofit entities for the installation of E–85 compatible infrastructure.

(3) The number of retailers whose retail locations are unable to support more than 2 underground storage tank dispensers.

(4) The expense incurred by retailers in the installation and sale of E–85 compatible dispensers and related systems and any potential effects on the price of motor vehicle fuel.

(Pub. L. 110–140, title II, § 242, Dec. 19, 2007, 121 Stat. 1540.)

§ 17052. Renewable fuel infrastructure grants

(a) Definition of renewable fuel blend

For purposes of this section, the term ''renewable fuel blend'' means a gasoline blend that contains not less than 11 percent, and not more than 85 percent, renewable fuel or diesel fuel that contains at least 10 percent renewable fuel.

(b) Infrastructure development grants

(1) Establishment

The Secretary shall establish a program for making grants for providing assistance to re-

tail and wholesale motor fuel dealers or other entities for the installation, replacement, or conversion of motor fuel storage and dispensing infrastructure to be used exclusively to store and dispense renewable fuel blends.

(2) Selection criteria

Not later than 12 months after December 19, 2007, the Secretary shall establish criteria for evaluating applications for grants under this subsection that will maximize the availability and use of renewable fuel blends, and that will ensure that renewable fuel blends are available across the country. Such criteria shall provide for—

(A) consideration of the public demand for each renewable fuel blend in a particular geographic area based on State registration records showing the number of flexible-fuel vehicles;

(B) consideration of the opportunity to create or expand corridors of renewable fuel blend stations along interstate or State highways;

(C) consideration of the experience of each applicant with previous, similar projects;

(D) consideration of population, number of flexible-fuel vehicles, number of retail fuel outlets, and saturation of flexible-fuel vehicles; and

(E) priority consideration to applications that—

(i) are most likely to maximize displacement of petroleum consumption, measured as a total quantity and a percentage;

(ii) are best able to incorporate existing infrastructure while maximizing, to the extent practicable, the use of renewable fuel blends; and

(iii) demonstrate the greatest commitment on the part of the applicant to ensure funding for the proposed project and the greatest likelihood that the project will be maintained or expanded after Federal assistance under this subsection is completed.

(3) Limitations

Assistance provided under this subsection shall not exceed—

(A) 33 percent of the estimated cost of the installation, replacement, or conversion of motor fuel storage and dispensing infrastructure; or

(B) $180,000 for a combination of equipment at any one retail outlet location.

(4) Operation of renewable fuel blend stations

The Secretary shall establish rules that set forth requirements for grant recipients under this section that include providing to the public the renewable fuel blends, establishing a marketing plan that informs consumers of the price and availability of the renewable fuel blends, clearly labeling the dispensers and related equipment, and providing periodic reports on the status of the renewable fuel blend sales, the type and amount of the renewable fuel blends dispensed at each location, and the average price of such fuel.

(5) Notification requirements

Not later than the date on which each renewable fuel blend station begins to offer renewable fuel blends to the public, the grant recipient that used grant funds to construct or upgrade such station shall notify the Secretary of such opening. The Secretary shall add each new renewable fuel blend station to the renewable fuel blend station locator on its Website when it receives notification under this subsection.

(6) Double counting

No person that receives a credit under section 30C of title 26 may receive assistance under this section.

(7) Reservation of funds

The Secretary shall reserve funds appropriated for the renewable fuel blends infrastructure development grant program for technical and marketing assistance described in subsection (c).

(c) Retail technical and marketing assistance

The Secretary shall enter into contracts with entities with demonstrated experience in assisting retail fueling stations in installing refueling systems and marketing renewable fuel blends nationally, for the provision of technical and marketing assistance to recipients of grants under this section. Such assistance shall include—

(1) technical advice for compliance with applicable Federal and State environmental requirements;

(2) help in identifying supply sources and securing long-term contracts; and

(3) provision of public outreach, education, and labeling materials.

(d) Refueling infrastructure corridors

(1) In general

The Secretary shall establish a competitive grant pilot program (referred to in this subsection as the ''pilot program''), to be administered through the Vehicle Technology Deployment Program of the Department, to provide not more than 10 geographically-dispersed project grants to State governments, Indian tribal governments, local governments, metropolitan transportation authorities, or partnerships of those entities to carry out 1 or more projects for the purposes described in paragraph (2).

(2) Grant purposes

A grant under this subsection shall be used for the establishment of refueling infrastructure corridors, as designated by the Secretary, for renewable fuel blends, including—

(A) installation of infrastructure and equipment necessary to ensure adequate distribution of renewable fuel blends within the corridor;

(B) installation of infrastructure and equipment necessary to directly support vehicles powered by renewable fuel blends; and

(C) operation and maintenance of infrastructure and equipment installed as part of a project funded by the grant.

(3) Applications

(A) Requirements

(i) In general

Subject to clause (ii), not later than 90 days after December 19, 2007, the Secretary

shall issue requirements for use in applying for grants under the pilot program.

(ii) Minimum requirements

At a minimum, the Secretary shall require that an application for a grant under this subsection—

(I) be submitted by—

(aa) the head of a State, tribal, or local government or a metropolitan transportation authority, or any combination of those entities; and

(bb) a registered participant in the Vehicle Technology Deployment Program of the Department; and

(II) include—

(aa) a description of the project proposed in the application, including the ways in which the project meets the requirements of this subsection;

(bb) an estimate of the degree of use of the project, including the estimated size of fleet of vehicles operated with renewable fuels blend available within the geographic region of the corridor, measured as a total quantity and a percentage;

(cc) an estimate of the potential petroleum displaced as a result of the project (measured as a total quantity and a percentage), and a plan to collect and disseminate petroleum displacement and other relevant data relating to the project to be funded under the grant, over the expected life of the project;

(dd) a description of the means by which the project will be sustainable without Federal assistance after the completion of the term of the grant;

(ee) a complete description of the costs of the project, including acquisition, construction, operation, and maintenance costs over the expected life of the project; and

(ff) a description of which costs of the project will be supported by Federal assistance under this subsection.

(B) Partners

An applicant under subparagraph (A) may carry out a project under the pilot program in partnership with public and private entities.

(4) Selection criteria

In evaluating applications under the pilot program, the Secretary shall—

(A) consider the experience of each applicant with previous, similar projects; and

(B) give priority consideration to applications that—

(i) are most likely to maximize displacement of petroleum consumption, measured as a total quantity and a percentage;

(ii) are best able to incorporate existing infrastructure while maximizing, to the extent practicable, the use of advanced biofuels;

(iii) demonstrate the greatest commitment on the part of the applicant to ensure funding for the proposed project and the greatest likelihood that the project will be maintained or expanded after Federal assistance under this subsection is completed;

(iv) represent a partnership of public and private entities; and

(v) exceed the minimum requirements of paragraph (3)(A)(ii).

(5) Pilot project requirements

(A) Maximum amount

The Secretary shall provide not more than $20,000,000 in Federal assistance under the pilot program to any applicant.

(B) Cost sharing

The non-Federal share of the cost of any activity relating to renewable fuel blend infrastructure development carried out using funds from a grant under this subsection shall be not less than 20 percent.

(C) Maximum period of grants

The Secretary shall not provide funds to any applicant under the pilot program for more than 2 years.

(D) Deployment and distribution

The Secretary shall seek, to the maximum extent practicable, to ensure a broad geographic distribution of project sites funded by grants under this subsection.

(E) Transfer of information and knowledge

The Secretary shall establish mechanisms to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(6) Schedule

(A) Initial grants

(i) In general

Not later than 90 days after December 19, 2007, the Secretary shall publish in the Federal Register, Commerce Business Daily, and such other publications as the Secretary considers to be appropriate, a notice and request for applications to carry out projects under the pilot program.

(ii) Deadline

An application described in clause (i) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that clause.

(iii) Initial selection

Not later than 90 days after the date by which applications for grants are due under clause (ii), the Secretary shall select by competitive, peer-reviewed proposal up to 5 applications for projects to be awarded a grant under the pilot program.

(B) Additional grants

(i) In general

Not later than 2 years after December 19, 2007, the Secretary shall publish in the Federal Register, Commerce Business

Daily, and such other publications as the Secretary considers to be appropriate, a notice and request for additional applications to carry out projects under the pilot program that incorporate the information and knowledge obtained through the implementation of the first round of projects authorized under the pilot program.

(ii) Deadline

An application described in clause (i) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that clause.

(iii) Initial selection

Not later than 90 days after the date by which applications for grants are due under clause (ii), the Secretary shall select by competitive, peer-reviewed proposal such additional applications for projects to be awarded a grant under the pilot program as the Secretary determines to be appropriate.

(7) Reports to Congress

(A) Initial report

Not later than 60 days after the date on which grants are awarded under this subsection, the Secretary shall submit to Congress a report containing—

(i) an identification of the grant recipients and a description of the projects to be funded under the pilot program;

(ii) an identification of other applicants that submitted applications for the pilot program but to which funding was not provided; and

(iii) a description of the mechanisms used by the Secretary to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(B) Evaluation

Not later than 2 years after December 19, 2007, and annually thereafter until the termination of the pilot program, the Secretary shall submit to Congress a report containing an evaluation of the effectiveness of the pilot program, including an assessment of the petroleum displacement and benefits to the environment derived from the projects included in the pilot program.

(e) Restriction

No grant shall be provided under subsection (b) or (c) to a large, vertically integrated oil company.

(f) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $200,000,000 for each of the fiscal years 2008 through 2014.

(Pub. L. 110–140, title II, § 244, Dec. 19, 2007, 121 Stat. 1541.)

§ 17053. Federal fleet fueling centers

(a) In general

Not later than January 1, 2010, the head of each Federal agency shall install at least 1 renewable fuel pump at each Federal fleet fueling center in the United States under the jurisdiction of the head of the Federal agency.

(b) Report

Not later than October 31 of the first calendar year beginning after December 19, 2007, and each October 31 thereafter, the President shall submit to Congress a report that describes the progress toward complying with subsection (a), including identifying—

(1) the number of Federal fleet fueling centers that contain at least 1 renewable fuel pump; and

(2) the number of Federal fleet fueling centers that do not contain any renewable fuel pumps.

(c) Department of Defense facility

This section shall not apply to a Department of Defense fueling center with a fuel turnover rate of less than 100,000 gallons of fuel per year.

(d) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title II, § 246, Dec. 19, 2007, 121 Stat. 1547.)

§ 17054. Biofuels distribution and advanced biofuels infrastructure

(a) In general

The Secretary, in coordination with the Secretary of Transportation and in consultation with the Administrator of the Environmental Protection Agency, shall carry out a program of research, development, and demonstration relating to existing transportation fuel distribution infrastructure and new alternative distribution infrastructure.

(b) Focus

The program described in subsection (a) shall focus on the physical and chemical properties of biofuels and efforts to prevent or mitigate against adverse impacts of those properties in the areas of—

(1) corrosion of metal, plastic, rubber, cork, fiberglass, glues, or any other material used in pipes and storage tanks;

(2) dissolving of storage tank sediments;

(3) clogging of filters;

(4) contamination from water or other adulterants or pollutants;

(5) poor flow properties related to low temperatures;

(6) oxidative and thermal instability in long-term storage and uses;

(7) microbial contamination;

(8) problems associated with electrical conductivity; and

(9) such other areas as the Secretary considers appropriate.

(Pub. L. 110–140, title II, § 248, Dec. 19, 2007, 121 Stat. 1548.)

SUBCHAPTER III—ENERGY SAVINGS IN BUILDINGS AND INDUSTRY

§ 17061. Definitions

In this title:[1]

(1) Administrator

The term ''Administrator'' means the Administrator of General Services.

(2) Advisory Committee

The term ''Advisory Committee'' means the Green Building Advisory Committee established under section 484.[1]

(3) Commercial Director

The term ''Commercial Director'' means the individual appointed to the position established under section 17081 of this title.

(4) Consortium

The term ''Consortium'' means the High-Performance Green Building Partnership Consortium created in response to section 17092(c)(1) of this title to represent the private sector in a public-private partnership to promote high-performance green buildings and zero-net-energy commercial buildings.

(5) Cost-effective lighting technology

(A) In general

The term ''cost-effective lighting technology'' means a lighting technology that—

(i) will result in substantial operational cost savings by ensuring an installed consumption of not more than 1 watt per square foot; or

(ii) is contained in a list under—

(I) section 8259b of this title;

(II) Federal acquisition regulation 23–203; and

(III) is at least as energy-conserving as required by other provisions of this Act, including the requirements of this title[1] and title III[1] which shall be applicable to the extent that they would achieve greater energy savings than provided under clause (i) or this clause.[2]

(B) Inclusions

The term ''cost-effective lighting technology'' includes—

(i) lamps;

(ii) ballasts;

(iii) luminaires;

(iv) lighting controls;

(v) daylighting; and

(vi) early use of other highly cost-effective lighting technologies.

(6) Cost-effective technologies and practices

The term ''cost-effective technologies and practices'' means a technology or practice that—

(A) will result in substantial operational cost savings by reducing electricity or fossil fuel consumption, water, or other utility costs, including use of geothermal heat pumps;

(B) complies with the provisions of section 8259b of this title and Federal acquisition regulation 23–203; and

(C) is at least as energy and water conserving as required under this title,[1] including sections 431 through 435, and title V,[1] including sections 511 through 525, which shall be applicable to the extent that they are more stringent or require greater energy or water savings than required by this section.

(7) Federal Director

The term ''Federal Director'' means the individual appointed to the position established under section 17092(a) of this title.

(8) Federal facility

The term ''Federal facility'' means any building that is constructed, renovated, leased, or purchased in part or in whole for use by the Federal Government.

(9) Operational cost savings

(A) In general

The term ''operational cost savings'' means a reduction in end-use operational costs through the application of cost-effective technologies and practices or geothermal heat pumps, including a reduction in electricity consumption relative to consumption by the same customer or at the same facility in a given year, as defined in guidelines promulgated by the Administrator pursuant to section 7628(b) of this title, that achieves cost savings sufficient to pay the incremental additional costs of using cost-effective technologies and practices including geothermal heat pumps by not later than the later of the date established under sections 431 through 434,[1] or—

(i) for cost-effective technologies and practices, the date that is 5 years after the date of installation; and

(ii) for geothermal heat pumps, as soon as practical after the date of installation of the applicable geothermal heat pump.

(B) Inclusions

The term ''operational cost savings'' includes savings achieved at a facility as a result of—

(i) the installation or use of cost-effective technologies and practices; or

(ii) the planting of vegetation that shades the facility and reduces the heating, cooling, or lighting needs of the facility.

(C) Exclusion

The term ''operational cost savings'' does not include savings from measures that would likely be adopted in the absence of cost-effective technology and practices programs, as determined by the Administrator.

(10) Geothermal heat pump

The term ''geothermal heat pump'' means any heating or air conditioning technology that—

(A) uses the ground or ground water as a thermal energy source to heat, or as a thermal energy sink to cool, a building; and

(B) meets the requirements of the Energy Star program of the Environmental Protec-

[1] See References in Text note below.

[2] So in original. Does not fit with cl. (ii) introductory provision.

tion Agency applicable to geothermal heat pumps on the date of purchase of the technology.

(11) GSA facility

(A) In general

The term ''GSA facility'' means any building, structure, or facility, in whole or in part (including the associated support systems of the building, structure, or facility) that—

(i) is constructed (including facilities constructed for lease), renovated, or purchased, in whole or in part, by the Administrator for use by the Federal Government; or

(ii) is leased, in whole or in part, by the Administrator for use by the Federal Government—

(I) except as provided in subclause (II), for a term of not less than 5 years; or

(II) for a term of less than 5 years, if the Administrator determines that use of cost-effective technologies and practices would result in the payback of expenses.

(B) Inclusion

The term ''GSA facility'' includes any group of buildings, structures, or facilities described in subparagraph (A) (including the associated energy-consuming support systems of the buildings, structures, and facilities).

(C) Exemption

The Administrator may exempt from the definition of ''GSA facility'' under this paragraph a building, structure, or facility that meets the requirements of section 8253(c) of this title.

(12) High-performance building

The term ''high-performance building'' means a building that integrates and optimizes on a life cycle basis all major high performance attributes, including energy conservation, environment, safety, security, durability, accessibility, cost-benefit, productivity, sustainability, functionality, and operational considerations.

(13) High-performance green building

The term ''high-performance green building'' means a high-performance building that, during its life-cycle, as compared with similar buildings (as measured by Commercial Buildings Energy Consumption Survey or Residential Energy Consumption Survey data from the Energy Information Agency)—

(A) reduces energy, water, and material resource use;

(B) improves indoor environmental quality, including reducing indoor pollution, improving thermal comfort, and improving lighting and acoustic environments that affect occupant health and productivity;

(C) reduces negative impacts on the environment throughout the life-cycle of the building, including air and water pollution and waste generation;

(D) increases the use of environmentally preferable products, including biobased, recycled content, and nontoxic products with lower life-cycle impacts;

(E) increases reuse and recycling opportunities;

(F) integrates systems in the building;

(G) reduces the environmental and energy impacts of transportation through building location and site design that support a full range of transportation choices for users of the building; and

(H) considers indoor and outdoor effects of the building on human health and the environment, including—

(i) improvements in worker productivity;

(ii) the life-cycle impacts of building materials and operations; and

(iii) other factors that the Federal Director or the Commercial Director consider to be appropriate.

(14) Life-cycle

The term ''life-cycle'', with respect to a high-performance green building, means all stages of the useful life of the building (including components, equipment, systems, and controls of the building) beginning at conception of a high-performance green building project and continuing through site selection, design, construction, landscaping, commissioning, operation, maintenance, renovation, deconstruction or demolition, removal, and recycling of the high-performance green building.

(15) Life-cycle assessment

The term ''life-cycle assessment'' means a comprehensive system approach for measuring the environmental performance of a product or service over the life of the product or service, beginning at raw materials acquisition and continuing through manufacturing, transportation, installation, use, reuse, and end-of-life waste management.

(16) Life-cycle costing

The term ''life-cycle costing'', with respect to a high-performance green building, means a technique of economic evaluation that—

(A) sums, over a given study period, the costs of initial investment (less resale value), replacements, operations (including energy use), and maintenance and repair of an investment decision; and

(B) is expressed—

(i) in present value terms, in the case of a study period equivalent to the longest useful life of the building, determined by taking into consideration the typical life of such a building in the area in which the building is to be located; or

(ii) in annual value terms, in the case of any other study period.

(17) Office of Commercial High-Performance Green Buildings

The term ''Office of Commercial High-Performance Green Buildings'' means the Office of Commercial High-Performance Green Buildings established under section 17081(a) of this title.

(18) Office of Federal High-Performance Green Buildings

The term ''Office of Federal High-Performance Green Buildings'' means the Office of

Federal High-Performance Green Buildings established under section 17092(a) of this title.

(19) Practices

The term ''practices'' means design, financing, permitting, construction, commissioning, operation and maintenance, and other practices that contribute to achieving zero-net-energy buildings or facilities.

(20) Zero-net-energy commercial building

The term ''zero-net-energy commercial building'' means a commercial building that is designed, constructed, and operated to—

(A) require a greatly reduced quantity of energy to operate;

(B) meet the balance of energy needs from sources of energy that do not produce greenhouse gases;

(C) therefore result in no net emissions of greenhouse gases; and

(D) be economically viable.

(Pub. L. 110–140, title IV, § 401, Dec. 19, 2007, 121 Stat. 1596.)

REFERENCES IN TEXT

This title, referred to in text, is title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1596, which enacted this subchapter, part C (§ 6341 et seq.) of subchapter III of chapter 77 of this title, sections 6371h–1 and 7628 of this title, and subchapter V (§ 2695 et seq.) of chapter 53 of Title 15, Commerce and Trade, amended sections 6832, 6834, 6862, 6872, 8253, 8254, and 12709 of this title, and enacted provisions set out as notes under sections 6834 and 6872 of this title. For complete classification of title IV to the Code, see Tables.

Section 484, referred to in par. (2), probably should be a reference to section 494 of Pub. L. 110–140, which is classified to section 17123 of this title.

This Act, referred to in par. (5)(A)(ii)(III), is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note set out under section 17001 of this title and Tables.

Title III, referred to in par. (5)(A)(ii)(III), is title III of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1549, which enacted section 3313 of Title 40, Public Buildings, Property, and Works, amended sections 6291 to 6295, 6297, 6302, 6304, 6311, 6313 to 6316, 15821, and 16191 of this title and sections 3307, 3310, and 3314 to 3316 of Title 40, and enacted provisions set out as notes under sections 6291, 6294, 6295, and 6313 of this title. For complete classification of title III to the Code, see Tables.

Sections 431 through 435, referred to in pars. (6)(C) and 9(A), are sections 431 to 435 of Pub. L. 110–140. Sections 431 to 434 amended sections 6832, 6834, and 8253 of this title and enacted provisions set out as a note under section 6834 of this title. Section 435 enacted section 17091 of this title.

Title V, referred to in par. (6)(C), is title V of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1655, which enacted subchapter IV (§ 17131 et seq.) of this chapter, part D (§ 8279) of subchapter III of chapter 91 of this title, and sections 1824, 2162a, and 2169 of Title 2, The Congress, amended sections 6325, 6834, 8256, 8258, 8259b, 8287, and 8287c of this title, section 2162 of Title 2, section 2913 of Title 10, Armed Forces, section 3203 of Title 15, Commerce and Trade, and section 2621 of Title 16, Conservation, and enacted provisions set out as a note under section 8259b of this title. For complete classification of title V to the Code, see Tables.

Sections 511 through 525, referred to in par. (6)(C), are sections 511 to 525 of Pub. L. 110–140, which enacted part A (§ 17131) of subchapter IV of this chapter and section 17141 of this title, amended sections 6834, 8256, 8258, 8259b, 8287, and 8287c of this title and section 2913 of Title 10, Armed Forces, and enacted provisions set out as a note under section 8259b of this title.

PART A—RESIDENTIAL BUILDING EFFICIENCY

§ 17071. Energy Code improvements applicable to manufactured housing

(a) Establishment of standards

(1) In general

Not later than 4 years after December 19, 2007, the Secretary shall by regulation establish standards for energy efficiency in manufactured housing.

(2) Notice, comment, and consultation

Standards described in paragraph (1) shall be established after—

(A) notice and an opportunity for comment by manufacturers of manufactured housing and other interested parties; and

(B) consultation with the Secretary of Housing and Urban Development, who may seek further counsel from the Manufactured Housing Consensus Committee.

(b) Requirements

(1) International Energy Conservation Code

The energy conservation standards established under this section shall be based on the most recent version of the International Energy Conservation Code (including supplements), except in cases in which the Secretary finds that the code[1] is not cost-effective, or a more stringent standard would be more cost-effective, based on the impact of the code[1] on the purchase price of manufactured housing and on total life-cycle construction and operating costs.

(2) Considerations

The energy conservation standards established under this section may—

(A) take into consideration the design and factory construction techniques of manufactured homes;

(B) be based on the climate zones established by the Department of Housing and Urban Development rather than the climate zones under the International Energy Conservation Code; and

(C) provide for alternative practices that result in net estimated energy consumption equal to or less than the specified standards.

(3) Updating

The energy conservation standards established under this section shall be updated not later than—

(A) 1 year after December 19, 2007; and

(B) 1 year after any revision to the International Energy Conservation Code.

(c) Enforcement

Any manufacturer of manufactured housing that violates a provision of the regulations under subsection (a) is liable to the United States for a civil penalty in an amount not exceeding 1 percent of the manufacturer's retail list price of the manufactured housing.

[1] So in original. Probably should be ''Code''.

(Pub. L. 110–140, title IV, § 413, Dec. 19, 2007, 121 Stat. 1601.)

PART B—HIGH-PERFORMANCE COMMERCIAL BUILDINGS

§ 17081. Commercial high-performance green buildings

(a) Director of Commercial High-Performance Green Buildings

Notwithstanding any other provision of law, the Secretary, acting through the Assistant Secretary of Energy Efficiency and Renewable Energy, shall appoint a Director of Commercial High-Performance Green Buildings to a position in the career-reserved Senior Executive service, with the principal responsibility to—

(1) establish and manage the Office of Commercial High-Performance Green Buildings; and

(2) carry out other duties as required under this part.

(b) Qualifications

The Commercial Director shall be an individual, who by reason of professional background and experience, is specifically qualified to carry out the duties required under this part.

(c) Duties

The Commercial Director shall, with respect to development of high-performance green buildings and zero-energy commercial buildings nationwide—

(1) coordinate the activities of the Office of Commercial High-Performance Green Buildings with the activities of the Office of Federal High-Performance Green Buildings;

(2) develop the legal predicates and agreements for, negotiate, and establish one or more public-private partnerships with the Consortium, members of the Consortium, and other capable parties meeting the qualifications of the Consortium, to further such development;

(3) represent the public and the Department in negotiating and performing in accord with such public-private partnerships;

(4) use appropriated funds in an effective manner to encourage the maximum investment of private funds to achieve such development;

(5) promote research and development of high-performance green buildings, consistent with section 17083 of this title; and

(6) jointly establish with the Federal Director a national high-performance green building clearinghouse in accordance with section 17083(1) of this title, which shall provide high-performance green building information and disseminate research results through—

(A) outreach;

(B) education; and

(C) the provision of technical assistance.

(d) Reporting

The Commercial Director shall report directly to the Assistant Secretary for Energy Efficiency and Renewable Energy, or to other senior officials in a way that facilitates the integrated program of this part for both energy efficiency and renewable energy and both technology development and technology deployment.

(e) Coordination

The Commercial Director shall ensure full coordination of high-performance green building information and activities, including activities under this part, within the Federal Government by working with the General Services Administration and all relevant agencies, including, at a minimum—

(1) the Environmental Protection Agency;

(2) the Office of the Federal Environmental Executive;

(3) the Office of Federal Procurement Policy;

(4) the Department of Energy, particularly the Federal Energy Management Program;

(5) the Department of Health and Human Services;

(6) the Department of Housing and Urban Development;

(7) the Department of Defense;

(8) the National Institute of Standards and Technology;

(9) the Department of Transportation;

(10) the Office of Science Technology and Policy; and

(11) such nonprofit high-performance green building rating and analysis entities as the Commercial Director determines can offer support, expertise, and review services.

(f) High-Performance Green Building Partnership Consortium

(1) Recognition

Not later than 90 days after December 19, 2007, the Commercial Director shall formally recognize one or more groups that qualify as a high-performance green building partnership consortium.

(2) Representation to qualify

To qualify under this section, any consortium shall include representation from—

(A) the design professions, including national associations of architects and of professional engineers;

(B) the development, construction, financial, and real estate industries;

(C) building owners and operators from the public and private sectors;

(D) academic and research organizations, including at least one national laboratory with extensive commercial building energy expertise;

(E) building code agencies and organizations, including a model energy code-setting organization;

(F) independent high-performance green building associations or councils;

(G) experts in indoor air quality and environmental factors;

(H) experts in intelligent buildings and integrated building information systems;

(I) utility energy efficiency programs;

(J) manufacturers and providers of equipment and techniques used in high-performance green buildings;

(K) public transportation industry experts; and

(L) nongovernmental energy efficiency organizations.

(3) Funding

The Secretary may make payments to the Consortium pursuant to the terms of a public-

private partnership for such activities of the Consortium undertaken under such a partnership as described in this part directly to the Consortium or through one or more of its members.

(g) Report

Not later than 2 years after December 19, 2007, and biennially thereafter, the Commercial Director, in consultation with the Consortium, shall submit to Congress a report that—

(1) describes the status of the high-performance green building initiatives under this part and other Federal programs affecting commercial high-performance green buildings in effect as of the date of the report, including—

(A) the extent to which the programs are being carried out in accordance with this part; and

(B) the status of funding requests and appropriations for those programs; and

(2) summarizes and highlights development, at the State and local level, of high-performance green building initiatives, including executive orders, policies, or laws adopted promoting high-performance green building (including the status of implementation of those initiatives).

(Pub. L. 110–140, title IV, § 421, Dec. 19, 2007, 121 Stat. 1602.)

§ 17082. Zero Net Energy Commercial Buildings Initiative

(a) Definitions

In this section:

(1) Consortium

The term ''consortium'' means a High-Performance Green Building Consortium selected by the Commercial Director.

(2) Initiative

The term ''initiative'' means the Zero-Net-Energy Commercial Buildings Initiative established under subsection (b)(1).

(3) Zero-net-energy commercial building

The term ''zero-net-energy commercial building'' means a high-performance commercial building that is designed, constructed, and operated—

(A) to require a greatly reduced quantity of energy to operate;

(B) to meet the balance of energy needs from sources of energy that do not produce greenhouse gases;

(C) in a manner that will result in no net emissions of greenhouse gases; and

(D) to be economically viable.

(b) Establishment

(1) In general

The Commercial Director shall establish an initiative, to be known as the ''Zero-Net-Energy Commercial Buildings Initiative''—

(A) to reduce the quantity of energy consumed by commercial buildings located in the United States; and

(B) to achieve the development of zero net energy commercial buildings in the United States.

(2) Consortium

(A) In general

Not later than 180 days after December 19, 2007, the Commercial Director shall competitively select, and enter into an agreement with, a consortium to develop and carry out the initiative.

(B) Agreements

In entering into an agreement with a consortium under subparagraph (A), the Commercial Director shall use the authority described in section 7256(g) of this title, to the maximum extent practicable.

(c) Goal of initiative

The goal of the initiative shall be to develop and disseminate technologies, practices, and policies for the development and establishment of zero net energy commercial buildings for—

(1) any commercial building newly constructed in the United States by 2030;

(2) 50 percent of the commercial building stock of the United States by 2040; and

(3) all commercial buildings in the United States by 2050.

(d) Components

In carrying out the initiative, the Commercial Director, in consultation with the consortium, may—

(1) conduct research and development on building science, design, materials, components, equipment and controls, operation and other practices, integration, energy use measurement, and benchmarking;

(2) conduct pilot programs and demonstration projects to evaluate replicable approaches to achieving energy efficient commercial buildings for a variety of building types in a variety of climate zones;

(3) conduct deployment, dissemination, and technical assistance activities to encourage widespread adoption of technologies, practices, and policies to achieve energy efficient commercial buildings;

(4) conduct other research, development, demonstration, and deployment activities necessary to achieve each goal of the initiative, as determined by the Commercial Director, in consultation with the consortium;

(5) develop training materials and courses for building professionals and trades on achieving cost-effective high-performance energy efficient buildings;

(6) develop and disseminate public education materials to share information on the benefits and cost-effectiveness of high-performance energy efficient buildings;

(7) support code-setting organizations and State and local governments in developing minimum performance standards in building codes that recognize the ready availability of many technologies utilized in high-performance energy efficient buildings;

(8) develop strategies for overcoming the split incentives between builders and purchasers, and landlords and tenants, to ensure that energy efficiency and high-performance investments are made that are cost-effective on a lifecycle basis; and

(9) develop improved means of measurement and verification of energy savings and performance for public dissemination.

(e) Cost sharing

In carrying out this section, the Commercial Director shall require cost sharing in accordance with section 16352 of this title.

(f) Authorization of appropriations

There are authorized to be appropriated to carry out this section—

(1) $20,000,000 for fiscal year 2008;

(2) $50,000,000 for each of fiscal years 2009 and 2010;

(3) $100,000,000 for each of fiscal years 2011 and 2012; and

(4) $200,000,000 for each of fiscal years 2013 through 2018.

(Pub. L. 110–140, title IV, § 422, Dec. 19, 2007, 121 Stat. 1604.)

