§ 15706. Authorization of appropriations

(a) Federal Emergency Management Agency

There are authorized to be appropriated to the Federal Emergency Management Agency for carrying out this chapter—

(1) $8,700,000 for fiscal year 2006;
(2) $9,400,000 for fiscal year 2007; and
(3) $9,400,000 for fiscal year 2008.

(b) National Science Foundation

There are authorized to be appropriated to the National Science Foundation for carrying out this chapter—

(1) $8,700,000 for fiscal year 2006;
(2) $9,400,000 for fiscal year 2007; and
(3) $9,400,000 for fiscal year 2008.

(c) National Institute of Standards and Technology

There are authorized to be appropriated to the National Institute of Standards and Technology for carrying out this chapter—

(1) $3,000,000 for fiscal year 2006;
(2) $4,000,000 for fiscal year 2007; and
(3) $4,000,000 for fiscal year 2008.

(d) National Oceanic and Atmospheric Administration

There are authorized to be appropriated to the National Oceanic and Atmospheric Administration for carrying out this chapter—

(1) $2,100,000 for fiscal year 2006;
(2) $2,200,000 for fiscal year 2007; and
(3) $2,200,000 for fiscal year 2008.

(Pub. L. 108–360, title II, § 207, Oct. 25, 2004, 118 Stat. 1679.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original ''this title'', meaning title II of Pub. L. 108–360, Oct. 25, 2004, 118 Stat. 1675, which is classified generally to this chapter. For complete classification of title II to the Code, see Short Title note set out under section 15701 of this title and Tables.

TRANSFER OF FUNCTIONS

For transfer of all functions, personnel, assets, components, authorities, grant programs, and liabilities of the Federal Emergency Management Agency, including the functions of the Under Secretary for Federal Emergency Management relating thereto, to the Federal Emergency Management Agency, see section 315(a)(1) of Title 6, Domestic Security.

§ 15707. Coordination

The Secretary of Commerce, the Director of the National Institute of Standards and Technology, the Director of the Office of Science and Technology Policy and the heads of other Federal departments and agencies carrying out activities under this chapter and the statutes amended by this chapter shall work together to ensure that research, technologies, and response techniques are shared among the programs authorized in this chapter in order to coordinate the Nation's efforts to reduce vulnerability to the hazards described in this chapter.

(Pub. L. 108–360, title II, § 209, Oct. 25, 2004, 118 Stat. 1680.)

REFERENCES IN TEXT

This chapter, referred to in text, was in the original ''this title'', meaning title II of Pub. L. 108–360, Oct. 25, 2004, 118 Stat. 1675, which is classified generally to this chapter. For complete classification of title II to the Code, see Short Title note set out under section 15701 of this title and Tables.

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§ 15801. Definitions

Except as otherwise provided, in this Act:

(1) Department

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

(2) Institution of higher education

(A) In general

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

(B) Inclusion

The term ''institution of higher education'' includes an organization that—

(i) is organized, and at all times thereafter operated, exclusively for the benefit of, to perform the functions of, or to carry out the functions of one or more organizations referred to in subparagraph (A); and

(ii) is operated, supervised, or controlled by or in connection with one or more of those organizations.

(3) National Laboratory

The term ''National Laboratory'' means any of the following laboratories owned by the Department:

(A) Ames Laboratory.
(B) Argonne National Laboratory.
(C) Brookhaven National Laboratory.
(D) Fermi National Accelerator Laboratory.
(E) Idaho National Laboratory.
(F) Lawrence Berkeley National Laboratory.
(G) Lawrence Livermore National Laboratory.
(H) Los Alamos National Laboratory.
(I) National Energy Technology Laboratory.
(J) National Renewable Energy Laboratory.
(K) Oak Ridge National Laboratory.
(L) Pacific Northwest National Laboratory.
(M) Princeton Plasma Physics Laboratory.
(N) Sandia National Laboratories.
(O) Savannah River National Laboratory.
(P) Stanford Linear Accelerator Center.
(Q) Thomas Jefferson National Accelerator Facility.

(4) Secretary

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

(5) Small business concern

The term ''small business concern'' has the meaning given the term in section 632 of title 15.

(Pub. L. 109–58, § 2, Aug. 8, 2005, 119 Stat. 604.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title note below and Tables.

SHORT TITLE OF 2011 AMENDMENT

Pub. L. 111–364, § 1, Jan. 4, 2011, 124 Stat. 4056, provided that: ''This Act [amending sections 16131 to 16134 and 16137 of this title and enacting provisions set out as a note under section 16131 of this title] may be cited as the 'Diesel Emissions Reduction Act of 2010'.''

SHORT TITLE OF 2007 AMENDMENT

Pub. L. 110–69, title V, § 5001, Aug. 9, 2007, 121 Stat. 600, provided that: ''This title [enacting subchapter XVII of this chapter and sections 7381g to 7381r of this title, amending sections 7381a, 7381d, 7381e, and 16311 of this title, and enacting provisions set out as a note under section 7381g of this title] may be cited as the 'Protecting America's Competitive Edge Through Energy Act' or the 'PACE–Energy Act'.''

SHORT TITLE OF 2006 AMENDMENT

Pub. L. 109–375, § 1, Dec. 1, 2006, 120 Stat. 2656, provided that: ''This Act [amending section 15855 of this title] may be cited as the 'Sierra National Forest Land Exchange Act of 2006'.''

SHORT TITLE

Pub. L. 109–58, § 1(a), Aug. 8, 2005, 119 Stat. 594, provided that: ''This Act [see Tables for classification] may be cited as the 'Energy Policy Act of 2005'.''

Pub. L. 109–58, title IV, § 431, Aug. 8, 2005, 119 Stat. 760, provided that: ''This subtitle [subtitle D (§§ 431–438) of title IV of Pub. L. 109–58, enacting part C (§ 15991) of subchapter IV of this chapter, amending sections 201, 202a, 203, and 207 of Title 30, Mineral Lands and Mining, and enacting provisions set out as a note under section 201 of Title 30] may be cited as the 'Coal Leasing Amendments Act of 2005'.''

Pub. L. 109–58, title V, § 501, Aug. 8, 2005, 119 Stat. 763, provided that: ''This title [enacting subchapter V of this chapter, section 7144e of this title, and chapter 37 (§ 3501 et seq.) of Title 25, Indians, amending section 5315 of Title 5, Government Organization and Employees, and section 4132 of Title 25, and enacting provisions set out as a note under section 3501 of Title 25] may be cited as the 'Indian Tribal Energy Development and Self-Determination Act of 2005'.''

Pub. L. 109–58, title VIII, § 801, Aug. 8, 2005, 119 Stat. 844, provided that: ''This title [enacting subchapter VIII of this chapter] may be cited as the 'Spark M. Matsunaga Hydrogen Act of 2005'.''

Pub. L. 109–58, title IX, § 901, Aug. 8, 2005, 119 Stat. 856, provided that: ''This title [enacting subchapter IX of this chapter, amending sections 8101 and 8102 of Title 7, Agriculture, and section 5523 of Title 15, Commerce and Trade, enacting provisions set out as notes under section 8102 of Title 7 and section 2001 of Title 30, Mineral Lands and Mining, amending provisions set out as notes under section 8101 of Title 7, and section 1902 of Title 30 may be cited as the 'Energy Research, Development, Demonstration, and Commercial Application Act of 2005'.''

Pub. L. 109–58, title XII, § 1201, Aug. 8, 2005, 119 Stat. 941, provided that: ''This title [enacting subchapter XII of this chapter and sections 824j–1 and 824*o* to 824w of Title 16, Conservation, amending sections 796, 824, 824a–3, 824b, 824e, 824j, 824m, 825e, 825f, 825*l* to 825*o*, 825*o*–1, 2621, 2622, 2625, 2634, and 2642 of Title 16, repealing chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and sections 824n and 825q of Title 16, and enacting provisions set out as notes under section 16451 of this title and sections 824b, 824*o*, 824q, and 2642 of Title 16] may be cited as the 'Electricity Modernization Act of 2005'.''

Pub. L. 109–58, title XII, § 1261, Aug. 8, 2005, 119 Stat. 972, provided that: ''This subtitle [subtitle F (§§ 1261–1277) of title XII of Pub.L. 109–58, enacting part D (§ 16451 et seq.) of subchapter XII of this chapter, amending sections 824 and 824m of Title 16, Conservation, repealing chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacting provisions set out as a note under section 16451 of this title] may be cited as the 'Public Utility Holding Company Act of 2005'.''

SUBCHAPTER I—ENERGY EFFICIENCY

PART A—FEDERAL PROGRAMS

§ 15811. Voluntary commitments to reduce industrial energy intensity

(a) Definition of energy intensity

In this section, the term ''energy intensity'' means the primary energy consumed for each unit of physical output in an industrial process.

(b) Voluntary agreements

The Secretary may enter into voluntary agreements with one or more persons in industrial sectors that consume significant quantities of primary energy for each unit of physical output to reduce the energy intensity of the production activities of the persons.

(c) Goal

Voluntary agreements under this section shall have as a goal the reduction of energy intensity by not less than 2.5 percent each year during the period of calendar years 2007 through 2016.

(d) Recognition

The Secretary, in cooperation with other appropriate Federal agencies, shall develop mechanisms to recognize and publicize the achievements of participants in voluntary agreements under this section.

(e) Technical assistance

A person that enters into an agreement under this section and continues to make a good faith effort to achieve the energy efficiency goals specified in the agreement shall be eligible to receive from the Secretary a grant or technical assistance, as appropriate, to assist in the achievement of those goals.

(f) Report

Not later than each of June 30, 2012, and June 30, 2017, the Secretary shall submit to Congress a report that—

(1) evaluates the success of the voluntary agreements under this section; and

(2) provides independent verification of a sample of the energy savings estimates provided by participating firms.

(Pub. L. 109–58, title I, § 106, Aug. 8, 2005, 119 Stat. 611.)

§ 15812. Advanced Building Efficiency Testbed

(a) Establishment

The Secretary, in consultation with the Administrator of General Services, shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration of advanced engineering systems, components, and materials to enable innovations in building technologies. The program shall evaluate efficiency concepts for government and industry buildings, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health (including by improving indoor air quality) as well as flexibility and technological change to improve environmental sustainability. Such program shall complement and not duplicate existing national programs.

(b) Participants

The program established under subsection (a) shall be led by a university with the ability to combine the expertise from numerous academic fields including, at a minimum, intelligent workplaces and advanced building systems and engineering, electrical and computer engineering, computer science, architecture, urban design, and environmental and mechanical engineering. Such university shall partner with other universities and entities who have established programs and the capability of advancing innovative building efficiency technologies.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $6,000,000 for each of the fiscal years 2006 through 2008, to remain available until expended. For any fiscal year in which funds are expended under this section, the Secretary shall provide one-third of the total amount to the lead university described in subsection (b), and provide the remaining two-thirds to the other participants referred to in subsection (b) on an equal basis.

(Pub. L. 109–58, title I, § 107, Aug. 8, 2005, 119 Stat. 612.)

§ 15813. Enhancing energy efficiency in management of Federal lands

(a) Sense of the Congress

It is the sense of the Congress that Federal agencies should enhance the use of energy efficient technologies in the management of natural resources.

(b) Energy efficient buildings

To the extent practicable, the Secretary of the Interior, the Secretary of Commerce, and the Secretary of Agriculture shall seek to incorporate energy efficient technologies in public and administrative buildings associated with management of the National Park System, National Wildlife Refuge System, National Forest System, National Marine Sanctuaries System, and other public lands and resources managed by the Secretaries.

(c) Energy efficient vehicles

To the extent practicable, the Secretary of the Interior, the Secretary of Commerce, and the Secretary of Agriculture shall seek to use energy efficient motor vehicles, including vehicles equipped with biodiesel or hybrid engine technologies, in the management of the National Park System, National Wildlife Refuge System, National Forest System, National Marine Sanctuaries System, and other public lands and resources managed by the Secretaries.

(Pub. L. 109–58, title I, § 111, Aug. 8, 2005, 119 Stat. 615.)

PART B—ENERGY ASSISTANCE AND STATE PROGRAMS

§ 15821. Energy efficient appliance rebate programs

(a) Definitions

In this section:

(1) Eligible State

The term ''eligible State'' means a State that meets the requirements of subsection (b).

(2) Energy Star program

The term ''Energy Star program'' means the program established by section 6294a of this title.

(3) Residential Energy Star product

The term ''residential Energy Star product'' means a product for a residence that is rated for energy efficiency under the Energy Star program.

(4) State energy office

The term ''State energy office'' means the State agency responsible for developing State energy conservation plans under section 6322 of this title.

(5) State program

The term ''State program'' means a State energy efficient appliance rebate program described in subsection (b)(1).

(b) Eligible States

A State shall be eligible to receive an allocation under subsection (c) if the State—

(1) establishes (or has established) a State energy efficient appliance rebate program to provide rebates to residential consumers for the purchase of residential Energy Star products, or products with improved energy efficiency in cold climates, to replace used appliances of the same type;

(2) submits an application for the allocation at such time, in such form, and containing such information as the Secretary may require; and

(3) provides assurances satisfactory to the Secretary that the State will use the allocation to supplement, but not supplant, funds made available to carry out the State program.

(c) Amount of allocations

(1) In general

Subject to paragraph (2), for each fiscal year, the Secretary shall allocate to the State energy office of each eligible State to carry out subsection (d) an amount equal to the product obtained by multiplying the amount

made available under subsection (f) for the fiscal year by the ratio that the population of the State in the most recent calendar year for which data are available bears to the total population of all eligible States in that calendar year.

(2) Minimum allocations

For each fiscal year, the amounts allocated under this subsection shall be adjusted proportionately so that no eligible State is allocated a sum that is less than an amount determined by the Secretary.

(d) Use of allocated funds

The allocation to a State energy office under subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying out a State program.

(e) Issuance of rebates

Rebates may be provided to residential consumers that meet the requirements of the State program. The amount of a rebate shall be determined by the State energy office, taking into consideration—

(1) the amount of the allocation to the State energy office under subsection (c);

(2) the amount of any Federal or State tax incentive available for the purchase of the residential Energy Star product or product with improved energy efficiency in a cold climate; and

(3) the difference between the cost of the residential Energy Star product or product with improved energy efficiency in a cold climate and the cost of an appliance that is not a residential Energy Star product or product with improved energy efficiency in a cold climate, but is of the same type as, and is the nearest capacity, performance, and other relevant characteristics (as determined by the State energy office) to, the residential Energy Star product or product with improved energy efficiency in a cold climate.

(f) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $50,000,000 for each of the fiscal years 2006 through 2010.

(Pub. L. 109–58, title I, § 124, Aug. 8, 2005, 119 Stat. 617; Pub. L. 110–140, title III, § 315(b), Dec. 19, 2007, 121 Stat. 1572.)

AMENDMENTS

2007—Subsec. (b)(1). Pub. L. 110–140, § 315(b)(1), inserted ‘‘, or products with improved energy efficiency in cold climates,’’ after ‘‘residential Energy Star products’’.

Subsec. (e)(2), (3). Pub. L. 110–140, § 315(b)(2), inserted ‘‘or product with improved energy efficiency in a cold climate’’ after ‘‘residential Energy Star product’’ wherever appearing.

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 15822. Energy efficient public buildings

(a) Grants

The Secretary may make grants to the State agency responsible for developing State energy conservation plans under section 6322 of this title, or, if no such agency exists, a State agency designated by the Governor of the State, to assist units of local government in the State in improving the energy efficiency of public buildings and facilities—

(1) through construction of new energy efficient public buildings that use at least 30 percent less energy than a comparable public building constructed in compliance with standards prescribed in the most recent version of the International Energy Conservation Code, or a similar State code intended to achieve substantially equivalent efficiency levels; or

(2) through renovation of existing public buildings to achieve reductions in energy use of at least 30 percent as compared to the baseline energy use in such buildings prior to renovation, assuming a 3-year, weather-normalized average for calculating such baseline.

(b) Administration

State energy offices receiving grants under this section shall—

(1) maintain such records and evidence of compliance as the Secretary may require; and

(2) develop and distribute information and materials and conduct programs to provide technical services and assistance to encourage planning, financing, and design of energy efficient public buildings by units of local government.

(c) Authorization of appropriations

For the purposes of this section, there are authorized to be appropriated to the Secretary $30,000,000 for each of fiscal years 2006 through 2010. Not more than 10 percent of appropriated funds shall be used for administration.

(Pub. L. 109–58, title I, § 125, Aug. 8, 2005, 119 Stat. 618.)