§ 17083. Public outreach

The Commercial Director and Federal Director, in coordination with the Consortium, shall carry out public outreach to inform individuals and entities of the information and services available governmentwide by—

(1) establishing and maintaining a national high-performance green building clearinghouse, including on the Internet, that—

(A) identifies existing similar efforts and coordinates activities of common interest; and

(B) provides information relating to high-performance green buildings, including hyperlinks to Internet sites that describe the activities, information, and resources of—

(i) the Federal Government;

(ii) State and local governments;

(iii) the private sector (including nongovernmental and nonprofit entities and organizations); and

(iv) international organizations;

(2) identifying and recommending educational resources for implementing high-performance green building practices, including security and emergency benefits and practices;

(3) providing access to technical assistance, tools, and resources for constructing high-performance green buildings, particularly tools to conduct life-cycle costing and life-cycle assessment;

(4) providing information on application processes for certifying a high-performance green building, including certification and commissioning;

(5) providing to the public, through the Commercial Director, technical and research information or other forms of assistance or advice that would be useful in planning and constructing high-performance green buildings;

(6) using such additional methods as are determined by the Commercial Director to be appropriate to conduct public outreach;

(7) surveying existing research and studies relating to high-performance green buildings; and

(8) coordinating activities of common interest.

(Pub. L. 110–140, title IV, § 423, Dec. 19, 2007, 121 Stat. 1606.)

PART C—HIGH-PERFORMANCE FEDERAL BUILDINGS

§ 17091. Leasing

(a) In general

Except as provided in subsection (b), effective beginning on the date that is 3 years after December 19, 2007, no Federal agency shall enter into a contract to lease space in a building that has not earned the Energy Star label in the most recent year.

(b) Exception

(1) Application

This subsection applies if—

(A) no space is available in a building described in subsection (a) that meets the functional requirements of an agency, including locational needs;

(B) the agency proposes to remain in a building that the agency has occupied previously;

(C) the agency proposes to lease a building of historical, architectural, or cultural significance (as defined in section 3306(a)(4) of title 40) or space in such a building; or

(D) the lease is for not more than 10,000 gross square feet of space.

(2) Buildings without Energy Star label

If one of the conditions described in paragraph (2)[1] is met, the agency may enter into a contract to lease space in a building that has not earned the Energy Star label in the most recent year if the lease contract includes provisions requiring that, prior to occupancy or, in the case of a contract described in paragraph (1)(B), not later than 1 year after signing the contract, the space will be renovated for all energy efficiency and conservation improvements that would be cost effective over the life of the lease, including improvements in lighting, windows, and heating, ventilation, and air conditioning systems.

(c) Revision of Federal Acquisition Regulation

(1) In general

Not later than 3 years after December 19, 2007, the Federal Acquisition Regulation described in section 1121(b) and (c)(1) of title 41 shall be revised to require Federal officers and employees to comply with this section in leasing buildings.

(2) Consultation

The members of the Federal Acquisition Regulatory Council established under section 1302(a) of title 41 shall consult with the Federal Director and the Commercial Director before promulgating regulations to carry out this subsection.

(Pub. L. 110–140, title IV, § 435, Dec. 19, 2007, 121 Stat. 1615.)

CODIFICATION

In subsec. (c)(1), ''section 1121(b) and (c)(1) of title 41'' substituted for ''section 6(a) of the Office of Federal

[1] So in original. Probably should be ''(1)''.

Procurement Policy Act (41 U.S.C. 405(a))'' on authority of Pub. L. 111–350, § 6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

In subsec. (c)(2), ''section 1302(a) of title 41'' substituted for ''section 25 of the Office of Federal Procurement Policy Act (41 U.S.C. 421)'' on authority of Pub. L. 111–350, § 6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

§ 17092. High-performance green Federal buildings

(a) Establishment of Office

Not later than 60 days after December 19, 2007, the Administrator shall establish within the General Services Administration an Office of Federal High-Performance Green Buildings, and appoint an individual to serve as Federal Director in, a position in the career-reserved Senior Executive service, to—

(1) establish and manage the Office of Federal High-Performance Green Buildings; and

(2) carry out other duties as required under this part.

(b) Compensation

The compensation of the Federal Director shall not exceed the maximum rate of basic pay for the Senior Executive Service under section 5382 of title 5, including any applicable locality-based comparability payment that may be authorized under section 5304(h)(2)(C) of that title.

(c) Duties

The Federal Director shall—

(1) coordinate the activities of the Office of Federal High-Performance Green Buildings with the activities of the Office of Commercial High-Performance Green Buildings, and the Secretary, in accordance with section 6834(a)(3)(D) of this title;

(2) ensure full coordination of high-performance green building information and activities within the General Services Administration and all relevant agencies, including, at a minimum—

(A) the Environmental Protection Agency;

(B) the Office of the Federal Environmental Executive;

(C) the Office of Federal Procurement Policy;

(D) the Department of Energy;

(E) the Department of Health and Human Services;

(F) the Department of Defense;

(G) the Department of Transportation;

(H) the National Institute of Standards and Technology; and

(I) the Office of Science and Technology Policy;

(3) establish a senior-level Federal Green Building Advisory Committee under section 474,[1] which shall provide advice and recommendations in accordance with that section and subsection (d);

(4) identify and every 5 years reassess improved or higher rating standards recommended by the Advisory Committee;

(5) ensure full coordination, dissemination of information regarding, and promotion of the results of research and development information relating to Federal high-performance green building initiatives;

(6) identify and develop Federal high-performance green building standards for all types of Federal facilities, consistent with the requirements of this part and section 6834(a)(3)(D) of this title;

(7) establish green practices that can be used throughout the life of a Federal facility;

(8) review and analyze current Federal budget practices and life-cycle costing issues, and make recommendations to Congress, in accordance with subsection (d); and

(9) identify opportunities to demonstrate innovative and emerging green building technologies and concepts.

(d) Additional duties

The Federal Director, in consultation with the Commercial Director and the Advisory Committee, and consistent with the requirements of section 6834(a)(3)(D) of this title shall—

(1) identify, review, and analyze current budget and contracting practices that affect achievement of high-performance green buildings, including the identification of barriers to high-performance green building life-cycle costing and budgetary issues;

(2) develop guidance and conduct training sessions with budget specialists and contracting personnel from Federal agencies and budget examiners to apply life-cycle cost criteria to actual projects;

(3) identify tools to aid life-cycle cost decisionmaking; and

(4) explore the feasibility of incorporating the benefits of high-performance green buildings, such as security benefits, into a cost-budget analysis to aid in life-cycle costing for budget and decisionmaking processes.

(e) Incentives

Within 90 days after December 19, 2007, the Federal Director shall identify incentives to encourage the expedited use of high-performance green buildings and related technology in the operations of the Federal Government, in accordance with the requirements of section 6834(a)(3)(D) of this title, including through—

(1) the provision of recognition awards; and

(2) the maximum feasible retention of financial savings in the annual budgets of Federal agencies for use in reinvesting in future high-performance green building initiatives.

(f) Report

Not later than 2 years after December 19, 2007, and biennially thereafter, the Federal Director, in consultation with the Secretary, shall submit to Congress a report that—

(1) describes the status of compliance with this part, the requirements of section 6834(a)(3)(D) of this title, and other Federal high-performance green building initiatives in effect as of the date of the report, including—

(A) the extent to which the programs are being carried out in accordance with this part and the requirements of section 6834(a)(3)(D) of this title; and

(B) the status of funding requests and appropriations for those programs;

[1] See References in Text note below.

(2) identifies within the planning, budgeting, and construction process all types of Federal facility procedures that may affect the certification of new and existing Federal facilities as high-performance green buildings under the provisions of section 6834(a)(3)(D) of this title and the criteria established in subsection (h);

(3) identifies inconsistencies, as reported to the Advisory Committee, in Federal law with respect to product acquisition guidelines and high-performance product guidelines;

(4) recommends language for uniform standards for use by Federal agencies in environmentally responsible acquisition;

(5) in coordination with the Office of Management and Budget, reviews the budget process for capital programs with respect to alternatives for—

(A) restructuring of budgets to require the use of complete energy and environmental cost accounting;

(B) using operations expenditures in budget-related decisions while simultaneously incorporating productivity and health measures (as those measures can be quantified by the Office of Federal High-Performance Green Buildings, with the assistance of universities and national laboratories);

(C) streamlining measures for permitting Federal agencies to retain all identified savings accrued as a result of the use of life-cycle costing for future high-performance green building initiatives; and

(D) identifying short-term and long-term cost savings that accrue from high-performance green buildings, including those relating to health and productivity;

(6) identifies green, self-sustaining technologies to address the operational needs of Federal facilities in times of national security emergencies, natural disasters, or other dire emergencies;

(7) summarizes and highlights development, at the State and local level, of high-performance green building initiatives, including executive orders, policies, or laws adopted promoting high-performance green building (including the status of implementation of those initiatives); and

(8) includes, for the 2-year period covered by the report, recommendations to address each of the matters, and a plan for implementation of each recommendation, described in paragraphs (1) through (7).

(g) Implementation

The Office of Federal High-Performance Green Buildings shall carry out each plan for implementation of recommendations under subsection (f)(8).

(h) Identification of certification system

(1) In general

For the purpose of this section, not later than 60 days after December 19, 2007, the Federal Director shall identify and shall provide to the Secretary pursuant to section 6834(a)(3)(D) of this title, a certification system that the Director determines to be the most likely to encourage a comprehensive and environmentally-sound approach to certification of green buildings.

(2) Basis

The system identified under paragraph (1) shall be based on—

(A) a study completed every 5 years and provided to the Secretary pursuant to section 6834(a)(3)(D) of this title, which shall be carried out by the Federal Director to compare and evaluate standards;

(B) the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement this part;

(C) the ability of the applicable standard-setting organization to collect and reflect public comment;

(D) the ability of the standard to be developed and revised through a consensus-based process;

(E) an evaluation of the robustness of the criteria for a high-performance green building, which shall give credit for promoting—

(i) efficient and sustainable use of water, energy, and other natural resources;

(ii) use of renewable energy sources;

(iii) improved indoor environmental quality through enhanced indoor air quality, thermal comfort, acoustics, day lighting, pollutant source control, and use of low-emission materials and building system controls;

(iv) reduced impacts from transportation through building location and site design that promote access by public transportation; and

(v) such other criteria as the Federal Director determines to be appropriate; and

(F) national recognition within the building industry.

(Pub. L. 110–140, title IV, § 436, Dec. 19, 2007, 121 Stat. 1616.)

REFERENCES IN TEXT

This part, referred to in subsecs. (a)(2), (c)(6), (f)(1) and (h)(2)(B), was in the original ''this subtitle'', meaning subtitle C (§§ 431–441) of title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1607, which enacted this part, amended sections 6832, 6834, 8253, and 8254 of this title, and enacted provisions set out as a note under section 6834 of this title. For complete classification of subtitle C to the Code, see Tables.

Section 474, referred to in subsec. (c)(3), probably means section 494 of Pub. L. 110–140, which is classified to section 17123 of this title.

§ 17093. Federal green building performance

(a) In general

Not later than October 31 of each of the 2 fiscal years following the fiscal year in which this Act is enacted, and at such times thereafter as the Comptroller General of the United States determines to be appropriate, the Comptroller General of the United States shall, with respect to the fiscal years that have passed since the preceding report—

(1) conduct an audit of the implementation of this part, section 6834(a)(3)(D) of this title, and section 17091 of this title; and

(2) submit to the Federal Director, the Advisory Committee, the Administrator, and Congress a report describing the results of the audit.

(b) Contents

An audit under subsection (a) shall include a review, with respect to the period covered by the report under subsection (a)(2), of—

(1) budget, life-cycle costing, and contracting issues, using best practices identified by the Comptroller General of the United States and heads of other agencies in accordance with section 17092(d) of this title;

(2) the level of coordination among the Federal Director, the Office of Management and Budget, the Department of Energy, and relevant agencies;

(3) the performance of the Federal Director and other agencies in carrying out the implementation plan;

(4) the design stage of high-performance green building measures;

(5) high-performance building data that were collected and reported to the Office; and

(6) such other matters as the Comptroller General of the United States determines to be appropriate.

(c) Environmental Stewardship Scorecard

The Federal Director shall consult with the Advisory Committee to enhance, and assist in the implementation of, the Office of Management and Budget government efficiency reports and scorecards under section 17144 of this title and the Environmental Stewardship Scorecard announced at the White House summit on Federal sustainable buildings in January 2006, to measure the implementation by each Federal agency of sustainable design and green building initiatives.

(Pub. L. 110–140, title IV, § 437, Dec. 19, 2007, 121 Stat. 1619.)

REFERENCES IN TEXT

This Act, referred to in subsec. (a), is Pub. L. 110–140, which was approved Dec. 19, 2007.

This part, referred to in subsec. (a)(1), was in the original ''this subtitle'', meaning subtitle C (§§ 431–441) of title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1607, which enacted this part, amended sections 6832, 6834, 8253, and 8254 of this title, and enacted provisions set out as a note under section 6834 of this title. For complete classification of subtitle C to the Code, see Tables.

§ 17094. Storm water runoff requirements for Federal development projects

The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

(Pub. L. 110–140, title IV, § 438, Dec. 19, 2007, 121 Stat. 1620.)

§ 17095. Cost-effective technology acceleration program

(a) Definition of Administrator

In this section, the term ''Administrator'' means the Administrator of General Services.

(b) Establishment

(1) In general

The Administrator shall establish a program to accelerate the use of more cost-effective technologies and practices at GSA facilities.

(2) Requirements

The program established under this subsection shall—

(A) ensure centralized responsibility for the coordination of cost reduction-related recommendations, practices, and activities of all relevant Federal agencies;

(B) provide technical assistance and operational guidance to applicable tenants to achieve the goal identified in subsection (c)(2)(B)(ii);

(C) establish methods to track the success of Federal departments and agencies with respect to that goal; and

(D) be fully coordinated with and no less stringent nor less energy-conserving or water-conserving than required by other provisions of this Act and other applicable law, including sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525 and amendments made by those sections.

(c) Accelerated use of technologies

(1) Review

(A) In general

As part of the program under this section, not later than 90 days after December 19, 2007, the Administrator shall conduct a review of—

(i) current use of cost-effective lighting technologies and geothermal heat pumps in GSA facilities; and

(ii) the availability to managers of GSA facilities of cost-effective lighting technologies and geothermal heat pumps.

(B) Requirements

The review under subparagraph (A) shall—

(i) examine the use of cost-effective lighting technologies, geothermal heat pumps, and other cost-effective technologies and practices by Federal agencies in GSA facilities; and

(ii) as prepared in consultation with the Administrator of the Environmental Protection Agency, identify cost-effective lighting technology and geothermal heat pump technology standards that could be used for all types of GSA facilities.

(2) Replacement

(A) In general

As part of the program under this section, not later than 180 days after December 19, 2007, the Administrator shall establish, using available appropriations and programs implementing sections 432 and 525[1] (and amendments made by those sections), a cost-effective lighting technology and geothermal heat pump technology acceleration program to achieve maximum feasible replacement of existing lighting, heating,

[1] See References in Text note below.

cooling[2] technologies with cost-effective lighting technologies and geothermal heat pump technologies in each GSA facility. Such program shall fully comply with the requirements of sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525[1] and amendments made by those sections and any other provisions of law, which shall be applicable to the extent that they are more stringent or would achieve greater energy savings than required by this section.

(B) Acceleration plan timetable

(i) In general

To implement the program established under subparagraph (A), not later than 1 year after December 19, 2007, the Administrator shall establish a timetable of actions to comply with the requirements of this section and sections 431 through 435, whichever achieves greater energy savings most expeditiously, including milestones for specific activities needed to replace existing lighting, heating, cooling[2] technologies with cost-effective lighting technologies and geothermal heat pump technologies, to the maximum extent feasible (including at the maximum rate feasible), at each GSA facility.

(ii) Goal

The goal of the timetable under clause (i) shall be to complete, using available appropriations and programs implementing sections 431 through 435[1] (and amendments made by those sections), maximum feasible replacement of existing lighting, heating, and cooling technologies with cost-effective lighting technologies and geothermal heat pump technologies consistent with the requirements of this section and sections 431 through 435,[1] whichever achieves greater energy savings most expeditiously. Notwithstanding any provision of this section, such program shall fully comply with the requirements of the Act[3] including sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525 and amendments made by those sections and other provisions of law, which shall be applicable to the extent that they are more stringent or would achieve greater energy or water savings than required by this section.

(d) GSA facility technologies and practices

(1) In general

Not later than 180 days after December 19, 2007, and annually thereafter, the Administrator shall—

(A) ensure that a manager responsible for implementing section 432[1] and for accelerating the use of cost-effective technologies and practices is designated for each GSA facility; and

(B) submit to Congress a plan to comply with section 432,[1] this section, and other applicable provisions of this Act and applicable law with respect to energy and water conservation at GSA facilities.

(2) Measures

The plan shall implement measures required by such other provisions of law in accordance with those provisions, and shall implement the measures required by this section to the maximum extent feasible (including at the maximum rate feasible) using available appropriations and programs implementing sections 431 through 435 and 525[1] (and amendments made by those sections), by not later than the date that is 5 years after December 19, 2007.

(3) Contents of plan

The plan shall—

(A) with respect to cost-effective technologies and practices—

(i) identify the specific activities needed to comply with sections 431 through 435;[1]

(ii) identify the specific activities needed to achieve at least a 20-percent reduction in operational costs through the application of cost-effective technologies and practices from 2003 levels at GSA facilities by not later than 5 years after December 19, 2007;

(iii) describe activities required and carried out to estimate the funds necessary to achieve the reduction described in clauses (i) and (ii);

(B) include an estimate of the funds necessary to carry out this section;

(C) describe the status of the implementation of cost-effective technologies and practices at GSA facilities, including—

(i) the extent to which programs, including the program established under subsection (b), are being carried out in accordance with this part; and

(ii) the status of funding requests and appropriations for those programs;

(D) identify within the planning, budgeting, and construction processes, all types of GSA facility-related procedures that inhibit new and existing GSA facilities from implementing cost-effective technologies;

(E) recommend language for uniform standards for use by Federal agencies in implementing cost-effective technologies and practices;

(F) in coordination with the Office of Management and Budget, review the budget process for capital programs with respect to alternatives for—

(i) implementing measures that will assure that Federal agencies retain all identified savings accrued as a result of the use of cost-effective technologies, consistent with section 8253(a)(1) of this title, and other applicable law; and

(ii) identifying short- and long-term cost savings that accrue from the use of cost-effective technologies and practices;

(G) with respect to cost-effective technologies and practices, achieve substantial operational cost savings through the application of the technologies; and

[2] So in original. Probably should be ''and cooling''.

[3] So in original. Probably should be ''this Act''.

(H) include recommendations to address each of the matters, and a plan for implementation of each recommendation, described in subparagraphs (A) through (G).

(4) Administration

Notwithstanding any provision of this section, the program required under this section shall fully comply with the requirements of sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525[1] and amendments made by those sections, which shall be applicable to the extent that they are more stringent or would achieve greater energy or water savings than required by this section.

(e) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section, to remain available until expended.

(Pub. L. 110–140, title IV, § 439, Dec. 19, 2007, 121 Stat. 1620.)

REFERENCES IN TEXT

This Act, referred to in subsecs. (b)(2)(D), (c)(2)(B)(ii), and (d)(1)(B), is Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1492, known as the Energy Independence and Security Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note set out under section 17001 of this title and Tables.

Sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525, referred to in subsecs. (b)(2)(D), (c)(2)(A), (B)(ii), and (d)(4), are sections 321 to 324, 431 to 438, 461, 511 to 518, and 523 to 525, respectively, of Pub. L. 110–140, which enacted sections 17091 to 17094 of this title, part A (§ 17131) of subchapter IV of this chapter, subchapter V (§ 2695 et seq.) of chapter 53 of Title 15, Commerce and Trade, and section 3313 of Title 40, Public Buildings, Property, and Works, amended sections 6291 to 6294, 6295, 6297, 6302, 6304, 6832, 6834, 8253, 8256, 8258, 8259b, 8287, and 8287c of this title, section 2913 of Title 10, Armed Forces, and sections 3307, 3310, and 3314 to 3316 of Title 40, and enacted provisions set out as notes under sections 6294, 6295, 6834, and 8259b of this title.

Sections 432 and 525, referred to in subsec. (c)(2)(A), are sections 432 and 525 of Pub. L. 110–140, which amended sections 8253 and 8259b of this title and enacted provisions set out as a note under section 8259b of this title.

Sections 431 through 435, referred to in subsecs. (c)(2)(B) and (d)(2), (3)(A)(i), are sections 431 to 435 of Pub. L. 110–140, which enacted section 17091 of this title, amended sections 6832, 6834, and 8253 of this title, and enacted provisions set out as a note under section 6834 of this title.

Section 432, referred to in subsec. (d)(1), is section 432 of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1607, which amended section 8253 of this title.

Section 525, referred to in subsec. (d)(2), is section 525 of Pub. L. 110–140, December 19, 2007, 121 Stat. 1663, which amended section 8259b of this title and enacted provisions set out as a note under section 8259b of this title.

This part, referred to in subsec. (d)(3)(C)(i), was in the original ''this subtitle'', meaning subtitle C (§§ 431–441) of title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1607, which enacted this part, amended sections 6832, 6834, 8253, and 8254 of this title, and enacted provisions set out as a note under section 6834 of this title. For complete classification of subtitle C to the Code, see Tables.

§ 17096. Authorization of appropriations

There is authorized to be appropriated to carry out sections 434 through 439 and 482[1] $4,000,000 for each of fiscal years 2008 through 2012, to remain available until expended.

(Pub. L. 110–140, title IV, § 440, Dec. 19, 2007, 121 Stat. 1623.)

REFERENCES IN TEXT

Sections 434 through 439, referred to in text, are sections 434 to 439 of Pub. L. 110–140, which enacted sections 17091 to 17095 of this title and amended section 8253 of this title. Section 482 is unidentifiable because Pub. L. 110–140 does not contain a section 482.

PART D—INDUSTRIAL ENERGY EFFICIENCY

§ 17111. Energy-intensive industries program

(a) Definitions

In this section:

(1) Eligible entity

The term ''eligible entity'' means—

(A) an energy-intensive industry;

(B) a national trade association representing an energy-intensive industry; or

(C) a person acting on behalf of 1 or more energy-intensive industries or sectors, as determined by the Secretary.

(2) Energy-intensive industry

The term ''energy-intensive industry'' means an industry that uses significant quantities of energy as part of its primary economic activities, including—

(A) information technology, including data centers containing electrical equipment used in processing, storing, and transmitting digital information;

(B) consumer product manufacturing;

(C) food processing;

(D) materials manufacturers, including—

(i) aluminum;

(ii) chemicals;

(iii) forest and paper products;

(iv) metal casting;

(v) glass;

(vi) petroleum refining;

(vii) mining; and

(viii) steel;

(E) other energy-intensive industries, as determined by the Secretary.

(3) Feedstock

The term ''feedstock'' means the raw material supplied for use in manufacturing, chemical, and biological processes.

(4) Partnership

The term ''partnership'' means an energy efficiency partnership established under subsection (c)(1)(A).

(5) Program

The term ''program'' means the energy-intensive industries program established under subsection (b).

(b) Establishment of program

The Secretary shall establish a program under which the Secretary, in cooperation with en-

[1] See References in Text note below.

ergy-intensive industries and national industry trade associations representing the energy-intensive industries, shall support, research, develop, and promote the use of new materials processes, technologies, and techniques to optimize energy efficiency and the economic competitiveness of the United States' industrial and commercial sectors.

(c) Partnerships

(1) In general

As part of the program, the Secretary shall establish energy efficiency partnerships between the Secretary and eligible entities to conduct research on, develop, and demonstrate new processes, technologies, and operating practices and techniques to significantly improve the energy efficiency of equipment and processes used by energy-intensive industries, including the conduct of activities to—

(A) increase the energy efficiency of industrial processes and facilities;

(B) research, develop, and demonstrate advanced technologies capable of energy intensity reductions and increased environmental performance; and

(C) promote the use of the processes, technologies, and techniques described in subparagraphs (A) and (B).

(2) Eligible activities

Partnership activities eligible for funding under this subsection include—

(A) feedstock and recycling research, development, and demonstration activities to identify and promote—

(i) opportunities for meeting industry feedstock requirements with more energy efficient and flexible sources of feedstock or energy supply;

(ii) strategies to develop and deploy technologies that improve the quality and quantity of feedstocks recovered from process and waste streams; and

(iii) other methods using recycling, reuse, and improved industrial materials;

(B) research to develop and demonstrate technologies and processes that utilize alternative energy sources to supply heat, power, and new feedstocks for energy-intensive industries;

(C) research to achieve energy efficiency in steam, power, control system, and process heat technologies, and in other manufacturing processes; and

(D) industrial and commercial energy efficiency and sustainability assessments to—

(i) assist individual industrial and commercial sectors in developing tools, techniques, and methodologies to assess—

(I) the unique processes and facilities of the sectors;

(II) the energy utilization requirements of the sectors; and

(III) the application of new, more energy efficient technologies; and

(ii) conduct energy savings assessments;

(E) the incorporation of technologies and innovations that would significantly improve the energy efficiency and utilization of energy-intensive commercial applications; and

(F) any other activities that the Secretary determines to be appropriate.

(3) Proposals

(A) In general

To be eligible for funding under this subsection, a partnership shall submit to the Secretary a proposal that describes the proposed research, development, or demonstration activity to be conducted by the partnership.

(B) Review

After reviewing the scientific, technical, and commercial merit of a proposals[1] submitted under subparagraph (A), the Secretary shall approve or disapprove the proposal.

(C) Competitive awards

The provision of funding under this subsection shall be on a competitive basis.

(4) Cost-sharing requirement

In carrying out this section, the Secretary shall require cost sharing in accordance with section 16352 of this title.

(d) Grants

The Secretary may award competitive grants for innovative technology research, development and demonstrations to universities, individual inventors, and small companies, based on energy savings potential, commercial viability, and technical merit.

(e) Institution of higher education-based industrial research and assessment centers

The Secretary shall provide funding to institution of higher education-based industrial research and assessment centers, whose purpose shall be—

(1) to identify opportunities for optimizing energy efficiency and environmental performance;

(2) to promote applications of emerging concepts and technologies in small- and medium-sized manufacturers;

(3) to promote research and development for the use of alternative energy sources to supply heat, power, and new feedstocks for energy-intensive industries;

(4) to coordinate with appropriate Federal and State research offices, and provide a clearinghouse for industrial process and energy efficiency technical assistance resources; and

(5) to coordinate with State-accredited technical training centers and community colleges, while ensuring appropriate services to all regions of the United States.

(f) Authorization of appropriations

(1) In general

There are authorized to be appropriated to the Secretary to carry out this section—

(A) $184,000,000 for fiscal year 2008;

(B) $190,000,000 for fiscal year 2009;

(C) $196,000,000 for fiscal year 2010;

(D) $202,000,000 for fiscal year 2011;

[1] So in original.

(E) $208,000,000 for fiscal year 2012; and

(F) such sums as are necessary for fiscal year 2013 and each fiscal year thereafter.

(2) Partnership activities

Of the amounts made available under paragraph (1), not less than 50 percent shall be used to pay the Federal share of partnership activities under subsection (c).

(3) Coordination and nonduplication

The Secretary shall coordinate efforts under this section with other programs of the Department and other Federal agencies to avoid duplication of effort.

(Pub. L. 110–140, title IV, § 452, Dec. 19, 2007, 121 Stat. 1634.)

§ 17112. Energy efficiency for data center buildings

(a) Definitions

In this section:

(1) Data center

The term ''data center'' means any facility that primarily contains electronic equipment used to process, store, and transmit digital information, which may be—

(A) a free-standing structure; or

(B) a facility within a larger structure, that uses environmental control equipment to maintain the proper conditions for the operation of electronic equipment.

(2) Data center operator

The term ''data center operator'' means any person or government entity that builds or operates a data center or purchases data center services, equipment, and facilities.

(b) Voluntary national information program

(1) In general

Not later than 90 days after December 19, 2007, the Secretary and the Administrator of the Environmental Protection Agency shall, after consulting with information technology industry and other interested parties, initiate a voluntary national information program for those types of data centers and data center equipment and facilities that are widely used and for which there is a potential for significant data center energy savings as a result of the program.

(2) Requirements

The program described in paragraph (1) shall—

(A) address data center efficiency holistically, reflecting the total energy consumption of data centers as whole systems, including both equipment and facilities;

(B) consider prior work and studies undertaken in this area, including by the Environmental Protection Agency and the Department of Energy;

(C) consistent with the objectives described in paragraph (1), determine the type of data center and data center equipment and facilities to be covered under the program;

(D) produce specifications, measurements, best practices, and benchmarks that will enable data center operators to make more informed decisions about the energy efficiency and costs of data centers, and that take into account—

(i) the performance and use of servers, data storage devices, and other information technology equipment;

(ii) the efficiency of heating, ventilation, and air conditioning, cooling, and power conditioning systems, provided that no modification shall be required of a standard then in effect under the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.) for any covered heating, ventilation, air-conditioning, cooling or power-conditioning product;

(iii) energy savings from the adoption of software and data management techniques; and

(iv) other factors determined by the organization described in subsection (c);

(E) allow for creation of separate specifications, measurements, and benchmarks based on data center size and function, as well as other appropriate characteristics;

(F) advance the design and implementation of efficiency technologies to the maximum extent economically practical;

(G) provide to data center operators in the private sector and the Federal Government information about best practices and purchasing decisions that reduce the energy consumption of data centers; and

(H) publish the information described in subparagraph (G), which may be disseminated through catalogs, trade publications, the Internet, or other mechanisms, that will allow data center operators to assess the energy consumption and potential cost savings of alternative data centers and data center equipment and facilities.

(3) Procedures

The program described in paragraph (1) shall be developed in consultation with and coordinated by the organization described in subsection (c) according to commonly accepted procedures for the development of specifications, measurements, and benchmarks.

(c) Data center efficiency organization

(1) In general

After the establishment of the program described in subsection (b), the Secretary and the Administrator shall jointly designate an information technology industry organization to consult with and to coordinate the program.

(2) Requirements

The organization designated under paragraph (1), whether preexisting or formed specifically for the purposes of subsection (b), shall—

(A) consist of interested parties that have expertise in energy efficiency and in the development, operation, and functionality of computer data centers, information technology equipment, and software, as well as representatives of hardware manufacturers, data center operators, and facility managers;

(B) obtain and address input from Department of Energy National Laboratories or any college, university, research institution, industry association, company, or public interest group with applicable expertise in any of the areas listed in paragraph (1);

(C) follow commonly accepted procedures for the development of specifications and accredited standards development processes;

(D) have a mission to develop and promote energy efficiency for data centers and information technology; and

(E) have the primary responsibility to consult in the development and publishing of the information, measurements, and benchmarks described in subsection (b) and transmission of the information to the Secretary and the Administrator for consideration under subsection (d).

(d) Measurements and specifications

(1) In general

The Secretary and the Administrator shall consider the specifications, measurements, and benchmarks described in subsection (b) for use by the Federal Energy Management Program, the Energy Star Program, and other efficiency programs of the Department of Energy and Environmental Protection Agency, respectively.

(2) Rejections

If the Secretary or the Administrator rejects 1 or more specifications, measurements, or benchmarks described in subsection (b), the rejection shall be made consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; Public Law 104–113).

(3) Determination of impracticability

A determination that a specification, measurement, or benchmark described in subsection (b) is impractical may include consideration of the maximum efficiency that is technologically feasible and economically justified.

(e) Monitoring

The Secretary and the Administrator shall—

(1) monitor and evaluate the efforts to develop the program described in subsection (b); and

(2) not later than 3 years after December 19, 2007, make a determination as to whether the program is consistent with the objectives of subsection (b).

(f) Alternative system

If the Secretary and the Administrator make a determination under subsection (e) that a voluntary national information program for data centers consistent with the objectives of subsection (b) has not been developed, the Secretary and the Administrator shall, after consultation with the National Institute of Standards and Technology and not later than 2 years after the determination, develop and implement the program under subsection (b).

(g) Protection of proprietary information

The Secretary, the Administrator, or the data center efficiency organization shall not disclose any proprietary information or trade secrets provided by any individual or company for the purposes of carrying out this section or the program established under this section.

(Pub. L. 110–140, title IV, § 453, Dec. 19, 2007, 121 Stat. 1637.)

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (b)(2)(D)(ii), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871, which is classified principally to chapter 77 (§ 6201 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

PART E—GENERAL PROVISIONS

§ 17121. Demonstration project

(a) In general

The Federal Director and the Commercial Director shall establish guidelines to implement a demonstration project to contribute to the research goals of the Office of Commercial High-Performance Green Buildings and the Office of Federal High-Performance Green Buildings.

(b) Projects

In accordance with guidelines established by the Federal Director and the Commercial Director under subsection (a) and the duties of the Federal Director and the Commercial Director described in this title,[1] the Federal Director or the Commercial Director shall carry out—

(1) for each of fiscal years 2009 through 2014, 1 demonstration project per year of green features in a Federal building selected by the Federal Director in accordance with relevant agencies and described in subsection (c)(1), that—

(A) provides for instrumentation, monitoring, and data collection related to the green features, for study of the impact of the features on overall energy use and operational costs, and for the evaluation of the information obtained through the conduct of projects and activities under this title;[1] and

(B) achieves the highest rating offered by the high performance green building system identified pursuant to section 17092(h) of this title;

(2) no fewer than 4 demonstration projects at 4 universities, that, as competitively selected by the Commercial Director in accordance with subsection (c)(2), have—

(A) appropriate research resources and relevant projects to meet the goals of the demonstration project established by the Office of Commercial High-Performance Green Buildings; and

(B) the ability—

(i) to serve as a model for high-performance green building initiatives, including research and education[2] by achieving the highest rating offered by the high performance green building system identified pursuant to section 17092(h) of this title;

(ii) to identify the most effective ways to use high-performance green building and

[1] See References in Text note below.

[2] So in original. A comma probably should appear.

landscape technologies to engage and educate undergraduate and graduate students;

(iii) to effectively implement a high-performance green building education program for students and occupants;

(iv) to demonstrate the effectiveness of various high-performance technologies, including their impacts on energy use and operational costs, in each of the 4 climatic regions of the United States described in subsection (c)(2)(B); and

(v) to explore quantifiable and nonquantifiable beneficial impacts on public health and employee and student performance;

(3) demonstration projects to evaluate replicable approaches of achieving high performance in actual building operation in various types of commercial buildings in various climates; and

(4) deployment activities to disseminate information on and encourage widespread adoption of technologies, practices, and policies to achieve zero-net-energy commercial buildings or low energy use and effective monitoring of energy use in commercial buildings.

(c) Criteria

(1) Federal facilities

With respect to the existing or proposed Federal facility at which a demonstration project under this section is conducted, the Federal facility shall—

(A) be an appropriate model for a project relating to—

(i) the effectiveness of high-performance technologies;

(ii) analysis of materials, components, systems, and emergency operations in the building, and the impact of those materials, components, and systems, including the impact on the health of building occupants;

(iii) life-cycle costing and life-cycle assessment of building materials and systems; and

(iv) location and design that promote access to the Federal facility through walking, biking, and mass transit; and

(B) possess sufficient technological and organizational adaptability.

(2) Universities

With respect to the 4 universities at which a demonstration project under this section is conducted—

(A) the universities should be selected, after careful review of all applications received containing the required information, as determined by the Commercial Director, based on—

(i) successful and established public-private research and development partnerships;

(ii) demonstrated capabilities to construct or renovate buildings that meet high indoor environmental quality standards;

(iii) organizational flexibility;

(iv) technological adaptability;

(v) the demonstrated capacity of at least 1 university to replicate lessons learned among nearby or sister universities, preferably by participation in groups or consortia that promote sustainability;

(vi) the demonstrated capacity of at least 1 university to have officially-adopted, institution-wide ''high-performance green building'' guidelines for all campus building projects; and

(vii) the demonstrated capacity of at least 1 university to have been recognized by similar institutions as a national leader in sustainability education and curriculum for students of the university; and

(B) each university shall be located in a different climatic region of the United States, each of which regions shall have, as determined by the Office of Commercial High-Performance Green Buildings—

(i) a hot, dry climate;

(ii) a hot, humid climate;

(iii) a cold climate; or

(iv) a temperate climate (including a climate with cold winters and humid summers).

(d) Applications

To receive a grant under subsection (b), an eligible applicant shall submit to the Federal Director or the Commercial Director an application at such time, in such manner, and containing such information as the Director may require, including a written assurance that all laborers and mechanics employed by contractors or subcontractors during construction, alteration, or repair that is financed, in whole or in part, by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40. The Secretary of Labor shall, with respect to the labor standards described in this subsection, have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.

(e) Report

Not later than 1 year after December 19, 2007, and annually thereafter through September 30, 2014—

(1) the Federal Director and the Commercial Director shall submit to the Secretary a report that describes the status of the demonstration projects; and

(2) each University at which a demonstration project under this section is conducted shall submit to the Secretary a report that describes the status of the demonstration projects under this section.

(f) Authorization of appropriations

There is authorized to be appropriated to carry out the demonstration project described in section[3] (b)(1), $10,000,000 for the period of fiscal years 2008 through 2012, and to carry out the demonstration project described in section[3] (b)(2), $10,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.

(Pub. L. 110–140, title IV, § 491, Dec. 19, 2007, 121 Stat. 1649.)

[3] So in original. Probably should be ''subsection''.

REFERENCES IN TEXT

This title, referred to in subsec. (b), is title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1596, which enacted this subchapter, part C (§ 6341 et seq.) of subchapter III of chapter 77 of this title, sections 6371h–1 and 7628 of this title, and subchapter V (§ 2695 et seq.) of chapter 53 of Title 15, Commerce and Trade, amended sections 6832, 6834, 6862, 6872, 8253, 8254, and 12709 of this title, and enacted provisions set out as notes under sections 6834 and 6872 of this title. For complete classification of title IV to the Code, see Tables.

Reorganization Plan Numbered 14 of 1950, referred to in subsec. (d), is set out in the Appendix to Title 5, Government Organization and Employees.

§ 17122. Research and development

(a) Establishment

The Federal Director and the Commercial Director, jointly and in coordination with the Advisory Committee, shall—

(1)(A) survey existing research and studies relating to high-performance green buildings; and

(B) coordinate activities of common interest;

(2) develop and recommend a high-performance green building research plan that—

(A) identifies information and research needs, including the relationships between human health, occupant productivity, safety, security, and accessibility and each of—

(i) emissions from materials and products in the building;

(ii) natural day lighting;

(iii) ventilation choices and technologies;

(iv) heating, cooling, and system control choices and technologies;

(v) moisture control and mold;

(vi) maintenance, cleaning, and pest control activities;

(vii) acoustics;

(viii) access to public transportation; and

(ix) other issues relating to the health, comfort, productivity, and performance of occupants of the building;

(B) promotes the development and dissemination of high-performance green building measurement tools that, at a minimum, may be used—

(i) to monitor and assess the life-cycle performance of facilities (including demonstration projects) built as high-performance green buildings; and

(ii) to perform life-cycle assessments; and

(C) identifies and tests new and emerging technologies for high-performance green buildings;

(3) assist the budget and life-cycle costing functions of the Directors' Offices under section 17092(d) of this title;

(4) study and identify potential benefits of green buildings relating to security, natural disaster, and emergency needs of the Federal Government; and

(5) support other research initiatives determined by the Directors' Offices.

(b) Indoor air quality

The Federal Director, in consultation with the Administrator of the Environmental Protection Agency and the Advisory Committee, shall develop and carry out a comprehensive indoor air quality program for all Federal facilities to ensure the safety of Federal workers and facility occupants—

(1) during new construction and renovation of facilities; and

(2) in existing facilities.

(Pub. L. 110–140, title IV, § 492, Dec. 19, 2007, 121 Stat. 1651.)

§ 17123. Green Building Advisory Committee

(a) Establishment

Not later than 180 days after December 19, 2007, the Federal Director, in coordination with the Commercial Director, shall establish an advisory committee, to be known as the ''Green Building Advisory Committee''.

(b) Membership

(1) In general

The Committee shall be composed of representatives of, at a minimum—

(A) each agency referred to in section 17081(e) of this title; and

(B) other relevant agencies and entities, as determined by the Federal Director, including at least 1 representative of each of—

(i) State and local governmental green building programs;

(ii) independent green building associations or councils;

(iii) building experts, including architects, material suppliers, and construction contractors;

(iv) security advisors focusing on national security needs, natural disasters, and other dire emergency situations;

(v) public transportation industry experts; and

(vi) environmental health experts, including those with experience in children's health.

(2) Non-Federal members

The total number of non-Federal members on the Committee at any time shall not exceed 15.

(c) Meetings

The Federal Director shall establish a regular schedule of meetings for the Committee.

(d) Duties

The Committee shall provide advice and expertise for use by the Federal Director in carrying out the duties under this part, including such recommendations relating to Federal activities carried out under sections 434 through 436[1] as are agreed to by a majority of the members of the Committee.

(e) FACA exemption

The Committee shall not be subject to section 14 of the Federal Advisory Committee Act (5 U.S.C. App.).

(Pub. L. 110–140, title IV, § 494, Dec. 19, 2007, 121 Stat. 1654.)

REFERENCES IN TEXT

This part, referred to in subsec. (d), was in the original ''this subtitle'', meaning subtitle H (§§ 491–495) of

[1] See References in Text note below.

title IV of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1649, which enacted this part and section 7628 of this title. For complete classification of subtitle H to the Code, see Tables.

Sections 434 through 436, referred to in subsec. (d), are sections 434 to 436 of Pub. L. 110–140, which enacted sections 17091 and 17092 of this title and amended section 8253 of this title.

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (e), is section 14 of Pub. L. 92–463, which is set out in the Appendix to Title 5, Government Organization and Employees.

§ 17124. Advisory Committee on Energy Efficiency Finance

(a) Establishment

The Secretary, acting through the Assistant Secretary of Energy for Energy Efficiency and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical ways of lowering costs and increasing investments in energy efficiency technologies.

(b) Membership

The advisory committee established under this section shall have a balanced membership that shall include members with expertise in—

(1) availability of seed capital;

(2) availability of venture capital;

(3) availability of other sources of private equity;

(4) investment banking with respect to corporate finance;

(5) investment banking with respect to mergers and acquisitions;

(6) equity capital markets;

(7) debt capital markets;

(8) research analysis;

(9) sales and trading;

(10) commercial lending; and

(11) residential lending.

(c) Termination

The Advisory Committee on Energy Efficiency Finance shall terminate on the date that is 10 years after December 19, 2007.

(d) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to the Secretary for carrying out this section.

(Pub. L. 110–140, title IV, § 495, Dec. 19, 2007, 121 Stat. 1654.)

SUBCHAPTER IV—ENERGY SAVINGS IN GOVERNMENT AND PUBLIC INSTITUTIONS

PART A—ENERGY SAVINGS PERFORMANCE CONTRACTING

§ 17131. Training Federal contracting officers to negotiate energy efficiency contracts

(a) Program

The Secretary shall create and administer in the Federal Energy Management Program a training program to educate Federal contract negotiation and contract management personnel so that the contract officers are prepared to—

(1) negotiate energy savings performance contracts;

(2) conclude effective and timely contracts for energy efficiency services with all companies offering energy efficiency services; and

(3) review Federal contracts for all products and services for the potential energy efficiency opportunities and implications of the contracts.

(b) Schedule

Not later than 1 year after December 19, 2007, the Secretary shall plan, staff, announce, and begin training under the Federal Energy Management Program.

(c) Personnel to be trained

Personnel appropriate to receive training under the Federal Energy Management Program shall be selected by and sent for the training from—

(1) the Department of Defense;

(2) the Department of Veterans Affairs;

(3) the Department;

(4) the General Services Administration;

(5) the Department of Housing and Urban Development;

(6) the United States Postal Service; and

(7) all other Federal agencies and departments that enter contracts for buildings, building services, electricity and electricity services, natural gas and natural gas services, heating and air conditioning services, building fuel purchases, and other types of procurement or service contracts determined by the Secretary, in carrying out the Federal Energy Management Program, to offer the potential for energy savings and greenhouse gas emission reductions if negotiated with taking into account those goals.

(d) Trainers

Training under the Federal Energy Management Program may be conducted by—

(1) attorneys or contract officers with experience in negotiating and managing contracts described in subsection (c)(7) from any agency, except that the Secretary shall reimburse the related salaries and expenses of the attorneys or contract officers from amounts made available for carrying out this section to the extent the attorneys or contract officers are not employees of the Department; and

(2) private experts hired by the Secretary for the purposes of this section, except that the Secretary may not hire experts who are simultaneously employed by any company under contract to provide energy efficiency services to the Federal Government.

(e) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $750,000 for each of fiscal years 2008 through 2012.

(Pub. L. 110–140, title V, § 517, Dec. 19, 2007, 121 Stat. 1659.)

PART B—ENERGY EFFICIENCY IN FEDERAL AGENCIES

§ 17141. Prohibition on incandescent lamps by Coast Guard

(a) Prohibition

Except as provided by subsection (b), on and after January 1, 2009, a general service incandescent lamp shall not be purchased or installed in a Coast Guard facility by or on behalf of the Coast Guard.

(b) Exception

A general service incandescent lamp may be purchased, installed, and used in a Coast Guard facility whenever the application of a general service incandescent lamp is—

(1) necessary due to purpose or design, including medical, security, and industrial applications;

(2) reasonable due to the architectural or historical value of a light fixture installed before January 1, 2009; or

(3) the Commandant of the Coast Guard determines that operational requirements necessitate the use of a general service incandescent lamp.

(c) Limitation

In this section, the term ''facility'' does not include a vessel or aircraft of the Coast Guard.

(Pub. L. 110–140, title V, § 522, Dec. 19, 2007, 121 Stat. 1662.)

§ 17142. Procurement and acquisition of alternative fuels

No Federal agency shall enter into a contract for procurement of an alternative or synthetic fuel, including a fuel produced from nonconventional petroleum sources, for any mobility-related use, other than for research or testing, unless the contract specifies that the lifecycle greenhouse gas emissions associated with the production and combustion of the fuel supplied under the contract must, on an ongoing basis, be less than or equal to such emissions from the equivalent conventional fuel produced from conventional petroleum sources.

(Pub. L. 110–140, title V, § 526, Dec. 19, 2007, 121 Stat. 1663.)

§ 17143. Government efficiency status reports

(a) In general

Each Federal agency subject to any of the requirements of this title[1] or the amendments made by this title[1] shall compile and submit to the Director of the Office of Management and Budget an annual Government efficiency status report on—

(1) compliance by the agency with each of the requirements of this title[1] and the amendments made by this title;[1]

(2) the status of the implementation by the agency of initiatives to improve energy efficiency, reduce energy costs, and reduce emissions of greenhouse gases; and

(3) savings to the taxpayers of the United States resulting from mandated improvements under this title[1] and the amendments made by this title.[1]

(b) Submission

The report shall be submitted—

(1) to the Director at such time as the Director requires;

(2) in electronic, not paper, format; and

(3) consistent with related reporting requirements.

(Pub. L. 110–140, title V, § 527, Dec. 19, 2007, 121 Stat. 1663.)

REFERENCES IN TEXT

This title, referred to in subsec. (a), is title V of Pub. L. 110–140, which enacted this subchapter, part D (§ 8279) of subchapter III of chapter 91 of this title, and sections 1824, 2162a, and 2169 of Title 2, The Congress, amended sections 6325, 6834, 8256, 8258, 8259b, 8287, and 8287c of this title, section 2162 of Title 2, section 2913 of Title 10, Armed Forces, section 3203 of Title 15, Commerce and Trade, and section 2621 of Title 16, Conservation, and enacted provisions set out as a note under section 8259b of this title. For complete classification of title V to the Code, see Tables.

§ 17144. OMB Government efficiency reports and scorecards

(a) Reports

Not later than April 1 of each year, the Director of the Office of Management and Budget shall submit an annual Government efficiency report to the Committee on Oversight and Government Reform of the House of Representatives and the Committee on Governmental Affairs of the Senate, which shall contain—

(1) a summary of the information reported by agencies under section 17143 of this title;

(2) an evaluation of the overall progress of the Federal Government toward achieving the goals of this title[1] and the amendments made by this title;[1] and

(3) recommendations for additional actions necessary to meet the goals of this title[1] and the amendments made by this title.[1]

(b) Scorecards

The Director of the Office of Management and Budget shall include in any annual energy scorecard the Director is otherwise required to submit a description of the compliance of each agency with the requirements of this title[1] and the amendments made by this title.[1]

(Pub. L. 110–140, title V, § 528, Dec. 19, 2007, 121 Stat. 1664.)

REFERENCES IN TEXT

This title, referred to in text, is title V of Pub. L. 110–140, which enacted this subchapter, part D (§ 8279) of subchapter III of chapter 91 of this title, and sections 1824, 2162a, and 2169 of Title 2, The Congress, amended sections 6325, 6834, 8256, 8258, 8259b, 8287, and 8287c of this title, section 2162 of Title 2, section 2913 of Title 10, Armed Forces, section 3203 of Title 15, Commerce and Trade, and section 2621 of Title 16, Conservation, and enacted provisions set out as a note under section 8259b of this title. For complete classification of title V to the Code, see Tables.

[1] See References in Text note below.

[1] See References in Text note below.

PART C—ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANTS

§ 17151. Definitions

In this part:

(1) Eligible entity

The term ''eligible entity'' means—

(A) a State;

(B) an eligible unit of local government; and

(C) an Indian tribe.

(2) Eligible unit of local government

The term ''eligible unit of local government'' means—

(A) an eligible unit of local government-alternative 1; and

(B) an eligible unit of local government-alternative 2.

(3)(A) Eligible unit of local government-alternative 1

The term ''eligible unit of local government-alternative 1'' means—

(i) a city with a population—

(I) of at least 35,000; or

(II) that causes the city to be 1 of the 10 highest-populated cities of the State in which the city is located; and

(ii) a county with a population—

(I) of at least 200,000; or

(II) that causes the county to be 1 of the 10 highest-populated counties of the State in which the county is located.

(B) Eligible unit of local government-alternative 2

The term ''eligible unit of local government-alternative 2'' means—

(i) a city with a population of at least 50,000; or

(ii) a county with a population of at least 200,000.

(4) Indian tribe

The term ''Indian tribe'' has the meaning given the term in section 450b of title 25.

(5) Program

The term ''program'' means the Energy Efficiency and Conservation Block Grant Program established under section 17152(a) of this title.

(6) State

The term ''State'' means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico; and

(D) any other territory or possession of the United States.

(Pub. L. 110–140, title V, § 541, Dec. 19, 2007, 121 Stat. 1667.)

§ 17152. Energy Efficiency and Conservation Block Grant Program

(a) Establishment

The Secretary shall establish a program, to be known as the ''Energy Efficiency and Conservation Block Grant Program'', under which the Secretary shall provide grants to eligible entities in accordance with this part.

(b) Purpose

The purpose of the program shall be to assist eligible entities in implementing strategies—

(1) to reduce fossil fuel emissions created as a result of activities within the jurisdictions of eligible entities in a manner that—

(A) is environmentally sustainable; and

(B) to the maximum extent practicable, maximizes benefits for local and regional communities;

(2) to reduce the total energy use of the eligible entities; and

(3) to improve energy efficiency in—

(A) the transportation sector;

(B) the building sector; and

(C) other appropriate sectors.

(Pub. L. 110–140, title V, § 542, Dec. 19, 2007, 121 Stat. 1668.)

§ 17153. Allocation of funds

(a) In general

Of amounts made available to provide grants under this part for each fiscal year, the Secretary shall allocate—

(1) 34 percent to eligible units of local government—alternative 1, in accordance with subsection (b);

(2) 34 percent to eligible units of local government—alternative 2, in accordance with subsection (b);

(3) 28 percent to States in accordance with subsection (c);

(4) 2 percent to Indian tribes in accordance with subsection (d); and

(5) 2 percent for competitive grants under section 17156 of this title.

(b) Eligible units of local government

Of amounts available for distribution to eligible units of local government under subsection (a)(1) or (2), the Secretary shall provide grants to eligible units of local government under this section based on a formula established by the Secretary according to—

(1) the populations served by the eligible units of local government, according to the latest available decennial census; and

(2) the daytime populations of the eligible units of local government and other similar factors (such as square footage of commercial, office, and industrial space), as determined by the Secretary.

(c) States

Of amounts available for distribution to States under subsection (a)(2), the Secretary shall provide—

(1) not less than 1.25 percent to each State; and

(2) the remainder among the States, based on a formula to be established by the Secretary that takes into account—

(A) the population of each State; and

(B) any other criteria that the Secretary determines to be appropriate.

(d) Indian tribes

Of amounts available for distribution to Indian tribes under subsection (a)(3), the Secretary shall establish a formula for allocation of

the amounts to Indian tribes, taking into account any factors that the Secretary determines to be appropriate.

(e) Publication of allocation formulas

Not later than 90 days before the beginning of each fiscal year for which grants are provided under this part, the Secretary shall publish in the Federal Register the formulas for allocation established under this section.

(f) State and local advisory committee

The Secretary shall establish a State and local advisory committee to advise the Secretary regarding administration, implementation, and evaluation of the program.

(Pub. L. 110–140, title V, § 543, Dec. 19, 2007, 121 Stat. 1668; Pub. L. 111–5, div. A, title IV, § 404(a), (b), Feb. 17, 2009, 123 Stat. 143.)

AMENDMENTS

2009—Subsec. (a)(1). Pub. L. 111–5, § 404(a)(2), added par. (1) and struck out former par. (1) which read as follows: ''68 percent to eligible units of local government in accordance with subsection (b);''.

Subsec. (a)(2) to (5). Pub. L. 111–5, § 404(a), added par. (2) and redesignated former pars. (2) to (4) as (3) to (5), respectively.

Subsec. (b). Pub. L. 111–5, § 404(b), substituted ''subsection (a)(1) or (2)'' for ''subsection (a)(1)'' in introductory provisions.

§ 17154. Use of funds

An eligible entity may use a grant received under this part to carry out activities to achieve the purposes of the program, including—

(1) development and implementation of an energy efficiency and conservation strategy under section 17155(b) of this title;

(2) retaining technical consultant services to assist the eligible entity in the development of such a strategy, including—

(A) formulation of energy efficiency, energy conservation, and energy usage goals;

(B) identification of strategies to achieve those goals—

(i) through efforts to increase energy efficiency and reduce energy consumption; and

(ii) by encouraging behavioral changes among the population served by the eligible entity;

(C) development of methods to measure progress in achieving the goals;

(D) development and publication of annual reports to the population served by the eligible entity describing—

(i) the strategies and goals; and

(ii) the progress made in achieving the strategies and goals during the preceding calendar year; and

(E) other services to assist in the implementation of the energy efficiency and conservation strategy;

(3) conducting residential and commercial building energy audits;

(4) establishment of financial incentive programs for energy efficiency improvements;

(5) the provision of grants to nonprofit organizations and governmental agencies for the purpose of performing energy efficiency retrofits;

(6) development and implementation of energy efficiency and conservation programs for buildings and facilities within the jurisdiction of the eligible entity, including—

(A) design and operation of the programs;

(B) identifying the most effective methods for achieving maximum participation and efficiency rates;

(C) public education;

(D) measurement and verification protocols; and

(E) identification of energy efficient technologies;

(7) development and implementation of programs to conserve energy used in transportation, including—

(A) use of flex time by employers;

(B) satellite work centers;

(C) development and promotion of zoning guidelines or requirements that promote energy efficient development;

(D) development of infrastructure, such as bike lanes and pathways and pedestrian walkways;

(E) synchronization of traffic signals; and

(F) other measures that increase energy efficiency and decrease energy consumption;

(8) development and implementation of building codes and inspection services to promote building energy efficiency;

(9) application and implementation of energy distribution technologies that significantly increase energy efficiency, including—

(A) distributed resources; and

(B) district heating and cooling systems;

(10) activities to increase participation and efficiency rates for material conservation programs, including source reduction, recycling, and recycled content procurement programs that lead to increases in energy efficiency;

(11) the purchase and implementation of technologies to reduce, capture, and, to the maximum extent practicable, use methane and other greenhouse gases generated by landfills or similar sources;

(12) replacement of traffic signals and street lighting with energy efficient lighting technologies, including—

(A) light emitting diodes; and

(B) any other technology of equal or greater energy efficiency;

(13) development, implementation, and installation on or in any government building of the eligible entity of onsite renewable energy technology that generates electricity from renewable resources, including—

(A) solar energy;

(B) wind energy;

(C) fuel cells; and

(D) biomass; and

(14) any other appropriate activity, as determined by the Secretary, in consultation with—

(A) the Administrator of the Environmental Protection Agency;

(B) the Secretary of Transportation; and

(C) the Secretary of Housing and Urban Development.

(Pub. L. 110–140, title V, § 544, Dec. 19, 2007, 121 Stat. 1669.)

§ 17155. Requirements for eligible entities

(a) Construction requirement

(1) In general

To be eligible to receive a grant under the program, each eligible applicant shall submit to the Secretary a written assurance that all laborers and mechanics employed by any contractor or subcontractor of the eligible entity during any construction, alteration, or repair activity funded, in whole or in part, by the grant shall be paid wages at rates not less than the prevailing wages for similar construction activities in the locality, as determined by the Secretary of Labor, in accordance with sections 3141 through 3144, 3146, and 3147 of title 40.

(2) Secretary of Labor

With respect to the labor standards referred to in paragraph (1), the Secretary of Labor shall have the authority and functions described in—

(A) Reorganization Plan Numbered 14 of 1950 (5 U.S.C. 903 note);[1] and

(B) section 3145 of title 40.

(b) Eligible units of local government and Indian tribes

(1) Proposed strategy

(A) In general

Not later than 1 year after the date on which an eligible unit of local government or Indian tribe receives a grant under this part, the eligible unit of local government or Indian tribe shall submit to the Secretary a proposed energy efficiency and conservation strategy in accordance with this paragraph.

(B) Inclusions

The proposed strategy under subparagraph (A) shall include—

(i) a description of the goals of the eligible unit of local government or Indian tribe, in accordance with the purposes of this part, for increased energy efficiency and conservation in the jurisdiction of the eligible unit of local government or Indian tribe; and

(ii) a plan for the use of the grant to assist the eligible unit of local government or Indian tribe in achieving those goals, in accordance with section 17154 of this title.

(C) Requirements for eligible units of local government

In developing the strategy under subparagraph (A), an eligible unit of local government shall—

(i) take into account any plans for the use of funds by adjacent eligible units of local governments that receive grants under the program; and

(ii) coordinate and share information with the State in which the eligible unit of local government is located regarding activities carried out using the grant to maximize the energy efficiency and conservation benefits under this part.

(2) Approval by Secretary

(A) In general

The Secretary shall approve or disapprove a proposed strategy under paragraph (1) by not later than 120 days after the date of submission of the proposed strategy.

(B) Disapproval

If the Secretary disapproves a proposed strategy under subparagraph (A)—

(i) the Secretary shall provide to the eligible unit of local government or Indian tribe the reasons for the disapproval; and

(ii) the eligible unit of local government or Indian tribe may revise and resubmit the proposed strategy as many times as necessary until the Secretary approves a proposed strategy.

(C) Requirement

The Secretary shall not provide to an eligible unit of local government or Indian tribe any grant under the program until a proposed strategy of the eligible unit of local government or Indian tribe is approved by the Secretary under this paragraph.

(3) Limitations on use of funds

Of amounts provided to an eligible unit of local government or Indian tribe under the program, an eligible unit of local government or Indian tribe may use—

(A) for administrative expenses, excluding the cost of meeting the reporting requirements of this part, an amount equal to the greater of—

(i) 10 percent; and[2]

(ii) $75,000;

(B) for the establishment of revolving loan funds, an amount equal to the greater of—

(i) 20 percent; and[2]

(ii) $250,000; and

(C) for the provision of subgrants to nongovernmental organizations for the purpose of assisting in the implementation of the energy efficiency and conservation strategy of the eligible unit of local government or Indian tribe, an amount equal to the greater of—

(i) 20 percent; and[2]

(ii) $250,000.

(4) Annual report

Not later than 2 years after the date on which funds are initially provided to an eligible unit of local government or Indian tribe under the program, and annually thereafter, the eligible unit of local government or Indian tribe shall submit to the Secretary a report describing—

(A) the status of development and implementation of the energy efficiency and conservation strategy of the eligible unit of local government or Indian tribe; and

(B) as practicable, an assessment of energy efficiency gains within the jurisdiction of the eligible unit of local government or Indian tribe.

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[1] See References in Text note below.

[2] So in original. Probably should be ''or''.

(c) States

(1) Distribution of funds

(A) In general

A State that receives a grant under the program shall use not less than 60 percent of the amount received to provide subgrants to units of local government in the State that are not eligible units of local government.

(B) Deadline

The State shall provide the subgrants required under subparagraph (A) by not later than 180 days after the date on which the Secretary approves a proposed energy efficiency and conservation strategy of the State under paragraph (3).

(2) Revision of conservation plan; proposed strategy

Not later than 120 days after December 19, 2007, each State shall—

(A) modify the State energy conservation plan of the State under section 6322 of this title to establish additional goals for increased energy efficiency and conservation in the State; and

(B) submit to the Secretary a proposed energy efficiency and conservation strategy that—

(i) establishes a process for providing subgrants as required under paragraph (1); and

(ii) includes a plan of the State for the use of funds received under the program to assist the State in achieving the goals established under subparagraph (A), in accordance with sections 17152(b) and 17154 of this title.

(3) Approval by Secretary

(A) In general

The Secretary shall approve or disapprove a proposed strategy under paragraph (2)(B) by not later than 120 days after the date of submission of the proposed strategy.

(B) Disapproval

If the Secretary disapproves a proposed strategy under subparagraph (A)—

(i) the Secretary shall provide to the State the reasons for the disapproval; and

(ii) the State may revise and resubmit the proposed strategy as many times as necessary until the Secretary approves a proposed strategy.

(C) Requirement

The Secretary shall not provide to a State any grant under the program until a proposed strategy of the State is approved by the Secretary under this paragraph.

(4) Limitations on use of funds

A State may use not more than 10 percent of amounts provided under the program for administrative expenses.

(5) Annual reports

Each State that receives a grant under the program shall submit to the Secretary an annual report that describes—

(A) the status of development and implementation of the energy efficiency and conservation strategy of the State during the preceding calendar year;

(B) the status of the subgrant program of the State under paragraph (1);

(C) the energy efficiency gains achieved through the energy efficiency and conservation strategy of the State during the preceding calendar year; and

(D) specific energy efficiency and conservation goals of the State for subsequent calendar years.