§ 15823. Low income community energy efficiency pilot program

(a) Grants

The Secretary is authorized to make grants to units of local government, private, non-profit community development organizations, and Indian tribe economic development entities to improve energy efficiency; identify and develop alternative, renewable, and distributed energy supplies; and increase energy conservation in low income rural and urban communities.

(b) Purpose of grants

The Secretary may make grants on a competitive basis for—

(1) investments that develop alternative, renewable, and distributed energy supplies;

(2) energy efficiency projects and energy conservation programs;

(3) studies and other activities that improve energy efficiency in low income rural and urban communities;

(4) planning and development assistance for increasing the energy efficiency of buildings and facilities; and

(5) technical and financial assistance to local government and private entities on developing new renewable and distributed

sources of power or combined heat and power generation.

(c) Definition

For purposes of this section, the term ''Indian tribe'' means any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

(d) Authorization of appropriations

For the purposes of this section there are authorized to be appropriated to the Secretary $20,000,000 for each of fiscal years 2006 through 2008.

(Pub. L. 109–58, title I, § 126, Aug. 8, 2005, 119 Stat. 618.)

REFERENCES IN TEXT

The Alaska Native Claims Settlement Act, referred to in subsec. (c), is Pub. L. 92–203, Dec. 18, 1971, 85 Stat. 688, as amended, which is classified generally to chapter 33 (§ 1601 et seq.) of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1601 of Title 43 and Tables.

§ 15824. State Technologies Advancement Collaborative

(a) In general

The Secretary, in cooperation with the States, shall establish a cooperative program for research, development, demonstration, and deployment of technologies in which there is a common Federal and State energy efficiency, renewable energy, and fossil energy interest, to be known as the ''State Technologies Advancement Collaborative'' (referred to in this section as the ''Collaborative'').

(b) Duties

The Collaborative shall—

(1) leverage Federal and State funding through cost-shared activity;

(2) reduce redundancies in Federal and State funding; and

(3) create multistate projects to be awarded through a competitive process.

(c) Administration

The Collaborative shall be administered through an agreement between the Department and appropriate State-based organizations.

(d) Funding sources

Funding for the Collaborative may be provided from—

(1) amounts specifically appropriated for the Collaborative; or

(2) amounts that may be allocated from other appropriations without changing the purpose for which the amounts are appropriated.

(e) Authorization of appropriations

There are authorized to carry out this section such sums as are necessary for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title I, § 127, Aug. 8, 2005, 119 Stat. 619.)

PART C—ENERGY EFFICIENT PRODUCTS

§ 15831. Public energy education program

(a) In general

Not later than 180 days after August 8, 2005, the Secretary shall convene an organizational conference for the purpose of establishing an ongoing, self-sustaining national public energy education program.

(b) Participants

The Secretary shall invite to participate in the conference individuals and entities representing all aspects of energy production and distribution, including—

(1) industrial firms;

(2) professional societies;

(3) educational organizations;

(4) trade associations; and

(5) governmental agencies.

(c) Purpose, scope, and structure

(1) Purpose

The purpose of the conference shall be to establish an ongoing, self-sustaining national public energy education program to examine and recognize interrelationships between energy sources in all forms, including—

(A) conservation and energy efficiency;

(B) the role of energy use in the economy; and

(C) the impact of energy use on the environment.

(2) Scope and structure

Taking into consideration the purpose described in paragraph (1), the participants in the conference invited under subsection (b) shall design the scope and structure of the program described in subsection (a).

(d) Technical assistance

The Secretary shall provide technical assistance and other guidance necessary to carry out the program described in subsection (a).

(e) Authorization of appropriations

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

(Pub. L. 109–58, title I, § 133, Aug. 8, 2005, 119 Stat. 622.)

§ 15832. Energy efficiency public information initiative

(a) In general

The Secretary shall carry out a comprehensive national program, including advertising and media awareness, to inform consumers about—

(1) the need to reduce energy consumption during the 4-year period beginning on August 8, 2005;

(2) the benefits to consumers of reducing consumption of electricity, natural gas, and petroleum, particularly during peak use periods;

(3) the importance of low energy costs to economic growth and preserving manufacturing jobs in the United States; and

(4) practical, cost-effective measures that consumers can take to reduce consumption of electricity, natural gas, and gasoline, including—

(A) maintaining and repairing heating and cooling ducts and equipment;

(B) weatherizing homes and buildings;

(C) purchasing energy efficient products; and

(D) proper tire maintenance.

(b) Cooperation

The program carried out under subsection (a) shall—

(1) include collaborative efforts with State and local government officials and the private sector; and

(2) incorporate, to the maximum extent practicable, successful State and local public education programs.

(c) Report

Not later than July 1, 2009, the Secretary shall submit to Congress a report describing the effectiveness of the program under this section.

(d) Termination of authority

The program carried out under this section shall terminate on December 31, 2010.

(e) Authorization of appropriations

There are authorized to be appropriated to carry out this section $90,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title I, § 134, Aug. 8, 2005, 119 Stat. 623.)

§ 15833. Energy efficiency pilot program

(a) In general

The Secretary shall establish a pilot program under which the Secretary provides financial assistance to at least 3, but not more than 7, States to carry out pilot projects in the States for—

(1) planning and adopting statewide programs that encourage, for each year in which the pilot project is carried out—

(A) energy efficiency; and

(B) reduction of consumption of electricity or natural gas in the State by at least 0.75 percent, as compared to a baseline determined by the Secretary for the period preceding the implementation of the program; or

(2) for any State that has adopted a statewide program as of August 8, 2005, activities that reduce energy consumption in the State by expanding and improving the program.

(b) Verification

A State that receives financial assistance under subsection (a)(1) shall submit to the Secretary independent verification of any energy savings achieved through the statewide program.

(c) Authorization of appropriations

There is authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2006 through 2010, to remain available until expended.

(Pub. L. 109–58, title I, § 140, Aug. 8, 2005, 119 Stat. 647.)

§ 15834. Report on failure to comply with deadlines for new or revised energy conservation standards

(a) Initial report

The Secretary shall submit a report to Congress regarding each new or revised energy conservation or water use standard which the Secretary has failed to issue in conformance with the deadlines established in the Energy Policy and Conservation Act [42 U.S.C. 6201 et seq.]. Such report shall state the reasons why the Secretary has failed to comply with the deadline for issuances of the new or revised standard and set forth the Secretary's plan for expeditiously prescribing such new or revised standard. The Secretary's initial report shall be submitted not later than 6 months following August 8, 2005, and subsequent reports shall be submitted whenever the Secretary determines that additional deadlines for issuance of new or revised standards have been missed.

(b) Implementation report

Every 6 months following the submission of a report under subsection (a) until the adoption of a new or revised standard described in such report, the Secretary shall submit to the Congress an implementation report describing the Secretary's progress in implementing the Secretary's plan or the issuance of the new or revised standard.

(Pub. L. 109–58, title I, § 141, Aug. 8, 2005, 119 Stat. 648.)

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (a), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871, as amended, 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 D—PUBLIC HOUSING

§ 15841. Energy-efficient appliances

In purchasing appliances, a public housing agency shall purchase energy-efficient appliances that are Energy Star products or FEMP-designated products, as such terms are defined in section 8259b of this title, unless the purchase of energy-efficient appliances is not cost-effective to the agency.

(Pub. L. 109–58, title I, § 152, Aug. 8, 2005, 119 Stat. 649.)

§ 15842. Energy strategy for HUD

The Secretary of Housing and Urban Development shall develop and implement an integrated strategy to reduce utility expenses through cost-effective energy conservation and efficiency measures and energy efficient design and construction of public and assisted housing. The energy strategy shall include the development of energy reduction goals and incentives for public housing agencies. The Secretary shall submit a report to Congress, not later than 1 year after August 8, 2005, on the energy strategy and the

actions taken by the Department of Housing and Urban Development to monitor the energy usage of public housing agencies and shall submit an update every 2 years thereafter on progress in implementing the strategy.

(Pub. L. 109–58, title I, § 154, Aug. 8, 2005, 119 Stat. 650.)

SUBCHAPTER II—RENEWABLE ENERGY

PART A—GENERAL PROVISIONS

§ 15851. Assessment of renewable energy resources

(a) Resource assessment

Not later than 6 months after August 8, 2005, and each year thereafter, the Secretary shall review the available assessments of renewable energy resources within the United States, including solar, wind, biomass, ocean (including tidal, wave, current, and thermal), geothermal, and hydroelectric energy resources, and undertake new assessments as necessary, taking into account changes in market conditions, available technologies, and other relevant factors.

(b) Contents of reports

Not later than 1 year after August 8, 2005, and each year thereafter, the Secretary shall publish a report based on the assessment under subsection (a). The report shall contain—

(1) a detailed inventory describing the available amount and characteristics of the renewable energy resources; and

(2) such other information as the Secretary believes would be useful in developing such renewable energy resources, including descriptions of surrounding terrain, population and load centers, nearby energy infrastructure, location of energy and water resources, and available estimates of the costs needed to develop each resource, together with an identification of any barriers to providing adequate transmission for remote sources of renewable energy resources to current and emerging markets, recommendations for removing or addressing such barriers, and ways to provide access to the grid that do not unfairly disadvantage renewable or other energy producers.

(c) Authorization of appropriations

For the purposes of this section, there are authorized to be appropriated to the Secretary $10,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title II, § 201, Aug. 8, 2005, 119 Stat. 650.)

§ 15852. Federal purchase requirement

(a) Requirement

The President, acting through the Secretary, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy:

(1) Not less than 3 percent in fiscal years 2007 through 2009.

(2) Not less than 5 percent in fiscal years 2010 through 2012.

(3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter.

(b) Definitions

In this section:

(1) Biomass

The term ''biomass'' means any lignin waste material that is segregated from other waste materials and is determined to be nonhazardous by the Administrator of the Environmental Protection Agency and any solid, nonhazardous, cellulosic material that is derived from—

(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or nonmerchantable material;

(B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the biodegradation of solid waste, or paper that is commonly recycled;

(C) agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or

(D) a plant that is grown exclusively as a fuel for the production of electricity.

(2) Renewable energy

The term ''renewable energy'' means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

(c) Calculation

For purposes of determining compliance with the requirement of this section, the amount of renewable energy shall be doubled if—

(1) the renewable energy is produced and used on-site at a Federal facility;

(2) the renewable energy is produced on Federal lands and used at a Federal facility; or

(3) the renewable energy is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) and used at a Federal facility.

(d) Report

Not later than April 15, 2007, and every 2 years thereafter, the Secretary shall provide a report to Congress on the progress of the Federal Government in meeting the goals established by this section.

(Pub. L. 109–58, title II, § 203, Aug. 8, 2005, 119 Stat. 652.)

REFERENCES IN TEXT

The Energy Policy Act of 1992, referred to in subsec. (c)(3), is Pub. L. 102–486, Oct. 24, 1992, 106 Stat. 2776, as amended. Title XXVI of the Act is classified generally to chapter 37 (§ 3501 et seq.) of Title 25, Indians. For complete classification of this Act to the Code, see Short Title note set out under section 13201 of this title and Tables.

§ 15853. Rebate program

(1) Establishment

The Secretary shall establish a program providing rebates for consumers for expenditures made for the installation of a renewable energy system in connection with a dwelling unit or small business.

(2) Amount of rebate

Rebates provided under the program established under paragraph (1) shall be in an amount not to exceed the lesser of—

(A) 25 percent of the expenditures described in paragraph (1) made by the consumer; or

(B) $3,000.

(3) Definition

For purposes of this section, the term ''renewable energy system'' has the meaning given that term in section 6865(c)(6)(A) of this title.

(4) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section, to remain available until expended—

(A) $150,000,000 for fiscal year 2006;

(B) $150,000,000 for fiscal year 2007;

(C) $200,000,000 for fiscal year 2008;

(D) $250,000,000 for fiscal year 2009; and

(E) $250,000,000 for fiscal year 2010.

(Pub. L. 109–58, title II, § 206(c), Aug. 8, 2005, 119 Stat. 655.)

§ 15854. Sugar Cane Ethanol Program

(a) Definition of program

In this section, the term ''program'' means the Sugar Cane Ethanol Program established by subsection (b).

(b) Establishment

There is established within the Environmental Protection Agency a program to be known as the ''Sugar Cane Ethanol Program''.

(c) Project

(1) In general

Subject to the availability of appropriations under subsection (d), in carrying out the program, the Administrator of the Environmental Protection Agency shall establish a project that is—

(A) carried out in multiple States—

(i) in each of which is produced cane sugar that is eligible for loans under section 7272 of title 7, or a similar subsequent authority; and

(ii) at the option of each such State, that have an incentive program that requires the use of ethanol in the State; and

(B) designed to study the production of ethanol from cane sugar, sugarcane, and sugarcane byproducts.

(2) Requirements

A project described in paragraph (1) shall—

(A) be limited to sugar producers and the production of ethanol in the States of Florida, Louisiana, Texas, and Hawaii, divided equally among the States, to demonstrate that the process may be applicable to cane sugar, sugarcane, and sugarcane byproducts;

(B) include information on the ways in which the scale of production may be replicated once the sugar cane industry has located sites for, and constructed, ethanol production facilities; and

(C) not last more than 3 years.

(d) Authorization of appropriations

There is authorized to be appropriated to carry out this section $36,000,000, to remain available until expended.

(Pub. L. 109–58, title II, § 208, Aug. 8, 2005, 119 Stat. 656.)

§ 15855. Grants to improve the commercial value of forest biomass for electric energy, useful heat, transportation fuels, and other commercial purposes

(a) Definitions

In this section:

(1) Biomass

The term ''biomass'' means nonmerchantable materials or precommercial thinnings that are byproducts of preventive treatments, such as trees, wood, brush, thinnings, chips, and slash, that are removed—

(A) to reduce hazardous fuels;

(B) to reduce or contain disease or insect infestation; or

(C) to restore forest health.

(2) Indian tribe

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

(3) Nonmerchantable

For purposes of subsection (b), the term ''nonmerchantable'' means that portion of the byproducts of preventive treatments that would not otherwise be used for higher value products.

(4) Person

The term ''person'' includes—

(A) an individual;

(B) a community (as determined by the Secretary concerned);

(C) an Indian tribe;

(D) a small business or a corporation that is incorporated in the United States; and

(E) a nonprofit organization.

(5) Preferred community

The term ''preferred community'' means—

(A) any Indian tribe;

(B) any town, township, municipality, or other similar unit of local government (as determined by the Secretary concerned) that—

(i) has a population of not more than 50,000 individuals; and

(ii) the Secretary concerned, in the sole discretion of the Secretary concerned, determines contains or is located near Federal or Indian land, the condition of which is at significant risk of catastrophic wildfire, disease, or insect infestation or which suffers from disease or insect infestation; or

(C) any county that—

(i) is not contained within a metropolitan statistical area; and

(ii) the Secretary concerned, in the sole discretion of the Secretary concerned, determines contains or is located near Federal or Indian land, the condition of which is at significant risk of catastrophic wildfire, disease, or insect infestation or which suffers from disease or insect infestation.

(6) Secretary concerned

The term ''Secretary concerned'' means the Secretary of Agriculture or the Secretary of the Interior.

(b) Biomass commercial use grant program

(1) In general

The Secretary concerned may make grants to any person in a preferred community that owns or operates a facility that uses biomass as a raw material to produce electric energy, sensible heat, or transportation fuels to offset the costs incurred to purchase biomass for use by such facility.

(2) Grant amounts

A grant under this subsection may not exceed $20 per green ton of biomass delivered.

(3) Monitoring of grant recipient activities

As a condition of a grant under this subsection, the grant recipient shall keep such records as the Secretary concerned may require to fully and correctly disclose the use of the grant funds and all transactions involved in the purchase of biomass. Upon notice by a representative of the Secretary concerned, the grant recipient shall afford the representative reasonable access to the facility that purchases or uses biomass and an opportunity to examine the inventory and records of the facility.

(c) Improved biomass use grant program

(1) In general

The Secretary concerned may make grants to persons to offset the cost of projects to develop or research opportunities to improve the use of, or add value to, biomass. In making such grants, the Secretary concerned shall give preference to persons in preferred communities.

(2) Selection

The Secretary concerned shall select a grant recipient under paragraph (1) after giving consideration to—

(A) the anticipated public benefits of the project, including the potential to develop thermal or electric energy resources or affordable energy;

(B) opportunities for the creation or expansion of small businesses and micro-businesses;

(C) the potential for new job creation;

(D) the potential for the project to improve efficiency or develop cleaner technologies for biomass utilization; and

(E) the potential for the project to reduce the hazardous fuels from the areas in greatest need of treatment.

(3) Grant amount

A grant under this subsection may not exceed $500,000.

(d) Authorization of appropriations

There are authorized to be appropriated $50,000,000 for fiscal year 2006 and $35,000,000 for each of fiscal years 2007 through 2016 to carry out this section.

(e) Report

Not later than October 1, 2010, the Secretary of Agriculture, in consultation with the Secretary of the Interior, shall submit to the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry of the Senate, and the Committee on Resources, the Committee on Energy and Commerce, and the Committee on Agriculture of the House of Representatives, a report describing the results of the grant programs authorized by this section. The report shall include the following:

(1) An identification of the size, type, and use of biomass by persons that receive grants under this section.

(2) The distance between the land from which the biomass was removed and the facility that used the biomass.

(3) The economic impacts, particularly new job creation, resulting from the grants to and operation of the eligible operations.

(Pub. L. 109–58, title II, § 210, Aug. 8, 2005, 119 Stat. 658; Pub. L. 109–375, § 6, Dec. 1, 2006, 120 Stat. 2658.)

AMENDMENTS

2006—Subsec. (d). Pub. L. 109–375 substituted ''$50,000,000 for fiscal year 2006 and $35,000,000 for each of fiscal years 2007 through 2016'' for ''$50,000,000 for each of the fiscal years 2006 through 2016''.

CHANGE OF NAME

Committee on Resources of House of Representatives changed to Committee on Natural Resources of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

PART B—GEOTHERMAL ENERGY

§ 15871. Coordination of geothermal leasing and permitting on Federal lands

(a) In general

Not later than 180 days after August 8, 2005, the Secretary of the Interior and the Secretary of Agriculture shall enter into and submit to Congress a memorandum of understanding in accordance with this section, the Geothermal Steam Act of 1970 (as amended by this Act) [30 U.S.C. 1001 et seq.], and other applicable laws, regarding coordination of leasing and permitting for geothermal development of public lands and National Forest System lands under their respective jurisdictions.

(b) Lease and permit applications

The memorandum of understanding shall—

(1) establish an administrative procedure for processing geothermal lease applications, including lines of authority, steps in application processing, and time limits for application procession;

(2) establish a 5-year program for geothermal leasing of lands in the National Forest System, and a process for updating that program every 5 years; and

(3) establish a program for reducing the backlog of geothermal lease application pending on January 1, 2005, by 90 percent within the 5-year period beginning on August 8, 2005, including, as necessary, by issuing leases, rejecting lease applications for failure to comply with the provisions of the regulations under which they were filed, or determining that an original applicant (or the applicant's assigns, heirs, or estate) is no longer interested in pursuing the lease application.

(c) Data retrieval system

The memorandum of understanding shall establish a joint data retrieval system that is capable of tracking lease and permit applications and providing to the applicant information as to their status within the Departments of the Interior and Agriculture, including an estimate of the time required for administrative action.

(Pub. L. 109–58, title II, § 225, Aug. 8, 2005, 119 Stat. 665.)

REFERENCES IN TEXT

The Geothermal Steam Act of 1970, referred to in subsec. (a), is Pub. L. 91–581, Dec. 24, 1970, 84 Stat. 1566, as amended, which is classified principally to chapter 23 (§ 1001 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of Title 30 and Tables.

This Act, referred to in subsec. (a), is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 15872. Assessment of geothermal energy potential

Not later than 3 years after August 8, 2005, and thereafter as the availability of data and developments in technology warrants, the Secretary of the Interior, acting through the Director of the United States Geological Survey and in cooperation with the States, shall—

(1) update the Assessment of Geothermal Resources made during 1978; and

(2) submit to Congress the updated assessment.

(Pub. L. 109–58, title II, § 226, Aug. 8, 2005, 119 Stat. 665.)

§ 15873. Deposit and use of geothermal lease revenues for 5 fiscal years

(a) Deposit of geothermal resources leases

Notwithstanding any other provision of law, amounts received by the United States in the first 5 fiscal years beginning after August 8, 2005, as rentals, royalties, and other payments required under leases under the Geothermal Steam Act of 1970 [30 U.S.C. 1001 et seq.], excluding funds required to be paid to State and county governments, shall be deposited into a separate account in the Treasury.

(b) Use of deposits

Amounts deposited under subsection (a) shall be available to the Secretary of the Interior for expenditure, without further appropriation and without fiscal year limitation, to implement the Geothermal Steam Act of 1970 [30 U.S.C. 1001 et seq.] and this Act.

(c) Transfer of funds

For the purposes of coordination and processing of geothermal leases and geothermal use authorizations on Federal land the Secretary of the Interior may authorize the expenditure or transfer of such funds as are necessary to the Forest Service.

(Pub. L. 109–58, title II, § 234, Aug. 8, 2005, 119 Stat. 671.)

REFERENCES IN TEXT

The Geothermal Steam Act of 1970, referred to in subsecs. (a) and (b), is Pub. L. 91–581, Dec. 24, 1970, 84 Stat. 1566, as amended, which is classified principally to chapter 23 (§ 1001 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of Title 30 and Tables.

This Act, referred to in subsec. (b), is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 15874. Intermountain West Geothermal Consortium

(a) Participation authorized

The Secretary, acting through the Idaho National Laboratory, may participate in a consortium described in subsection (b) to address science and science policy issues surrounding the expanded discovery and use of geothermal energy, including from geothermal resources on public lands.

(b) Members

The consortium referred to in subsection (a) shall—

(1) be known as the ''Intermountain West Geothermal Consortium'';

(2) be a regional consortium of institutions and government agencies that focuses on building collaborative efforts among the universities in the State of Idaho, other regional universities, State agencies, and the Idaho National Laboratory;

(3) include Boise State University, the University of Idaho (including the Idaho Water Resources Research Institute), the Oregon Institute of Technology, the Desert Research Institute with the University and Community College System of Nevada, and the Energy and Geoscience Institute at the University of Utah;

(4) be hosted and managed by Boise State University; and

(5) have a director appointed by Boise State University, and associate directors appointed by each participating institution.

(c) Financial assistance

The Secretary, acting through the Idaho National Laboratory and subject to the availability of appropriations, will provide financial assistance to Boise State University for expenditure under contracts with members of the con-

sortium to carry out the activities of the consortium.

(Pub. L. 109–58, title II, § 237, Aug. 8, 2005, 119 Stat. 673.)

PART C—HYDROELECTRIC

§ 15881. Hydroelectric production incentives

(a) Incentive payments

For electric energy generated and sold by a qualified hydroelectric facility during the incentive period, the Secretary shall make, subject to the availability of appropriations, incentive payments to the owner or operator of such facility. The amount of such payment made to any such owner or operator shall be as determined under subsection (e) of this section. Payments under this section may only be made upon receipt by the Secretary of an incentive payment application which establishes that the applicant is eligible to receive such payment and which satisfies such other requirements as the Secretary deems necessary. Such application shall be in such form, and shall be submitted at such time, as the Secretary shall establish.

(b) Definitions

For purposes of this section:

(1) Qualified hydroelectric facility

The term ''qualified hydroelectric facility'' means a turbine or other generating device owned or solely operated by a non-Federal entity which generates hydroelectric energy for sale and which is added to an existing dam or conduit.

(2) Existing dam or conduit

The term ''existing dam or conduit'' means any dam or conduit the construction of which was completed before August 8, 2005, and which does not require any construction or enlargement of impoundment or diversion structures (other than repair or reconstruction) in connection with the installation of a turbine or other generating device.

(3) Conduit

The term ''conduit'' has the same meaning as when used in section 823a(a)(2) of title 16.

The terms defined in this subsection shall apply without regard to the hydroelectric kilowatt capacity of the facility concerned, without regard to whether the facility uses a dam owned by a governmental or nongovernmental entity, and without regard to whether the facility begins operation on or after August 8, 2005.

(c) Eligibility window

Payments may be made under this section only for electric energy generated from a qualified hydroelectric facility which begins operation during the period of 10 fiscal years beginning with the first full fiscal year occurring after August 8, 2005.

(d) Incentive period

A qualified hydroelectric facility may receive payments under this section for a period of 10 fiscal years (referred to in this section as the ''incentive period''). Such period shall begin with the fiscal year in which electric energy generated from the facility is first eligible for such payments.

(e) Amount of payment

(1) In general

Payments made by the Secretary under this section to the owner or operator of a qualified hydroelectric facility shall be based on the number of kilowatt hours of hydroelectric energy generated by the facility during the incentive period. For any such facility, the amount of such payment shall be 1.8 cents per kilowatt hour (adjusted as provided in paragraph (2)), subject to the availability of appropriations under subsection (g), except that no facility may receive more than $750,000 in 1 calendar year.

(2) Adjustments

The amount of the payment made to any person under this section as provided in paragraph (1) shall be adjusted for inflation for each fiscal year beginning after calendar year 2005 in the same manner as provided in the provisions of section 29(d)(2)(B)[1] of title 26, except that in applying such provisions the calendar year 2005 shall be substituted for calendar year 1979.

(f) Sunset

No payment may be made under this section to any qualified hydroelectric facility after the expiration of the period of 20 fiscal years beginning with the first full fiscal year occurring after August 8, 2005, and no payment may be made under this section to any such facility after a payment has been made with respect to such facility for a period of 10 fiscal years.

(g) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out the purposes of this section $10,000,000 for each of the fiscal years 2006 through 2015.

(Pub. L. 109–58, title II, § 242, Aug. 8, 2005, 119 Stat. 677.)

REFERENCES IN TEXT

Section 29 of title 26, referred to in subsec. (e)(2), was renumbered section 45K of title 26 by Pub. L. 109–58, title XIII, § 1322(a)(1), Aug. 8, 2005, 119 Stat. 1011.

§ 15882. Hydroelectric efficiency improvement

(a) Incentive payments

The Secretary shall make incentive payments to the owners or operators of hydroelectric facilities at existing dams to be used to make capital improvements in the facilities that are directly related to improving the efficiency of such facilities by at least 3 percent.

(b) Limitations

Incentive payments under this section shall not exceed 10 percent of the costs of the capital improvement concerned and not more than 1 payment may be made with respect to improvements at a single facility. No payment in excess of $750,000 may be made with respect to improvements at a single facility.

[1] See References in Text note below.

(c) Authorization of appropriations

There are authorized to be appropriated to carry out this section not more than $10,000,000 for each of the fiscal years 2006 through 2015.

(Pub. L. 109–58, title II, § 243, Aug. 8, 2005, 119 Stat. 678.)

PART D—INSULAR ENERGY

§ 15891. Projects enhancing insular energy independence

(a) Project feasibility studies

(1) In general

On a request described in paragraph (2), the Secretary shall conduct a feasibility study of a project to implement a strategy or project identified in the plans submitted to Congress pursuant to section 1492 of title 48 as having the potential to—

(A) significantly reduce the dependence of an insular area on imported fossil fuels; or

(B) provide needed distributed generation to an insular area.

(2) Request

The Secretary shall conduct a feasibility study under paragraph (1) on—

(A) the request of an electric utility located in an insular area that commits to fund at least 10 percent of the cost of the study; and

(B) if the electric utility is located in the Federated States of Micronesia, the Republic of the Marshall Islands, or the Republic of Palau, written support for that request by the President or the Ambassador of the affected freely associated state.

(3) Consultation

The Secretary shall consult with regional utility organizations in—

(A) conducting feasibility studies under paragraph (1); and

(B) determining the feasibility of potential projects.

(4) Feasibility

For the purpose of a feasibility study under paragraph (1), a project shall be determined to be feasible if the project would significantly reduce the dependence of an insular area on imported fossil fuels, or provide needed distributed generation to an insular area, at a reasonable cost.

(b) Implementation

(1) In general

On a determination by the Secretary (in consultation with the Secretary of the Interior) that a project is feasible under subsection (a) and a commitment by an electric utility to operate and maintain the project, the Secretary may provide such technical and financial assistance as the Secretary determines is appropriate for the implementation of the project.

(2) Regional utility organizations

In providing assistance under paragraph (1), the Secretary shall consider providing the assistance through regional utility organizations.

(c) Authorization of appropriations

(1) In general

There are authorized to be appropriated to the Secretary—

(A) $500,000 for each fiscal year for project feasibility studies under subsection (a); and

(B) $4,000,000 for each fiscal year for project implementation under subsection (b).

(2) Limitation of funds received by insular areas

No insular area may receive, during any 3-year period, more than 20 percent of the total funds made available during that 3-year period under subparagraphs (A) and (B) of paragraph (1) unless the Secretary determines that providing funding in excess of that percentage best advances existing opportunities to meet the objectives of this section.

(Pub. L. 109–58, title II, § 252, Aug. 8, 2005, 119 Stat. 682.)

SUBCHAPTER III—OIL AND GAS

PART A—PRODUCTION INCENTIVES

§ 15901. Definition of Secretary

In this part, the term ''Secretary'' means the Secretary of the Interior.

(Pub. L. 109–58, title III, § 341, Aug. 8, 2005, 119 Stat. 697.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle E (§§ 341–357) of title III of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 697, which enacted this part, amended sections 6504, 6506a, 6507, and 6508 of this title, sections 184 and 226 of Title 30, Mineral Lands and Mining, and section 1337 of Title 43, Public Lands, and enacted provisions set out as a note under section 226 of Title 30. For complete classification of subtitle E to the Code, see Tables.

§ 15902. Program on oil and gas royalties in-kind

(a) Applicability of section

Notwithstanding any other provision of law, this section applies to all royalty in-kind accepted by the Secretary on or after August 8, 2005, under any Federal oil or gas lease or permit under—

(1) section 192 of title 30;

(2) section 1353 of title 43; or

(3) any other Federal law governing leasing of Federal land for oil and gas development.

(b) Terms and conditions

All royalty accruing to the United States shall, on the demand of the Secretary, be paid in-kind. If the Secretary makes such a demand, the following provisions apply to the payment:

(1) Satisfaction of royalty obligation

Delivery by, or on behalf of, the lessee of the royalty amount and quality due under the lease satisfies royalty obligation of the lessee for the amount delivered, except that transportation and processing reimbursements paid to, or deductions claimed by, the lessee shall be subject to review and audit.

(2) Marketable condition

(A) Definition of marketable condition

In this paragraph, the term ''in marketable condition'' means sufficiently free from impurities and otherwise in a condition that the royalty production will be accepted by a purchaser under a sales contract typical of the field or area in which the royalty production was produced.

(B) Requirement

Royalty production shall be placed in marketable condition by the lessee at no cost to the United States.

(3) Disposition by the Secretary

The Secretary may—

(A) sell or otherwise dispose of any royalty production taken in-kind (other than oil or gas transferred under section 1353(a)(3) of title 43[1] for not less than the market price; and

(B) transport or process (or both) any royalty production taken in-kind.

(4) Retention by the Secretary

The Secretary may, notwithstanding section 3302 of title 31, retain and use a portion of the revenues from the sale of oil and gas taken in-kind that otherwise would be deposited to miscellaneous receipts, without regard to fiscal year limitation, or may use oil or gas received as royalty taken in-kind (referred to in this paragraph as ''royalty production'') to pay the cost of—

(A) transporting the royalty production;

(B) processing the royalty production;

(C) disposing of the royalty production; or

(D) any combination of transporting, processing, and disposing of the royalty production.

(5) Limitation

(A) In general

Except as provided in subparagraph (B), the Secretary may not use revenues from the sale of oil and gas taken in-kind to pay for personnel, travel, or other administrative costs of the Federal Government.

(B) Exception

Notwithstanding subparagraph (A), the Secretary may use a portion of the revenues from royalty in-kind sales, without fiscal year limitation, to pay salaries and other administrative costs directly related to the royalty in-kind program.

(c) Reimbursement of cost

If the lessee, pursuant to an agreement with the United States or as provided in the lease, processes the royalty gas or delivers the royalty oil or gas at a point not on or adjacent to the lease area, the Secretary shall—

(1) reimburse the lessee for the reasonable costs of transportation (not including gathering) from the lease to the point of delivery or for processing costs; or

(2) allow the lessee to deduct the transportation or processing costs in reporting and paying royalties in-value for other Federal oil and gas leases.

(d) Benefit to the United States required

The Secretary may receive oil or gas royalties in-kind only if the Secretary determines that receiving royalties in-kind provides benefits to the United States that are greater than or equal to the benefits that are likely to have been received had royalties been taken in-value.

(e) Reports

(1) In general

Not later than September 30, 2006, the Secretary shall submit to Congress a report that addresses—

(A) actions taken to develop business processes and automated systems to fully support the royalty-in-kind capability to be used in tandem with the royalty-in-value approach in managing Federal oil and gas revenue; and

(B) future royalty-in-kind businesses operation plans and objectives.