(Pub. L. 110–140, title V, § 545, Dec. 19, 2007, 121 Stat. 1670.)

REFERENCES IN TEXT

Reorganization Plan Numbered 14 of 1950, referred to in subsec. (a)(2)(A), is set out in the Appendix to Title 5, Government Organization and Employees. Section 903 of Title 5 relates to Presidential authority regarding reorganization plans.

§ 17156. Competitive grants

(a) In general

Of the total amount made available for each fiscal year to carry out this part, the Secretary shall use not less than 2 percent to provide grants under this section, on a competitive basis, to—

(1) units of local government (including Indian tribes) that are not eligible entities; and

(2) consortia of units of local government described in paragraph (1).

(b) Applications

To be eligible to receive a grant under this section, a unit of local government or consortia shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including a plan of the unit of local government to carry out an activity described in section 17154 of this title.

(c) Priority

In providing grants under this section, the Secretary shall give priority to units of local government—

(1) located in States with populations of less than 2,000,000; or

(2) that plan to carry out projects that would result in significant energy efficiency improvements or reductions in fossil fuel use.

(Pub. L. 110–140, title V, § 546, Dec. 19, 2007, 121 Stat. 1673.)

§ 17157. Review and evaluation

(a) In general

The Secretary may review and evaluate the performance of any eligible entity that receives a grant under the program, including by conducting an audit, as the Secretary determines to be appropriate.

(b) Withholding of funds

The Secretary may withhold from an eligible entity any portion of a grant to be provided to the eligible entity under the program if the Secretary determines that the eligible entity has failed to achieve compliance with—

(1) any applicable guideline or regulation of the Secretary relating to the program, includ-

ing the misuse or misappropriation of funds provided under the program; or

(2) the energy efficiency and conservation strategy of the eligible entity.

(Pub. L. 110–140, title V, § 547, Dec. 19, 2007, 121 Stat. 1674.)

§ 17158. Funding

(a) Authorization of appropriations

(1) Grants

There is authorized to be appropriated to the Secretary for the provision of grants under the program $2,000,000,000 for each of fiscal years 2008 through 2012.

(2) Administrative costs

There are authorized to be appropriated to the Secretary for administrative expenses of the program—

(A) $20,000,000 for each of fiscal years 2008 and 2009;

(B) $25,000,000 for each of fiscal years 2010 and 2011; and

(C) $30,000,000 for fiscal year 2012.

(b) Maintenance of funding

The funding provided under this section shall supplement (and not supplant) other Federal funding provided under—

(1) a State energy conservation plan established under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.); or

(2) the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).

(Pub. L. 110–140, title V, § 548, Dec. 19, 2007, 121 Stat. 1674; Pub. L. 111–5, div. A, title IV, § 404(c), Feb. 17, 2009, 123 Stat. 143.)

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (b)(1), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871. Part D of title III of the Act is classified generally to part B (§ 6321 et seq.) of subchapter III of chapter 77 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

The Energy Conservation and Production Act, referred to in subsec. (b)(2), is Pub. L. 94–385, Aug. 14, 1976, 90 Stat. 1125. Part A of title IV of the Act is classified generally to part A (§ 6861 et seq.) of subchapter III of chapter 81 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6801 of this title and Tables.

AMENDMENTS

2009—Subsec. (a)(1). Pub. L. 111–5 struck out ''; provided that 49 percent of the appropriated funds shall be distributed using the definition of eligible unit of local government-alternative 1 in section 17151(3)(A) of this title and 49 percent of the appropriated funds shall be distributed using the definition of eligible unit of local government-alternative 2 in section 17151(3)(B) of this title'' after ''2012''.

SUBCHAPTER V—ACCELERATED RESEARCH AND DEVELOPMENT

PART A—SOLAR ENERGY

§ 17171. Thermal energy storage research and development program

(a) Establishment

The Secretary shall establish a program of research and development to provide lower cost and more viable thermal energy storage technologies to enable the shifting of electric power loads on demand and extend the operating time of concentrating solar power electric generating plants.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $5,000,000 for fiscal year 2008, $7,000,000 for fiscal year 2009, $9,000,000 for fiscal year 2010, $10,000,000 for fiscal year 2011, and $12,000,000 for fiscal year 2012.

(Pub. L. 110–140, title VI, § 602, Dec. 19, 2007, 121 Stat. 1674.)

SHORT TITLE

This part known as the ''Solar Energy Research and Advancement Act of 2007'', see Short Title note set out under section 17001 of this title.

§ 17172. Solar energy curriculum development and certification grants

(a) Establishment

The Secretary shall establish in the Office of Solar Energy Technologies a competitive grant program to create and strengthen solar industry workforce training and internship programs in installation, operation, and maintenance of solar energy products. The goal of this program is to ensure a supply of well-trained individuals to support the expansion of the solar energy industry.

(b) Authorized activities

Grant funds may be used to support the following activities:

(1) Creation and development of a solar energy curriculum appropriate for the local educational, entrepreneurial, and environmental conditions, including curriculum for community colleges.

(2) Support of certification programs for individual solar energy system installers, instructors, and training programs.

(3) Internship programs that provide hands-on participation by students in commercial applications.

(4) Activities required to obtain certification of training programs and facilities by an industry-accepted quality-control certification program.

(5) Incorporation of solar-specific learning modules into traditional occupational training and internship programs for construction-related trades.

(6) The purchase of equipment necessary to carry out activities under this section.

(7) Support of programs that provide guidance and updates to solar energy curriculum instructors.

(c) Administration of grants

Grants may be awarded under this section for up to 3 years. The Secretary shall award grants to ensure sufficient geographic distribution of training programs nationally. Grants shall only be awarded for programs certified by an industry-accepted quality-control certification institution, or for new and growing programs with a credible path to certification. Due consideration shall be given to women, underrepresented minorities, and persons with disabilities.

(d) Report

The Secretary shall make public, on the website of the Department or upon request, information on the name and institution for all grants awarded under this section, including a brief description of the project as well as the grant award amount.

(e) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $10,000,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 604, Dec. 19, 2007, 121 Stat. 1675.)

§ 17173. Daylighting systems and direct solar light pipe technology

(a) Establishment

The Secretary shall establish a program of research and development to provide assistance in the demonstration and commercial application of direct solar renewable energy sources to provide alternatives to traditional power generation for lighting and illumination, including light pipe technology, and to promote greater energy conservation and improved efficiency. All direct solar renewable energy devices supported under this program shall have the capability to provide measurable data on the amount of kilowatt-hours saved over the traditionally powered light sources they have replaced.

(b) Reporting

The Secretary shall transmit to Congress an annual report assessing the measurable data derived from each project in the direct solar renewable energy sources program and the energy savings resulting from its use.

(c) Definitions

For purposes of this section—

(1) the term ''direct solar renewable energy'' means energy from a device that converts sunlight into useable light within a building, tunnel, or other enclosed structure, replacing artificial light generated by a light fixture and doing so without the conversion of the sunlight into another form of energy; and

(2) the term ''light pipe'' means a device designed to transport visible solar radiation from its collection point to the interior of a building while excluding interior heat gain in the nonheating season.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $3,500,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 605, Dec. 19, 2007, 121 Stat. 1676.)

§ 17174. Solar air conditioning research and development program

(a) Establishment

The Secretary shall establish a research, development, and demonstration program to promote less costly and more reliable decentralized distributed solar-powered air conditioning for individuals and businesses.

(b) Authorized activities

Grants made available under this section may be used to support the following activities:

(1) Advancing solar thermal collectors, including concentrating solar thermal and electric systems, flat plate and evacuated tube collector performance.

(2) Achieving technical and economic integration of solar-powered distributed air-conditioning systems with existing hot water and storage systems for residential applications.

(3) Designing and demonstrating mass manufacturing capability to reduce costs of modular standardized solar-powered distributed air conditioning systems and components.

(4) Improving the efficiency of solar-powered distributed air-conditioning to increase the effectiveness of solar-powered absorption chillers, solar-driven compressors and condensors,[1] and cost-effective precooling approaches.

(5) Researching and comparing performance of solar-powered distributed air conditioning systems in different regions of the country, including potential integration with other onsite systems, such as solar, biogas, geothermal heat pumps, and propane assist or combined propane fuel cells, with a goal to develop site-specific energy production and management systems that ease fuel and peak utility loading.

(c) Cost sharing

Section 16352 of this title shall apply to a project carried out under this section.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $2,500,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 606, Dec. 19, 2007, 121 Stat. 1676.)

§ 17175. Photovoltaic demonstration program

(a) In general

The Secretary shall establish a program of grants to States to demonstrate advanced photovoltaic technology.

(b) Requirements

(1) Ability to meet requirements

To receive funding under the program under this section, a State must submit a proposal that demonstrates, to the satisfaction of the Secretary, that the State will meet the requirements of subsection (f).

[1] So in original.

(2) Compliance with requirements

If a State has received funding under this section for the preceding year, the State must demonstrate, to the satisfaction of the Secretary, that it complied with the requirements of subsection (f) in carrying out the program during that preceding year, and that it will do so in the future, before it can receive further funding under this section.

(c) Competition

The Secretary shall award grants on a competitive basis to the States with the proposals the Secretary considers most likely to encourage the widespread adoption of photovoltaic technologies. The Secretary shall take into consideration the geographic distribution of awards.

(d) Proposals

Not later than 6 months after December 19, 2007, and in each subsequent fiscal year for the life of the program, the Secretary shall solicit proposals from the States to participate in the program under this section.

(e) Competitive criteria

In awarding funds in a competitive allocation under subsection (c), the Secretary shall consider—

(1) the likelihood of a proposal to encourage the demonstration of, or lower the costs of, advanced photovoltaic technologies; and

(2) the extent to which a proposal is likely to—

(A) maximize the amount of photovoltaics demonstrated;

(B) maximize the proportion of non-Federal cost share; and

(C) limit State administrative costs.

(f) State program

A program operated by a State with funding under this section shall provide competitive awards for the demonstration of advanced photovoltaic technologies. Each State program shall—

(1) require a contribution of at least 60 percent per award from non-Federal sources, which may include any combination of State, local, and private funds, except that at least 10 percent of the funding must be supplied by the State;

(2) endeavor to fund recipients in the commercial, industrial, institutional, governmental, and residential sectors;

(3) limit State administrative costs to no more than 10 percent of the grant;

(4) report annually to the Secretary on—

(A) the amount of funds disbursed;

(B) the amount of photovoltaics purchased; and

(C) the results of the monitoring under paragraph (5);

(5) provide for measurement and verification of the output of a representative sample of the photovoltaics systems demonstrated throughout the average working life of the systems, or at least 20 years; and

(6) require that applicant buildings must have received an independent energy efficiency audit during the 6-month period preceding the filing of the application.

(g) Unexpended funds

If a State fails to expend any funds received under this section within 3 years of receipt, such remaining funds shall be returned to the Treasury.

(h) Reports

The Secretary shall report to Congress 5 years after funds are first distributed to the States under this section—

(1) the amount of photovoltaics demonstrated;

(2) the number of projects undertaken;

(3) the administrative costs of the program;

(4) the results of the monitoring under subsection (f)(5); and

(5) the total amount of funds distributed, including a breakdown by State.

(i) Authorization of appropriations

There are authorized to be appropriated to the Secretary for the purposes of carrying out this section—

(1) $15,000,000 for fiscal year 2008;

(2) $30,000,000 for fiscal year 2009;

(3) $45,000,000 for fiscal year 2010;

(4) $60,000,000 for fiscal year 2011; and

(5) $70,000,000 for fiscal year 2012.

(Pub. L. 110–140, title VI, § 607, Dec. 19, 2007, 121 Stat. 1677.)

PART B—GEOTHERMAL ENERGY

§ 17191. Definitions

For purposes of this part:

(1) Engineered

When referring to enhanced geothermal systems, the term ''engineered'' means subjected to intervention, including intervention to address one or more of the following issues:

(A) Lack of effective permeability or porosity or open fracture connectivity within the reservoir.

(B) Insufficient contained geofluid in the reservoir.

(C) A low average geothermal gradient, which necessitates deeper drilling.

(2) Enhanced geothermal systems

The term ''enhanced geothermal systems'' means geothermal reservoir systems that are engineered, as opposed to occurring naturally.

(3) Geofluid

The term ''geofluid'' means any fluid used to extract thermal energy from the Earth which is transported to the surface for direct use or electric power generation, except that such term shall not include oil or natural gas.

(4) Geopressured resources

The term ''geopressured resources'' mean geothermal deposits found in sedimentary rocks under higher than normal pressure and saturated with gas or methane.

(5) Geothermal

The term ''geothermal'' refers to heat energy stored in the Earth's crust that can be accessed for direct use or electric power generation.

(6) Hydrothermal

The term ''hydrothermal'' refers to naturally occurring subsurface reservoirs of hot water or steam.

(7) Systems approach

The term ''systems approach'' means an approach to solving problems or designing systems that attempts to optimize the performance of the overall system, rather than a particular component of the system.

(Pub. L. 110–140, title VI, § 612, Dec. 19, 2007, 121 Stat. 1679.)

SHORT TITLE

This part known as the ''Advanced Geothermal Energy Research and Development Act of 2007'', see Short Title note set out under section 17001 of this title.

§ 17192. Hydrothermal research and development

(a) In general

The Secretary shall support programs of research, development, demonstration, and commercial application to expand the use of geothermal energy production from hydrothermal systems, including the programs described in subsection (b).

(b) Programs

(1) Advanced hydrothermal resource tools

The Secretary, in consultation with other appropriate agencies, shall support a program to develop advanced geophysical, geochemical, and geologic tools to assist in locating hidden hydrothermal resources, and to increase the reliability of site characterization before, during, and after initial drilling. The program shall develop new prospecting techniques to assist in prioritization of targets for characterization. The program shall include a field component.

(2) Industry coupled exploratory drilling

The Secretary shall support a program of cost-shared field demonstration programs, to be pursued, simultaneously and independently, in collaboration with industry partners, for the demonstration of advanced technologies and techniques of siting and exploratory drilling for undiscovered resources in a variety of geologic settings. The program shall include incentives to encourage the use of advanced technologies and techniques.

(Pub. L. 110–140, title VI, § 613, Dec. 19, 2007, 121 Stat. 1679.)

§ 17193. General geothermal systems research and development

(a) Subsurface components and systems

The Secretary shall support a program of research, development, demonstration, and commercial application of components and systems capable of withstanding extreme geothermal environments and necessary to cost-effectively develop, produce, and monitor geothermal reservoirs and produce geothermal energy. These components and systems shall include advanced casing systems (expandable tubular casing, low-clearance casing designs, and others), high-temperature cements, high-temperature submersible pumps, and high-temperature packers, as well as technologies for under-reaming, multilateral completions, high-temperature and high-pressure logging, logging while drilling, deep fracture stimulation, and reservoir system diagnostics.

(b) Reservoir performance modeling

The Secretary shall support a program of research, development, demonstration, and commercial application of models of geothermal reservoir performance, with an emphasis on accurately modeling performance over time. Models shall be developed to assist both in the development of geothermal reservoirs and to more accurately account for stress-related effects in stimulated hydrothermal and enhanced geothermal systems production environments.

(c) Environmental impacts

The Secretary shall—

(1) support a program of research, development, demonstration, and commercial application of technologies and practices designed to mitigate or preclude potential adverse environmental impacts of geothermal energy development, production or use, and seek to ensure that geothermal energy development is consistent with the highest practicable standards of environmental stewardship;

(2) in conjunction with the Assistant Administrator for Research and Development at the Environmental Protection Agency, support a research program to identify potential environmental impacts of geothermal energy development, production, and use, and ensure that the program described in paragraph (1) addresses such impacts, including effects on groundwater and local hydrology; and

(3) support a program of research to compare the potential environmental impacts identified as part of the development, production, and use of geothermal energy with the potential emission reductions of greenhouse gases gained by geothermal energy development, production, and use.

(Pub. L. 110–140, title VI, § 614, Dec. 19, 2007, 121 Stat. 1680.)

§ 17194. Enhanced geothermal systems research and development

(a) In general

The Secretary shall support a program of research, development, demonstration, and commercial application for enhanced geothermal systems, including the programs described in subsection (b).

(b) Programs

(1) Enhanced geothermal systems technologies

The Secretary shall support a program of research, development, demonstration, and commercial application of the technologies and knowledge necessary for enhanced geothermal systems to advance to a state of commercial readiness, including advances in—

(A) reservoir stimulation;

(B) reservoir characterization, monitoring, and modeling;

(C) stress mapping;

(D) tracer development;

(E) three-dimensional tomography; and

(F) understanding seismic effects of reservoir engineering and stimulation.

(2) Enhanced geothermal systems reservoir stimulation

(A) Program

In collaboration with industry partners, the Secretary shall support a program of research, development, and demonstration of enhanced geothermal systems reservoir stimulation technologies and techniques. A minimum of 4 sites shall be selected in locations that show particular promise for enhanced geothermal systems development. Each site shall—

(i) represent a different class of subsurface geologic environments; and

(ii) take advantage of an existing site where subsurface characterization has been conducted or existing drill holes can be utilized, if possible.

(B) Consideration of existing site

The Desert Peak, Nevada, site, where a Department of Energy and industry cooperative enhanced geothermal systems project is already underway, may be considered for inclusion among the sites selected under subparagraph (A).

(Pub. L. 110–140, title VI, § 615, Dec. 19, 2007, 121 Stat. 1680.)

§ 17195. Geothermal energy production from oil and gas fields and recovery and production of geopressured gas resources

(a) In general

The Secretary shall establish a program of research, development, demonstration, and commercial application to support development of geothermal energy production from oil and gas fields and production and recovery of energy, including electricity, from geopressured resources. In addition, the Secretary shall conduct such supporting activities including research, resource characterization, and technology development as necessary.

(b) Geothermal energy production from oil and gas fields

The Secretary shall implement a grant program in support of geothermal energy production from oil and gas fields. The program shall include grants for a total of not less than three demonstration projects of the use of geothermal techniques such as advanced organic rankine cycle systems at marginal, unproductive, and productive oil and gas wells. The Secretary shall, to the extent practicable and in the public interest, make awards that—

(1) include not less than five oil or gas well sites per project award;

(2) use a range of oil or gas well hot water source temperatures from 150 degrees Fahrenheit to 300 degrees Fahrenheit;

(3) cover a range of sizes up to one megawatt;

(4) are located at a range of sites;

(5) can be replicated at a wide range of sites;

(6) facilitate identification of optimum techniques among competing alternatives;

(7) include business commercialization plans that have the potential for production of equipment at high volumes and operation and support at a large number of sites; and

(8) satisfy other criteria that the Secretary determines are necessary to carry out the program and collect necessary data and information.

The Secretary shall give preference to assessments that address multiple elements contained in paragraphs (1) through (8).

(c) Grant awards

Each grant award for demonstration of geothermal technology such as advanced organic rankine cycle systems at oil and gas wells made by the Secretary under subsection (b) shall include—

(1) necessary and appropriate site engineering study;

(2) detailed economic assessment of site specific conditions;

(3) appropriate feasibility studies to determine whether the demonstration can be replicated;

(4) design or adaptation of existing technology for site specific circumstances or conditions;

(5) installation of equipment, service, and support;

(6) operation for a minimum of 1 year and monitoring for the duration of the demonstration; and

(7) validation of technical and economic assumptions and documentation of lessons learned.

(d) Geopressured gas resource recovery and production

(1) The Secretary shall implement a program to support the research, development, demonstration, and commercial application of cost-effective techniques to produce energy from geopressured resources.

(2) The Secretary shall solicit preliminary engineering designs for geopressured resources production and recovery facilities.

(3) Based upon a review of the preliminary designs, the Secretary shall award grants, which may be cost-shared, to support the detailed development and completion of engineering, architectural and technical plans needed to support construction of new designs.

(4) Based upon a review of the final design plans above, the Secretary shall award cost-shared development and construction grants for demonstration geopressured production facilities that show potential for economic recovery of the heat, kinetic energy and gas resources from geopressured resources.

(e) Competitive grant selection

Not less than 90 days after December 19, 2007, the Secretary shall conduct a national solicitation for applications for grants under the programs outlined in subsections (b) and (d). Grant recipients shall be selected on a competitive basis based on criteria in the respective subsection.

(f) Well drilling

No funds may be used under this section for the purpose of drilling new wells.

(Pub. L. 110–140, title VI, § 616, Dec. 19, 2007, 121 Stat. 1681.)

§ 17196. Cost sharing and proposal evaluation

(a) Federal share

The Federal share of costs of projects funded under this part shall be in accordance with section 16352 of this title.

(b) Organization and administration of programs

Programs under this part shall incorporate the following elements:

(1) The Secretary shall coordinate with, and where appropriate may provide funds in furtherance of the purposes of this part to, other Department of Energy research and development programs focused on drilling, subsurface characterization, and other related technologies.

(2) In evaluating proposals, the Secretary shall give priority to proposals that demonstrate clear evidence of employing a systems approach.

(3) The Secretary shall coordinate and consult with the appropriate Federal land management agencies in selecting proposals for funding under this part.

(4) Nothing in this part shall be construed to alter or affect any law relating to the management or protection of Federal lands.

(Pub. L. 110–140, title VI, § 617, Dec. 19, 2007, 121 Stat. 1682.)

§ 17197. Center for Geothermal Technology Transfer

(a) In general

The Secretary shall award to an institution of higher education (or consortium thereof) a grant to establish a Center for Geothermal Technology Transfer (referred to in this section as the ''Center'').

(b) Duties

The Center shall—

(1) serve as an information clearinghouse for the geothermal industry by collecting and disseminating information on best practices in all areas relating to developing and utilizing geothermal resources;

(2) make data collected by the Center available to the public; and

(3) seek opportunities to coordinate efforts and share information with domestic and international partners engaged in research and development of geothermal systems and related technology.

(c) Selection criteria

In awarding the grant under subsection (a) the Secretary shall select an institution of higher education (or consortium thereof) best suited to provide national leadership on geothermal related issues and perform the duties enumerated under subsection (b).

(d) Duration of grant

A grant made under subsection (a)—

(1) shall be for an initial period of 5 years; and

(2) may be renewed for additional 5-year periods on the basis of—

(A) satisfactory performance in meeting the duties outlined in subsection (b); and

(B) any other requirements specified by the Secretary.

(Pub. L. 110–140, title VI, § 618, Dec. 19, 2007, 121 Stat. 1683.)

§ 17198. GeoPowering America

The Secretary shall expand the Department of Energy's GeoPowering the West program to extend its geothermal technology transfer activities throughout the entire United States. The program shall be renamed ''GeoPowering America''. The program shall continue to be based in the Department of Energy office in Golden, Colorado.

(Pub. L. 110–140, title VI, § 619, Dec. 19, 2007, 121 Stat. 1683.)

§ 17199. Educational pilot program

The Secretary shall seek to award grant funding, on a competitive basis, to an institution of higher education for a geothermal-powered energy generation facility on the institution's campus. The purpose of the facility shall be to provide electricity and space heating. The facility shall also serve as an educational resource to students in relevant fields of study, and the data generated by the facility shall be available to students and the general public. The total funding award shall not exceed $2,000,000.

(Pub. L. 110–140, title VI, § 620, Dec. 19, 2007, 121 Stat. 1683.)

§ 17200. Reports

(a) Reports on advanced uses of geothermal energy

Not later than 3 years and 5 years after December 19, 2007, the Secretary shall report to the Committee on Science and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate on advanced concepts and technologies to maximize the geothermal resource potential of the United States. The reports shall include—

(1) the use of carbon dioxide as an alternative geofluid with potential carbon sequestration benefits;

(2) mineral recovery from geofluids;

(3) use of geothermal energy to produce hydrogen;

(4) use of geothermal energy to produce biofuels;

(5) use of geothermal heat for oil recovery from oil shales and tar sands; and

(6) other advanced geothermal technologies, including advanced drilling technologies and advanced power conversion technologies.

(b) Progress reports

(1) Not later than 36 months after December 19, 2007, the Secretary shall submit to the Committee on Science and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate an interim report describing the progress made under this part. At the end of 60 months, the Secretary shall submit to Congress a report on the results of projects undertaken under this part and other

such information the Secretary considers appropriate.

(2) As necessary, the Secretary shall report to the Congress on any legal, regulatory, or other barriers encountered that hinder economic development of these resources, and provide recommendations on legislative or other actions needed to address such impediments.

(Pub. L. 110–140, title VI, § 621, Dec. 19, 2007, 121 Stat. 1684.)

§ 17201. Applicability of other laws

Nothing in this part shall be construed as waiving, modifying, or superseding the applicability of any requirement under any environmental or other Federal or State law. To the extent that activities authorized in this part take place in coastal and ocean areas, the Secretary shall consult with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, regarding the potential marine environmental impacts and measures to address such impacts.

(Pub. L. 110–140, title VI, § 622, Dec. 19, 2007, 121 Stat. 1684.)

§ 17202. Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this part $90,000,000 for each of the fiscal years 2008 through 2012, of which $10,000,000 for each fiscal year shall be for carrying out section 17195 of this title. There are also authorized to be appropriated to the Secretary for the Intermountain West Geothermal Consortium $5,000,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 623, Dec. 19, 2007, 121 Stat. 1684.)

§ 17203. International geothermal energy development

(a) In general

The Secretary of Energy, in coordination with other appropriate Federal and multilateral agencies (including the United States Agency for International Development) shall support international collaborative efforts to promote the research, development, and deployment of geothermal technologies used to develop hydrothermal and enhanced geothermal system resources, including as partners (as appropriate) the African Rift Geothermal Development Facility, Australia, China, France, the Republic of Iceland, India, Japan, and the United Kingdom.

(b) United States Trade and Development Agency

The Director of the United States Trade and Development Agency may—

(1) encourage participation by United States firms in actions taken to carry out subsection (a); and

(2) provide grants and other financial support for feasibility and resource assessment studies conducted in, or intended to benefit, less developed countries.

(c) Authorization of appropriations

There are authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 624, Dec. 19, 2007, 121 Stat. 1684.)

§ 17204. High cost region geothermal energy grant program

(a) Definitions

In this section:

(1) Eligible entity

The term ''eligible entity'' means—

(A) a utility;

(B) an electric cooperative;

(C) a State;

(D) a political subdivision of a State;

(E) an Indian tribe; or

(F) a Native corporation.

(2) High-cost region

The term ''high-cost region'' means a region in which the average cost of electrical power exceeds 150 percent of the national average retail cost, as determined by the Secretary.

(b) Program

The Secretary shall use amounts made available to carry out this section to make grants to eligible entities for activities described in subsection (c).

(c) Eligible activities

An eligible entity may use grant funds under this section, with respect to a geothermal energy project in a high-cost region, only—

(1) to conduct a feasibility study, including a study of exploration, geochemical testing, geomagnetic surveys, geologic information gathering, baseline environmental studies, well drilling, resource characterization, permitting, and economic analysis;

(2) for design and engineering costs, relating to the project; and

(3) to demonstrate and promote commercial application of technologies related to geothermal energy as part of the project.

(d) Cost sharing

The cost-sharing requirements of section 16352 of this title shall apply to any project carried out under this section.

(e) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title VI, § 625, Dec. 19, 2007, 121 Stat. 1685.)

PART C—MARINE AND HYDROKINETIC RENEWABLE ENERGY TECHNOLOGIES

§ 17211. Definition

For purposes of this part, the term ''marine and hydrokinetic renewable energy'' means electrical energy from—

(1) waves, tides, and currents in oceans, estuaries, and tidal areas;

(2) free flowing water in rivers, lakes, and streams;

(3) free flowing water in man-made channels; and

(4) differentials in ocean temperature (ocean thermal energy conversion).

The term ''marine and hydrokinetic renewable energy'' does not include energy from any

source that uses a dam, diversionary structure, or impoundment for electric power purposes.

(Pub. L. 110–140, title VI, § 632, Dec. 19, 2007, 121 Stat. 1686.)

SHORT TITLE

This part known as the ''Marine and Hydrokinetic Renewable Energy Research and Development Act'', see Short Title note set out under section 17001 of this title.

§ 17212. Marine and hydrokinetic renewable energy research and development

(a) In general

The Secretary, in consultation with the Secretary of the Interior and the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, shall establish a program of research, development, demonstration, and commercial application to expand marine and hydrokinetic renewable energy production, including programs to—

(1) study and compare existing marine and hydrokinetic renewable energy technologies;

(2) research, develop, and demonstrate marine and hydrokinetic renewable energy systems and technologies;

(3) reduce the manufacturing and operation costs of marine and hydrokinetic renewable energy technologies;

(4) investigate efficient and reliable integration with the utility grid and intermittency issues;

(5) advance wave forecasting technologies;

(6) conduct experimental and numerical modeling for optimization of marine energy conversion devices and arrays;

(7) increase the reliability and survivability of marine and hydrokinetic renewable energy technologies, including development of corrosive-resistant materials;

(8) identify, in conjunction with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, and other Federal agencies as appropriate, the potential environmental impacts, including potential impacts on fisheries and other marine resources, of marine and hydrokinetic renewable energy technologies, measures to prevent adverse impacts, and technologies and other means available for monitoring and determining environmental impacts;

(9) identify, in conjunction with the Secretary of the Department in which the United States Coast Guard is operating, acting through the Commandant of the United States Coast Guard, the potential navigational impacts of marine and hydrokinetic renewable energy technologies and measures to prevent adverse impacts on navigation;

(10) develop power measurement standards for marine and hydrokinetic renewable energy;

(11) develop identification standards for marine and hydrokinetic renewable energy devices;

(12) address standards development, demonstration, and technology transfer for advanced systems engineering and system integration methods to identify critical interfaces;

(13) identifying[1] opportunities for cross fertilization and development of economies of scale between other renewable sources and marine and hydrokinetic renewable energy sources; and

(14) providing[2] public information and opportunity for public comment concerning all technologies.

(b) Report

Not later than 18 months after December 19, 2007, the Secretary, in conjunction with the Secretary of Commerce, acting through the Undersecretary of Commerce for Oceans and Atmosphere, and the Secretary of the Interior, shall provide to the Congress a report that addresses—

(1) the potential environmental impacts, including impacts to fisheries and marine resources, of marine and hydrokinetic renewable energy technologies;

(2) options to prevent adverse environmental impacts;

(3) the potential role of monitoring and adaptive management in identifying and addressing any adverse environmental impacts; and

(4) the necessary components of such an adaptive management program.

(Pub. L. 110–140, title VI, § 633, Dec. 19, 2007, 121 Stat. 1686.)

§ 17213. National Marine Renewable Energy Research, Development, and Demonstration Centers

(a) Centers

The Secretary shall award grants to institutions of higher education (or consortia thereof) for the establishment of 1 or more National Marine Renewable Energy Research, Development, and Demonstration Centers. In selecting locations for Centers, the Secretary shall consider sites that meet one of the following criteria:

(1) Hosts an existing marine renewable energy research and development program in coordination with an engineering program at an institution of higher education.

(2) Has proven expertise to support environmental and policy-related issues associated with harnessing of energy in the marine environment.

(3) Has access to and utilizes the marine resources in the Gulf of Mexico, the Atlantic Ocean, or the Pacific Ocean.

The Secretary may give special consideration to historically black colleges and universities and land grant universities that also meet one of these criteria. In establishing criteria for the selection of the Centers, the Secretary shall consult with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, on the criteria related to ocean waves, tides, and currents including those for advancing wave forecasting technologies, ocean temperature differences, and studying the compatibility of marine renewable energy technologies and systems with the environment, fisheries, and other marine resources.

[1] So in original. Probably should be ''identify''.

[2] So in original. Probably should be ''provide''.

(b) Purposes

The Centers shall advance research, development, demonstration, and commercial application of marine renewable energy, and shall serve as an information clearinghouse for the marine renewable energy industry, collecting and disseminating information on best practices in all areas related to developing and managing enhanced marine renewable energy systems resources.

(c) Demonstration of need

When applying for a grant under this section, an applicant shall include a description of why Federal support is necessary for the Center, including evidence that the research of the Center will not be conducted in the absence of Federal support.

(Pub. L. 110–140, title VI, § 634, Dec. 19, 2007, 121 Stat. 1687.)

§ 17214. Applicability of other laws

Nothing in this part shall be construed as waiving, modifying, or superseding the applicability of any requirement under any environmental or other Federal or State law.

(Pub. L. 110–140, title VI, § 635, Dec. 19, 2007, 121 Stat. 1688.)

§ 17215. Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this part $50,000,000 for each of the fiscal years 2008 through 2012, except that no funds shall be appropriated under this section for activities that are receiving funds under section 16231(a)(2)(E)(i) of this title.

(Pub. L. 110–140, title VI, § 636, Dec. 19, 2007, 121 Stat. 1688.)

PART D—ENERGY STORAGE FOR TRANSPORTATION AND ELECTRIC POWER

§ 17231. Energy storage competitiveness

(a) Short title

This section may be cited as the ''United States Energy Storage Competitiveness Act of 2007''.

(b) Definitions

In this section:

(1) Council

The term ''Council'' means the Energy Storage Advisory Council established under subsection (e).

(2) Compressed air energy storage

The term ''compressed air energy storage'' means, in the case of an electricity grid application, the storage of energy through the compression of air.

(3) Electric drive vehicle

The term ''electric drive vehicle'' means—

(A) a vehicle that uses an electric motor for all or part of the motive power of the vehicle, including battery electric, hybrid electric, plug-in hybrid electric, fuel cell, and plug-in fuel cell vehicles and rail transportation vehicles; or

(B) mobile equipment that uses an electric motor to replace an internal combustion engine for all or part of the work of the equipment.

(4) Islanding

The term ''islanding'' means a distributed generator or energy storage device continuing to power a location in the absence of electric power from the primary source.

(5) Flywheel

The term ''flywheel'' means, in the case of an electricity grid application, a device used to store rotational kinetic energy.

(6) Microgrid

The term ''microgrid'' means an integrated energy system consisting of interconnected loads and distributed energy resources (including generators and energy storage devices), which as an integrated system can operate in parallel with the utility grid or in an intentional islanding mode.

(7) Self-healing grid

The term ''self-healing grid'' means a grid that is capable of automatically anticipating and responding to power system disturbances (including the isolation of failed sections and components), while optimizing the performance and service of the grid to customers.

(8) Spinning reserve services

The term ''spinning reserve services'' means a quantity of electric generating capacity in excess of the quantity needed to meet peak electric demand.

(9) Ultracapacitor

The term ''ultracapacitor'' means an energy storage device that has a power density comparable to a conventional capacitor but is capable of exceeding the energy density of a conventional capacitor by several orders of magnitude.

(c) Program

The Secretary shall carry out a research, development, and demonstration program to support the ability of the United States to remain globally competitive in energy storage systems for electric drive vehicles, stationary applications, and electricity transmission and distribution.

(d) Coordination

In carrying out the activities of this section, the Secretary shall coordinate relevant efforts with appropriate Federal agencies, including the Department of Transportation.

(e) Energy Storage Advisory Council

(1) Establishment

Not later than 90 days after December 19, 2007, the Secretary shall establish an Energy Storage Advisory Council.

(2) Composition

(A) In general

Subject to subparagraph (B), the Council shall consist of not less than 15 individuals appointed by the Secretary, based on recommendations of the National Academy of Sciences.

(B) Energy storage industry

The Council shall consist primarily of representatives of the energy storage industry of the United States.

(C) Chairperson

The Secretary shall select a Chairperson for the Council from among the members appointed under subparagraph (A).

(3) Meetings

(A) In general

The Council shall meet not less than once a year.

(B) Federal Advisory Committee Act

The Federal Advisory Committee Act (5 U.S.C. App.) shall apply to a meeting of the Council.

(4) Plans

No later than 1 year after December 19, 2007, and every 5 years thereafter, the Council, in conjunction with the Secretary, shall develop a 5-year plan for integrating basic and applied research so that the United States retains a globally competitive domestic energy storage industry for electric drive vehicles, stationary applications, and electricity transmission and distribution.

(5) Review

The Council shall—

(A) assess, every 2 years, the performance of the Department in meeting the goals of the plans developed under paragraph (4); and

(B) make specific recommendations to the Secretary on programs or activities that should be established or terminated to meet those goals.

(f) Basic research program

(1) Basic research

The Secretary shall conduct a basic research program on energy storage systems to support electric drive vehicles, stationary applications, and electricity transmission and distribution, including—

(A) materials design;

(B) materials synthesis and characterization;

(C) electrode-active materials, including electrolytes and bioelectrolytes;

(D) surface and interface dynamics;

(E) modeling and simulation; and

(F) thermal behavior and life degradation mechanisms.

(2) Nanoscience centers

The Secretary, in cooperation with the Council, shall coordinate the activities of the nanoscience centers of the Department to help the energy storage research centers of the Department maintain a globally competitive posture in energy storage systems for electric drive vehicles, stationary applications, and electricity transmission and distribution.

(3) Funding

For activities carried out under this subsection, in addition to funding activities at National Laboratories, the Secretary shall award funds to, and coordinate activities with, a range of stakeholders including the public, private, and academic sectors.

(g) Applied research program

(1) In general

The Secretary shall conduct an applied research program on energy storage systems to support electric drive vehicles, stationary applications, and electricity transmission and distribution technologies, including—

(A) ultracapacitors;

(B) flywheels;

(C) batteries and battery systems (including flow batteries);

(D) compressed air energy systems;

(E) power conditioning electronics;

(F) manufacturing technologies for energy storage systems;

(G) thermal management systems; and

(H) hydrogen as an energy storage medium.

(2) Funding

For activities carried out under this subsection, in addition to funding activities at National Laboratories, the Secretary shall provide funds to, and coordinate activities with, a range of stakeholders, including the public, private, and academic sectors.

(h) Energy storage research centers

(1) In general

The Secretary shall establish, through competitive bids, not more than 4 energy storage research centers to translate basic research into applied technologies to advance the capability of the United States to maintain a globally competitive posture in energy storage systems for electric drive vehicles, stationary applications, and electricity transmission and distribution.

(2) Program management

The centers shall be managed by the Under Secretary for Science of the Department.

(3) Participation agreements

As a condition of participating in a center, a participant shall enter into a participation agreement with the center that requires that activities conducted by the participant for the center promote the goal of enabling the United States to compete successfully in global energy storage markets.

(4) Plans

A center shall conduct activities that promote the achievement of the goals of the plans of the Council under subsection (e)(4).

(5) National laboratories

A national laboratory (as defined in section 15801 of this title) may participate in a center established under this subsection, including a cooperative research and development agreement (as defined in section 3710a(d) of title 15).

(6) Disclosure

Section 13293 of this title may apply to any project carried out through a grant, contract, or cooperative agreement under this subsection.

(7) Intellectual property

In accordance with section 202(a)(ii) of title 35, section 2182 of this title, and section 5908 of

this title, the Secretary may require, for any new invention developed under this subsection, that—

(A) if an industrial participant is active in a[1] energy storage research center established under this subsection relating to the advancement of energy storage technologies carried out, in whole or in part, with Federal funding, the industrial participant be granted the first option to negotiate with the invention owner, at least in the field of energy storage technologies, nonexclusive licenses, and royalties on terms that are reasonable, as determined by the Secretary;

(B) if 1 or more industry participants are active in a center, during a 2-year period beginning on the date on which an invention is made—

(i) the patent holder shall not negotiate any license or royalty agreement with any entity that is not an industrial participant under this subsection; and

(ii) the patent holder shall negotiate nonexclusive licenses and royalties in good faith with any interested industrial participant under this subsection; and

(C) the new invention be developed under such other terms as the Secretary determines to be necessary to promote the accelerated commercialization of inventions made under this subsection to advance the capability of the United States to successfully compete in global energy storage markets.

(i) Energy storage systems demonstrations

(1) In general

The Secretary shall carry out a program of new demonstrations of advanced energy storage systems.

(2) Scope

The demonstrations shall—

(A) be regionally diversified; and

(B) expand on the existing technology demonstration program of the Department.

(3) Stakeholders

In carrying out the demonstrations, the Secretary shall, to the maximum extent practicable, include the participation of a range of stakeholders, including—

(A) rural electric cooperatives;

(B) investor owned utilities;

(C) municipally owned electric utilities;

(D) energy storage systems manufacturers;

(E) electric drive vehicle manufacturers;

(F) the renewable energy production industry;

(G) State or local energy offices;

(H) the fuel cell industry; and

(I) institutions of higher education.

(4) Objectives

Each of the demonstrations shall include 1 or more of the following:

(A) Energy storage to improve the feasibility of microgrids or islanding, or transmission and distribution capability, to improve reliability in rural areas.

(B) Integration of an energy storage system with a self-healing grid.

(C) Use of energy storage to improve security to emergency response infrastructure and ensure availability of emergency backup power for consumers.

(D) Integration with a renewable energy production source, at the source or away from the source.

(E) Use of energy storage to provide ancillary services, such as spinning reserve services, for grid management.

(F) Advancement of power conversion systems to make the systems smarter, more efficient, able to communicate with other inverters, and able to control voltage.

(G) Use of energy storage to optimize transmission and distribution operation and power quality, which could address overloaded lines and maintenance of transformers and substations.

(H) Use of advanced energy storage for peak load management of homes, businesses, and the grid.

(I) Use of energy storage devices to store energy during nonpeak generation periods to make better use of existing grid assets.

(j) Vehicle energy storage demonstration

(1) In general

The Secretary shall carry out a program of electric drive vehicle energy storage technology demonstrations.

(2) Consortia

The technology demonstrations shall be conducted through consortia, which may include—

(A) energy storage systems manufacturers and suppliers of the manufacturers;

(B) electric drive vehicle manufacturers;

(C) rural electric cooperatives;

(D) investor owned utilities;

(E) municipal and rural electric utilities;

(F) State and local governments;

(G) metropolitan transportation authorities; and

(H) institutions of higher education.

(3) Objectives

The program shall demonstrate 1 or more of the following:

(A) Novel, high capacity, high efficiency energy storage, charging, and control systems, along with the collection of data on performance characteristics, such as battery life, energy storage capacity, and power delivery capacity.

(B) Advanced onboard energy management systems and highly efficient battery cooling systems.

(C) Integration of those systems on a prototype vehicular platform, including with drivetrain systems for passenger, commercial, and nonroad electric drive vehicles.

(D) New technologies and processes that reduce manufacturing costs.

(E) Integration of advanced vehicle technologies with electricity distribution system and smart metering technology.

(F) Control systems that minimize emissions profiles in cases in which clean diesel

[1] So in original. Probably should be ''an''.

engines are part of a plug-in hybrid drive system.

(k) Secondary applications and disposal of electric drive vehicle batteries

The Secretary shall carry out a program of research, development, and demonstration of—

(1) secondary applications of energy storage devices following service in electric drive vehicles; and

(2) technologies and processes for final recycling and disposal of the devices.

(*l*) Cost sharing

The Secretary shall carry out the programs established under this section in accordance with section 16352 of this title.

(m) Merit review of proposals

The Secretary shall carry out the programs established under subsections (i), (j), and (k) in accordance with section 16353 of this title.

(n) Coordination and nonduplication

To the maximum extent practicable, the Secretary shall coordinate activities under this section with other programs and laboratories of the Department and other Federal research programs.

(*o*) Review by National Academy of Sciences

On the business day that is 5 years after December 19, 2007, the Secretary shall offer to enter into an arrangement with the National Academy of Sciences to assess the performance of the Department in carrying out this section.

(p) Authorization of appropriations

There are authorized to be appropriated to carry out—

(1) the basic research program under subsection (f) $50,000,000 for each of fiscal years 2009 through 2018;

(2) the applied research program under subsection (g) $80,000,000 for each of fiscal years 2009 through 2018; and;[2]

(3) the energy storage research center program under subsection (h) $100,000,000 for each of fiscal years 2009 through 2018;

(4) the energy storage systems demonstration program under subsection (i) $30,000,000 for each of fiscal years 2009 through 2018;

(5) the vehicle energy storage demonstration program under subsection (j) $30,000,000 for each of fiscal years 2009 through 2018; and

(6) the secondary applications and disposal of electric drive vehicle batteries program under subsection (k) $5,000,000 for each of fiscal years 2009 through 2018.

(Pub. L. 110–140, title VI, § 641, Dec. 19, 2007, 121 Stat. 1688.)

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (e)(3)(B), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

[2] So in original.

PART E—MISCELLANEOUS PROVISIONS

§ 17241. Lightweight materials research and development

(a) In general

As soon as practicable after December 19, 2007, the Secretary of Energy shall establish a program to determine ways in which the weight of motor vehicles could be reduced to improve fuel efficiency without compromising passenger safety by conducting research, development, and demonstration relating to—

(1) the development of new materials (including cast metal composite materials formed by autocombustion synthesis) and material processes that yield a higher strength-to-weight ratio or other properties that reduce vehicle weight; and

(2) reducing the cost of—

(A) lightweight materials (including high-strength steel alloys, aluminum, magnesium, metal composites, and carbon fiber reinforced polymer composites) with the properties required for construction of lighter-weight vehicles; and

(B) materials processing, automated manufacturing, joining, and recycling lightweight materials for high-volume applications.

(b) Authorization of appropriations

There is authorized to be appropriated to carry out this section $80,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 651, Dec. 19, 2007, 121 Stat. 1694.)

§ 17242. Commercial insulation demonstration program

(a) Definitions

In this section:

(1) Advanced insulation

The term ''advanced insulation'' means insulation that has an R value of not less than R35 per inch.

(2) Covered refrigeration unit

The term ''covered refrigeration unit'' means any—

(A) commercial refrigerated truck;

(B) commercial refrigerated trailer; or

(C) commercial refrigerator, freezer, or refrigerator-freezer described in section 6313(c) of this title.

(b) Report

Not later than 90 days after December 19, 2007, the Secretary shall submit to Congress a report that includes an evaluation of—

(1) the state of technological advancement of advanced insulation; and

(2) the projected amount of cost savings that would be generated by implementing advanced insulation into covered refrigeration units.

(c) Demonstration program

(1) Establishment

If the Secretary determines in the report described in subsection (b) that the implementation of advanced insulation into covered re-

frigeration units would generate an economically justifiable amount of cost savings, the Secretary, in cooperation with manufacturers of covered refrigeration units, shall establish a demonstration program under which the Secretary shall demonstrate the cost-effectiveness of advanced insulation.

(2) Disclosure

The Secretary may, for a period of up to 5 years after an award is granted under the demonstration program, exempt from mandatory disclosure under section 552 of title 5 (popularly known as the Freedom of Information Act) information that the Secretary determines would be a privileged or confidential trade secret or commercial or financial information under subsection (b)(4) of such section if the information had been obtained from a non-Government party.

(3) Cost-sharing

Section 16352 of this title shall apply to any project carried out under this subsection.

(d) Authorization of appropriations

There is authorized to be appropriated to carry out this section $8,000,000 for the period of fiscal years 2009 through 2014.

(Pub. L. 110–140, title VI, § 652, Dec. 19, 2007, 121 Stat. 1694.)

§ 17243. Bright Tomorrow Lighting Prizes

(a) Establishment

Not later than 1 year after December 19, 2007, as part of the program carried out under section 16396 of this title, the Secretary shall establish and award Bright Tomorrow Lighting Prizes for solid state lighting in accordance with this section.

(b) Prize specifications

(1) 60-Watt Incandescent Replacement Lamp Prize

The Secretary shall award a 60-Watt Incandescent Replacement Lamp Prize to an entrant that produces a solid-state-light package simultaneously capable of—

(A) producing a luminous flux greater than 900 lumens;

(B) consuming less than or equal to 10 watts;

(C) having an efficiency greater than 90 lumens per watt;

(D) having a color rendering index greater than 90;

(E) having a correlated color temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

(G) having a light distribution pattern similar to a soft 60-watt incandescent A19 bulb;

(H) having a size and shape that fits within the maximum dimensions of an A19 bulb in accordance with American National Standards Institute standard C78.20–2003, figure C78.20–211;

(I) using a single contact medium screw socket; and

(J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(2) PAR Type 38 Halogen Replacement Lamp Prize

The Secretary shall award a Parabolic Aluminized Reflector Type 38 Halogen Replacement Lamp Prize (referred to in this section as the ''PAR Type 38 Halogen Replacement Lamp Prize'') to an entrant that produces a solid-state-light package simultaneously capable of—

(A) producing a luminous flux greater than or equal to 1,350 lumens;

(B) consuming less than or equal to 11 watts;

(C) having an efficiency greater than 123 lumens per watt;

(D) having a color rendering index greater than or equal to 90;

(E) having a correlated color coordinate temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

(G) having a light distribution pattern similar to a PAR 38 halogen lamp;

(H) having a size and shape that fits within the maximum dimensions of a PAR 38 halogen lamp in accordance with American National Standards Institute standard C78–21–2003, figure C78.21–238;

(I) using a single contact medium screw socket; and

(J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(3) Twenty-First Century Lamp Prize

The Secretary shall award a Twenty-First Century Lamp Prize to an entrant that produces a solid-state-light-light[1] capable of—

(A) producing a light output greater than 1,200 lumens;

(B) having an efficiency greater than 150 lumens per watt;

(C) having a color rendering index greater than 90;

(D) having a color coordinate temperature between 2,800 and 3,000 degrees Kelvin; and

(E) having a lifetime exceeding 25,000 hours.

(c) Private funds

(1) In general

Subject to paragraph (2), and notwithstanding section 3302 of title 31, the Secretary may accept, retain, and use funds contributed by any person, government entity, or organiza-

[1] So in original.

tion for purposes of carrying out this subsection—

(A) without further appropriation; and

(B) without fiscal year limitation.

(2) Prize competition

A private source of funding may not participate in the competition for prizes awarded under this section.

(d) Technical review

The Secretary shall establish a technical review committee composed of non-Federal officers to review entrant data submitted under this section to determine whether the data meets the prize specifications described in subsection (b).

(e) Third party administration

The Secretary may competitively select a third party to administer awards under this section.

(f) Eligibility for prizes

To be eligible to be awarded a prize 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

Subject to the availability of funds to carry out this section, the amount of—

(1) the 60-Watt Incandescent Replacement Lamp Prize described in subsection (b)(1) shall be $10,000,000;

(2) the PAR Type 38 Halogen Replacement Lamp Prize described in subsection (b)(2) shall be $5,000,000; and

(3) the Twenty-First Century Lamp Prize described in subsection (b)(3) shall be $5,000,000.

(h) Federal procurement of solid-state-lights

(1) 60-watt incandescent replacement

Subject to paragraph (3), as soon as practicable after the successful award of the 60-Watt Incandescent Replacement Lamp Prize under subsection (b)(1), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with a goal of replacing the use of 60-watt incandescent lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(1) by not later than the date that is 5 years after the date the award is made.

(2) PAR 38 halogen replacement lamp replacement [1]

Subject to paragraph (3), as soon as practicable after the successful award of the PAR Type 38 Halogen Replacement Lamp Prize under subsection (b)(2), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with the goal of replacing the use of PAR 38 halogen lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(2) by not later than the date that is 5 years after the date the award is made.

(3) Waivers

(A) In general

The Secretary or the Administrator of General Services may waive the application of paragraph (1) or (2) if the Secretary or Administrator determines that the return on investment from the purchase of a solid-state-light package described in paragraph (1) or (2) of subsection (b), respectively, is cost prohibitive.

(B) Report of waiver

If the Secretary or Administrator waives the application of paragraph (1) or (2), the Secretary or Administrator, respectively, shall submit to Congress an annual report that describes the waiver and provides a detailed justification for the waiver.

(i) Report

Not later than 2 years after December 19, 2007, and annually thereafter, the Administrator of General Services shall submit to the Energy Information Agency a report describing the quantity, type, and cost of each lighting product purchased by the Federal Government.

(j) Bright Tomorrow Lighting Award Fund

(1) Establishment

There is established in the United States Treasury a Bright Tomorrow Lighting permanent fund without fiscal year limitation to award prizes under paragraphs (1), (2), and (3) of subsection (b).

(2) Sources of funding

The fund established under paragraph (1) shall accept—

(A) fiscal year appropriations; and

(B) private contributions authorized under subsection (c).

(k) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title VI, § 655, Dec. 19, 2007, 121 Stat. 1700.)

§ 17244. Renewable Energy Innovation Manufacturing Partnership

(a) Establishment

The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the ''Program''), to make assistance awards to eligible entities for use in carrying out research, development, and demonstration relating to the manufacturing of renewable energy technologies.

(b) Solicitation

To carry out the Program, the Secretary shall annually conduct a competitive solicitation for assistance awards for an eligible project described in subsection (e).

(c) Program purposes

The purposes of the Program are—

(1) to develop, or aid in the development of, advanced manufacturing processes, materials, and infrastructure;

(2) to increase the domestic production of renewable energy technology and components; and

(3) to better coordinate Federal, State, and private resources to meet regional and national renewable energy goals through advanced manufacturing partnerships.

(d) Eligible entities

An entity shall be eligible to receive an assistance award under the Program to carry out an eligible project described in subsection (e) if the entity is composed of—

(1) 1 or more public or private nonprofit institutions or national laboratories engaged in research, development, demonstration, or technology transfer, that would participate substantially in the project; and

(2) 1 or more private entities engaged in the manufacturing or development of renewable energy system components (including solar energy, wind energy, biomass, geothermal energy, energy storage, or fuel cells).

(e) Eligible projects

An eligible entity may use an assistance award provided under this section to carry out a project relating to—

(1) the conduct of studies of market opportunities for component manufacturing of renewable energy systems;

(2) the conduct of multiyear applied research, development, demonstration, and deployment projects for advanced manufacturing processes, materials, and infrastructure for renewable energy systems; and

(3) other similar ventures, as approved by the Secretary, that promote advanced manufacturing of renewable technologies.

(f) Criteria and guidelines

The Secretary shall establish criteria and guidelines for the submission, evaluation, and funding of proposed projects under the Program.

(g) Cost sharing

Section 16352 of this title shall apply to a project carried out under this section.

(h) Disclosure

The Secretary may, for a period of up to 5 years after an award is granted under this section, exempt from mandatory disclosure under section 552 of title 5 (popularly known as the Freedom of Information Act) information that the Secretary determines would be a privileged or confidential trade secret or commercial or financial information under subsection (b)(4) of such section if the information had been obtained from a non-Government party.

(i) Sense of the Congress

It is the sense of the Congress that the Secretary should ensure that small businesses engaged in renewable manufacturing be given priority consideration for the assistance awards provided under this section.

(j) Authorization of appropriations

There is authorized to be appropriated out of funds already authorized to carry out this section $25,000,000 for each of fiscal years 2008 through 2013, to remain available until expended.

(Pub. L. 110–140, title VI, § 656, Dec. 19, 2007, 121 Stat. 1703.)

SUBCHAPTER VI—CARBON CAPTURE AND SEQUESTRATION

PART A—CARBON CAPTURE AND SEQUESTRATION RESEARCH, DEVELOPMENT, AND DEMONSTRATION

§ 17251. Carbon capture

(a) Program establishment

(1) In general

The Secretary shall carry out a program to demonstrate technologies for the large-scale capture of carbon dioxide from industrial sources. In making awards under this program, the Secretary shall select, as appropriate, a diversity of capture technologies to address the need to capture carbon dioxide from a range of industrial sources.

(2) Scope of award

Awards under this section shall be only for the portion of the project that—

(A) carries out the large-scale capture (including purification and compression) of carbon dioxide from industrial sources;

(B) provides for the transportation and injection of carbon dioxide; and

(C) incorporates a comprehensive measurement, monitoring, and validation program.

(3) Preferences for award

To ensure reduced carbon dioxide emissions, the Secretary shall take necessary actions to provide for the integration of the program under this paragraph with the large-scale carbon dioxide sequestration tests described in section 16293(c)(3) of this title. These actions should not delay implementation of these tests. The Secretary shall give priority consideration to projects with the following characteristics:

(A) Capacity

Projects that will capture a high percentage of the carbon dioxide in the treated stream and large volumes of carbon dioxide as determined by the Secretary.

(B) Sequestration

Projects that capture carbon dioxide from industrial sources that are near suitable geological reservoirs and could continue sequestration including—

(i) a field testing validation activity under section 16293 of this title; or

(ii) other geologic sequestration projects approved by the Secretary.

(4) Requirement

For projects that generate carbon dioxide that is to be sequestered, the carbon dioxide stream shall be of a sufficient purity level to allow for safe transport and sequestration.

(5) Cost-sharing

The cost-sharing requirements of section 16352 of this title for research and development projects shall apply to this section.

(b) Authorization of appropriations

There is authorized to be appropriated to the Secretary to carry out this section $200,000,000 per year for fiscal years 2009 through 2013.

(Pub. L. 110–140, title VII, § 703, Dec. 19, 2007, 121 Stat. 1708.)

SHORT TITLE

Subtitle A (§§ 701–708) of title VII of Pub. L. 110–140, which is classified principally to this part, is known as the ''Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007''. See Short Title note set out under section 17001 of this title.

§ 17252. Review of large-scale programs

The Secretary shall enter into an arrangement with the National Academy of Sciences for an independent review and oversight, beginning in 2011, of the programs under section 16293(c)(3) of this title and under section 17251 of this title, to ensure that the benefits of such programs are maximized. Not later than January 1, 2012, the Secretary shall transmit to the Congress a report on the results of such review and oversight.

(Pub. L. 110–140, title VII, § 704, Dec. 19, 2007, 121 Stat. 1709.)

§ 17253. Geologic sequestration training and research

(a) Study

(1) In general

The Secretary shall enter into an arrangement with the National Academy of Sciences to undertake a study that—

(A) defines an interdisciplinary program in geology, engineering, hydrology, environmental science, and related disciplines that will support the Nation's capability to capture and sequester carbon dioxide from anthropogenic sources;

(B) addresses undergraduate and graduate education, especially to help develop graduate level programs of research and instruction that lead to advanced degrees with emphasis on geologic sequestration science;

(C) develops guidelines for proposals from colleges and universities with substantial capabilities in the required disciplines that seek to implement geologic sequestration science programs that advance the Nation's capacity to address carbon management through geologic sequestration science; and

(D) outlines a budget and recommendations for how much funding will be necessary to establish and carry out the grant program under subsection (b).

(2) Report

Not later than 1 year after December 19, 2007, the Secretary shall transmit to the Congress a copy of the results of the study provided by the National Academy of Sciences under paragraph (1).

(3) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this subsection $1,000,000 for fiscal year 2008.

(b) Grant program

(1) Establishment

The Secretary shall establish a competitive grant program through which colleges and universities may apply for and receive 4-year grants for—

(A) salary and startup costs for newly designated faculty positions in an integrated geologic carbon sequestration science program; and

(B) internships for graduate students in geologic sequestration science.

(2) Renewal

Grants under this subsection shall be renewable for up to 2 additional 3-year terms, based on performance criteria, established by the National Academy of Sciences study conducted under subsection (a), that include the number of graduates of such programs.

(3) Interface with regional geologic carbon sequestration partnerships

To the greatest extent possible, geologic carbon sequestration science programs supported under this subsection shall interface with the research of the Regional Carbon Sequestration Partnerships operated by the Department to provide internships and practical training in carbon capture and geologic sequestration.

(4) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this subsection such sums as may be necessary.

(Pub. L. 110–140, title VII, § 705, Dec. 19, 2007, 121 Stat. 1709.)

§ 17254. Relation to Safe Drinking Water Act

The injection and geologic sequestration of carbon dioxide pursuant to this subtitle and the amendments made by this subtitle shall be subject to the requirements of the Safe Drinking Water Act (42 U.S.C. 300f et seq.), including the provisions of part C of such Act (42 U.S.C. 300h et seq.; relating to protection of underground sources of drinking water). Nothing in this subtitle and the amendments made by this subtitle imposes or authorizes the promulgation of any requirement that is inconsistent or in conflict with the requirements of the Safe Drinking Water Act (42 U.S.C. 300f et seq.) or regulations thereunder.

(Pub. L. 110–140, title VII, § 706, Dec. 19, 2007, 121 Stat. 1710.)

REFERENCES IN TEXT

This subtitle, referred to in text, is subtitle A (§§ 701–708) of title VII of Pub. L. 110–140, which enacted this part, amended section 16293 of this title, and enacted provisions set out as a note under section 17001 of this title. For complete classification of subtitle A to the Code, see Short Title note set out under section 17001 of this title and Tables.

The Safe Drinking Water Act, referred to in text, is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93–523, § 2(a), 88 Stat. 1660, which is classified generally to subchapter XII (§ 300f et seq.) of chapter 6A of this title. Part C of the Act is classified generally to part C (§ 300h et seq.) of subchapter XII of chapter 6A of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

§ 17255. Safety research

(a) Program

The Administrator of the Environmental Protection Agency shall conduct a research pro-

gram to address public health, safety, and environmental impacts that may be associated with capture, injection, and sequestration of greenhouse gases in geologic reservoirs.

(b) Authorization of appropriations

There are authorized to be appropriated for carrying out this section $5,000,000 for each fiscal year.

(Pub. L. 110–140, title VII, § 707, Dec. 19, 2007, 121 Stat. 1710.)

§ 17256. University based research and development grant program

(a) Establishment

The Secretary, in consultation with other appropriate agencies, shall establish a university based research and development program to study carbon capture and sequestration using the various types of coal.

(b) Rural and agricultural institutions

The Secretary shall give special consideration to rural or agricultural based institutions in areas that have regional sources of coal and that offer interdisciplinary programs in the area of environmental science to study carbon capture and sequestration.

(c) Authorization of appropriations

There are to be authorized to be appropriated $10,000,000 to carry out this section.

(Pub. L. 110–140, title VII, § 708, Dec. 19, 2007, 121 Stat. 1710.)

PART B—CARBON CAPTURE AND SEQUESTRATION ASSESSMENT AND FRAMEWORK

§ 17271. Carbon dioxide sequestration capacity assessment

(a) Definitions

In this section—

(1) Assessment

The term ''assessment'' means the national assessment of onshore capacity for carbon dioxide completed under subsection (f).

(2) Capacity

The term ''capacity'' means the portion of a sequestration formation that can retain carbon dioxide in accordance with the requirements (including physical, geological, and economic requirements) established under the methodology developed under subsection (b).

(3) Engineered hazard

The term ''engineered hazard'' includes the location and completion history of any well that could affect potential sequestration.

(4) Risk

The term ''risk'' includes any risk posed by geomechanical, geochemical, hydrogeological, structural, and engineered hazards.

(5) Secretary

The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

(6) Sequestration formation

The term ''sequestration formation'' means a deep saline formation, unmineable coal seam, or oil or gas reservoir that is capable of accommodating a volume of industrial carbon dioxide.