(2) Reports on oil or gas royalties taken in-kind

For each of fiscal years 2006 through 2015 in which the United States takes oil or gas royalties in-kind from production in any State or from the outer Continental Shelf, excluding royalties taken in-kind and sold to refineries under subsection (h), the Secretary shall submit to Congress a report that describes—

(A) the 1 or more methodologies used by the Secretary to determine compliance with subsection (d), including the performance standard for comparing amounts received by the United States derived from royalties in-kind to amounts likely to have been received had royalties been taken in-value;

(B) an explanation of the evaluation that led the Secretary to take royalties in-kind from a lease or group of leases, including the expected revenue effect of taking royalties in-kind;

(C) actual amounts received by the United States derived from taking royalties in-kind and costs and savings incurred by the United States associated with taking royalties in-kind, including administrative savings and any new or increased administrative costs; and

(D) an evaluation of other relevant public benefits or detriments associated with taking royalties in-kind.

(f) Deduction of expenses

(1) In general

Before making payments under section 191 of title 30 or section 1337(g) of title 43 of revenues derived from the sale of royalty production taken in-kind from a lease, the Secretary shall deduct amounts paid or deducted under subsections (b)(4) and (c) and deposit the amount of the deductions in the miscellaneous receipts of the Treasury.

(2) Accounting for deductions

When the Secretary allows the lessee to deduct transportation or processing costs under subsection (c), the Secretary may not reduce

[1] So in original. Probably should be followed by a closing parenthesis.

any payments to recipients of revenues derived from any other Federal oil and gas lease as a consequence of that deduction.

(g) Consultation with States

The Secretary—

(1) shall consult with a State before conducting a royalty in-kind program under this part within the State;

(2) may delegate management of any portion of the Federal royalty in-kind program to the State except as otherwise prohibited by Federal law; and

(3) shall consult annually with any State from which Federal oil or gas royalty is being taken in-kind to ensure, to the maximum extent practicable, that the royalty in-kind program provides revenues to the State greater than or equal to the revenues likely to have been received had royalties been taken in-value.

(h) Small refineries

(1) Preference

If the Secretary finds that sufficient supplies of crude oil are not available in the open market to refineries that do not have their own source of supply for crude oil, the Secretary may grant preference to those refineries in the sale of any royalty oil accruing or reserved to the United States under Federal oil and gas leases issued under any mineral leasing law, for processing or use in those refineries at private sale at not less than the market price.

(2) Proration among refineries in production area

In disposing of oil under this subsection, the Secretary may, at the discretion of the Secretary, prorate the oil among refineries described in paragraph (1) in the area in which the oil is produced.

(i) Disposition to Federal agencies

(1) Onshore royalty

Any royalty oil or gas taken by the Secretary in-kind from onshore oil and gas leases may be sold at not less than the market price to any Federal agency.

(2) Offshore royalty

Any royalty oil or gas taken in-kind from a Federal oil or gas lease on the outer Continental Shelf may be disposed of only under section 1353 of title 43.

(j) Federal low-income energy assistance programs

(1) Preference

In disposing of royalty oil or gas taken in-kind under this section, the Secretary may grant a preference to any person, including any Federal or State agency, for the purpose of providing additional resources to any Federal low-income energy assistance program.

(2) Report

Not later than 3 years after August 8, 2005, the Secretary shall submit a report to Congress—

(A) assessing the effectiveness of granting preferences specified in paragraph (1); and

(B) providing a specific recommendation on the continuation of authority to grant preferences.

(Pub. L. 109–58, title III, § 342, Aug. 8, 2005, 119 Stat. 697.)

REFERENCES IN TEXT

This part, referred to in subsec. (g)(1), was in the original ''this subtitle'', meaning subtitle E (§§ 341–357) of title III of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 697, which enacted this part, amended sections 6504, 6506a, 6507, and 6508 of this title, sections 184 and 226 of Title 30, Mineral Lands and Mining, and section 1337 of Title 43, Public Lands, and enacted provisions set out as a note under section 226 of Title 30. For complete classification of subtitle E to the Code, see Tables.

§ 15903. Marginal property production incentives

(a) Definition of marginal property

Until such time as the Secretary issues regulations under subsection (e) that prescribe a different definition, in this section, the term ''marginal property'' means an onshore unit, communitization agreement, or lease not within a unit or communitization agreement, that produces on average the combined equivalent of less than 15 barrels of oil per well per day or 90,000,000 British thermal units of gas per well per day calculated based on the average over the 3 most recent production months, including only wells that produce on more than half of the days during those 3 production months.

(b) Conditions for reduction of royalty rate

Until such time as the Secretary issues regulations under subsection (e) that prescribe different standards or requirements, the Secretary shall reduce the royalty rate on—

(1) oil production from marginal properties as prescribed in subsection (c) if the spot price of West Texas Intermediate crude oil at Cushing, Oklahoma, is, on average, less than $15 per barrel (adjusted in accordance with the Consumer Price Index for all-urban consumers, United States city average, as published by the Bureau of Labor Statistics) for 90 consecutive trading days; and

(2) gas production from marginal properties as prescribed in subsection (c) if the spot price of natural gas delivered at Henry Hub, Louisiana, is, on average, less than $2.00 per million British thermal units (adjusted in accordance with the Consumer Price Index for all-urban consumers, United States city average, as published by the Bureau of Labor Statistics) for 90 consecutive trading days.

(c) Reduced royalty rate

(1) In general

When a marginal property meets the conditions specified in subsection (b), the royalty rate shall be the lesser of—

(A) 5 percent; or

(B) the applicable rate under any other statutory or regulatory royalty relief provision that applies to the affected production.

(2) Period of effectiveness

The reduced royalty rate under this subsection shall be effective beginning on the first day of the production month following the date on which the applicable condition specified in subsection (b) is met.

(d) Termination of reduced royalty rate

A royalty rate prescribed in subsection (c)(1) shall terminate—

(1) with respect to oil production from a marginal property, on the first day of the production month following the date on which—

(A) the spot price of West Texas Intermediate crude oil at Cushing, Oklahoma, on average, exceeds $15 per barrel (adjusted in accordance with the Consumer Price Index for all-urban consumers, United States city average, as published by the Bureau of Labor Statistics) for 90 consecutive trading days; or

(B) the property no longer qualifies as a marginal property; and

(2) with respect to gas production from a marginal property, on the first day of the production month following the date on which—

(A) the spot price of natural gas delivered at Henry Hub, Louisiana, on average, exceeds $2.00 per million British thermal units (adjusted in accordance with the Consumer Price Index for all-urban consumers, United States city average, as published by the Bureau of Labor Statistics) for 90 consecutive trading days; or

(B) the property no longer qualifies as a marginal property.

(e) Regulations prescribing different relief

(1) Discretionary regulations

The Secretary may by regulation prescribe different parameters, standards, and requirements for, and a different degree or extent of, royalty relief for marginal properties in lieu of those prescribed in subsections (a) through (d).

(2) Mandatory regulations

Unless a determination is made under paragraph (3), not later than 18 months after August 8, 2005, the Secretary shall by regulation—

(A) prescribe standards and requirements for, and the extent of royalty relief for, marginal properties for oil and gas leases on the outer Continental Shelf; and

(B) define what constitutes a marginal property on the outer Continental Shelf for purposes of this section.

(3) Report

To the extent the Secretary determines that it is not practicable to issue the regulations referred to in paragraph (2), the Secretary shall provide a report to Congress explaining such determination by not later than 18 months after August 8, 2005.

(4) Considerations

In issuing regulations under this subsection, the Secretary may consider—

(A) oil and gas prices and market trends;

(B) production costs;

(C) abandonment costs;

(D) Federal and State tax provisions and the effects of those provisions on production economics;

(E) other royalty relief programs;

(F) regional differences in average wellhead prices;

(G) national energy security issues; and

(H) other relevant matters, as determined by the Secretary.

(f) Savings provision

Nothing in this section prevents a lessee from receiving royalty relief or a royalty reduction pursuant to any other law (including a regulation) that provides more relief than the amounts provided by this section.

(Pub. L. 109–58, title III, § 343, Aug. 8, 2005, 119 Stat. 700.)

§ 15904. Incentives for natural gas production from deep wells in the shallow waters of the Gulf of Mexico

(a) Royalty incentive regulations for ultra deep gas wells

(1) In general

Not later than 180 days after August 8, 2005, in addition to any other regulations that may provide royalty incentives for natural gas produced from deep wells on oil and gas leases issued pursuant to the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), the Secretary shall issue regulations granting royalty relief suspension volumes of not less than 35 billion cubic feet with respect to the production of natural gas from ultra deep wells on leases issued in shallow waters less than 400 meters deep located in the Gulf of Mexico wholly west of 87 degrees, 30 minutes west longitude. Regulations issued under this subsection shall be retroactive to the date that the notice of proposed rulemaking is published in the Federal Register.

(2) Suspension volumes

The Secretary may grant suspension volumes of not less than 35 billion cubic feet in any case in which—

(A) the ultra deep well is a sidetrack; or

(B) the lease has previously produced from wells with a perforated interval the top of which is at least 15,000 feet true vertical depth below the datum at mean sea level.

(3) Definitions

In this subsection:

(A) Ultra deep well

The term ''ultra deep well'' means a well drilled with a perforated interval, the top of which is at least 20,000 true vertical depth below the datum at mean sea level.

(B) Sidetrack

(i) In general

The term ''sidetrack'' means a well resulting from drilling an additional hole to a new objective bottom-hole location by leaving a previously drilled hole.

(ii) Inclusion

The term ''sidetrack'' includes—

(I) drilling a well from a platform slot reclaimed from a previously drilled well;

(II) re-entering and deepening a previously drilled well; and

(III) a bypass from a sidetrack, including drilling around material blocking a

hole or drilling to straighten a crooked hole.

(b) Royalty incentive regulations for deep gas wells

Not later than 180 days after August 8, 2005, in addition to any other regulations that may provide royalty incentives for natural gas produced from deep wells on oil and gas leases issued pursuant to the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), the Secretary shall issue regulations granting royalty relief suspension volumes with respect to production of natural gas from deep wells on leases issued in waters more than 200 meters but less than 400 meters deep located in the Gulf of Mexico wholly west of 87 degrees, 30 minutes west longitude. The suspension volumes for deep wells within 200 to 400 meters of water depth shall be calculated using the same methodology used to calculate the suspension volumes for deep wells in the shallower waters of the Gulf of Mexico, and in no case shall the suspension volumes for deep wells within 200 to 400 meters of water depth be lower than those for deep wells in shallower waters. Regulations issued under this subsection shall be retroactive to the date that the notice of proposed rulemaking is published in the Federal Register.

(c) Limitations

The Secretary may place limitations on the royalty relief granted under this section based on market price. The royalty relief granted under this section shall not apply to a lease for which deep water royalty relief is available.

(Pub. L. 109–58, title III, § 344, Aug. 8, 2005, 119 Stat. 702.)

REFERENCES IN TEXT

The Outer Continental Shelf Lands Act, referred to in subsecs. (a)(1) and (b), is act Aug. 7, 1953, ch. 345, 67 Stat. 462, as amended, which is classified generally to subchapter III (§ 1331 et seq.) of chapter 29 of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1331 of Title 43 and Tables.

§ 15905. Royalty relief for deep water production

(a) In general

Subject to subsections (b) and (c), for each tract located in water depths of greater than 400 meters in the Western and Central Planning Area of the Gulf of Mexico (including the portion of the Eastern Planning Area of the Gulf of Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude), any oil or gas lease sale under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) occurring during the 5-year period beginning on August 8, 2005, shall use the bidding system authorized under section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(a)(1)(H)).

(b) Suspension of royalties

The suspension of royalties under subsection (a) shall be established at a volume of not less than—

(1) 5,000,000 barrels of oil equivalent for each lease in water depths of 400 to 800 meters;

(2) 9,000,000 barrels of oil equivalent for each lease in water depths of 800 to 1,600 meters;

(3) 12,000,000 barrels of oil equivalent for each lease in water depths of 1,600 to 2,000 meters; and

(4) 16,000,000 barrels of oil equivalent for each lease in water depths greater than 2,000 meters.

(c) Limitation

The Secretary may place limitations on royalty relief granted under this section based on market price.

(Pub. L. 109–58, title III, § 345, Aug. 8, 2005, 119 Stat. 703.)

REFERENCES IN TEXT

The Outer Continental Shelf Lands Act, referred to in subsec. (a), is act Aug. 7, 1953, ch. 345, 67 Stat. 462, as amended, which is classified generally to subchapter III (§ 1331 et seq.) of chapter 29 of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1331 of Title 43 and Tables.

§ 15906. North Slope Science Initiative

(a) Establishment

(1) In general

The Secretary of the Interior shall establish a long-term initiative to be known as the ''North Slope Science Initiative'' (referred to in this section as the ''Initiative'').

(2) Purpose

The purpose of the Initiative shall be to implement efforts to coordinate collection of scientific data that will provide a better understanding of the terrestrial, aquatic, and marine ecosystems of the North Slope of Alaska.

(b) Objectives

To ensure that the Initiative is conducted through a comprehensive science strategy and implementation plan, the Initiative shall, at a minimum—

(1) identify and prioritize information needs for inventory, monitoring, and research activities to address the individual and cumulative effects of past, ongoing, and anticipated development activities and environmental change on the North Slope;

(2) develop an understanding of information needs for regulatory and land management agencies, local governments, and the public;

(3) focus on prioritization of pressing natural resource management and ecosystem information needs, coordination, and cooperation among agencies and organizations;

(4) coordinate ongoing and future inventory, monitoring, and research activities to minimize duplication of effort, share financial resources and expertise, and assure the collection of quality information;

(5) identify priority needs not addressed by agency science programs in effect on August 8, 2005, and develop a funding strategy to meet those needs;

(6) provide a consistent approach to high caliber science, including inventory, monitoring, and research;

(7) maintain and improve public and agency access to—

(A) accumulated and ongoing research; and

(B) contemporary and traditional local knowledge; and

(8) ensure through appropriate peer review that the science conducted by participating agencies and organizations is of the highest technical quality.

(c) Membership

(1) In general

To ensure comprehensive collection of scientific data, in carrying out the Initiative, the Secretary shall consult and coordinate with Federal, State, and local agencies that have responsibilities for land and resource management across the North Slope.

(2) Cooperative agreements

The Secretary shall enter into cooperative agreements with the State of Alaska, the North Slope Borough, the Arctic Slope Regional Corporation, and other Federal agencies as appropriate to coordinate efforts, share resources, and fund projects under this section.

(d) Science technical advisory panel

(1) In general

The Initiative shall include a panel to provide advice on proposed inventory, monitoring, and research functions.

(2) Membership

The panel described in paragraph (1) shall consist of a representative group of not more than 15 scientists and technical experts from diverse professions and interests, including the oil and gas industry, subsistence users, Native Alaskan entities, conservation organizations, wildlife management organizations, and academia, as determined by the Secretary.

(e) Reports

Not later than 3 years after August 8, 2005, and each year thereafter, the Secretary shall publish a report that describes the studies and findings of the Initiative.

(f) Authorization of appropriations

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

(Pub. L. 109–58, title III, § 348, Aug. 8, 2005, 119 Stat. 708.)

§ 15907. Orphaned, abandoned, or idled wells on Federal land

(a) In general

The Secretary, in cooperation with the Secretary of Agriculture, shall establish a program not later than 1 year after August 8, 2005, to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on land administered by the land management agencies within the Department of the Interior and the Department of Agriculture.

(b) Activities

The program under subsection (a) shall—

(1) include a means of ranking orphaned, abandoned, or idled wells sites for priority in remediation, reclamation, and closure, based on public health and safety, potential environmental harm, and other land use priorities;

(2) provide for identification and recovery of the costs of remediation, reclamation, and closure from persons or other entities currently providing a bond or other financial assurance required under State or Federal law for an oil or gas well that is orphaned, abandoned, or idled; and

(3) provide for recovery from the persons or entities identified under paragraph (2), or their sureties or guarantors, of the costs of remediation, reclamation, and closure of such wells.

(c) Cooperation and consultations

In carrying out the program under subsection (a), the Secretary shall—

(1) work cooperatively with the Secretary of Agriculture and the States within which Federal land is located; and

(2) consult with the Secretary of Energy and the Interstate Oil and Gas Compact Commission.

(d) Plan

Not later than 1 year after August 8, 2005, the Secretary, in cooperation with the Secretary of Agriculture, shall submit to Congress a plan for carrying out the program under subsection (a).

(e) Idled well

For the purposes of this section, a well is idled if—

(1) the well has been nonoperational for at least 7 years; and

(2) there is no anticipated beneficial use for the well.