(b) Methodology

Not later than 1 year after December 19, 2007, the Secretary shall develop a methodology for conducting an assessment under subsection (f), taking into consideration—

(1) the geographical extent of all potential sequestration formations in all States;

(2) the capacity of the potential sequestration formations;

(3) the injectivity of the potential sequestration formations;

(4) an estimate of potential volumes of oil and gas recoverable by injection and sequestration of industrial carbon dioxide in potential sequestration formations;

(5) the risk associated with the potential sequestration formations; and

(6) the work done to develop the Carbon Sequestration Atlas of the United States and Canada that was completed by the Department.

(c) Coordination

(1) Federal coordination

(A) Consultation

The Secretary shall consult with the Secretary of Energy and the Administrator of the Environmental Protection Agency on issues of data sharing, format, development of the methodology, and content of the assessment required under this section to ensure the maximum usefulness and success of the assessment.

(B) Cooperation

The Secretary of Energy and the Administrator shall cooperate with the Secretary to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(2) State coordination

The Secretary shall consult with State geological surveys and other relevant entities to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(d) External review and publication

On completion of the methodology under subsection (b), the Secretary shall—

(1) publish the methodology and solicit comments from the public and the heads of affected Federal and State agencies;

(2) establish a panel of individuals with expertise in the matters described in paragraphs (1) through (5) of subsection (b) composed, as appropriate, of representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international geoscience organizations to review the methodology and comments received under paragraph (1); and

(3) on completion of the review under paragraph (2), publish in the Federal Register the revised final methodology.

(e) Periodic updates

The methodology developed under this section shall be updated periodically (including at least

once every 5 years) to incorporate new data as the data becomes available.

(f) National assessment

(1) In general

Not later than 2 years after the date of publication of the methodology under subsection (d)(1), the Secretary, in consultation with the Secretary of Energy and State geological surveys, shall complete a national assessment of capacity for carbon dioxide in accordance with the methodology.

(2) Geological verification

As part of the assessment under this subsection, the Secretary shall carry out a drilling program to supplement the geological data relevant to determining sequestration capacity of carbon dioxide in geological sequestration formations, including—

(A) well log data;

(B) core data; and

(C) fluid sample data.

(3) Partnership with other drilling programs

As part of the drilling program under paragraph (2), the Secretary shall enter, as appropriate, into partnerships with other entities to collect and integrate data from other drilling programs relevant to the sequestration of carbon dioxide in geological formations.

(4) Incorporation into NatCarb

(A) In general

On completion of the assessment, the Secretary of Energy and the Secretary of the Interior shall incorporate the results of the assessment using—

(i) the NatCarb database, to the maximum extent practicable; or

(ii) a new database developed by the Secretary of Energy, as the Secretary of Energy determines to be necessary.

(B) Ranking

The database shall include the data necessary to rank potential sequestration sites for capacity and risk, across the United States, within each State, by formation, and within each basin.

(5) Report

Not later than 180 days after the date on which the assessment is completed, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report describing the findings under the assessment.

(6) Periodic updates

The national assessment developed under this section shall be updated periodically (including at least once every 5 years) to support public and private sector decisionmaking.

(g) Authorization of appropriations

There is authorized to be appropriated to carry out this section $30,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110–140, title VII, § 711, Dec. 19, 2007, 121 Stat. 1710.)

§ 17272. Assessment of carbon sequestration and methane and nitrous oxide emissions from ecosystems

(a) Definitions

In this section:

(1) Adaptation strategy

The term ''adaptation strategy'' means a land use and management strategy that can be used—

(A) to increase the sequestration capabilities of covered greenhouse gases of any ecosystem; or

(B) to reduce the emissions of covered greenhouse gases from any ecosystem.

(2) Assessment

The term ''assessment'' means the national assessment authorized under subsection (b).

(3) Covered greenhouse gas

The term ''covered greenhouse gas'' means carbon dioxide, nitrous oxide, and methane gas.

(4) Ecosystem

The term ''ecosystem'' means any terrestrial, freshwater aquatic, or coastal ecosystem, including an estuary.

(5) Native plant species

The term ''native plant species'' means any noninvasive, naturally occurring plant species within an ecosystem.

(6) Secretary

The term ''Secretary'' means the Secretary of the Interior.

(b) Authorization of assessment

Not later than 2 years after the date on which the final methodology is published under subsection (f)(3)(D), the Secretary shall complete a national assessment of—

(1) the quantity of carbon stored in and released from ecosystems, including from man-caused and natural fires; and

(2) the annual flux of covered greenhouse gases in and out of ecosystems.

(c) Components

In conducting the assessment under subsection (b), the Secretary shall—

(1) determine the processes that control the flux of covered greenhouse gases in and out of each ecosystem;

(2) estimate the potential for increasing carbon sequestration in natural and managed ecosystems through management activities or restoration activities in each ecosystem;

(3) develop near-term and long-term adaptation strategies or mitigation strategies that can be employed—

(A) to enhance the sequestration of carbon in each ecosystem;

(B) to reduce emissions of covered greenhouse gases from ecosystems; and

(C) to adapt to climate change; and

(4) estimate the annual carbon sequestration capacity of ecosystems under a range of policies in support of management activities to optimize sequestration.

(d) Use of native plant species

In developing restoration activities under subsection (c)(2) and management strategies and adaptation strategies under subsection (c)(3), the Secretary shall emphasize the use of native plant species (including mixtures of many native plant species) for sequestering covered greenhouse gas in each ecosystem.

(e) Consultation

(1) In general

In conducting the assessment under subsection (b) and developing the methodology under subsection (f), the Secretary shall consult with—

(A) the Secretary of Energy;

(B) the Secretary of Agriculture;

(C) the Administrator of the Environmental Protection Agency;

(D) the Secretary of Commerce, acting through the Under Secretary for Oceans and Atmosphere; and

(E) the heads of other relevant agencies.

(2) Ocean and coastal ecosystems

In carrying out this section with respect to ocean and coastal ecosystems (including estuaries), the Secretary shall work jointly with the Secretary of Commerce, acting through the Under Secretary for Oceans and Atmosphere.

(f) Methodology

(1) In general

Not later than 1 year after December 19, 2007, the Secretary shall develop a methodology for conducting the assessment.

(2) Requirements

The methodology developed under paragraph (1)—

(A) shall—

(i) determine the method for measuring, monitoring, and quantifying covered greenhouse gas emissions and reductions;

(ii) estimate the total capacity of each ecosystem to sequester carbon; and

(iii) estimate the ability of each ecosystem to reduce emissions of covered greenhouse gases through management practices; and

(B) may employ economic and other systems models, analyses, and estimates, to be developed in consultation with each of the individuals described in subsection (e).

(3) External review and publication

On completion of a proposed methodology, the Secretary shall—

(A) publish the proposed methodology;

(B) at least 60 days before the date on which the final methodology is published, solicit comments from—

(i) the public; and

(ii) heads of affected Federal and State agencies;

(C) establish a panel to review the proposed methodology published under subparagraph (A) and any comments received under subparagraph (B), to be composed of members—

(i) with expertise in the matters described in subsections (c) and (d); and

(ii) that are, as appropriate, representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international organizations; and

(D) on completion of the review under subparagraph (C), publish in the Federal Register the revised final methodology.

(g) Estimate; review

The Secretary shall—

(1) based on the assessment, prescribe the data, information, and analysis needed to establish a scientifically sound estimate of the carbon sequestration capacity of relevant ecosystems; and

(2) not later than 180 days after the date on which the assessment is completed, submit to the heads of applicable Federal agencies and the appropriate committees of Congress a report that describes the results of the assessment.

(h) Data and report availability

On completion of the assessment, the Secretary shall incorporate the results of the assessment into a web-accessible database for public use.

(i) Authorization

There is authorized to be appropriated to carry out this section $20,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110–140, title VII, § 712, Dec. 19, 2007, 121 Stat. 1713.)

SUBCHAPTER VII—IMPROVED MANAGEMENT OF ENERGY POLICY

PART A—MANAGEMENT IMPROVEMENTS

§ 17281. National media campaign

(a) In general

The Secretary, acting through the Assistant Secretary for Energy Efficiency and Renewable Energy (referred to in this section as the ''Secretary''), shall develop and conduct a national media campaign—

(1) to increase energy efficiency throughout the economy of the United States during the 10-year period beginning on December 19, 2007;

(2) to promote the national security benefits associated with increased energy efficiency; and

(3) to decrease oil consumption in the United States during the 10-year period beginning on December 19, 2007.

(b) Contract with entity

The Secretary shall carry out subsection (a) directly or through—

(1) competitively bid contracts with 1 or more nationally recognized media firms for the development and distribution of monthly television, radio, and newspaper public service announcements; or

(2) collective agreements with 1 or more nationally recognized institutes, businesses, or nonprofit organizations for the funding, devel-

opment, and distribution of monthly television, radio, and newspaper public service announcements.

(c) Use of funds

(1) In general

Amounts made available to carry out this section shall be used for—

(A) advertising costs, including—

(i) the purchase of media time and space;

(ii) creative and talent costs;

(iii) testing and evaluation of advertising; and

(iv) evaluation of the effectiveness of the media campaign; and

(B) administrative costs, including operational and management expenses.

(2) Limitations

In carrying out this section, the Secretary shall allocate not less than 85 percent of funds made available under subsection (e) for each fiscal year for the advertising functions specified under paragraph (1)(A).

(d) Reports

The Secretary shall annually submit to Congress a report that describes—

(1) the strategy of the national media campaign and whether specific objectives of the campaign were accomplished, including—

(A) determinations concerning the rate of change of energy consumption, in both absolute and per capita terms; and

(B) an evaluation that enables consideration of whether the media campaign contributed to reduction of energy consumption;

(2) steps taken to ensure that the national media campaign operates in an effective and efficient manner consistent with the overall strategy and focus of the campaign;

(3) plans to purchase advertising time and space;

(4) policies and practices implemented to ensure that Federal funds are used responsibly to purchase advertising time and space and eliminate the potential for waste, fraud, and abuse; and

(5) all contracts or cooperative agreements entered into with a corporation, partnership, or individual working on behalf of the national media campaign.

(e) Authorization of appropriations

(1) In general

There is authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2008 through 2012.

(2) Decreased oil consumption

The Secretary shall use not less than 50 percent of the amount that is made available under this section for each fiscal year to develop and conduct a national media campaign to decrease oil consumption in the United States over the next decade.

(Pub. L. 110–140, title VIII, § 801, Dec. 19, 2007, 121 Stat. 1716.)

§ 17282. Renewable energy deployment

(a) Definitions

In this section:

(1) Alaska small hydroelectric power

The term ''Alaska small hydroelectric power'' means power that—

(A) is generated—

(i) in the State of Alaska;

(ii) without the use of a dam or impoundment of water; and

(iii) through the use of—

(I) a lake tap (but not a perched alpine lake); or

(II) a run-of-river screened at the point of diversion; and

(B) has a nameplate capacity rating of a wattage that is not more than 15 megawatts.

(2) Eligible applicant

The term ''eligible applicant'' means any—

(A) governmental entity;

(B) private utility;

(C) public utility;

(D) municipal utility;

(E) cooperative utility;

(F) Indian tribes; and

(G) Regional Corporation (as defined in section 1602 of title 43).

(3) Ocean energy

(A) Inclusions

The term ''ocean energy'' includes current, wave, and tidal energy.

(B) Exclusion

The term ''ocean energy'' excludes thermal energy.

(4) Renewable energy project

The term ''renewable energy project'' means a project—

(A) for the commercial generation of electricity; and

(B) that generates electricity from—

(i) solar, wind, or geothermal energy or ocean energy;

(ii) biomass (as defined in section 15852(b) of this title);

(iii) landfill gas; or

(iv) Alaska small hydroelectric power.

(b) Renewable energy construction grants

(1) In general

The Secretary shall use amounts appropriated under this section to make grants for use in carrying out renewable energy projects.

(2) Criteria

Not later than 180 days after December 19, 2007, the Secretary shall set forth criteria for use in awarding grants under this section.

(3) Application

To receive a grant from the Secretary under paragraph (1), an eligible applicant shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including a written assurance that—

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

struction in the locality, as determined by the Secretary of Labor in accordance with sections 3141–3144, 3146, and 3147 of title 40; and

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

(4) Non-Federal share

Each eligible applicant that receives a grant under this subsection shall contribute to the total cost of the renewable energy project constructed by the eligible applicant an amount not less than 50 percent of the total cost of the project.

(c) Authorization of appropriations

There are authorized to be appropriated to the Fund such sums as are necessary to carry out this section.

(Pub. L. 110–140, title VIII, § 803, Dec. 19, 2007, 121 Stat. 1718.)

REFERENCES IN TEXT

Reorganization Plan Numbered 14 of 1950, referred to in subsec. (b)(3)(B), is set out in the Appendix to Title 5, Government Organization and Employees.

§ 17283. Coordination of planned refinery outages

(a) Definitions

In this section:

(1) Administrator

The term ''Administrator'' means the Administrator of the Energy Information Administration.

(2) Planned refinery outage

(A) In general

The term ''planned refinery outage'' means a removal, scheduled before the date on which the removal occurs, of a refinery, or any unit of a refinery, from service for maintenance, repair, or modification.

(B) Exclusion

The term ''planned refinery outage'' does not include any necessary and unplanned removal of a refinery, or any unit of a refinery, from service as a result of a component failure, safety hazard, emergency, or action reasonably anticipated to be necessary to prevent such events.

(3) Refined petroleum product

The term ''refined petroleum product'' means any gasoline, diesel fuel, fuel oil, lubricating oil, liquid petroleum gas, or other petroleum distillate that is produced through the refining or processing of crude oil or an oil derived from tar sands, shale, or coal.

(4) Refinery

The term ''refinery'' means a facility used in the production of a refined petroleum product through distillation, cracking, or any other process.

(b) Review and analysis of available information

The Administrator shall, on an ongoing basis—

(1) review information on refinery outages that is available from commercial reporting services;

(2) analyze that information to determine whether the scheduling of a refinery outage may nationally or regionally substantially affect the price or supply of any refined petroleum product by—

(A) decreasing the production of the refined petroleum product; and

(B) causing or contributing to a retail or wholesale supply shortage or disruption;

(3) not less frequently than twice each year, submit to the Secretary a report describing the results of the review and analysis under paragraphs (1) and (2); and

(4) specifically alert the Secretary of any refinery outage that the Administrator determines may nationally or regionally substantially affect the price or supply of a refined petroleum product.

(c) Action by Secretary

On a determination by the Secretary, based on a report or alert under paragraph (3) or (4) of subsection (b), that a refinery outage may affect the price or supply of a refined petroleum product, the Secretary shall make available to refinery operators information on planned refinery outages to encourage reductions of the quantity of refinery capacity that is out of service at any time.

(d) Limitation

Nothing in this section shall alter any existing legal obligation or responsibility of a refinery operator, or create any legal right of action, nor shall this section authorize the Secretary—

(1) to prohibit a refinery operator from conducting a planned refinery outage; or

(2) to require a refinery operator to continue to operate a refinery.

(Pub. L. 110–140, title VIII, § 804, Dec. 19, 2007, 121 Stat. 1720.)

§ 17284. Assessment of resources

(a) 5-year plan

(1) Establishment

The Administrator of the Energy Information Administration (referred to in this section as the ''Administrator'') shall establish a 5-year plan to enhance the quality and scope of the data collection necessary to ensure the scope, accuracy, and timeliness of the information needed for efficient functioning of energy markets and related financial operations.

(2) Requirement

In establishing the plan under paragraph (1), the Administrator shall pay particular attention to—

(A) data series terminated because of budget constraints;

(B) data on demand response;

(C) timely data series of State-level information;

(D) improvements in the area of oil and gas data;

(E) improvements in data on solid byproducts from coal-based energy-producing facilities; and

(F) the ability to meet applicable deadlines under Federal law (including regulations) to provide data required by Congress.

(b) Submission to Congress

The Administrator shall submit to Congress the plan established under subsection (a), including a description of any improvements needed to enhance the ability of the Administrator to collect and process energy information in a manner consistent with the needs of energy markets.

(c) Guidelines

(1) In general

The Administrator shall—

(A) establish guidelines to ensure the quality, comparability, and scope of State energy data, including data on energy production and consumption by product and sector and renewable and alternative sources, required to provide a comprehensive, accurate energy profile at the State level;

(B) share company-level data collected at the State level with each State involved, in a manner consistent with the legal authorities, confidentiality protections, and stated uses in effect at the time the data were collected, subject to the condition that the State shall agree to reasonable requirements for use of the data, as the Administrator may require;

(C) assess any existing gaps in data obtained and compiled by the Energy Information Administration; and

(D) evaluate the most cost-effective ways to address any data quality and quantity issues in conjunction with State officials.

(2) Consultation

The Administrator shall consult with State officials and the Federal Energy Regulatory Commission on a regular basis in—

(A) establishing guidelines and determining the scope of State-level data under paragraph (1); and

(B) exploring ways to address data needs and serve data uses.

(d) Assessment of State data needs

Not later than 1 year after December 19, 2007, the Administrator shall submit to Congress an assessment of State-level data needs, including a plan to address the needs.

(e) Authorization of appropriations

In addition to any other amounts made available to the Administrator, there are authorized to be appropriated to the Administrator to carry out this section—

(1) $10,000,000 for fiscal year 2008;
(2) $10,000,000 for fiscal year 2009;
(3) $10,000,000 for fiscal year 2010;
(4) $15,000,000 for fiscal year 2011;
(5) $20,000,000 for fiscal year 2012; and
(6) such sums as are necessary for subsequent fiscal years.

(Pub. L. 110–140, title VIII, § 805, Dec. 19, 2007, 121 Stat. 1721.)

§ 17285. Sense of Congress relating to the use of renewable resources to generate energy

(a) Findings

Congress finds that—

(1) the United States has a quantity of renewable energy resources that is sufficient to supply a significant portion of the energy needs of the United States;

(2) the agricultural, forestry, and working land of the United States can help ensure a sustainable domestic energy system;

(3) accelerated development and use of renewable energy technologies provide numerous benefits to the United States, including improved national security, improved balance of payments, healthier rural economies, improved environmental quality, and abundant, reliable, and affordable energy for all citizens of the United States;

(4) the production of transportation fuels from renewable energy would help the United States meet rapidly growing domestic and global energy demands, reduce the dependence of the United States on energy imported from volatile regions of the world that are politically unstable, stabilize the cost and availability of energy, and safeguard the economy and security of the United States;

(5) increased energy production from domestic renewable resources would attract substantial new investments in energy infrastructure, create economic growth, develop new jobs for the citizens of the United States, and increase the income for farm, ranch, and forestry jobs in the rural regions of the United States;

(6) increased use of renewable energy is practical and can be cost effective with the implementation of supportive policies and proper incentives to stimulate markets and infrastructure; and

(7) public policies aimed at enhancing renewable energy production and accelerating technological improvements will further reduce energy costs over time and increase market demand.

(b) Sense of Congress

It is the sense of Congress that it is the goal of the United States that, not later than January 1, 2025, the agricultural, forestry, and working land of the United States should—

(1) provide from renewable resources not less than 25 percent of the total energy consumed in the United States; and

(2) continue to produce safe, abundant, and affordable food, feed, and fiber.

(Pub. L. 110–140, title VIII, § 806, Dec. 19, 2007, 121 Stat. 1722.)

§ 17286. Geothermal assessment, exploration information, and priority activities

(a) In general

Not later than January 1, 2012, the Secretary of the Interior, acting through the Director of the United States Geological Survey, shall—

(1) complete a comprehensive nationwide geothermal resource assessment that examines the full range of geothermal resources in the United States; and

(2) submit to the the[1] Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Re-

[1] So in original.

sources of the Senate a report describing the results of the assessment.

(b) Periodic updates

At least once every 10 years, the Secretary shall update the national assessment required under this section to support public and private sector decisionmaking.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary of the Interior to carry out this section—

(1) $15,000,000 for each of fiscal years 2008 through 2012; and

(2) such sums as are necessary for each of fiscal years 2013 through 2022.

(Pub. L. 110–140, title VIII, § 807, Dec. 19, 2007, 121 Stat. 1723.)

PART B—PROHIBITIONS ON MARKET MANIPULATION AND FALSE INFORMATION

§ 17301. Prohibition on market manipulation

It is unlawful for any person, directly or indirectly, to use or employ, in connection with the purchase or sale of crude oil[1] gasoline or petroleum distillates at wholesale, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Federal Trade Commission may prescribe as necessary or appropriate in the public interest or for the protection of United States citizens.

(Pub. L. 110–140, title VIII, § 811, Dec. 19, 2007, 121 Stat. 1723.)

§ 17302. Prohibition on false information

It is unlawful for any person to report information related to the wholesale price of crude oil[1] gasoline or petroleum distillates to a Federal department or agency if—

(1) the person knew, or reasonably should have known, the information to be false or misleading;

(2) the information was required by law to be reported; and

(3) the person intended the false or misleading data to affect data compiled by the department or agency for statistical or analytical purposes with respect to the market for crude oil, gasoline, or petroleum distillates.

(Pub. L. 110–140, title VIII, § 812, Dec. 19, 2007, 121 Stat. 1723.)

§ 17303. Enforcement by the Federal Trade Commission

(a) Enforcement

This part shall be enforced by the Federal Trade Commission in the same manner, by the same means, and with the same jurisdiction as though all applicable terms of the Federal Trade Commission Act (15 U.S.C. 41 et seq.) were incorporated into and made a part of this part.

(b) Violation is treated as unfair or deceptive act or practice

The violation of any provision of this part shall be treated as an unfair or deceptive act or practice proscribed under a rule issued under section 18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)).

(Pub. L. 110–140, title VIII, § 813, Dec. 19, 2007, 121 Stat. 1724.)

REFERENCES IN TEXT

The Federal Trade Commission Act, referred to in subsec. (a), is act Sept. 26, 1914, ch. 311, 38 Stat. 717, which is classified generally to subchapter I (§ 41 et seq.) of chapter 2 of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see section 58 of Title 15 and Tables.

§ 17304. Penalties

(a) Civil penalty

In addition to any penalty applicable under the Federal Trade Commission Act (15 U.S.C. 41 et seq.), any supplier that violates section 17301 or 17302 of this title shall be punishable by a civil penalty of not more than $1,000,000.

(b) Method

The penalties provided by subsection (a) shall be obtained in the same manner as civil penalties imposed under section 5 of the Federal Trade Commission Act (15 U.S.C. 45).

(c) Multiple offenses; mitigating factors

In assessing the penalty provided by subsection (a)—

(1) each day of a continuing violation shall be considered a separate violation; and

(2) the court shall take into consideration, among other factors—

(A) the seriousness of the violation; and

(B) the efforts of the person committing the violation to remedy the harm caused by the violation in a timely manner.

(Pub. L. 110–140, title VIII, § 814, Dec. 19, 2007, 121 Stat. 1724.)

REFERENCES IN TEXT

The Federal Trade Commission Act, referred to in subsec. (a), is act Sept. 26, 1914, ch. 311, 38 Stat. 717, which is classified generally to subchapter I (§ 41 et seq.) of chapter 2 of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see section 58 of Title 15 and Tables.

§ 17305. Effect on other laws

(a) Other authority of the Commission

Nothing in this part limits or affects the authority of the Federal Trade Commission to bring an enforcement action or take any other measure under the Federal Trade Commission Act (15 U.S.C. 41 et seq.) or any other provision of law.

(b) Antitrust law

Nothing in this part shall be construed to modify, impair, or supersede the operation of any of the antitrust laws. For purposes of this subsection, the term ''antitrust laws'' shall have the meaning given it in subsection (a) of the first section of the Clayton Act (15 U.S.C. 12), except that it includes section 5 of the Federal Trade Commission Act (15 U.S.C. 45) to the extent that such section 5 applies to unfair methods of competition.

(c) State law

Nothing in this part preempts any State law.

[1] So in original. A comma probably should appear.

[1] So in original. A comma probably should appear.

(Pub. L. 110–140, title VIII, § 815, Dec. 19, 2007, 121 Stat. 1724.)

REFERENCES IN TEXT

The Federal Trade Commission Act, referred to in subsec. (a), is act Sept. 26, 1914, ch. 311, 38 Stat. 717, which is classified generally to subchapter I (§ 41 et seq.) of chapter 2 of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see section 58 of Title 15 and Tables.

SUBCHAPTER VIII—INTERNATIONAL ENERGY PROGRAMS

§ 17321. Definitions

In this subchapter:

(1) Appropriate congressional committees

The term ''appropriate congressional committees'' means—

(A) the Committee on Foreign Affairs and the Committee on Energy and Commerce of the House of Representatives; and

(B) the Committee on Foreign Relations, the Committee on Energy and Natural Resources, the Committee on Environment and Public Works, and the Committee on Commerce, Science, and Transportation of the Senate.

(2) Clean and efficient energy technology

The term ''clean and efficient energy technology'' means an energy supply or end-use technology that, compared to a similar technology already in widespread commercial use in a recipient country, will—

(A) reduce emissions of greenhouse gases; or

(B)(i) increase efficiency of energy production; or

(ii) decrease intensity of energy usage.

(3) Greenhouse gas

The term ''greenhouse gas'' means—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) hydrofluorocarbons;

(E) perfluorocarbons; or

(F) sulfur hexafluoride.

(Pub. L. 110–140, title IX, § 901, Dec. 19, 2007, 121 Stat. 1725.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original ''this title'', meaning title IX of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1725, which enacted this subchapter and amended section 5314 of Title 5, Government Organization and Employees, section 9101 of Title 31, Money and Finance, and section 402 of Title 50, War and National Defense. For complete classification of title IX to the Code, see Tables.

PART A—ASSISTANCE TO PROMOTE CLEAN AND EFFICIENT ENERGY TECHNOLOGIES IN FOREIGN COUNTRIES

§ 17331. United States assistance for developing countries

(a) Assistance authorized

The Administrator of the United States Agency for International Development shall support policies and programs in developing countries that promote clean and efficient energy technologies—

(1) to produce the necessary market conditions for the private sector delivery of energy and environmental management services;

(2) to create an environment that is conducive to accepting clean and efficient energy technologies that support the overall purpose of reducing greenhouse gas emissions, including—

(A) improving policy, legal, and regulatory frameworks;

(B) increasing institutional abilities to provide energy and environmental management services; and

(C) increasing public awareness and participation in the decision-making of delivering energy and environmental management services; and

(3) to promote the use of American-made clean and efficient energy technologies, products, and energy and environmental management services.

(b) Report

The Administrator of the United States Agency for International Development shall submit to the appropriate congressional committees an annual report on the implementation of this section for each of the fiscal years 2008 through 2012.

(c) Authorization of appropriations

To carry out this section, there are authorized to be appropriated to the Administrator of the United States Agency for International Development $200,000,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title IX, § 911, Dec. 19, 2007, 121 Stat. 1725.)

§ 17332. United States exports and outreach programs for India, China, and other countries

(a) Assistance authorized

The Secretary of Commerce shall direct the United States and Foreign Commercial Service to expand or create a corps of the Foreign Commercial Service officers to promote United States exports in clean and efficient energy technologies and build the capacity of government officials in India, China, and any other country the Secretary of Commerce determines appropriate, to become more familiar with the available technologies—

(1) by assigning or training Foreign Commercial Service attachés, who have expertise in clean and efficient energy technologies from the United States, to embark on business development and outreach efforts to such countries; and

(2) by deploying the attachés described in paragraph (1) to educate provincial, state, and local government officials in such countries on the variety of United States-based technologies in clean and efficient energy technologies for the purposes of promoting United States exports and reducing global greenhouse gas emissions.

(b) Report

The Secretary of Commerce shall submit to the appropriate congressional committees an

annual report on the implementation of this section for each of the fiscal years 2008 through 2012.

(c) Authorization of appropriations

To carry out this section, there are authorized to be appropriated to the Secretary of Commerce such sums as may be necessary for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title IX, § 912, Dec. 19, 2007, 121 Stat. 1726.)

§ 17333. United States trade missions to encourage private sector trade and investment

(a) Assistance authorized

The Secretary of Commerce shall direct the International Trade Administration to expand or create trade missions to and from the United States to encourage private sector trade and investment in clean and efficient energy technologies—

(1) by organizing and facilitating trade missions to foreign countries and by matching United States private sector companies with opportunities in foreign markets so that clean and efficient energy technologies can help to combat increases in global greenhouse gas emissions; and

(2) by creating reverse trade missions in which the Department of Commerce facilitates the meeting of foreign private and public sector organizations with private sector companies in the United States for the purpose of showcasing clean and efficient energy technologies in use or in development that could be exported to other countries.

(b) Report

The Secretary of Commerce shall submit to the appropriate congressional committees an annual report on the implementation of this section for each of the fiscal years 2008 through 2012.

(c) Authorization of appropriations

To carry out this section, there are authorized to be appropriated to the Secretary of Commerce such sums as may be necessary for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title IX, § 913, Dec. 19, 2007, 121 Stat. 1726.)

§ 17334. Actions by Overseas Private Investment Corporation

(a) Sense of Congress

It is the sense of Congress that the Overseas Private Investment Corporation should promote greater investment in clean and efficient energy technologies by—

(1) proactively reaching out to United States companies that are interested in investing in clean and efficient energy technologies in countries that are significant contributors to global greenhouse gas emissions;

(2) giving preferential treatment to the evaluation and awarding of projects that involve the investment or utilization of clean and efficient energy technologies; and

(3) providing greater flexibility in supporting projects that involve the investment or utilization of clean and efficient energy technologies, including financing, insurance, and other assistance.

(b) Report

The Overseas Private Investment Corporation shall include in its annual report required under section 2200a of title 22—

(1) a description of the activities carried out to implement this section; or

(2) if the Corporation did not carry out any activities to implement this section, an explanation of the reasons therefor.

(Pub. L. 110–140, title IX, § 914, Dec. 19, 2007, 121 Stat. 1727.)

§ 17335. Actions by United States Trade and Development Agency

(a) Assistance authorized

The Director of the Trade and Development Agency shall establish or support policies that—

(1) proactively seek opportunities to fund projects that involve the utilization of clean and efficient energy technologies, including in trade capacity building and capital investment projects;

(2) where appropriate, advance the utilization of clean and efficient energy technologies, particularly to countries that have the potential for significant reduction in greenhouse gas emissions; and

(3) recruit and retain individuals with appropriate expertise or experience in clean, renewable, and efficient energy technologies to identify and evaluate opportunities for projects that involve clean and efficient energy technologies and services.

(b) Report

The President shall include in the annual report on the activities of the Trade and Development Agency required under section 2421(d) of title 22 a description of the activities carried out to implement this section.

(Pub. L. 110–140, title IX, § 915, Dec. 19, 2007, 121 Stat. 1727.)

§ 17336. Deployment of international clean and efficient energy technologies and investment in global energy markets

(a) Task Force

(1) Establishment

Not later than 90 days after December 19, 2007, the President shall establish a Task Force on International Cooperation for Clean and Efficient Energy Technologies (in this section referred to as the ''Task Force'').

(2) Composition

The Task Force shall be composed of representatives, appointed by the head of the respective Federal department or agency, of—

(A) the Council on Environmental Quality;

(B) the Department of Energy;

(C) the Department of Commerce;

(D) the Department of the Treasury;

(E) the Department of State;

(F) the Environmental Protection Agency;

(G) the United States Agency for International Development;

(H) the Export-Import Bank of the United States;

(I) the Overseas Private Investment Corporation:[1]

(J) the Trade and Development Agency;

(K) the Small Business Administration;

(L) the Office of the United States Trade Representative; and

(M) other Federal departments and agencies, as determined by the President.

(3) Chairperson

The President shall designate a Chairperson or Co-Chairpersons of the Task Force.