(f) Federal reimbursement for orphaned well reclamation pilot program

(1) Reimbursement for remediating, reclaiming, and closing wells on land subject to a new lease

The Secretary shall carry out a pilot program under which, in issuing a new oil and gas lease on federally owned land on which 1 or more orphaned wells are located, the Secretary—

(A) may require, other than as a condition of the lease, that the lessee remediate, reclaim, and close in accordance with standards established by the Secretary, all orphaned wells on the land leased; and

(B) shall develop a program to reimburse a lessee, through a royalty credit against the Federal share of royalties owed or other means, for the reasonable actual costs of remediating, reclaiming, and closing the orphaned wells pursuant to that requirement.

(2) Reimbursement for reclaiming orphaned wells on other land

In carrying out this subsection, the Secretary—

(A) may authorize any lessee under an oil and gas lease on federally owned land to reclaim in accordance with the Secretary's standards—

(i) an orphaned well on unleased federally owned land; or

(ii) an orphaned well located on an existing lease on federally owned land for the reclamation of which the lessee is not legally responsible; and

(B) shall develop a program to provide reimbursement of 100 percent of the reasonable actual costs of remediating, reclaiming, and closing the orphaned well, through credits against the Federal share of royalties or other means.

(3) Regulations

The Secretary may issue such regulations as are appropriate to carry out this subsection.

(g) Technical assistance program for non-Federal land

(1) In general

The Secretary of Energy shall establish a program to provide technical and financial assistance to oil and gas producing States to facilitate State efforts over a 10-year period to ensure a practical and economical remedy for environmental problems caused by orphaned or abandoned oil and gas exploration or production well sites on State or private land.

(2) Assistance

The Secretary of Energy shall work with the States, through the Interstate Oil and Gas Compact Commission, to assist the States in quantifying and mitigating environmental risks of onshore orphaned or abandoned oil or gas wells on State and private land.

(3) Activities

The program under paragraph (1) shall include—

(A) mechanisms to facilitate identification, if feasible, of the persons currently providing a bond or other form of financial assurance required under State or Federal law for an oil or gas well that is orphaned or abandoned;

(B) criteria for ranking orphaned or abandoned well sites based on factors such as public health and safety, potential environmental harm, and other land use priorities;

(C) information and training programs on best practices for remediation of different types of sites; and

(D) funding of State mitigation efforts on a cost-shared basis.

(h) Authorization of appropriations

(1) In general

There are authorized to be appropriated to carry out this section $25,000,000 for each of fiscal years 2006 through 2010.

(2) Use

Of the amounts authorized under paragraph (1), $5,000,000 are authorized for each fiscal year for activities under subsection (f).

(Pub. L. 109–58, title III, § 349, Aug. 8, 2005, 119 Stat. 709.)

§ 15908. Preservation of geological and geophysical data

(a) Short title

This section may be cited as the ''National Geological and Geophysical Data Preservation Program Act of 2005''.

(b) Program

The Secretary shall carry out a National Geological and Geophysical Data Preservation Program in accordance with this section—

(1) to archive geologic, geophysical, and engineering data, maps, well logs, and samples;

(2) to provide a national catalog of such archival material; and

(3) to provide technical and financial assistance related to the archival material.

(c) Plan

Not later than 1 year after August 8, 2005, the Secretary shall submit to Congress a plan for the implementation of the Program.

(d) Data archive system

(1) Establishment

The Secretary shall establish, as a component of the Program, a data archive system to provide for the storage, preservation, and archiving of subsurface, surface, geological, geophysical, and engineering data and samples. The Secretary, in consultation with the Advisory Committee, shall develop guidelines relating to the data archive system, including the types of data and samples to be preserved.

(2) System components

The system shall be comprised of State agencies that elect to be part of the system and agencies within the Department of the Interior that maintain geological and geophysical data and samples that are designated by the Secretary in accordance with this subsection. The Program shall provide for the storage of data and samples through data repositories operated by such agencies.

(3) Limitation of designation

The Secretary may not designate a State agency as a component of the data archive system unless that agency is the agency that acts as the geological survey in the State.

(4) Data from Federal land

The data archive system shall provide for the archiving of relevant subsurface data and samples obtained from Federal land—

(A) in the most appropriate repository designated under paragraph (2), with preference being given to archiving data in the State in which the data were collected; and

(B) consistent with all applicable law and requirements relating to confidentiality and proprietary data.

(e) National catalog

(1) In general

As soon as practicable after August 8, 2005, the Secretary shall develop and maintain, as a component of the Program, a national catalog that identifies—

(A) data and samples available in the data archive system established under subsection (d);

(B) the repository for particular material in the system; and

(C) the means of accessing the material.

(2) Availability

The Secretary shall make the national catalog accessible to the public on the site of the Survey on the Internet, consistent with all applicable requirements related to confidentiality and proprietary data.

(f) Advisory Committee

(1) In general

The Advisory Committee shall advise the Secretary on planning and implementation of the Program.

(2) New duties

In addition to its duties under the National Geologic Mapping Act of 1992 (43 U.S.C. 31a et seq.), the Advisory Committee shall perform the following duties:

(A) Advise the Secretary on developing guidelines and procedures for providing assistance for facilities under subsection (g)(1).

(B) Review and critique the draft implementation plan prepared by the Secretary under subsection (c).

(C) Identify useful studies of data archived under the Program that will advance understanding of the Nation's energy and mineral resources, geologic hazards, and engineering geology.

(D) Review the progress of the Program in archiving significant data and preventing the loss of such data, and the scientific progress of the studies funded under the Program.

(E) Include in the annual report to the Secretary required under section 5(b)(3)[1] of the National Geologic Mapping Act of 1992 (43 U.S.C. 31d(b)(3)) an evaluation of the progress of the Program toward fulfilling the purposes of the Program under subsection (b).

(g) Financial assistance

(1) Archive facilities

Subject to the availability of appropriations, the Secretary shall provide financial assistance to a State agency that is designated under subsection (d)(2) for providing facilities to archive energy material.

(2) Studies

Subject to the availability of appropriations, the Secretary shall provide financial assistance to any State agency designated under subsection (d)(2) for studies and technical assistance activities that enhance understanding, interpretation, and use of materials archived in the data archive system established under subsection (d).

(3) Federal share

The Federal share of the cost of an activity carried out with assistance under this subsection shall be not more than 50 percent of the total cost of the activity.

(4) Private contributions

The Secretary shall apply to the non-Federal share of the cost of an activity carried out with assistance under this subsection the value of private contributions of property and services used for that activity.

(h) Report

The Secretary shall include in each report under section 8 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31g)—

(1) a description of the status of the Program;

(2) an evaluation of the progress achieved in developing the Program during the period covered by the report; and

(3) any recommendations for legislative or other action the Secretary considers necessary and appropriate to fulfill the purposes of the Program under subsection (b).

(i) Maintenance of State effort

It is the intent of Congress that the States not use this section as an opportunity to reduce State resources applied to the activities that are the subject of the Program.

(j) Definitions

In this section:

(1) Advisory Committee

The term ''Advisory Committee'' means the advisory committee established under section 5 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31d).

(2) Program

The term ''Program'' means the National Geological and Geophysical Data Preservation Program carried out under this section.

(3) Secretary

The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

(4) Survey

The term ''Survey'' means the United States Geological Survey.

(k) Authorization of appropriations

There are authorized to be appropriated to carry out this section $30,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title III, § 351, Aug. 8, 2005, 119 Stat. 711.)

REFERENCES IN TEXT

The National Geologic Mapping Act of 1992, referred to in subsec. (f)(2), is Pub. L. 102–285, May 18, 1992, 106 Stat. 166, which is classified principally to sections 31a to 31h of Title 43, Public Lands. Par. (3) of section 5(b) of the Act was redesignated par. (4) by Pub. L. 111–11, title XI, § 11001(f)(2)(B), Mar. 30, 2009, 123 Stat. 1415, and is now classified to section 31d(b)(4) of Title 43. For complete classification of this Act to the Code, see Short Title note set out under section 31a of Title 43 and Tables.

§ 15909. Gas hydrate production incentive

(a) Purpose

The purpose of this section is to promote natural gas production from the natural gas hydrate resources on the outer Continental Shelf and Federal lands in Alaska by providing royalty incentives.

(b) Suspension of royalties

(1) In general

The Secretary may grant royalty relief in accordance with this section for natural gas produced from gas hydrate resources under an eligible lease.

(2) Eligible leases

A lease shall be an eligible lease for purposes of this section if—

[1] See References in Text note below.

(A) it is issued under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), or is an oil and gas lease issued for onshore Federal lands in Alaska;

(B) it is issued prior to January 1, 2016; and

(C) production under the lease of natural gas from gas hydrate resources commences prior to January 1, 2018.

(3) Amount of relief

The Secretary shall conduct a rulemaking and grant royalty relief under this section as a suspension volume if the Secretary determines that such royalty relief would encourage production of natural gas from gas hydrate resources from an eligible lease. The maximum suspension volume shall be 30 billion cubic feet of natural gas per lease. Such relief shall be in addition to any other royalty relief under any other provision applicable to the lease that does not specifically grant a gas hydrate production incentive. Such royalty suspension volume shall be applied to any eligible production occurring on or after the date of publication of the advanced notice of proposed rulemaking.

(4) Limitation

The Secretary may place limitations on royalty relief granted under this section based on market price.

(c) Application

This section shall apply to any eligible lease issued before, on, or after August 8, 2005.

(d) Rulemakings

(1) Requirement

The Secretary shall publish the advanced notice of proposed rulemaking within 180 days after August 8, 2005, and complete the rulemaking implementing this section within 365 days after August 8, 2005.

(2) Gas hydrate resources defined

Such regulations shall define the term ''gas hydrate resources'' to include both the natural gas content of gas hydrates within the hydrate stability zone and free natural gas trapped by and beneath the hydrate stability zone.

(e) Review

Not later than 365 days after August 8, 2005, the Secretary, in consultation with the Secretary of Energy, shall carry out a review of, and submit to Congress a report on, further opportunities to enhance production of natural gas from gas hydrate resources on the outer Continental Shelf and on Federal lands in Alaska through the provision of other production incentives or through technical or financial assistance.

(Pub. L. 109–58, title III, § 353, Aug. 8, 2005, 119 Stat. 714.)

REFERENCES IN TEXT

The Outer Continental Shelf Lands Act, referred to in subsec. (b)(2)(A), is act Aug. 7, 1953, ch. 345, 67 Stat. 462, as amended, which is classified generally to subchapter III (§ 1331 et seq.) of chapter 29 of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1331 of Title 43 and Tables.

§ 15910. Enhanced oil and natural gas production through carbon dioxide injection

(a) Production incentive

(1) Findings

Congress finds the following:

(A) Approximately two-thirds of the original oil in place in the United States remains unproduced.

(B) Enhanced oil and natural gas production from the sequestering of carbon dioxide and other appropriate gases has the potential to increase oil and natural gas production.

(C) Capturing and productively using carbon dioxide would help reduce the carbon intensity of the economy.

(2) Purpose

The purpose of this section is—

(A) to promote the capturing, transportation, and injection of produced carbon dioxide, natural carbon dioxide, and other appropriate gases or other matter for sequestration into oil and gas fields; and

(B) to promote oil and natural gas production from the outer Continental Shelf and onshore Federal lands under lease by providing royalty incentives to use enhanced recovery techniques using injection of the substances referred to in subparagraph (A).

(b) Suspension of royalties

(1) In general

If the Secretary determines that reduction of the royalty under a Federal oil and gas lease that is an eligible lease is in the public interest and promotes the purposes of this section, the Secretary shall undertake a rulemaking to provide for such reduction for an eligible lease.

(2) Rulemakings

The Secretary shall publish the advanced notice of proposed rulemaking within 180 days after August 8, 2005, and complete the rulemaking implementing this section within 365 days after August 8, 2005.

(3) Eligible leases

A lease shall be an eligible lease for purposes of this section if—

(A) it is a lease for production of oil and gas from the outer Continental Shelf or Federal onshore lands;

(B) the injection of the substances referred to in subsection (a)(2)(A) will be used as an enhanced recovery technique on such lease; and

(C) the Secretary determines that the lease contains oil or gas that would not likely be produced without the royalty reduction provided under this section.

(4) Amount of relief

The rulemaking shall provide for a suspension volume, which shall not exceed 5,000,000 barrels of oil equivalent for each eligible lease. Such suspension volume shall be applied to any production from an eligible lease occurring on or after the date of publication of any advanced notice of proposed rulemaking under this subsection.

(5) Limitation

The Secretary may place limitations on the royalty reduction granted under this section based on market price.

(6) Application

This section shall apply to any eligible lease issued before, on, or after August 8, 2005.

(c) Demonstration program

(1) Establishment

(A) In general

The Secretary of Energy shall establish a competitive grant program to provide grants to producers of oil and gas to carry out projects to inject carbon dioxide for the purpose of enhancing recovery of oil or natural gas while increasing the sequestration of carbon dioxide.

(B) Projects

The demonstration program shall provide for—

(i) not more than 10 projects in the Willistin Basin in North Dakota and Montana; and

(ii) 1 project in the Cook Inlet Basin in Alaska.

(2) Requirements

(A) In general

The Secretary of Energy shall issue requirements relating to applications for grants under paragraph (1).

(B) Rulemaking

The issuance of requirements under subparagraph (A) shall not require a rulemaking.

(C) Minimum requirements

At a minimum, the Secretary shall require under subparagraph (A) that an application for a grant include—

(i) a description of the project proposed in the application;

(ii) an estimate of the production increase and the duration of the production increase from the project, as compared to conventional recovery techniques, including water flooding;

(iii) an estimate of the carbon dioxide sequestered by project, over the life of the project;

(iv) a plan to collect and disseminate data relating to each project to be funded by the grant;

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

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

(vii) a description of which costs of the project will be supported by Federal assistance under this section; and

(viii) a description of any secondary or tertiary recovery efforts in the field and the efficacy of water flood recovery techniques used.

(3) Partners

An applicant for a grant under paragraph (1) may carry out a project under a pilot program in partnership with 1 or more other public or private entities.

(4) Selection criteria

In evaluating applications under this subsection, the Secretary of Energy shall—

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

(B) give priority consideration to applications that—

(i) are most likely to maximize production of oil and gas in a cost-effective manner;

(ii) sequester significant quantities of carbon dioxide from anthropogenic sources;

(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 section is completed; and

(iv) minimize any adverse environmental effects from the project.

(5) Demonstration program requirements

(A) Maximum amount

The Secretary of Energy shall not provide more than $3,000,000 in Federal assistance under this subsection to any applicant.

(B) Cost sharing

The Secretary of Energy shall require cost-sharing under this subsection in accordance with section 16352 of this title.

(C) Period of grants

(i) In general

A project funded by a grant under this subsection shall begin construction not later than 2 years after the date of provision of the grant, but in any case not later than December 31, 2010.

(ii) Term

The Secretary shall not provide grant funds to any applicant under this subsection for a period of more than 5 years.

(6) Transfer of information and knowledge

The Secretary of Energy shall establish mechanisms to ensure that the information and knowledge gained by participants in the program under this subsection are transferred among other participants and interested persons, including other applicants that submitted applications for a grant under this subsection.

(7) Schedule

(A) Publication

Not later than 180 days after August 8, 2005, the Secretary of Energy shall publish in the Federal Register, and elsewhere, as appropriate, a request for applications to carry out projects under this subsection.

(B) Date for applications

An application for a grant under this subsection shall be submitted not later than 180

days after the date of publication of the request under subparagraph (A).

(C) Selection

After the date by which applications for grants are required to be submitted under subparagraph (B), the Secretary of Energy, in a timely manner, shall select, after peer review and based on the criteria under paragraph (4), those projects to be awarded a grant under this subsection.

(d) Records and inventory

The Secretary of the Interior, acting through the Bureau of Land Management, shall maintain records on, and an inventory of, the quantity of carbon dioxide stored within Federal mineral leaseholds.

(e) Authorization of appropriations

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

(Pub. L. 109–58, title III, § 354, Aug. 8, 2005, 119 Stat. 715; Pub. L. 110–140, title VII, § 713, Dec. 19, 2007, 121 Stat. 1715.)

AMENDMENTS

2007—Subsecs. (d), (e). Pub. L. 110–140 added subsec. (d) and redesignated former subsec. (d) as (e).

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 15911. Denali Commission

(a) Definition of Commission

In this section, the term ''Commission'' means the Denali Commission established by the Denali Commission Act of 1998 (42 U.S.C. 3121 note; Public Law 105–277).

(b) Energy programs

The Commission shall use amounts made available under subsection (d) to carry out energy programs, including—

(1) energy generation and development, including—

(A) fuel cells, hydroelectric, solar, wind, wave, and tidal energy; and

(B) alternative energy sources;

(2) the construction of energy transmission, including interties;

(3) the replacement and cleanup of fuel tanks;

(4) the construction of fuel transportation networks and related facilities;

(5) power cost equalization programs; and

(6) projects using coal as a fuel, including coal gasification projects.

(c) Open meetings

(1) In general

Except as provided in paragraph (2), a meeting of the Commission shall be open to the public if—

(A) the Commission members take action on behalf of the Commission; or

(B) the deliberations of the Commission determine, or result in the joint conduct or disposition of, official Commission business.

(2) Exceptions

Paragraph (1) shall not apply to any portion of a Commission meeting for which the Commission, in public session, votes to close the meeting for the reasons described in paragraph (2), (4), (5), or (6) of subsection (c) of section 552b of title 5.

(3) Public notice

(A) In general

At least 1 week before a meeting of the Commission, the Commission shall make a public announcement of the meeting that describes—

(i) the time, place, and subject matter of the meeting;

(ii) whether the meeting is to be open or closed to the public; and

(iii) the name and telephone number of an appropriate person to respond to requests for information about the meeting.

(B) Additional notice

The Commission shall make a public announcement of any change to the information made available under subparagraph (A) at the earliest practicable time.

(4) Minutes

The Commission shall keep, and make available to the public, a transcript, electronic recording, or minutes from each Commission meeting, except for portions of the meeting closed under paragraph (2).

(d) Authorization of appropriations

There is authorized to be appropriated to the Commission not more than $55,000,000 for each of fiscal years 2006 through 2015 to carry out subsection (b).

(Pub. L. 109–58, title III, § 356, Aug. 8, 2005, 119 Stat. 719.)

REFERENCES IN TEXT

The Denali Commission Act of 1998, referred to in subsec. (a), is title III of Pub. L. 105–277, div. C, Oct. 21, 1998, 112 Stat. 2681–637, which is set out as a note under section 3121 of this title. For complete classification of this Act to the Code, see Tables.

§ 15912. Comprehensive inventory of OCS oil and natural gas resources

(a) In general

The Secretary shall conduct an inventory and analysis of oil and natural gas resources beneath all of the waters of the United States Outer Continental Shelf (''OCS''). The inventory and analysis shall—

(1) use available data on oil and gas resources in areas offshore of Mexico and Canada that will provide information on trends of oil and gas accumulation in areas of the OCS;

(2) use any available technology, except drilling, but including 3–D seismic technology to obtain accurate resource estimates;

(3) analyze how resource estimates in OCS areas have changed over time in regards to gathering geological and geophysical data, initial exploration, or full field development, including areas such as the deepwater and subsalt areas in the Gulf of Mexico;

(4) estimate the effect that understated oil and gas resource inventories have on domestic energy investments; and

(5) identify and explain how legislative, regulatory, and administrative programs or processes restrict or impede the development of identified resources and the extent that they affect domestic supply, such as moratoria, lease terms and conditions, operational stipulations and requirements, approval delays by the Federal Government and coastal States, and local zoning restrictions for onshore processing facilities and pipeline landings.

(b) Reports

The Secretary shall submit a report to Congress on the inventory of estimates and the analysis of restrictions or impediments, together with any recommendations, within 6 months of August 8, 2005. The report shall be publicly available and updated at least every 5 years.

(Pub. L. 109–58, title III, § 357, Aug. 8, 2005, 119 Stat. 720.)

PART B—ACCESS TO FEDERAL LANDS

§ 15921. Management of Federal oil and gas leasing programs

(a) Timely action on leases and permits

(1) Secretary of the Interior

To ensure timely action on oil and gas leases and applications for permits to drill on land otherwise available for leasing, the Secretary of the Interior (referred to in this section as the ''Secretary'') shall—

(A) ensure expeditious compliance with section 4332(2)(C) of this title and any other applicable environmental and cultural resources laws;

(B) improve consultation and coordination with the States and the public; and

(C) improve the collection, storage, and retrieval of information relating to the oil and gas leasing activities.

(2) Secretary of Agriculture

To ensure timely action on oil and gas lease applications for permits to drill on land otherwise available for leasing, the Secretary of Agriculture shall—

(A) ensure expeditious compliance with all applicable environmental and cultural resources laws; and

(B) improve the collection, storage, and retrieval of information relating to the oil and gas leasing activities.

(b) Best management practices

(1) In general

Not later than 18 months after August 8, 2005, the Secretary shall develop and implement best management practices to—

(A) improve the administration of the onshore oil and gas leasing program under the Mineral Leasing Act (30 U.S.C. 181 et seq.); and

(B) ensure timely action on oil and gas leases and applications for permits to drill on land otherwise available for leasing.

(2) Considerations

In developing the best management practices under paragraph (1), the Secretary shall consider any recommendations from the review under section 361.[1]

(3) Regulations

Not later than 180 days after the development of the best management practices under paragraph (1), the Secretary shall publish, for public comment, proposed regulations that set forth specific timeframes for processing leases and applications in accordance with the best management practices, including deadlines for—

(A) approving or disapproving—

(i) resource management plans and related documents;

(ii) lease applications;

(iii) applications for permits to drill; and

(iv) surface use plans; and

(B) related administrative appeals.

(c) Improved enforcement

The Secretary and the Secretary of Agriculture shall improve inspection and enforcement of oil and gas activities, including enforcement of terms and conditions in permits to drill on land under the jurisdiction of the Secretary and the Secretary of Agriculture, respectively.

(d) Authorization of appropriations

In addition to amounts made available to carry out activities relating to oil and gas leasing on public land administered by the Secretary and National Forest System land administered by the Secretary of Agriculture, there are authorized to be appropriated for each of fiscal years 2006 through 2010—

(1) to the Secretary, acting through the Director of the Bureau of Land Management—

(A) $40,000,000 to carry out subsections (a)(1) and (b); and

(B) $20,000,000 to carry out subsection (c);

(2) to the Secretary, acting through the Director of the United States Fish and Wildlife Service, $5,000,000 to carry out subsection (a)(1); and

(3) to the Secretary of Agriculture, acting through the Chief of the Forest Service, $5,000,000 to carry out subsections (a)(2) and (c).

(Pub. L. 109–58, title III, § 362, Aug. 8, 2005, 119 Stat. 721.)

REFERENCES IN TEXT

The Mineral Leasing Act, referred to in subsec. (b)(1)(A), is act Feb. 25, 1920, ch. 85, 41 Stat. 437, as amended, which is classified generally to chapter 3A (§ 181 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 181 of Title 30 and Tables.

Section 361, referred to in subsec. (b)(2), is section 361 of Pub. L. 109–58, title III, Aug. 8, 2005, 119 Stat. 720, which is not classified to the Code.

[1] See References in Text note below.

§ 15922. Consultation regarding oil and gas leasing on public land

(a) In general

Not later than 180 days after August 8, 2005, the Secretary of the Interior and the Secretary of Agriculture shall enter into a memorandum of understanding regarding oil and gas leasing on—

(1) public land under the jurisdiction of the Secretary of the Interior; and

(2) National Forest System land under the jurisdiction of the Secretary of Agriculture.

(b) Contents

The memorandum of understanding shall include provisions that—

(1) establish administrative procedures and lines of authority that ensure timely processing of—

(A) oil and gas lease applications;

(B) surface use plans of operation, including steps for processing surface use plans; and

(C) applications for permits to drill consistent with applicable timelines;

(2) eliminate duplication of effort by providing for coordination of planning and environmental compliance efforts;

(3) ensure that lease stipulations are—

(A) applied consistently;

(B) coordinated between agencies; and

(C) only as restrictive as necessary to protect the resource for which the stipulations are applied;

(4) establish a joint data retrieval system that is capable of—

(A) tracking applications and formal requests made in accordance with procedures of the Federal onshore oil and gas leasing program; and

(B) providing information regarding the status of the applications and requests within the Department of the Interior and the Department of Agriculture; and

(5) establish a joint geographic information system mapping system for use in—

(A) tracking surface resource values to aid in resource management; and

(B) processing surface use plans of operation and applications for permits to drill.

(Pub. L. 109–58, title III, § 363, Aug. 8, 2005, 119 Stat. 722.)

§ 15923. Methodology

The Secretary of the Interior shall use the same assessment methodology across all geological provinces, areas, and regions in preparing and issuing national geological assessments to ensure accurate comparisons of geological resources.

(Pub. L. 109–58, title III, § 364(b), Aug. 8, 2005, 119 Stat. 723.)

§ 15924. Pilot project to improve Federal permit coordination

(a) Establishment

The Secretary of the Interior (referred to in this section as the ''Secretary'') shall establish a Federal Permit Streamlining Pilot Project (referred to in this section as the ''Pilot Project'').

(b) Memorandum of understanding

(1) In general

Not later than 90 days after August 8, 2005, the Secretary shall enter into a memorandum of understanding for purposes of this section with—

(A) the Secretary of Agriculture;

(B) the Administrator of the Environmental Protection Agency; and

(C) the Chief of Engineers.

(2) State participation

The Secretary may request that the Governors of Wyoming, Montana, Colorado, Utah, and New Mexico be signatories to the memorandum of understanding.

(c) Designation of qualified staff

(1) In general

Not later than 30 days after the date of the signing of the memorandum of understanding under subsection (b), all Federal signatory parties shall, if appropriate, assign to each of the field offices identified in subsection (d) an employee who has expertise in the regulatory issues relating to the office in which the employee is employed, including, as applicable, particular expertise in—

(A) the consultations and the preparation of biological opinions under section 1536 of title 16;

(B) permits under section 1344 of title 33;

(C) regulatory matters under the Clean Air Act (42 U.S.C. 7401 et seq.);

(D) planning under the National Forest Management Act of 1976 (16 U.S.C. 472a et seq.); and

(E) the preparation of analyses under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(2) Duties

Each employee assigned under paragraph (1) shall—

(A) not later than 90 days after the date of assignment, report to the Bureau of Land Management Field Managers in the office to which the employee is assigned;

(B) be responsible for all issues relating to the jurisdiction of the home office or agency of the employee; and

(C) participate as part of the team of personnel working on proposed energy projects, planning, and environmental analyses.

(d) Field offices

The following Bureau of Land Management Field Offices shall serve as the Pilot Project offices:

(1) Rawlins, Wyoming.

(2) Buffalo, Wyoming.

(3) Miles City, Montana.

(4) Farmington, New Mexico.

(5) Carlsbad, New Mexico.

(6) Grand Junction/Glenwood Springs, Colorado.

(7) Vernal, Utah.

(e) Reports

Not later than 3 years after August 8, 2005, the Secretary shall submit to Congress a report that—

(1) outlines the results of the Pilot Project to date; and

(2) makes a recommendation to the President regarding whether the Pilot Project should be implemented throughout the United States.

(f) Additional personnel

The Secretary shall assign to each field office identified in subsection (d) any additional personnel that are necessary to ensure the effective implementation of—

(1) the Pilot Project; and

(2) other programs administered by the field offices, including inspection and enforcement relating to energy development on Federal land, in accordance with the multiple use mandate of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

(g) Omitted

(h) Transfer of funds

For the purposes of coordination and processing of oil and gas use authorizations on Federal land under the administration of the Pilot Project offices identified in subsection (d), the Secretary may authorize the expenditure or transfer of such funds as are necessary to—

(1) the United States Fish and Wildlife Service;

(2) the Bureau of Indian Affairs;

(3) the Forest Service;

(4) the Environmental Protection Agency;

(5) the Corps of Engineers; and

(6) the States of Wyoming, Montana, Colorado, Utah, and New Mexico.

(i) Fees

During the period in which the Pilot Project is authorized, the Secretary shall not implement a rulemaking that would enable an increase in fees to recover additional costs related to processing drilling-related permit applications and use authorizations.

(j) Savings provision

Nothing in this section affects—

(1) the operation of any Federal or State law; or

(2) any delegation of authority made by the head of a Federal agency whose employees are participating in the Pilot Project.

(Pub. L. 109–58, title III, § 365, Aug. 8, 2005, 119 Stat. 723.)

REFERENCES IN TEXT

The Clean Air Act, referred to in subsec. (c)(1)(C), is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, 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.

The National Forest Management Act of 1976, referred to in subsec. (c)(1)(D), is Pub. L. 94–588, Oct. 22, 1976, 90 Stat. 2949, as amended, which enacted sections 472a, 521b, 1600, and 1611 to 1614 of Title 16, Conservation, amended sections 500, 515, 516, 518, 576b, and 1601 to 1610 of Title 16, repealed sections 476, 513, and 514 of Title 16, and enacted provisions set out as notes under sections 476, 513, 528, 594–2, and 1600 of Title 16. For complete classification of this Act to the Code, see Short Title of 1976 Amendment note set out under section 1600 of Title 16 and Tables.

The National Environmental Policy Act of 1969, referred to in subsec. (c)(1)(E), is Pub. L. 91–190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified generally to chapter 55 (§ 4321 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 4321 of this title and Tables.

The Federal Land Policy and Management Act of 1976, referred to in subsec. (f)(2), is Pub. L. 94–579, Oct. 21, 1976, 90 Stat. 2743, as amended, which is classified principally to chapter 35 (§ 1701 et seq.) of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1701 of Title 43 and Tables.

CODIFICATION

Section is comprised of section 365 of Pub. L. 109–58. Subsec. (g) of section 365 of Pub. L. 109–58 amended section 191 of Title 30, Mineral Lands and Mining.

§ 15925. Fair market value determinations for linear rights-of-way across public lands and national forests

(a) Update of fee schedule

Not later than 1 year after August 8, 2005—

(1) the Secretary of the Interior shall update section 2806.20 of title 43, Code of Federal Regulations, as in effect on August 8, 2005, to revise the per acre rental fee zone value schedule by State, county, and type of linear right-of-way use to reflect current values of land in each zone; and

(2) the Secretary of Agriculture shall make the same revision for linear rights-of-way granted, issued, or renewed under title V of the Federal Lands Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) on National Forest System land.

(b) Fair market value rental determination for linear rights-of-way

The fair market value rent of a linear right-of-way across public lands or National Forest System lands issued under section 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1764) or section 185 of title 30 shall be determined in accordance with subpart 2806 of title 43, Code of Federal Regulations, as in effect on August 8, 2005 (including the annual or periodic updates specified in the regulations), and as updated in accordance with subsection (a).

(Pub. L. 109–58, title III, § 367, Aug. 8, 2005, 119 Stat. 726.)

REFERENCES IN TEXT

The Federal Land Policy and Management Act of 1976, referred to in subsec. (a)(2), is Pub. L. 94–579, Oct. 21, 1976, 90 Stat. 2743, as amended. Title V of the Act is classified generally to subchapter V (§ 1761 et seq.) of chapter 35 of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1701 of Title 43 and Tables.

§ 15926. Energy right-of-way corridors on Federal land

(a) Western States

Not later than 2 years after August 8, 2005, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Defense, the Secretary of Energy, and the Secretary of the Interior (in this section referred to collectively as ''the Secretaries''), in consultation with the Federal En-

ergy Regulatory Commission, States, tribal or local units of governments as appropriate, affected utility industries, and other interested persons, shall consult with each other and shall—

(1) designate, under their respective authorities, corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities on Federal land in the eleven contiguous Western States (as defined in section 1702(*o*) of title 43;[1]

(2) perform any environmental reviews that may be required to complete the designation of such corridors; and

(3) incorporate the designated corridors into the relevant agency land use and resource management plans or equivalent plans.

(b) Other States

Not later than 4 years after August 8, 2005, the Secretaries, in consultation with the Federal Energy Regulatory Commission, affected utility industries, and other interested persons, shall jointly—

(1) identify corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities on Federal land in States other than those described in subsection (a); and

(2) schedule prompt action to identify, designate, and incorporate the corridors into the applicable land use plans.

(c) Ongoing responsibilities

The Secretaries, in consultation with the Federal Energy Regulatory Commission, affected utility industries, and other interested parties, shall establish procedures under their respective authorities that—

(1) ensure that additional corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities on Federal land are promptly identified and designated as necessary; and

(2) expedite applications to construct or modify oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities within such corridors, taking into account prior analyses and environmental reviews undertaken during the designation of such corridors.

(d) Considerations

In carrying out this section, the Secretaries shall take into account the need for upgraded and new electricity transmission and distribution facilities to—

(1) improve reliability;

(2) relieve congestion; and

(3) enhance the capability of the national grid to deliver electricity.

(e) Specifications of corridor

A corridor designated under this section shall, at a minimum, specify the centerline, width, and compatible uses of the corridor.

(Pub. L. 109–58, title III, § 368, Aug. 8, 2005, 119 Stat. 727.)

[1] So in original. A closing parenthesis probably should follow ''title 43''.

§ 15927. Oil shale, tar sands, and other strategic unconventional fuels

(a) Short title

This section may be cited as the ''Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels Act of 2005''.