(4) Duties

The Task Force—

(A) shall develop and assist in the implementation of the strategy required under subsection (c); and

(B)(i) shall analyze technology, policy, and market opportunities for the development, demonstration, and deployment of clean and efficient energy technologies on an international basis; and

(ii) shall examine relevant trade, tax, finance, international, and other policy issues to assess which policies, in the United States and in developing countries, would help open markets and improve the export of clean and efficient energy technologies from the United States.

(5) Termination

The Task Force, including any working group established by the Task Force pursuant to subsection (b), shall terminate 12 years after December 19, 2007.

(b) Working groups

(1) Establishment

The Task Force—

(A) shall establish an Interagency Working Group on the Export of Clean and Efficient Energy Technologies (in this section referred to as the ''Interagency Working Group''); and

(B) may establish other working groups as may be necessary to carry out this section.

(2) Composition

The Interagency Working Group shall be composed of—

(A) the Secretary of Energy, the Secretary of Commerce, and the Secretary of State, who shall serve as Co-Chairpersons of the Interagency Working Group; and

(B) other members, as determined by the Chairperson or Co-Chairpersons of the Task Force.

(3) Duties

The Interagency Working Group shall coordinate the resources and relevant programs of the Department of Energy, the Department of Commerce, the Department of State, and other relevant Federal departments and agencies to support the export of clean and efficient energy technologies developed or demonstrated in the United States to other countries and the deployment of such clean and efficient energy technologies in such other countries.

(4) Interagency Center

The Interagency Working Group—

(A) shall establish an Interagency Center on the Export of Clean and Efficient Energy Technologies (in this section referred to as the ''Interagency Center'') to assist the Interagency Working Group in carrying out its duties required under paragraph (3); and

(B) shall locate the Interagency Center at a site agreed upon by the Co-Chairpersons of the Interagency Working Group, with the approval of the Chairperson or Co-Chairpersons of the Task Force.

(c) Strategy

(1) In general

Not later than 1 year after December 19, 2007, the Task Force shall develop and submit to the President and the appropriate congressional committees a strategy to—

(A) support the development and implementation of programs, policies, and initiatives in developing countries to promote the adoption and deployment of clean and efficient energy technologies, with an emphasis on those developing countries that are expected to experience the most significant growth in energy production and use over the next 20 years;

(B) open and expand clean and efficient energy technology markets and facilitate the export of clean and efficient energy technologies to developing countries, in a manner consistent with United States obligations as a member of the World Trade Organization;

(C) integrate into the foreign policy objectives of the United States the promotion of—

(i) the deployment of clean and efficient energy technologies and the reduction of greenhouse gas emissions in developing countries; and

(ii) the export of clean and efficient energy technologies; and

(D) develop financial mechanisms and instruments, including securities that mitigate the political and foreign exchange risks of uses that are consistent with the foreign policy objectives of the United States by combining the private sector market and government enhancements, that—

(i) are cost-effective; and

(ii) facilitate private capital investment in clean and efficient energy technology projects in developing countries.

(2) Updates

Not later than 3 years after the date of submission of the strategy under paragraph (1), and every 3 years thereafter, the Task Force shall update the strategy in accordance with the requirements of paragraph (1).

(d) Report

(1) In general

Not later than 3 years after the date of submission of the strategy under subsection (c)(1), and every 3 years thereafter, the President

[1] So in original. The colon probably should be a semicolon.

shall transmit to the appropriate congressional committees a report on the implementation of this section for the prior 3-year period.

(2) Matters to be included

The report required under paragraph (1) shall include the following:

(A) The update of the strategy required under subsection (c)(2) and a description of the actions taken by the Task Force to assist in the implementation of the strategy.

(B) A description of actions taken by the Task Force to carry out the duties required under subsection (a)(4)(B).

(C) A description of assistance provided under this section.

(D) The results of programs, projects, and activities carried out under this section.

(E) A description of priorities for promoting the diffusion and adoption of clean and efficient energy technologies and strategies in developing countries, taking into account economic and security interests of the United States and opportunities for the export of technology of the United States.

(F) Recommendations to the heads of appropriate Federal departments and agencies on methods to streamline Federal programs and policies to improve the role of such Federal departments and agencies in the development, demonstration, and deployment of clean and efficient energy technologies on an international basis.

(G) Strategies to integrate representatives of the private sector and other interested groups on the export and deployment of clean and efficient energy technologies.

(H) A description of programs to disseminate information to the private sector and the public on clean and efficient energy technologies and opportunities to transfer such clean and efficient energy technologies.

(e) Authorization of appropriations

There are authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2008 through 2020.

(Pub. L. 110–140, title IX, § 916, Dec. 19, 2007, 121 Stat. 1728.)

§ 17337. United States-Israel energy cooperation

(a) Findings

Congress finds that—

(1) it is in the highest national security interests of the United States to develop renewable energy sources;

(2) the State of Israel is a steadfast ally of the United States;

(3) the special relationship between the United States and Israel is manifested in a variety of cooperative scientific research and development programs, such as—

(A) the United States-Israel Binational Science Foundation; and

(B) the United States-Israel Binational Industrial Research and Development Foundation;

(4) those programs have made possible many scientific, technological, and commercial breakthroughs in the fields of life sciences, medicine, bioengineering, agriculture, biotechnology, communications, and others;

(5) on February 1, 1996, the Secretary of Energy (referred to in this section as the ''Secretary'') and the Israeli Minister of Energy and Infrastructure signed an agreement to establish a framework for collaboration between the United States and Israel in energy research and development activities;

(6) Israeli scientists and engineers are at the forefront of research and development in the field of renewable energy sources; and

(7) enhanced cooperation between the United States and Israel for the purpose of research and development of renewable energy sources would be in the national interests of both countries.

(b) Grant program

(1) Establishment

In implementing the agreement entitled the ''Agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel Concerning Energy Cooperation'', dated February 1, 1996, the Secretary shall establish a grant program in accordance with the requirements of sections 16352 and 16353 of this title to support research, development, and commercialization of renewable energy or energy efficiency.

(2) Types of energy

In carrying out paragraph (1), the Secretary may make grants to promote—

(A) solar energy;

(B) biomass energy;

(C) energy efficiency;

(D) wind energy;

(E) geothermal energy;

(F) wave and tidal energy; and

(G) advanced battery technology.

(3) Eligible applicants

An applicant shall be eligible to receive a grant under this subsection if the project of the applicant—

(A) addresses a requirement in the area of improved energy efficiency or renewable energy sources, as determined by the Secretary; and

(B) is a joint venture between—

(i)(I) a for-profit business entity, academic institution, National Laboratory (as defined in section 15801 of this title), or nonprofit entity in the United States; and

(II) a for-profit business entity, academic institution, or nonprofit entity in Israel; or

(ii)(I) the Federal Government; and

(II) the Government of Israel.

(4) Applications

To be eligible to receive a grant under this subsection, an applicant shall submit to the Secretary an application for the grant in accordance with procedures established by the Secretary, in consultation with the advisory board established under paragraph (5).

(5) Advisory board

(A) Establishment

The Secretary shall establish an advisory board—

(i) to monitor the method by which grants are awarded under this subsection; and

(ii) to provide to the Secretary periodic performance reviews of actions taken to carry out this subsection.

(B) Composition

The advisory board established under subparagraph (A) shall be composed of 3 members, to be appointed by the Secretary, of whom—

(i) 1 shall be a representative of the Federal Government;

(ii) 1 shall be selected from a list of nominees provided by the United States-Israel Binational Science Foundation; and

(iii) 1 shall be selected from a list of nominees provided by the United States-Israel Binational Industrial Research and Development Foundation.

(6) Contributed funds

Notwithstanding section 3302 of title 31, 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.

(7) Report

Not later than 180 days after the date of completion of a project for which a grant is provided under this subsection, the grant recipient shall submit to the Secretary a report that contains—

(A) a description of the method by which the recipient used the grant funds; and

(B) an evaluation of the level of success of each project funded by the grant.

(8) Classification

Grants shall be awarded under this subsection only for projects that are considered to be unclassified by both the United States and Israel.

(c) Termination

The grant program and the advisory committee established under this section terminate on the date that is 7 years after December 19, 2007.

(d) Authorization of appropriations

The Secretary shall use amounts authorized to be appropriated under section 16231 of this title to carry out this section.

(Pub. L. 110–140, title IX, § 917, Dec. 19, 2007, 121 Stat. 1730.)

PART B—INTERNATIONAL CLEAN ENERGY FOUNDATION

§ 17351. Definitions

In this part:

(1) Board

The term ''Board'' means the Board of Directors of the Foundation established pursuant to section 17352(c) of this title.

(2) Chief Executive Officer

The term ''Chief Executive Officer'' means the chief executive officer of the Foundation appointed pursuant to section 17352(b) of this title.

(3) Foundation

The term ''Foundation'' means the International Clean Energy Foundation established by section 17352(a) of this title.

(Pub. L. 110–140, title IX, § 921, Dec. 19, 2007, 121 Stat. 1732.)

§ 17352. Establishment and management of Foundation

(a) Establishment

(1) In general

There is established in the executive branch a foundation to be known as the ''International Clean Energy Foundation'' that shall be responsible for carrying out the provisions of this part. The Foundation shall be a government corporation, as defined in section 103 of title 5.

(2) Board of Directors

The Foundation shall be governed by a Board of Directors in accordance with subsection (c).

(3) Intent of Congress

It is the intent of Congress, in establishing the structure of the Foundation set forth in this subsection, to create an entity that serves the long-term foreign policy and energy security goals of reducing global greenhouse gas emissions.

(b) Chief Executive Officer

(1) In general

There shall be in the Foundation a Chief Executive Officer who shall be responsible for the management of the Foundation.

(2) Appointment

The Chief Executive Officer shall be appointed by the Board, with the advice and consent of the Senate, and shall be a recognized leader in clean and efficient energy technologies and climate change and shall have experience in energy security, business, or foreign policy, chosen on the basis of a rigorous search.

(3) Relationship to Board

The Chief Executive Officer shall report to, and be under the direct authority of, the Board.

(4) Compensation and rank

(A) In general

The Chief Executive Officer shall be compensated at the rate provided for level III of the Executive Schedule under section 5314 of title 5.

(B) Omitted

(C) Authorities and duties

The Chief Executive Officer shall be responsible for the management of the Foundation and shall exercise the powers and discharge the duties of the Foundation.

(D) Authority to appoint officers

In consultation and with approval of the Board, the Chief Executive Officer shall appoint all officers of the Foundation.

(c) Board of Directors

(1) Establishment

There shall be in the Foundation a Board of Directors.

(2) Duties

The Board shall perform the functions specified to be carried out by the Board in this part and may prescribe, amend, and repeal bylaws, rules, regulations, and procedures governing the manner in which the business of the Foundation may be conducted and in which the powers granted to it by law may be exercised.

(3) Membership

The Board shall consist of—

(A) the Secretary of State (or the Secretary's designee), the Secretary of Energy (or the Secretary's designee), and the Administrator of the United States Agency for International Development (or the Administrator's designee); and

(B) four other individuals with relevant experience in matters relating to energy security (such as individuals who represent institutions of energy policy, business organizations, foreign policy organizations, or other relevant organizations) who shall be appointed by the President, by and with the advice and consent of the Senate, of whom—

(i) one individual shall be appointed from among a list of individuals submitted by the Majority Leader of the House of Representatives;

(ii) one individual shall be appointed from among a list of individuals submitted by the Minority Leader of the House of Representatives;

(iii) one individual shall be appointed from among a list of individuals submitted by the Majority Leader of the Senate; and

(iv) one individual shall be appointed from among a list of individuals submitted by the Minority Leader of the Senate.

(4) Chief Executive Officer

The Chief Executive Officer of the Foundation shall serve as a nonvoting, ex officio member of the Board.

(5) Terms

(A) Officers of the Federal Government

Each member of the Board described in paragraph (3)(A) shall serve for a term that is concurrent with the term of service of the individual's position as an officer within the other Federal department or agency.

(B) Other members

Each member of the Board described in paragraph (3)(B) shall be appointed for a term of 3 years and may be reappointed for a term of an additional 3 years.

(C) Vacancies

A vacancy in the Board shall be filled in the manner in which the original appointment was made.

(D) Acting members

A vacancy in the Board may be filled with an appointment of an acting member by the Chairperson of the Board for up to 1 year while a nominee is named and awaits confirmation in accordance with paragraph (3)(B).

(6) Chairperson

There shall be a Chairperson of the Board. The Secretary of State (or the Secretary's designee) shall serve as the Chairperson.

(7) Quorum

A majority of the members of the Board described in paragraph (3) shall constitute a quorum, which, except with respect to a meeting of the Board during the 135-day period beginning on December 19, 2007, shall include at least 1 member of the Board described in paragraph (3)(B).

(8) Meetings

The Board shall meet at the call of the Chairperson, who shall call a meeting no less than once a year.

(9) Compensation

(A) Officers of the Federal Government

(i) In general

A member of the Board described in paragraph (3)(A) may not receive additional pay, allowances, or benefits by reason of the member's service on the Board.

(ii) Travel expenses

Each such member of the Board shall receive travel expenses, including per diem in lieu of subsistence, in accordance with applicable provisions under subchapter I of chapter 57 of title 5.

(B) Other members

(i) In general

Except as provided in clause (ii), a member of the Board described in paragraph (3)(B)—

(I) shall be paid compensation out of funds made available for the purposes of this part at the daily equivalent of the highest rate payable under section 5332 of title 5 for each day (including travel time) during which the member is engaged in the actual performance of duties as a member of the Board; and

(II) while away from the member's home or regular place of business on necessary travel in the actual performance of duties as a member of the Board, shall be paid per diem, travel, and transportation expenses in the same manner as is provided under subchapter I of chapter 57 of title 5.

(ii) Limitation

A member of the Board may not be paid compensation under clause (i)(II) for more than 90 days in any calendar year.

(Pub. L. 110–140, title IX, § 922, Dec. 19, 2007, 121 Stat. 1733.)

CODIFICATION

Section is comprised of section 922 of Pub. L. 110–140. Subsec. (b)(4)(B) of section 922 of Pub. L. 110–140 amended section 5314 of Title 5, Government Organization and Employees.

§ 17353. Duties of Foundation

The Foundation shall—

(1) use the funds authorized by this part to make grants to promote projects outside of the United States that serve as models of how to significantly reduce the emissions of global greenhouse gases through clean and efficient energy technologies, processes, and services;

(2) seek contributions from foreign governments, especially those rich in energy resources such as member countries of the Organization of the Petroleum Exporting Countries, and private organizations to supplement funds made available under this part;

(3) harness global expertise through collaborative partnerships with foreign governments and domestic and foreign private actors, including nongovernmental organizations and private sector companies, by leveraging public and private capital, technology, expertise, and services towards innovative models that can be instituted to reduce global greenhouse gas emissions;

(4) create a repository of information on best practices and lessons learned on the utilization and implementation of clean and efficient energy technologies and processes to be used for future initiatives to tackle the climate change crisis;

(5) be committed to minimizing administrative costs and to maximizing the availability of funds for grants under this part; and

(6) promote the use of American-made clean and efficient energy technologies, processes, and services by giving preference to entities incorporated in the United States and whose technology will be substantially manufactured in the United States.

(Pub. L. 110–140, title IX, § 923, Dec. 19, 2007, 121 Stat. 1735.)

§ 17354. Annual report

(a) Report required

Not later than March 31, 2008, and each March 31 thereafter, the Foundation shall submit to the appropriate congressional committees a report on the implementation of this part during the prior fiscal year.

(b) Contents

The report required by subsection (a) shall include—

(1) the total financial resources available to the Foundation during the year, including appropriated funds, the value and source of any gifts or donations accepted pursuant to section 17355(a)(6) of this title, and any other resources;

(2) a description of the Board's policy priorities for the year and the basis upon which competitive grant proposals were solicited and awarded to nongovernmental institutions and other organizations;

(3) a list of grants made to nongovernmental institutions and other organizations that includes the identity of the institutional recipient, the dollar amount, and the results of the program; and

(4) the total administrative and operating expenses of the Foundation for the year, as well as specific information on—

(A) the number of Foundation employees and the cost of compensation for Board members, Foundation employees, and personal service contractors;

(B) costs associated with securing the use of real property for carrying out the functions of the Foundation;

(C) total travel expenses incurred by Board members and Foundation employees in connection with Foundation activities; and

(D) total representational expenses.

(Pub. L. 110–140, title IX, § 924, Dec. 19, 2007, 121 Stat. 1736.)

§ 17355. Powers of the Foundation; related provisions

(a) Powers

The Foundation—

(1) shall have perpetual succession unless dissolved by a law enacted after December 19, 2007;

(2) may adopt, alter, and use a seal, which shall be judicially noticed;

(3) may make and perform such contracts, grants, and other agreements with any person or government however designated and wherever situated, as may be necessary for carrying out the functions of the Foundation;

(4) may determine and prescribe the manner in which its obligations shall be incurred and its expenses allowed and paid, including expenses for representation;

(5) may lease, purchase, or otherwise acquire, improve, and use such real property wherever situated, as may be necessary for carrying out the functions of the Foundation;

(6) may accept money, funds, services, or property (real, personal, or mixed), tangible or intangible, made available by gift, bequest[1] grant, or otherwise for the purpose of carrying out the provisions of this subchapter from domestic or foreign private individuals, charities, nongovernmental organizations, corporations, or governments;

(7) may use the United States mails in the same manner and on the same conditions as the executive departments;

(8) may contract with individuals for personal services, who shall not be considered Federal employees for any provision of law administered by the Office of Personnel Management;

(9) may hire or obtain passenger motor vehicles; and

(10) shall have such other powers as may be necessary and incident to carrying out this part.

(b) Principal office

The Foundation shall maintain its principal office in the metropolitan area of Washington, District of Columbia.

(c) Applicability of Government Corporation Control Act

(1) In general

The Foundation shall be subject to chapter 91 of subtitle VI of title 31, except that the

[1] So in original. A comma probably should appear.

Foundation shall not be authorized to issue obligations or offer obligations to the public.

(2) Omitted

(d) Inspector General

(1) In general

The Inspector General of the Department of State shall serve as Inspector General of the Foundation, and, in acting in such capacity, may conduct reviews, investigations, and inspections of all aspects of the operations and activities of the Foundation.

(2) Authority of the Board

In carrying out the responsibilities under this subsection, the Inspector General shall report to and be under the general supervision of the Board.

(3) Reimbursement and authorization of services

(A) Reimbursement

The Foundation shall reimburse the Department of State for all expenses incurred by the Inspector General in connection with the Inspector General's responsibilities under this subsection.

(B) Authorization for services

Of the amount authorized to be appropriated under section 17357(a) of this title for a fiscal year, up to $500,000 is authorized to be made available to the Inspector General of the Department of State to conduct reviews, investigations, and inspections of operations and activities of the Foundation.

(Pub. L. 110–140, title IX, § 925, Dec. 19, 2007, 121 Stat. 1736.)

REFERENCES IN TEXT

This subchapter, referred to in subsec. (a)(6), was in the original ''this title'', meaning title IX of Pub. L. 110–140, Dec. 19, 2007, 121 Stat. 1725, which enacted this subchapter and amended section 5314 of Title 5, Government Organization and Employees, section 9101 of Title 31, Money and Finance, and section 402 of Title 50, War and National Defense. For complete classification of title IX to the Code, see Tables.

CODIFICATION

Section is comprised of section 925 of Pub. L. 110–140. Subsec. (c)(2) of section 925 of Pub. L. 110–140 amended section 9101 of Title 31, Money and Finance.

§ 17356. General personnel authorities

(a) Detail of personnel

Upon request of the Chief Executive Officer, the head of an agency may detail any employee of such agency to the Foundation on a reimbursable basis. Any employee so detailed remains, for the purpose of preserving such employee's allowances, privileges, rights, seniority, and other benefits, an employee of the agency from which detailed.

(b) Reemployment rights

(1) In general

An employee of an agency who is serving under a career or career conditional appointment (or the equivalent), and who, with the consent of the head of such agency, transfers to the Foundation, is entitled to be reemployed in such employee's former position or a position of like seniority, status, and pay in such agency, if such employee—

(A) is separated from the Foundation for any reason, other than misconduct, neglect of duty, or malfeasance; and

(B) applies for reemployment not later than 90 days after the date of separation from the Foundation.

(2) Specific rights

An employee who satisfies paragraph (1) is entitled to be reemployed (in accordance with such paragraph) within 30 days after applying for reemployment and, on reemployment, is entitled to at least the rate of basic pay to which such employee would have been entitled had such employee never transferred.

(c) Hiring authority

Of persons employed by the Foundation, no more than 30 persons may be appointed, compensated, or removed without regard to the civil service laws and regulations.

(d) Basic pay

The Chief Executive Officer may fix the rate of basic pay of employees of the Foundation without regard to the provisions of chapter 51 of title 5 (relating to the classification of positions), subchapter III of chapter 53 of such title (relating to General Schedule pay rates), except that no employee of the Foundation may receive a rate of basic pay that exceeds the rate for level IV of the Executive Schedule under section 5315 of such title.

(e) Definitions

In this section—

(1) the term ''agency'' means an executive agency, as defined by section 105 of title 5; and

(2) the term ''detail'' means the assignment or loan of an employee, without a change of position, from the agency by which such employee is employed to the Foundation.

(Pub. L. 110–140, title IX, § 926, Dec. 19, 2007, 121 Stat. 1737.)

§ 17357. Authorization of appropriations

(a) Authorization of appropriations

To carry out this part, there are authorized to be appropriated $20,000,000 for each of the fiscal years 2009 through 2013.

(b) Allocation of funds

(1) In general

The Foundation may allocate or transfer to any agency of the United States Government any of the funds available for carrying out this part. Such funds shall be available for obligation and expenditure for the purposes for which the funds were authorized, in accordance with authority granted in this part or under authority governing the activities of the United States Government agency to which such funds are allocated or transferred.

(2) Notification

The Foundation shall notify the appropriate congressional committees not less than 15 days prior to an allocation or transfer of funds pursuant to paragraph (1).

(Pub. L. 110–140, title IX, § 927, Dec. 19, 2007, 121 Stat. 1738.)

PART C—MISCELLANEOUS PROVISIONS

§ 17371. Energy diplomacy and security within the Department of State

(a) State Department Coordinator for International Energy Affairs

(1) In general

The Secretary of State should ensure that energy security is integrated into the core mission of the Department of State.

(2) Coordinator for International Energy Affairs

There is established within the Office of the Secretary of State a Coordinator for International Energy Affairs, who shall be responsible for—

(A) representing the Secretary of State in interagency efforts to develop the international energy policy of the United States;

(B) ensuring that analyses of the national security implications of global energy and environmental developments are reflected in the decision making process within the Department of State;

(C) incorporating energy security priorities into the activities of the Department of State;

(D) coordinating energy activities of the Department of State with relevant Federal agencies; and

(E) coordinating energy security and other relevant functions within the Department of State currently undertaken by offices within—

(i) the Bureau of Economic, Energy and Business Affairs;

(ii) the Bureau of Oceans and International Environmental and Scientific Affairs; and

(iii) other offices within the Department of State.

(3) Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary to carry out this subsection.

(b) Energy experts in key embassies

Not later than 180 days after December 19, 2007, the Secretary of State shall submit a report to the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives that includes—

(1) a description of the Department of State personnel who are dedicated to energy matters and are stationed at embassies and consulates in countries that are major energy producers or consumers;

(2) an analysis of the need for Federal energy specialist personnel in United States embassies and other United States diplomatic missions; and

(3) recommendations for increasing energy expertise within United States embassies among foreign service officers and options for assigning to such embassies energy attachés from the National Laboratories or other agencies within the Department of Energy.

(c) Energy advisors

The Secretary of Energy may make appropriate arrangements with the Secretary of State to assign personnel from the Department of Energy or the National Laboratories of the Department of Energy to serve as dedicated advisors on energy matters in embassies of the United States or other United States diplomatic missions.

(d) Report

Not later than 180 days after December 19, 2007, and every 2 years thereafter for the following 20 years, the Secretary of State shall submit a report to the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives that describes—

(1) the energy-related activities being conducted by the Department of State, including activities within—

(A) the Bureau of Economic, Energy and Business Affairs;

(B) the Bureau of Oceans and Environmental and Scientific Affairs; and

(C) other offices within the Department of State;

(2) the amount of funds spent on each activity within each office described in paragraph (1); and

(3) the number and qualification of personnel in each embassy (or relevant foreign posting) of the United States whose work is dedicated exclusively to energy matters.

(Pub. L. 110–140, title IX, § 931, Dec. 19, 2007, 121 Stat. 1739.)

§ 17372. Annual national energy security strategy report

(a) Reports

(1) In general

Subject to paragraph (2), on the date on which the President submits to Congress the budget for the following fiscal year under section 1105 of title 31, the President shall submit to Congress a comprehensive report on the national energy security of the United States.

(2) New Presidents

In addition to the reports required under paragraph (1), the President shall submit a comprehensive report on the national energy security of the United States by not later than 150 days after the date on which the President assumes the office of President after a presidential election.

(b) Contents

Each report under this section shall describe the national energy security strategy of the United States, including a comprehensive description of—

(1) the worldwide interests, goals, and objectives of the United States that are vital to the national energy security of the United States;

(2) the foreign policy, worldwide commitments, and national defense capabilities of the United States necessary—

(A) to deter political manipulation of world energy resources; and

(B) to implement the national energy security strategy of the United States;

(3) the proposed short-term and long-term uses of the political, economic, military, and other authorities of the United States—

(A) to protect or promote energy security; and

(B) to achieve the goals and objectives described in paragraph (1);

(4) the adequacy of the capabilities of the United States to protect the national energy security of the United States, including an evaluation of the balance among the capabilities of all elements of the national authority of the United States to support the implementation of the national energy security strategy; and

(5) such other information as the President determines to be necessary to inform Congress on matters relating to the national energy security of the United States.

(c) Classified and unclassified form

Each national energy security strategy report shall be submitted to Congress in—

(1) a classified form; and

(2) an unclassified form.

(Pub. L. 110–140, title IX, § 933, Dec. 19, 2007, 121 Stat. 1740.)

§ 17373. Convention on Supplementary Compensation for Nuclear Damage contingent cost allocation

(a) Findings and purpose

(1) Findings

Congress finds that—

(A) section 2210 of this title (commonly known as the ''Price-Anderson Act'')—

(i) provides a predictable legal framework necessary for nuclear projects; and

(ii) ensures prompt and equitable compensation in the event of a nuclear incident in the United States;

(B) the Price-Anderson Act, in effect, provides operators of nuclear powerplants with insurance for damage arising out of a nuclear incident and funds the insurance primarily through the assessment of a retrospective premium from each operator after the occurrence of a nuclear incident;

(C) the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997, will establish a global system—

(i) to provide a predictable legal framework necessary for nuclear energy projects; and

(ii) to ensure prompt and equitable compensation in the event of a nuclear incident;

(D) the Convention benefits United States nuclear suppliers that face potentially unlimited liability for nuclear incidents that are not covered by the Price-Anderson Act by replacing a potentially open-ended liability with a predictable liability regime that, in effect, provides nuclear suppliers with insurance for damage arising out of such an incident;

(E) the Convention also benefits United States nuclear facility operators that may be publicly liable for a Price-Anderson incident by providing an additional early source of funds to compensate damage arising out of the Price-Anderson incident;

(F) the combined operation of the Convention, the Price-Anderson Act, and this section will augment the quantity of assured funds available for victims in a wider variety of nuclear incidents while reducing the potential liability of United States suppliers without increasing potential costs to United States operators;

(G) the cost of those benefits is the obligation of the United States to contribute to the supplementary compensation fund established by the Convention;

(H) any such contribution should be funded in a manner that does not—

(i) upset settled expectations based on the liability regime established under the Price-Anderson Act; or

(ii) shift to Federal taxpayers liability risks for nuclear incidents at foreign installations;

(I) with respect to a Price-Anderson incident, funds already available under the Price-Anderson Act should be used; and

(J) with respect to a nuclear incident outside the United States not covered by the Price-Anderson Act, a retrospective premium should be prorated among nuclear suppliers relieved from potential liability for which insurance is not available.

(2) Purpose

The purpose of this section is to allocate the contingent costs associated with participation by the United States in the international nuclear liability compensation system established by the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997—

(A) with respect to a Price-Anderson incident, by using funds made available under section 2210 of this title to cover the contingent costs in a manner that neither increases the burdens nor decreases the benefits under section 2210 of this title; and

(B) with respect to a covered incident outside the United States that is not a Price-Anderson incident, by allocating the contingent costs equitably, on the basis of risk, among the class of nuclear suppliers relieved by the Convention from the risk of potential liability resulting from any covered incident outside the United States.

(b) Definitions

In this section:

(1) Commission

The term ''Commission'' means the Nuclear Regulatory Commission.

(2) Contingent cost

The term ''contingent cost'' means the cost to the United States in the event of a covered

incident the amount of which is equal to the amount of funds the United States is obligated to make available under paragraph 1(b) of Article III of the Convention.

(3) Convention

The term ''Convention'' means the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997.

(4) Covered incident

The term ''covered incident'' means a nuclear incident the occurrence of which results in a request for funds pursuant to Article VII of the Convention.

(5) Covered installation

The term ''covered installation'' means a nuclear installation at which the occurrence of a nuclear incident could result in a request for funds under Article VII of the Convention.

(6) Covered person

(A) In general

The term ''covered person'' means—

(i) a United States person; and

(ii) an individual or entity (including an agency or instrumentality of a foreign country) that—

(I) is located in the United States; or

(II) carries out an activity in the United States.

(B) Exclusions

The term ''covered person'' does not include—

(i) the United States; or

(ii) any agency or instrumentality of the United States.

(7) Nuclear supplier

The term ''nuclear supplier'' means a covered person (or a successor in interest of a covered person) that—

(A) supplies facilities, equipment, fuel, services, or technology pertaining to the design, construction, operation, or decommissioning of a covered installation; or

(B) transports nuclear materials that could result in a covered incident.

(8) Price-Anderson incident

The term ''Price-Anderson incident'' means a covered incident for which section 2210 of this title would make funds available to compensate for public liability (as defined in section 2014 of this title).

(9) Secretary

The term ''Secretary'' means the Secretary of Energy.

(10) United States

(A) In general

The term ''United States'' has the meaning given the term in section 2014 of this title.

(B) Inclusions

The term ''United States'' includes—

(i) the Commonwealth of Puerto Rico;

(ii) any other territory or possession of the United States;

(iii) the Canal Zone; and

(iv) the waters of the United States territorial sea under Presidential Proclamation Number 5928, dated December 27, 1988 (43 U.S.C. 1331 note).

(11) United States person

The term ''United States person'' means—

(A) any individual who is a resident, national, or citizen of the United States (other than an individual residing outside of the United States and employed by a person who is not a United States person); and

(B) any corporation, partnership, association, joint stock company, business trust, unincorporated organization, or sole proprietorship that is organized under the laws of the United States.

(c) Use of Price-Anderson funds

(1) In general

Funds made available under section 2210 of this title shall be used to cover the contingent cost resulting from any Price-Anderson incident.

(2) Effect

The use of funds pursuant to paragraph (1) shall not reduce the limitation on public liability established under section 2210(e) of this title.

(d) Effect on amount of public liability

(1) In general

Funds made available to the United States under Article VII of the Convention with respect to a Price-Anderson incident shall be used to satisfy public liability resulting from the Price-Anderson incident.