(b) Declaration of policy

Congress declares that it is the policy of the United States that—

(1) United States oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports;

(2) the development of oil shale, tar sands, and other strategic unconventional fuels, for research and commercial development, should be conducted in an environmentally sound manner, using practices that minimize impacts; and

(3) development of those strategic unconventional fuels should occur, with an emphasis on sustainability, to benefit the United States while taking into account affected States and communities.

(c) Leasing program for research and development of oil shale and tar sands

In accordance with section 241 of title 30 and any other applicable law, except as provided in this section, not later than 180 days after August 8, 2005, from land otherwise available for leasing, the Secretary of the Interior (referred to in this section as the ''Secretary'') shall make available for leasing such land as the Secretary considers to be necessary to conduct research and development activities with respect to technologies for the recovery of liquid fuels from oil shale and tar sands resources on public lands. Prospective public lands within each of the States of Colorado, Utah, and Wyoming shall be made available for such research and development leasing.

(d) Programmatic environmental impact statement and commercial leasing program for oil shale and tar sands

(1) Programmatic environmental impact statement

Not later than 18 months after August 8, 2005, in accordance with section 4332(2)(C) of this title, the Secretary shall complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with an emphasis on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming.

(2) Final regulation

Not later than 6 months after the completion of the programmatic environmental impact statement under this subsection, the Secretary shall publish a final regulation establishing such program.

(e) Commencement of commercial leasing of oil shale and tar sands

Not later than 180 days after publication of the final regulation required by subsection (d), the

Secretary shall consult with the Governors of States with significant oil shale and tar sands resources on public lands, representatives of local governments in such States, interested Indian tribes, and other interested persons, to determine the level of support and interest in the States in the development of tar sands and oil shale resources. If the Secretary finds sufficient support and interest exists in a State, the Secretary may conduct a lease sale in that State under the commercial leasing program regulations. Evidence of interest in a lease sale under this subsection shall include, but not be limited to, appropriate areas nominated for leasing by potential lessees and other interested parties.

(f) Diligent development requirements

The Secretary shall, by regulation, designate work requirements and milestones to ensure the diligent development of the lease.

(g) Initial report by the Secretary of the Interior

Within 90 days after August 8, 2005, the Secretary of the Interior shall report to the Committee on Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate on—

(1) the interim actions necessary to—

(A) develop the program, complete the programmatic environmental impact statement, and promulgate the final regulation as required by subsection (d); and

(B) conduct the first lease sales under the program as required by subsection (e); and

(2) a schedule to complete such actions within the time limits mandated by this section.

(h) Task Force

(1) Establishment

The Secretary of Energy, in cooperation with the Secretary of the Interior and the Secretary of Defense, shall establish a task force to develop a program to coordinate and accelerate the commercial development of strategic unconventional fuels, including but not limited to oil shale and tar sands resources within the United States, in an integrated manner.

(2) Composition

The Task Force shall be composed of—

(A) the Secretary of Energy (or the designee of the Secretary);

(B) the Secretary of the Interior (or the designee of the Secretary of the Interior);

(C) the Secretary of Defense (or the designee of the Secretary of Defense);

(D) the Governors of affected States; and

(E) representatives of local governments in affected areas.

(3) Recommendations

The Task Force shall make such recommendations regarding promoting the development of the strategic unconventional fuels resources within the United States as it may deem appropriate.

(4) Partnerships

The Task Force shall make recommendations with respect to initiating a partnership with the Province of Alberta, Canada, for purposes of sharing information relating to the development and production of oil from tar sands, and similar partnerships with other nations that contain significant oil shale resources.

(5) Reports

(A) Initial report

Not later than 180 days after August 8, 2005, the Task Force shall submit to the President and Congress a report that describes the analysis and recommendations of the Task Force.

(B) Subsequent reports

The Secretary shall provide an annual report describing the progress in developing the strategic unconventional fuels resources within the United States for each of the 5 years following submission of the report provided for in subparagraph (A).

(i) Office of Petroleum Reserves

(1) In general

The Office of Petroleum Reserves of the Department of Energy shall—

(A) coordinate the creation and implementation of a commercial strategic fuel development program for the United States;

(B) evaluate the strategic importance of unconventional sources of strategic fuels to the security of the United States;

(C) promote and coordinate Federal Government actions that facilitate the development of strategic fuels in order to effectively address the energy supply needs of the United States;

(D) identify, assess, and recommend appropriate actions of the Federal Government required to assist in the development and manufacturing of strategic fuels; and

(E) coordinate and facilitate appropriate relationships between private industry and the Federal Government to promote sufficient and timely private investment to commercialize strategic fuels for domestic and military use.

(2) Consultation and coordination

The Office of Petroleum Reserves shall work closely with the Task Force and coordinate its staff support.

(3) Annual reports

Not later than 180 days after August 8, 2005, and annually thereafter, the Secretary shall submit to Congress a report that describes the activities of the Office of Petroleum Reserves carried out under this subsection.

(j) Omitted

(k) Interagency coordination and expeditious review of permitting process

(1) Department of the Interior as lead agency

Upon written request of a prospective applicant for Federal authorization to develop a proposed oil shale or tar sands project, the Department of the Interior shall act as the lead Federal agency for the purposes of coordinating all applicable Federal authorizations and environmental reviews. To the maximum extent practicable under applicable Federal

law, the Secretary shall coordinate this Federal authorization and review process with any Indian tribes and State and local agencies responsible for conducting any separate permitting and environmental reviews.

(2) Implementing regulations

Not later than 6 months after August 8, 2005, the Secretary shall issue any regulations necessary to implement this subsection.

(*l*) Cost-shared demonstration technologies

(1) Identification

The Secretary of Energy shall identify technologies for the development of oil shale and tar sands that—

(A) are ready for demonstration at a commercially-representative scale; and

(B) have a high probability of leading to commercial production.

(2) Assistance

For each technology identified under paragraph (1), the Secretary of Energy may provide—

(A) technical assistance;

(B) assistance in meeting environmental and regulatory requirements; and

(C) cost-sharing assistance.

(m) National oil shale and tar sands assessment

(1) Assessment

(A) In general

The Secretary shall carry out a national assessment of oil shale and tar sands resources for the purposes of evaluating and mapping oil shale and tar sands deposits, in the geographic areas described in subparagraph (B). In conducting such an assessment, the Secretary shall make use of the extensive geological assessment work for oil shale and tar sands already conducted by the United States Geological Survey.

(B) Geographic areas

The geographic areas referred to in subparagraph (A), listed in the order in which the Secretary shall assign priority, are—

(i) the Green River Region of the States of Colorado, Utah, and Wyoming;

(ii) the Devonian oil shales and other hydrocarbon-bearing rocks having the nomenclature of ''shale'' located east of the Mississippi River; and

(iii) any remaining area in the central and western United States (including the State of Alaska) that contains oil shale and tar sands, as determined by the Secretary.

(2) Use of State surveys and universities

In carrying out the assessment under paragraph (1), the Secretary may request assistance from any State-administered geological survey or university.

(n) Land exchanges

(1) In general

To facilitate the recovery of oil shale and tar sands, especially in areas where Federal, State, and private lands are intermingled, the Secretary shall consider the use of land exchanges where appropriate and feasible to consolidate land ownership and mineral interests into manageable areas.

(2) Identification and priority of public lands

The Secretary shall identify public lands containing deposits of oil shale or tar sands within the Green River, Piceance Creek, Uintah, and Washakie geologic basins, and shall give priority to implementing land exchanges within those basins. The Secretary shall consider the geology of the respective basin in determining the optimum size of the lands to be consolidated.

(3) Compliance with section 1716 of title 43

A land exchange undertaken in furtherance of this subsection shall be implemented in accordance with section 1716 of title 43.

(*o*) Royalty rates for leases

The Secretary shall establish royalties, fees, rentals, bonus, or other payments for leases under this section that shall—

(1) encourage development of the oil shale and tar sands resource; and

(2) ensure a fair return to the United States.

(p) Heavy oil technical and economic assessment

The Secretary of Energy shall update the 1987 technical and economic assessment of domestic heavy oil resources that was prepared by the Interstate Oil and Gas Compact Commission. Such an update should include all of North America and cover all unconventional oil, including heavy oil, tar sands (oil sands), and oil shale.

(q) Omitted

(r) State water rights

Nothing in this section preempts or affects any State water law or interstate compact relating to water.

(s) Authorization of appropriations

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

(Pub. L. 109–58, title III, § 369, Aug. 8, 2005, 119 Stat. 728.)

CODIFICATION

Section is comprised of section 369 of Pub. L. 109–58. Subsecs. (j) and (q) of section 369 of Pub. L. 109–58 enacted section 2398a of Title 10, Armed Forces, and amended the table of sections for chapter 141 of Title 10 and sections 226 and 241 of Title 30, Mineral Lands and Mining.

CHANGE OF NAME

Committee on Resources of House of Representatives changed to Committee on Natural Resources of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

§ 15928. Consultation regarding energy rights-of-way on public land

(a) Memorandum of understanding

(1) In general

Not later than 6 months after August 8, 2005, the Secretary of Energy, in consultation with the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Defense with

respect to lands under their respective jurisdictions, shall enter into a memorandum of understanding to coordinate all applicable Federal authorizations and environmental reviews relating to a proposed or existing utility facility. To the maximum extent practicable under applicable law, the Secretary of Energy shall, to ensure timely review and permit decisions, coordinate such authorizations and reviews with any Indian tribes, multi-State entities, and State agencies that are responsible for conducting any separate permitting and environmental reviews of the affected utility facility.

(2) Contents

The memorandum of understanding shall include provisions that—

(A) establish—

(i) a unified right-of-way application form; and

(ii) an administrative procedure for processing right-of-way applications, including lines of authority, steps in application processing, and timeframes for application processing;

(B) provide for coordination of planning relating to the granting of the rights-of-way;

(C) provide for an agreement among the affected Federal agencies to prepare a single environmental review document to be used as the basis for all Federal authorization decisions; and

(D) provide for coordination of use of right-of-way stipulations to achieve consistency.

(b) Natural gas pipelines

(1) In general

With respect to permitting activities for interstate natural gas pipelines, the May 2002 document entitled ''Interagency Agreement On Early Coordination Of Required Environmental And Historic Preservation Reviews Conducted In Conjunction With The Issuance Of Authorizations To Construct And Operate Interstate Natural Gas Pipelines Certificated By The Federal Energy Regulatory Commission'' shall constitute compliance with subsection (a).

(2) Report

(A) In general

Not later than 1 year after August 8, 2005, and every 2 years thereafter, agencies that are signatories to the document referred to in paragraph (1) shall transmit to Congress a report on how the agencies under the jurisdiction of the Secretaries are incorporating and implementing the provisions of the document referred to in paragraph (1).

(B) Contents

The report shall address—

(i) efforts to implement the provisions of the document referred to in paragraph (1);

(ii) whether the efforts have had a streamlining effect;

(iii) further improvements to the permitting process of the agency; and

(iv) recommendations for inclusion of State and tribal governments in a coordinated permitting process.

(c) Definition of utility facility

In this section, the term ''utility facility'' means any privately, publicly, or cooperatively owned line, facility, or system—

(1) for the transportation of—

(A) oil, natural gas, synthetic liquid fuel, or gaseous fuel;

(B) any refined product produced from oil, natural gas, synthetic liquid fuel, or gaseous fuel; or

(C) products in support of the production of material referred to in subparagraph (A) or (B);

(2) for storage and terminal facilities in connection with the production of material referred to in paragraph (1); or

(3) for the generation, transmission, and distribution of electric energy.

(Pub. L. 109–58, title III, § 372, Aug. 8, 2005, 119 Stat. 734.)

PART C—MISCELLANEOUS

§ 15941. Great Lakes oil and gas drilling ban

No Federal or State permit or lease shall be issued for new oil and gas slant, directional, or offshore drilling in or under one or more of the Great Lakes.

(Pub. L. 109–58, title III, § 386, Aug. 8, 2005, 119 Stat. 744.)

§ 15942. NEPA review

(a) NEPA review

Action by the Secretary of the Interior in managing the public lands, or the Secretary of Agriculture in managing National Forest System Lands, with respect to any of the activities described in subsection (b) shall be subject to a rebuttable presumption that the use of a categorical exclusion under the National Environmental Policy Act of 1969 [42 U.S.C. 4321 et seq.] (NEPA) would apply if the activity is conducted pursuant to the Mineral Leasing Act [30 U.S.C. 181 et seq.] for the purpose of exploration or development of oil or gas.

(b) Activities described

The activities referred to in subsection (a) are the following:

(1) Individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.

(2) Drilling an oil or gas well at a location or well pad site at which drilling has occurred previously within 5 years prior to the date of spudding the well.

(3) Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well.

(4) Placement of a pipeline in an approved right-of-way corridor, so long as the corridor was approved within 5 years prior to the date of placement of the pipeline.

(5) Maintenance of a minor activity, other than any construction or major renovation or a building or facility.

(Pub. L. 109–58, title III, § 390, Aug. 8, 2005, 119 Stat. 747.)

REFERENCES IN TEXT

The National Environmental Policy Act of 1969, referred to in subsec. (a), is Pub. L. 91–190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified generally to chapter 55 (§ 4321 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 4321 of this title and Tables.

The Mineral Leasing Act, referred to in subsec. (a), is act Feb. 25, 1920, ch. 85, 41 Stat. 437, as amended, which is classified generally to chapter 3A (§ 181 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 181 of Title 30 and Tables.

PART D—REFINERY REVITALIZATION

§ 15951. Findings and definitions

(a) Findings

Congress finds that—

(1) it serves the national interest to increase petroleum refining capacity for gasoline, heating oil, diesel fuel, jet fuel, kerosene, and petrochemical feedstocks wherever located within the United States, to bring more supply to the markets for the use of the American people;

(2) United States demand for refined petroleum products currently exceeds the country's petroleum refining capacity to produce such products;

(3) this excess demand has been met with increased imports;

(4) due to lack of capacity, refined petroleum product imports are expected to grow from 7.9 percent to 10.7 percent of total refined product by 2025;

(5) refiners are still subject to significant environmental and other regulations and face several new requirements under the Clean Air Act (42 U.S.C. 7401 et seq.) over the next decade; and

(6) better coordination of Federal and State regulatory reviews may help facilitate siting and construction of new refineries to meet the demand in the United States for refined products.

(b) Definitions

In this part:

(1) Administrator

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

(2) State

The term ''State'' means—

(A) a State;

(B) the Commonwealth of Puerto Rico; and

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

(Pub. L. 109–58, title III, § 391, Aug. 8, 2005, 119 Stat. 748.)

REFERENCES IN TEXT

The Clean Air Act, referred to in subsec. (a)(5), is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, 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.

§ 15952. Federal-State regulatory coordination and assistance

(a) In general

At the request of the Governor of a State, the Administrator may enter into a refinery permitting cooperative agreement with the State, under which each party to the agreement identifies steps, including timelines, that it will take to streamline the consideration of Federal and State environmental permits for a new refinery.

(b) Authority under agreement

The Administrator shall be authorized to—

(1) accept from a refiner a consolidated application for all permits required from the Environmental Protection Agency, to the extent consistent with other applicable law;

(2) enter into memoranda of agreement with other Federal agencies to coordinate consideration of refinery applications and permits among Federal agencies; and

(3) enter into memoranda of agreement with a State, under which Federal and State review of refinery permit applications will be coordinated and concurrently considered, to the extent practicable.

(c) State assistance

The Administrator is authorized to provide financial assistance to State governments to facilitate the hiring of additional personnel with expertise in fields relevant to consideration of refinery permits.

(d) Other assistance

The Administrator is authorized to provide technical, legal, or other assistance to State governments to facilitate their review of applications to build new refineries.

(Pub. L. 109–58, title III, § 392, Aug. 8, 2005, 119 Stat. 749.)

SUBCHAPTER IV—COAL

PART A—CLEAN COAL POWER INITIATIVE

§ 15961. Authorization of appropriations

(a) Clean coal power initiative

There are authorized to be appropriated to the Secretary to carry out the activities authorized by this part $200,000,000 for each of fiscal years 2006 through 2014, to remain available until expended.

(b) Report

The Secretary shall submit to Congress the report required by this subsection not later than March 31, 2007. The report shall include, with respect to subsection (a), a plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under subsection (a) are the appropriate funding levels for that program;

(2) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(3) a detailed list of technical milestones for each coal and related technology that will be pursued; and

(4) a detailed description of how the program will avoid problems enumerated in Government Accountability Office reports on the Clean Coal Technology Program, including problems that have resulted in unspent funds and projects that failed either financially or scientifically.