(2) Amount

The amount of public liability allowable under section 2210 of this title relating to a Price-Anderson incident under paragraph (1) shall be increased by an amount equal to the difference between—

(A) the amount of funds made available for the Price-Anderson incident under Article VII of the Convention; and

(B) the amount of funds used under subsection (c) to cover the contingent cost resulting from the Price-Anderson incident.

(e) Retrospective risk pooling program

(1) In general

Except as provided under paragraph (2), each nuclear supplier shall participate in a retrospective risk pooling program in accordance with this section to cover the contingent cost resulting from a covered incident outside the United States that is not a Price-Anderson incident.

(2) Deferred payment

(A) In general

The obligation of a nuclear supplier to participate in the retrospective risk pooling program shall be deferred until the United States is called on to provide funds pursuant to Article VII of the Convention with respect to a covered incident that is not a Price-Anderson incident.

(B) Amount of deferred payment

The amount of a deferred payment of a nuclear supplier under subparagraph (A) shall be based on the risk-informed assessment formula determined under subparagraph (C).

(C) Risk-informed assessment formula

(i) In general

Not later than 3 years after December 19, 2007, and every 5 years thereafter, the Secretary shall, by regulation, determine the risk-informed assessment formula for the allocation among nuclear suppliers of the contingent cost resulting from a covered incident that is not a Price-Anderson incident, taking into account risk factors such as—

(I) the nature and intended purpose of the goods and services supplied by each nuclear supplier to each covered installation outside the United States;

(II) the quantity of the goods and services supplied by each nuclear supplier to each covered installation outside the United States;

(III) the hazards associated with the supplied goods and services if the goods and services fail to achieve the intended purposes;

(IV) the hazards associated with the covered installation outside the United States to which the goods and services are supplied;

(V) the legal, regulatory, and financial infrastructure associated with the covered installation outside the United States to which the goods and services are supplied; and

(VI) the hazards associated with particular forms of transportation.

(ii) Factors for consideration

In determining the formula, the Secretary may—

(I) exclude—

(aa) goods and services with negligible risk;

(bb) classes of goods and services not intended specifically for use in a nuclear installation;

(cc) a nuclear supplier with a de minimis share of the contingent cost; and

(dd) a nuclear supplier no longer in existence for which there is no identifiable successor; and

(II) establish the period on which the risk assessment is based.

(iii) Application

In applying the formula, the Secretary shall not consider any covered installation or transportation for which funds would be available under section 2210 of this title.

(iv) Report

Not later than 5 years after December 19, 2007, and every 5 years thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives, a report on whether there is a need for continuation or amendment of this section, taking into account the effects of the implementation of the Convention on the United States nuclear industry and suppliers.

(f) Reporting

(1) Collection of information

(A) In general

The Secretary may collect information necessary for developing and implementing the formula for calculating the deferred payment of a nuclear supplier under subsection (e)(2).

(B) Provision of information

Each nuclear supplier and other appropriate persons shall make available to the Secretary such information, reports, records, documents, and other data as the Secretary determines, by regulation, to be necessary or appropriate to develop and implement the formula under subsection (e)(2)(C).

(2) Private insurance

The Secretary shall make available to nuclear suppliers, and insurers of nuclear suppliers, information to support the voluntary establishment and maintenance of private insurance against any risk for which nuclear suppliers may be required to pay deferred payments under this section.

(g) Effect on liability

Nothing in any other law (including regulations) limits liability for a covered incident to an amount equal to less than the amount prescribed in paragraph 1(a) of Article IV of the Convention, unless the law—

(1) specifically refers to this section; and

(2) explicitly repeals, alters, amends, modifies, impairs, displaces, or supersedes the effect of this subsection.

(h) Payments to and by the United States

(1) Action by nuclear suppliers

(A) Notification

In the case of a request for funds under Article VII of the Convention resulting from a covered incident that is not a Price-Anderson incident, the Secretary shall notify each nuclear supplier of the amount of the deferred payment required to be made by the nuclear supplier.

(B) Payments

(i) In general

Except as provided under clause (ii), not later than 60 days after receipt of a notification under subparagraph (A), a nuclear supplier shall pay to the general fund of the Treasury the deferred payment of the nuclear supplier required under subparagraph (A).

(ii) Annual payments

A nuclear supplier may elect to prorate payment of the deferred payment required under subparagraph (A) in 5 equal annual

payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due).

(C) Vouchers

A nuclear supplier shall submit payment certification vouchers to the Secretary of the Treasury in accordance with section 3325 of title 31.

(2) Use of funds

(A) In general

Amounts paid into the Treasury under paragraph (1) shall be available to the Secretary of the Treasury, without further appropriation and without fiscal year limitation, for the purpose of making the contributions of public funds required to be made by the United States under the Convention.

(B) Action by Secretary of Treasury

The Secretary of the Treasury shall pay the contribution required under the Convention to the court of competent jurisdiction under Article XIII of the Convention with respect to the applicable covered incident.

(3) Failure to pay

If a nuclear supplier fails to make a payment required under this subsection, the Secretary may take appropriate action to recover from the nuclear supplier—

(A) the amount of the payment due from the nuclear supplier;

(B) any applicable interest on the payment; and

(C) a penalty of not more than twice the amount of the deferred payment due from the nuclear supplier.

(i) Limitation on judicial review; cause of action

(1) Limitation on judicial review

(A) In general

In any civil action arising under the Convention over which Article XIII of the Convention grants jurisdiction to the courts of the United States, any appeal or review by writ of mandamus or otherwise with respect to a nuclear incident that is not a Price-Anderson incident shall be in accordance with chapter 83 of title 28, except that the appeal or review shall occur in the United States Court of Appeals for the District of Columbia Circuit.

(B) Supreme Court jurisdiction

Nothing in this paragraph affects the jurisdiction of the Supreme Court of the United States under chapter 81 of title 28.

(2) Cause of action

(A) In general

Subject to subparagraph (B), in any civil action arising under the Convention over which Article XIII of the Convention grants jurisdiction to the courts of the United States, in addition to any other cause of action that may exist, an individual or entity shall have a cause of action against the operator to recover for nuclear damage suffered by the individual or entity.

(B) Requirement

Subparagraph (A) shall apply only if the individual or entity seeks a remedy for nuclear damage (as defined in Article I of the Convention) that was caused by a nuclear incident (as defined in Article I of the Convention) that is not a Price-Anderson incident.

(C) Savings provision

Nothing in this paragraph may be construed to limit, modify, extinguish, or otherwise affect any cause of action that would have existed in the absence of enactment of this paragraph.

(j) Right of recourse

This section does not provide to an operator of a covered installation any right of recourse under the Convention.

(k) Protection of sensitive United States information

Nothing in the Convention or this section requires the disclosure of—

(1) any data that, at any time, was Restricted Data (as defined in section 2014 of this title);

(2) information relating to intelligence sources or methods protected by section 403–1(i) of title 50; or

(3) national security information classified under Executive Order 12958 (50 U.S.C. 435 note; relating to classified national security information) (or a successor Executive Order or regulation).

(*l*) Regulations

(1) In general

The Secretary or the Commission, as appropriate, may prescribe regulations to carry out section 2210 of this title and this section.

(2) Requirement

Rules prescribed under this subsection shall ensure, to the maximum extent practicable, that—

(A) the implementation of section 2210 of this title and this section is consistent and equitable; and

(B) the financial and operational burden on a Commission licensee in complying with section 2210 of this title is not greater as a result of the enactment of this section.

(3) Applicability of provision

Section 553 of title 5 shall apply with respect to the promulgation of regulations under this subsection.

(4) Effect of subsection

The authority provided under this subsection is in addition to, and does not impair or otherwise affect, any other authority of the Secretary or the Commission to prescribe regulations.

(m) Effective date

This section shall take effect on December 19, 2007.

(Pub. L. 110–140, title IX, § 934, Dec. 19, 2007, 121 Stat. 1741.)

REFERENCES IN TEXT

Presidential Proclamation Number 5928, referred to in subsec. (b)(10)(B)(iv), is set out as a note under section 1331 of Title 43, Public Lands.

Executive Order 12958, referred to in subsec. (k)(3), which was formerly set out as a note under section 435 of Title 50, War and National Defense, was revoked by Ex. Ord. No. 13526, § 6.2(g), Dec. 29, 2009, 75 F.R. 731.

§ 17374. Transparency in extractive industries resource payments

(a) Purpose

The purpose of this section is to—

(1) ensure greater United States energy security by combating corruption in the governments of foreign countries that receive revenues from the sale of their natural resources; and

(2) enhance the development of democracy and increase political and economic stability in such resource rich foreign countries.

(b) Statement of policy

It is the policy of the United States—

(1) to increase energy security by promoting anti-corruption initiatives in oil and natural gas rich countries; and

(2) to promote global energy security through promotion of programs such as the Extractive Industries Transparency Initiative (EITI) that seek to instill transparency and accountability into extractive industries resource payments.

(c) Sense of Congress

It is the sense of Congress that the United States should further global energy security and promote democratic development in resource-rich foreign countries by—

(1) encouraging further participation in the EITI by eligible countries and companies; and

(2) promoting the efficacy of the EITI program by ensuring a robust and candid review mechanism.

(d) Report

(1) Report required

Not later than 180 days after December 19, 2007, and annually thereafter, the Secretary of State, in consultation with the Secretary of Energy, shall submit to the appropriate congressional committees a report on progress made in promoting transparency in extractive industries resource payments.

(2) Matters to be included

The report required by paragraph (1) shall include a detailed description of United States participation in the EITI, bilateral and multilateral diplomatic efforts to further participation in the EITI, and other United States initiatives to strengthen energy security, deter energy kleptocracy, and promote transparency in the extractive industries.

(e) Authorization of appropriations

There is authorized to be appropriated $3,000,000 for the purposes of United States contributions to the Multi-Donor Trust Fund of the EITI.

(Pub. L. 110–140, title IX, § 935, Dec. 19, 2007, 121 Stat. 1748.)

SUBCHAPTER IX—SMART GRID

§ 17381. Statement of policy on modernization of electricity grid

It is the policy of the United States to support the modernization of the Nation's electricity transmission and distribution system to maintain a reliable and secure electricity infrastructure that can meet future demand growth and to achieve each of the following, which together characterize a Smart Grid:

(1) Increased use of digital information and controls technology to improve reliability, security, and efficiency of the electric grid.

(2) Dynamic optimization of grid operations and resources, with full cyber-security.

(3) Deployment and integration of distributed resources and generation, including renewable resources.

(4) Development and incorporation of demand response, demand-side resources, and energy-efficiency resources.

(5) Deployment of ''smart'' technologies (real-time, automated, interactive technologies that optimize the physical operation of appliances and consumer devices) for metering, communications concerning grid operations and status, and distribution automation.

(6) Integration of ''smart'' appliances and consumer devices.

(7) Deployment and integration of advanced electricity storage and peak-shaving technologies, including plug-in electric and hybrid electric vehicles, and thermal-storage air conditioning.

(8) Provision to consumers of timely information and control options.

(9) Development of standards for communication and interoperability of appliances and equipment connected to the electric grid, including the infrastructure serving the grid.

(10) Identification and lowering of unreasonable or unnecessary barriers to adoption of smart grid technologies, practices, and services.

(Pub. L. 110–140, title XIII, § 1301, Dec. 19, 2007, 121 Stat. 1783.)

§ 17382. Smart grid system report

The Secretary, acting through the Assistant Secretary of the Office of Electricity Delivery and Energy Reliability (referred to in this section as the ''OEDER'') and through the Smart Grid Task Force established in section 17383 of this title, shall, after consulting with any interested individual or entity as appropriate, no later than 1 year after December 19, 2007, and every 2 years thereafter, report to Congress concerning the status of smart grid deployments nationwide and any regulatory or government barriers to continued deployment. The report shall provide the current status and prospects of smart grid development, including information on technology penetration, communications network capabilities, costs, and obstacles. It may include recommendations for State and Federal policies or actions helpful to facilitate the transition to a smart grid. To the extent appropriate, it should take a regional perspective. In preparing this report, the Secretary shall solicit advice and contributions from the Smart Grid Advisory Committee created in section 17383 of this title; from other involved Federal agencies including but not limited to the Federal Energy Regulatory Commission (''Commis-

sion''), the National Institute of Standards and Technology (''Institute''), and the Department of Homeland Security; and from other stakeholder groups not already represented on the Smart Grid Advisory Committee.

(Pub. L. 110–140, title XIII, § 1302, Dec. 19, 2007, 121 Stat. 1784.)

CODIFICATION

December 19, 2007, referred to in text, was in the original ''enactment'' and was translated as meaning the date of enactment of Pub. L. 110–140 to reflect the probable intent of Congress.

§ 17383. Smart Grid Advisory Committee and Smart Grid Task Force

(a) Smart Grid Advisory Committee

(1) Establishment

The Secretary shall establish, within 90 days of December 19, 2007, a Smart Grid Advisory Committee (either as an independent entity or as a designated sub-part of a larger advisory committee on electricity matters). The Smart Grid Advisory Committee shall include eight or more members appointed by the Secretary who have sufficient experience and expertise to represent the full range of smart grid technologies and services, to represent both private and non-Federal public sector stakeholders. One member shall be appointed by the Secretary to Chair the Smart Grid Advisory Committee.

(2) Mission

The mission of the Smart Grid Advisory Committee shall be to advise the Secretary, the Assistant Secretary, and other relevant Federal officials concerning the development of smart grid technologies, the progress of a national transition to the use of smart-grid technologies and services, the evolution of widely-accepted technical and practical standards and protocols to allow interoperability and inter-communication among smart-grid capable devices, and the optimum means of using Federal incentive authority to encourage such progress.

(3) Applicability of Federal Advisory Committee Act

The Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Smart Grid Advisory Committee.

(b) Smart Grid Task Force

(1) Establishment

The Assistant Secretary of the Office of Electricity Delivery and Energy Reliability shall establish, within 90 days of December 19, 2007, a Smart Grid Task Force composed of designated employees from the various divisions of that office who have responsibilities related to the transition to smart-grid technologies and practices. The Assistant Secretary or his designee shall be identified as the Director of the Smart Grid Task Force. The Chairman of the Federal Energy Regulatory Commission and the Director of the National Institute of Standards and Technology shall each designate at least one employee to participate on the Smart Grid Task Force. Other members may come from other agencies at the invitation of the Assistant Secretary or the nomination of the head of such other agency. The Smart Grid Task Force shall, without disrupting the work of the Divisions or Offices from which its members are drawn, provide an identifiable Federal entity to embody the Federal role in the national transition toward development and use of smart grid technologies.

(2) Mission

The mission of the Smart Grid Task Force shall be to insure awareness, coordination and integration of the diverse activities of the Office and elsewhere in the Federal Government related to smart-grid technologies and practices, including but not limited to: smart grid research and development; development of widely accepted smart-grid standards and protocols; the relationship of smart-grid technologies and practices to electric utility regulation; the relationship of smart-grid technologies and practices to infrastructure development, system reliability and security; and the relationship of smart-grid technologies and practices to other facets of electricity supply, demand, transmission, distribution, and policy. The Smart Grid Task Force shall collaborate with the Smart Grid Advisory Committee and other Federal agencies and offices. The Smart Grid Task Force shall meet at the call of its Director as necessary to accomplish its mission.

(c) Authorization

There are authorized to be appropriated for the purposes of this section such sums as are necessary to the Secretary to support the operations of the Smart Grid Advisory Committee and Smart Grid Task Force for each of fiscal years 2008 through 2020.

(Pub. L. 110–140, title XIII, § 1303, Dec. 19, 2007, 121 Stat. 1784.)

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (a)(3), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

§ 17384. Smart grid technology research, development, and demonstration

(a) Power grid digital information technology

The Secretary, in consultation with the Federal Energy Regulatory Commission and other appropriate agencies, electric utilities, the States, and other stakeholders, shall carry out a program—

(1) to develop advanced techniques for measuring peak load reductions and energy-efficiency savings from smart metering, demand response, distributed generation, and electricity storage systems;

(2) to investigate means for demand response, distributed generation, and storage to provide ancillary services;

(3) to conduct research to advance the use of wide-area measurement and control networks, including data mining, visualization, advanced computing, and secure and dependable communications in a highly-distributed environment;

(4) to test new reliability technologies, including those concerning communications network capabilities, in a grid control room environment against a representative set of local outage and wide area blackout scenarios;

(5) to identify communications network capacity needed to implement advanced technologies.[1]

(6) to investigate the feasibility of a transition to time-of-use and real-time electricity pricing;

(7) to develop algorithms for use in electric transmission system software applications;

(8) to promote the use of underutilized electricity generation capacity in any substitution of electricity for liquid fuels in the transportation system of the United States; and

(9) in consultation with the Federal Energy Regulatory Commission, to propose interconnection protocols to enable electric utilities to access electricity stored in vehicles to help meet peak demand loads.

(b) Smart grid regional demonstration initiative

(1) In general

The Secretary shall establish a smart grid regional demonstration initiative (referred to in this subsection as the ''Initiative'') composed of demonstration projects specifically focused on advanced technologies for use in power grid sensing, communications, analysis, and power flow control. The Secretary shall seek to leverage existing smart grid deployments.

(2) Goals

The goals of the Initiative shall be—

(A) to demonstrate the potential benefits of concentrated investments in advanced grid technologies on a regional grid;

(B) to facilitate the commercial transition from the current power transmission and distribution system technologies to advanced technologies;

(C) to facilitate the integration of advanced technologies in existing electric networks to improve system performance, power flow control, and reliability;

(D) to demonstrate protocols and standards that allow for the measurement and validation of the energy savings and fossil fuel emission reductions associated with the installation and use of energy efficiency and demand response technologies and practices; and

(E) to investigate differences in each region and regulatory environment regarding best practices in implementing smart grid technologies.

(3) Demonstration projects

(A) In general

In carrying out the initiative,[2] the Secretary shall provide financial support to smart grid demonstration projects in urban, suburban, tribal, and rural areas, including areas where electric system assets are controlled by nonprofit entities and areas where electric system assets are controlled by investor-owned utilities.

(B) Cooperation

A demonstration project under subparagraph (A) shall be carried out in cooperation with the electric utility that owns the grid facilities in the electricity control area in which the demonstration project is carried out.

(C) Federal share of cost of technology investments

The Secretary shall provide to an electric utility described in subparagraph (B) or to other parties financial assistance for use in paying an amount equal to not more than 50 percent of the cost of qualifying advanced grid technology investments made by the electric utility or other party to carry out a demonstration project.

(D) Ineligibility for grants

No person or entity participating in any demonstration project conducted under this subsection shall be eligible for grants under section 17386 of this title for otherwise qualifying investments made as part of that demonstration project.

(E) Availability of data

The Secretary shall establish and maintain a smart grid information clearinghouse in a timely manner which will make data from smart grid demonstration projects and other sources available to the public. As a condition of receiving financial assistance under this subsection, a utility or other participant in a smart grid demonstration project shall provide such information as the Secretary may require to become available through the smart grid information clearinghouse in the form and within the timeframes as directed by the Secretary. The Secretary shall assure that business proprietary information and individual customer information is not included in the information made available through the clearinghouse.

(F) Open protocols and standards

The Secretary shall require as a condition of receiving funding under this subsection that demonstration projects utilize open protocols and standards (including Internet-based protocols and standards) if available and appropriate.

(c) Authorization of appropriations

There are authorized to be appropriated—

(1) to carry out subsection (a), such sums as are necessary for each of fiscal years 2008 through 2012; and

(2) to carry out subsection (b), such sums as may be necessary.

(Pub. L. 110–140, title XIII, § 1304, Dec. 19, 2007, 121 Stat. 1786; Pub. L. 111–5, div. A, title IV, § 405(1)–(4), Feb. 17, 2009, 123 Stat. 143, 144.)

AMENDMENTS

2009—Subsec. (b)(3)(A). Pub. L. 111–5, § 405(1), amended subpar. (A) generally. Prior to amendment, text read as

[1] So in original. The period probably should be a semicolon.

[2] So in original. Probably should be ''Initiative,''.

follows: ''In carrying out the initiative, the Secretary shall carry out smart grid demonstration projects in up to 5 electricity control areas, including rural areas and at least 1 area in which the majority of generation and transmission assets are controlled by a tax-exempt entity.''

Subsec. (b)(3)(C). Pub. L. 111–5, § 405(2), amended subpar. (C) generally. Prior to amendment, text read as follows: ''The Secretary shall provide to an electric utility described in subparagraph (B) financial assistance for use in paying an amount equal to not more than 50 percent of the cost of qualifying advanced grid technology investments made by the electric utility to carry out a demonstration project.''

Subsec. (b)(3)(E), (F). Pub. L. 111–5, § 405(3), added subpars. (E) and (F).

Subsec. (c)(2). Pub. L. 111–5, § 405(4), amended par. (2) generally. Prior to amendment, par. (2) read as follows: ''to carry out subsection (b), $100,000,000 for each of fiscal years 2008 through 2012.''

§ 17385. Smart grid interoperability framework

(a) Interoperability framework

The Director of the National Institute of Standards and Technology shall have primary responsibility to coordinate the development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems. Such protocols and standards shall further align policy, business, and technology approaches in a manner that would enable all electric resources, including demand-side resources, to contribute to an efficient, reliable electricity network. In developing such protocols and standards—

(1) the Director shall seek input and cooperation from the Commission, OEDER and its Smart Grid Task Force, the Smart Grid Advisory Committee, other relevant Federal and State agencies; and

(2) the Director shall also solicit input and cooperation from private entities interested in such protocols and standards, including but not limited to the Gridwise Architecture Council, the International Electrical and Electronics Engineers, the National Electric Reliability Organization recognized by the Federal Energy Regulatory Commission, and National Electrical Manufacturer's Association.

(b) Scope of framework

The framework developed under subsection (a) shall be flexible, uniform and technology neutral, including but not limited to technologies for managing smart grid information, and designed—

(1) to accommodate traditional, centralized generation and transmission resources and consumer distributed resources, including distributed generation, renewable generation, energy storage, energy efficiency, and demand response and enabling devices and systems;

(2) to be flexible to incorporate—

(A) regional and organizational differences; and

(B) technological innovations;

(3) to consider the use of voluntary uniform standards for certain classes of mass-produced electric appliances and equipment for homes and businesses that enable customers, at their election and consistent with applicable State and Federal laws, and are manufactured with the ability to respond to electric grid emergencies and demand response signals by curtailing all, or a portion of, the electrical power consumed by the appliances or equipment in response to an emergency or demand response signal, including through—

(A) load reduction to reduce total electrical demand;

(B) adjustment of load to provide grid ancillary services; and

(C) in the event of a reliability crisis that threatens an outage, short-term load shedding to help preserve the stability of the grid; and

(4) such voluntary standards should incorporate appropriate manufacturer lead time.[1]

(c) Timing of framework development

The Institute shall begin work pursuant to this section within 60 days of December 19, 2007. The Institute shall provide and publish an initial report on progress toward recommended or consensus standards and protocols within 1 year after December 19, 2007, further reports at such times as developments warrant in the judgment of the Institute, and a final report when the Institute determines that the work is completed or that a Federal role is no longer necessary.

(d) Standards for interoperability in Federal jurisdiction

At any time after the Institute's work has led to sufficient consensus in the Commission's judgment, the Commission shall institute a rulemaking proceeding to adopt such standards and protocols as may be necessary to insure smart-grid functionality and interoperability in interstate transmission of electric power, and regional and wholesale electricity markets.

(e) Authorization

There are authorized to be appropriated for the purposes of this section $5,000,000 to the Institute to support the activities required by this subsection[2] for each of fiscal years 2008 through 2012.

(Pub. L. 110–140, title XIII, § 1305, Dec. 19, 2007, 121 Stat. 1787.)

CODIFICATION

December 19, 2007, referred to in subsec. (c), was in the original ''enactment'' and was translated as meaning the date of enactment of Pub. L. 110–140, to reflect the probable intent of Congress.

§ 17386. Federal matching fund for smart grid investment costs

(a) Matching fund

The Secretary shall establish a Smart Grid Investment Matching Grant Program to provide grants of up to one-half (50 percent) of qualifying Smart Grid investments.

(b) Qualifying investments

Qualifying Smart Grid investments may include any of the following made on or after December 19, 2007:

[1] So in original. Does not fit with subsec. (b) introductory provisions.

[2] So in original. Probably should be ''section''.

(1) In the case of appliances covered for purposes of establishing energy conservation standards under part B of title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6291 et seq.), the documented expenditures incurred by a manufacturer of such appliances associated with purchasing or designing, creating the ability to manufacture, and manufacturing and installing for one calendar year, internal devices that allow the appliance to engage in Smart Grid functions.

(2) In the case of specialized electricity-using equipment, including motors and drivers, installed in industrial or commercial applications, the documented expenditures incurred by its owner or its manufacturer of installing devices or modifying that equipment to engage in Smart Grid functions.

(3) In the case of transmission and distribution equipment fitted with monitoring and communications devices to enable smart grid functions, the documented expenditures incurred by the electric utility to purchase and install such monitoring and communications devices.

(4) In the case of metering devices, sensors, control devices, and other devices integrated with and attached to an electric utility system or retail distributor or marketer of electricity that are capable of engaging in Smart Grid functions, the documented expenditures incurred by the electric utility, distributor, or marketer and its customers to purchase and install such devices.

(5) In the case of software that enables devices or computers to engage in Smart Grid functions, the documented purchase costs of the software.

(6) In the case of entities that operate or coordinate operations of regional electric grids, the documented expenditures for purchasing and installing such equipment that allows Smart Grid functions to operate and be combined or coordinated among multiple electric utilities and between that region and other regions.

(7) In the case of persons or entities other than electric utilities owning and operating a distributed electricity generator, the documented expenditures of enabling that generator to be monitored, controlled, or otherwise integrated into grid operations and electricity flows on the grid utilizing Smart Grid functions.

(8) In the case of electric or hybrid-electric vehicles, the documented expenses for devices that allow the vehicle to engage in Smart Grid functions (but not the costs of electricity storage for the vehicle).

(9) The documented expenditures related to purchasing and implementing Smart Grid functions in such other cases as the Secretary shall identify.

(c) Investments not included

Qualifying Smart Grid investments do not include any of the following:

(1) Investments or expenditures for Smart Grid technologies, devices, or equipment that utilize specific tax credits or deductions under the Internal Revenue Code, as amended.

(2) Expenditures for electricity generation, transmission, or distribution infrastructure or equipment not directly related to enabling Smart Grid functions.

(3) After the final date for State consideration of the Smart Grid Information Standard under section 2621(d)(17)[1] of title 16, an investment that is not in compliance with such standard.

(4) After the development and publication by the Institute of protocols and model standards for interoperability of smart grid devices and technologies, an investment that fails to incorporate any of such protocols or model standards.

(5) Expenditures for physical interconnection of generators or other devices to the grid except those that are directly related to enabling Smart Grid functions.

(6) Expenditures for ongoing salaries, benefits, or personnel costs not incurred in the initial installation, training, or start up of smart grid functions.

(7) Expenditures for travel, lodging, meals or other personal costs.

(8) Ongoing or routine operation, billing, customer relations, security, and maintenance expenditures.

(9) Such other expenditures that the Secretary determines not to be Qualifying Smart Grid Investments by reason of the lack of the ability to perform Smart Grid functions or lack of direct relationship to Smart Grid functions.

(d) Smart grid functions

The term ''smart grid functions'' means any of the following:

(1) The ability to develop, store, send and receive digital information concerning electricity use, costs, prices, time of use, nature of use, storage, or other information relevant to device, grid, or utility operations, to or from or by means of the electric utility system, through one or a combination of devices and technologies.

(2) The ability to develop, store, send and receive digital information concerning electricity use, costs, prices, time of use, nature of use, storage, or other information relevant to device, grid, or utility operations to or from a computer or other control device.

(3) The ability to measure or monitor electricity use as a function of time of day, power quality characteristics such as voltage level, current, cycles per second, or source or type of generation and to store, synthesize or report that information by digital means.

(4) The ability to sense and localize disruptions or changes in power flows on the grid and communicate such information instantaneously and automatically for purposes of enabling automatic protective responses to sustain reliability and security of grid operations.

(5) The ability to detect, prevent, communicate with regard to, respond to, or recover from system security threats, including cybersecurity threats and terrorism, using digital information, media, and devices.

[1] See References in Text note below.

(6) The ability of any appliance or machine to respond to such signals, measurements, or communications automatically or in a manner programmed by its owner or operator without independent human intervention.

(7) The ability to use digital information to operate functionalities on the electric utility grid that were previously electro-mechanical or manual.

(8) The ability to use digital controls to manage and modify electricity demand, enable congestion management, assist in voltage control, provide operating reserves, and provide frequency regulation.

(9) Such other functions as the Secretary may identify as being necessary or useful to the operation of a Smart Grid.

(e) Procedures and rules

(1) The Secretary shall, within 60 days after February 17, 2009, by means of a notice of intent and subsequent solicitation of grant proposals—

(A) establish procedures by which applicants can obtain grants of not more than one-half of their documented costs;

(B) require as a condition of receiving funding under this subsection that demonstration projects utilize open protocols and standards (including Internet-based protocols and standards) if available and appropriate;

(C) establish procedures to ensure that there is no duplication or multiple payment for the same investment or costs, that the grant goes to the party making the actual expenditures for the qualifying Smart Grid investments, and that the grants made have a significant effect in encouraging and facilitating the development of a smart grid;

(D) establish procedures to ensure there will be public records of grants made, recipients, and qualifying Smart Grid investments which have received grants; and

(E) establish procedures to provide advance payment of moneys up to the full amount of the grant award.

(2) The Secretary shall have discretion and exercise reasonable judgment to deny grants for investments that do not qualify.

(f) Authorization of appropriations

There are authorized to be appropriated to the Secretary such sums as are necessary for the administration of this section and the grants to be made pursuant to this section for fiscal years 2008 through 2012.

(Pub. L. 110–140, title XIII, § 1306, Dec. 19, 2007, 121 Stat. 1789; Pub. L. 111–5, div. A, title IV, § 405(5)–(8), Feb. 17, 2009, 123 Stat. 144.)

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (b)(1), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871. Part B of title III of the Act is classified generally to part A (§ 6291 et seq.) of subchapter III of chapter 77 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

Section 2621(d)(17) of title 16, referred to in subsec. (c)(3), was redesignated section 2621(d)(19) by Pub. L. 111–5, div. A, title IV, § 408(a), Feb. 17, 2009, 123 Stat. 146.

AMENDMENTS

2009—Subsec. (a). Pub. L. 111–5, § 405(5), substituted ''grants of up to one-half (50 percent)'' for ''reimbursement of one-fifth (20 percent)''.

Subsec. (b)(9). Pub. L. 111–5, § 405(6), struck out last sentence which read as follows: ''In making such grants, the Secretary shall seek to reward innovation and early adaptation, even if success is not complete, rather than deployment of proven and commercially viable technologies.''

Subsec. (c)(1). Pub. L. 111–5, § 405(7), substituted ''utilize'' for ''are eligible for''.

Subsec. (e). Pub. L. 111–5, § 405(8), amended subsec. (e) generally. Prior to amendment, text related to establishment of procedures by which applicants who have made qualifying Smart Grid investments can seek and obtain reimbursement of one-fifth of documented expenditures.

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§ 17501. Purposes; findings

(a) Purposes

The purposes of the Act are—

(1) to break the cycle of criminal recidivism, increase public safety, and help States, local units of government, and Indian Tribes, better address the growing population of criminal offenders who return to their communities and commit new crimes;