(Pub. L. 109–58, title IV, § 401, Aug. 8, 2005, 119 Stat. 749.)

§ 15962. Project criteria

(a) In general

To be eligible to receive assistance under this part, a project shall advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in commercial service or have been demonstrated on a scale that the Secretary determines is sufficient to demonstrate that commercial service is viable as of August 8, 2005.

(b) Technical criteria for clean coal power initiative

(1) Gasification projects

(A) In general

In allocating the funds made available under section 15961(a) of this title, the Secretary shall ensure that at least 70 percent of the funds are used only to fund projects on coal-based gasification technologies, including—

(i) gasification combined cycle;

(ii) gasification fuel cells and turbine combined cycle;

(iii) gasification coproduction;

(iv) hybrid gasification and combustion; and

(v) other advanced coal based technologies capable of producing a concentrated stream of carbon dioxide.

(B) Technical milestones

(i) Periodic determination

(I) In general

The Secretary shall periodically set technical milestones specifying the emission and thermal efficiency levels that coal gasification projects under this part shall be designed, and reasonably expected, to achieve.

(II) Prescriptive milestones

The technical milestones shall become more prescriptive during the period of the clean coal power initiative.

(ii) 2020 goals

The Secretary shall establish the periodic milestones so as to achieve by the year 2020 coal gasification projects able—

(I)(aa) to remove at least 99 percent of sulfur dioxide; or

(bb) to emit not more than 0.04 pound SO_2 per million Btu, based on a 30-day average;

(II) to emit not more than .05 lbs of NO_x per million Btu;

(III) to achieve at least 95 percent reductions in mercury emissions; and

(IV) to achieve a thermal efficiency of at least—

(aa) 50 percent for coal of more than 9,000 Btu;

(bb) 48 percent for coal of 7,000 to 9,000 Btu; and

(cc) 46 percent for coal of less than 7,000 Btu.

(2) Other projects

(A) Allocation of funds

The Secretary shall ensure that up to 30 percent of the funds made available under section 15961(a) of this title are used to fund projects other than those described in paragraph (1).

(B) Technical milestones

(i) Periodic determination

(I) In general

The Secretary shall periodically establish technical milestones specifying the emission and thermal efficiency levels that projects funded under this paragraph shall be designed, and reasonably expected, to achieve.

(II) Prescriptive milestones

The technical milestones shall become more prescriptive during the period of the clean coal power initiative.

(ii) 2020 goals

The Secretary shall set the periodic milestones so as to achieve by the year 2020 projects able—

(I) to remove at least 97 percent of sulfur dioxide;

(II) to emit no more than .08 lbs of NO_x per million Btu;

(III) to achieve at least 90 percent reductions in mercury emissions; and

(IV) to achieve a thermal efficiency of at least—

(aa) 43 percent for coal of more than 9,000 Btu;

(bb) 41 percent for coal of 7,000 to 9,000 Btu; and

(cc) 39 percent for coal of less than 7,000 Btu.

(3) Consultation

Before setting the technical milestones under paragraphs (1)(B) and (2)(B), the Secretary shall consult with—

(A) the Administrator of the Environmental Protection Agency; and

(B) interested entities, including—

(i) coal producers;

(ii) industries using coal;

(iii) organizations that promote coal or advanced coal technologies;

(iv) environmental organizations;

(v) organizations representing workers; and

(vi) organizations representing consumers.

(4) Existing units

In the case of projects at units in existence on August 8, 2005, in lieu of the thermal effi-

ciency requirements described in paragraphs (1)(B)(ii)(IV) and (2)(B)(ii)(IV), the milestones shall be designed to achieve an overall thermal design efficiency improvement, compared to the efficiency of the unit as operated, of not less than—

(A) 7 percent for coal of more than 9,000 Btu;

(B) 6 percent for coal of 7,000 to 9,000 Btu; or

(C) 4 percent for coal of less than 7,000 Btu.

(5) Administration

(A) Elevation of site

In evaluating project proposals to achieve thermal efficiency levels established under paragraphs (1)(B)(i) and (2)(B)(i) and in determining progress towards thermal efficiency milestones under paragraphs (1)(B)(ii)(IV), (2)(B)(ii)(IV), and (4), the Secretary shall take into account and make adjustments for the elevation of the site at which a project is proposed to be constructed.

(B) Applicability of milestones

In applying the thermal efficiency milestones under paragraphs (1)(B)(ii)(IV), (2)(B)(ii)(IV), and (4) to projects that separate and capture at least 50 percent of the potential emissions of carbon dioxide by a facility, the energy used for separation and capture of carbon dioxide shall not be counted in calculating the thermal efficiency.

(C) Permitted uses

In carrying out this section, the Secretary may give priority to projects that include, as part of the project—

(i) the separation or capture of carbon dioxide; or

(ii) the reduction of the demand for natural gas if deployed.

(c) Financial criteria

The Secretary shall not provide financial assistance under this part for a project unless the recipient documents to the satisfaction of the Secretary that—

(1) the recipient is financially responsible;

(2) the recipient will provide sufficient information to the Secretary to enable the Secretary to ensure that the funds are spent efficiently and effectively; and

(3) a market exists for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of the technology.

(d) Financial assistance

The Secretary shall provide financial assistance to projects that, as determined by the Secretary—

(1) meet the requirements of subsections (a), (b), and (c); and

(2) are likely—

(A) to achieve overall cost reductions in the use of coal to generate useful forms of energy or chemical feedstocks;

(B) to improve the competitiveness of coal among various forms of energy in order to maintain a diversity of fuel choices in the United States to meet electricity generation requirements; and

(C) to demonstrate methods and equipment that are applicable to 25 percent of the electricity generating facilities, using various types of coal, that use coal as the primary feedstock as of August 8, 2005.

(e) Cost-sharing

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

(f) Scheduled completion of selected projects

(1) In general

In selecting a project for financial assistance under this section, the Secretary shall establish a reasonable period of time during which the owner or operator of the project shall complete the construction or demonstration phase of the project, as the Secretary determines to be appropriate.

(2) Condition of financial assistance

The Secretary shall require as a condition of receipt of any financial assistance under this part that the recipient of the assistance enter into an agreement with the Secretary not to request an extension of the time period established for the project by the Secretary under paragraph (1).

(3) Extension of time period

(A) In general

Subject to subparagraph (B), the Secretary may extend the time period established under paragraph (1) if the Secretary determines, in the sole discretion of the Secretary, that the owner or operator of the project cannot complete the construction or demonstration phase of the project within the time period due to circumstances beyond the control of the owner or operator.

(B) Limitation

The Secretary shall not extend a time period under subparagraph (A) by more than 4 years.

(g) Fee title

The Secretary may vest fee title or other property interests acquired under cost-share clean coal power initiative agreements under this part in any entity, including the United States.

(h) Data protection

For a period not exceeding 5 years after completion of the operations phase of a cooperative agreement, the Secretary may provide appropriate protections (including exemptions from subchapter II of chapter 5 of title 5) against the dissemination of information that—

(1) results from demonstration activities carried out under the clean coal power initiative program; and

(2) would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from and first produced by a non-Federal party participating in a clean coal power initiative project.

(i) Applicability

No technology, or level of emission reduction, solely by reason of the use of the technology, or

the achievement of the emission reduction, by 1 or more facilities receiving assistance under this Act, shall be considered to be—

(1) adequately demonstrated for purposes of section 7411 of this title;

(2) achievable for purposes of section 7479 of this title; or

(3) achievable in practice for purposes of section 7501 of this title.

(Pub. L. 109–58, title IV, § 402, Aug. 8, 2005, 119 Stat. 750; Pub. L. 110–140, title VI, § 653, Dec. 19, 2007, 121 Stat. 1695.)

REFERENCES IN TEXT

This Act, referred to in subsec. (i), is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

AMENDMENTS

2007—Subsec. (b)(1)(B)(ii)(I). Pub. L. 110–140 added subcl. (I) and struck out former subcl. (I) which read as follows: ''to remove at least 99 percent of sulfur dioxide;''.

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 15963. Report

Not later than 1 year after August 8, 2005, and once every 2 years thereafter through 2014, the Secretary, in consultation with other appropriate Federal agencies, shall submit to Congress a report describing—

(1) the technical milestones set forth in section 15962 of this title and how those milestones ensure progress toward meeting the requirements of subsections (b)(1)(B) and (b)(2) of section 15962 of this title; and

(2) the status of projects funded under this part.

(Pub. L. 109–58, title IV, § 403, Aug. 8, 2005, 119 Stat. 753.)

§ 15964. Clean coal centers of excellence

(a) In general

As part of the clean coal power initiative, the Secretary shall award competitive, merit-based grants to institutions of higher education for the establishment of centers of excellence for energy systems of the future.

(b) Basis for grants

The Secretary shall award grants under this section to institutions of higher education that show the greatest potential for advancing new clean coal technologies.

(Pub. L. 109–58, title IV, § 404, Aug. 8, 2005, 119 Stat. 753.)

§ 15965. Time limit for award; extension

If a Clean Coal Power Initiative project selected after March 11, 2009, for negotiation under this or any other Act in any fiscal year, is not awarded within 2 years from the date the application was selected, negotiations shall cease and the Federal funds committed to the application shall be retained by the Department for future coal-related research, development and demonstration projects, except that the time limit may be extended at the Secretary's discretion for matters outside the control of the applicant, or if the Secretary determines that extension of the time limit is in the public interest.

(Pub. L. 111–8, div. C, title III, Mar. 11, 2009, 123 Stat. 616.)

CODIFICATION

Section was enacted as part of the Energy and Water Development and Related Agencies Appropriations Act, 2009, and also as part of the Omnibus Appropriations Act, 2009, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

PART B—CLEAN POWER PROJECTS

§ 15971. Integrated coal/renewable energy system

(a) In general

Subject to the availability of appropriations, the Secretary may provide loan guarantees for a project to produce energy from coal of less than 7,000 Btu/lb. using appropriate advanced integrated gasification combined cycle technology, including repowering of existing facilities, that—

(1) is combined with wind and other renewable sources;

(2) minimizes and offers the potential to sequester carbon dioxide emissions; and

(3) provides a ready source of hydrogen for near-site fuel cell demonstrations.

(b) Requirements

The facility—

(1) may be built in stages;

(2) shall have a combined output of at least 200 megawatts at successively more competitive rates; and

(3) shall be located in the Upper Great Plains.

(c) Technical criteria

Technical criteria described in section 15962(b) of this title shall apply to the facility.

(d) Investment tax credits

(1) In general

The loan guarantees provided under this section do not preclude the facility from receiving an allocation for investment tax credits under section 48A of title 26.

(2) Other funding

Use of the investment tax credit described in paragraph (1) does not prohibit the use of other clean coal program funding.

(Pub. L. 109–58, title IV, § 411, Aug. 8, 2005, 119 Stat. 754.)

§ 15972. Loan to place Alaska clean coal technology facility in service

(a) Definitions

In this section:

(1) Borrower

The term ''borrower'' means the owner of the clean coal technology plant.

(2) Clean coal technology plant

The term ''clean coal technology plant'' means the plant located near Healy, Alaska, constructed under Department cooperative agreement number DE–FC–22–91PC90544.

(3) Cost of a direct loan

The term ''cost of a direct loan'' has the meaning given the term in section 661a(5)(B) of title 2.

(b) Authorization

Subject to subsection (c), the Secretary shall use amounts made available under subsection (e) to provide the cost of a direct loan to the borrower for purposes of placing the clean coal technology plant into reliable operation for the generation of electricity.

(c) Requirements

(1) Maximum loan amount

The amount of the direct loan provided under subsection (b) shall not exceed $80,000,000.

(2) Determinations by Secretary

Before providing the direct loan to the borrower under subsection (b), the Secretary shall determine that—

(A) the plan of the borrower for placing the clean coal technology plant in reliable operation has a reasonable prospect of success;

(B) the amount of the loan (when combined with amounts available to the borrower from other sources) will be sufficient to carry out the project; and

(C) there is a reasonable prospect that the borrower will repay the principal and interest on the loan.

(3) Interest; term

The direct loan provided under subsection (b) shall bear interest at a rate and for a term that the Secretary determines appropriate, after consultation with the Secretary of the Treasury, taking into account the needs and capacities of the borrower and the prevailing rate of interest for similar loans made by public and private lenders.

(4) Additional terms and conditions

The Secretary may require any other terms and conditions that the Secretary determines to be appropriate.

(d) Use of payments

The Secretary shall retain any payments of principal and interest on the direct loan provided under subsection (b) to support energy research and development activities, to remain available until expended, subject to any other conditions in an applicable appropriations Act.

(e) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to provide the cost of a direct loan under subsection (b).

(Pub. L. 109–58, title IV, § 412, Aug. 8, 2005, 119 Stat. 754.)

§ 15973. Western integrated coal gasification demonstration project

(a) In general

Subject to the availability of appropriations, the Secretary shall carry out a project to demonstrate production of energy from coal mined in the western United States using integrated gasification combined cycle technology (referred to in this section as the ''demonstration project'').

(b) Components

The demonstration project—

(1) may include repowering of existing facilities;

(2) shall be designed to demonstrate the ability to use coal with an energy content of not more than 9,000 Btu/lb.; and

(3) shall be capable of removing and sequestering carbon dioxide emissions.

(c) All types of western coals

Notwithstanding the foregoing, and to the extent economically feasible, the demonstration project shall also be designed to demonstrate the ability to use a variety of types of coal (including subbituminous and bituminous coal with an energy content of up to 13,000 Btu/lb.) mined in the western United States.

(d) Location

The demonstration project shall be located in a western State at an altitude of greater than 4,000 feet above sea level.

(e) Cost sharing

The Federal share of the cost of the demonstration project shall be determined in accordance with section 16352 of this title.

(f) Loan guarantees

Notwithstanding subchapter XIII of this chapter, the demonstration project shall not be eligible for Federal loan guarantees.

(Pub. L. 109–58, title IV, § 413, Aug. 8, 2005, 119 Stat. 755.)

REFERENCES IN TEXT

Subchapter XIII of this chapter, referred to in subsec. (f), was in the original ''title XIV'', meaning title XIV of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 1061, which enacted subchapter XIII of this chapter and section 13557 of this title. For complete classification of title XIV to the Code, see Tables.

§ 15974. Coal gasification

The Secretary is authorized to provide loan guarantees for a project to produce energy from a plant using integrated gasification combined cycle technology of at least 400 megawatts in capacity that produces power at competitive rates in deregulated energy generation markets and that does not receive any subsidy (direct or indirect) from ratepayers.

(Pub. L. 109–58, title IV, § 414, Aug. 8, 2005, 119 Stat. 755.)

§ 15975. Petroleum coke gasification

The Secretary is authorized to provide loan guarantees for at least 5 petroleum coke gasification projects.

(Pub. L. 109–58, title IV, § 415, Aug. 8, 2005, 119 Stat. 756.)

§ 15976. Electron scrubbing demonstration

The Secretary shall use $5,000,000 from amounts appropriated to initiate, through the

Chicago Operations Office, a project to demonstrate the viability of high-energy electron scrubbing technology on commercial-scale electrical generation using high-sulfur coal.

(Pub. L. 109–58, title IV, § 416, Aug. 8, 2005, 119 Stat. 756.)

§ 15977. Department of Energy transportation fuels from Illinois basin coal

(a) In general

The Secretary shall carry out a program to evaluate the commercial and technical viability of advanced technologies for the production of Fischer-Tropsch transportation fuels, and other transportation fuels, manufactured from Illinois basin coal, including the capital modification of existing facilities and the construction of testing facilities under subsection (b).

(b) Facilities

For the purpose of evaluating the commercial and technical viability of different processes for producing Fischer-Tropsch transportation fuels, and other transportation fuels, from Illinois basin coal, the Secretary shall support the use and capital modification of existing facilities and the construction of new facilities at—

(1) Southern Illinois University Coal Research Center;

(2) University of Kentucky Center for Applied Energy Research; and

(3) Energy Center at Purdue University.

(c) Gasification products test center

In conjunction with the activities described in subsections (a) and (b), the Secretary shall construct a test center to evaluate and confirm liquid and gas products from syngas catalysis in order that the system has an output of at least 500 gallons of Fischer-Tropsch transportation fuel per day in a 24-hour operation.

(d) Milestones

(1) Selection of processes

Not later than 180 days after August 8, 2005, the Secretary shall select processes for evaluating the commercial and technical viability of different processes of producing Fischer-Tropsch transportation fuels, and other transportation fuels, from Illinois basin coal.

(2) Agreements

Not later than 1 year after August 8, 2005, the Secretary shall offer to enter into agreements—

(A) to carry out the activities described in this section, at the facilities described in subsection (b); and

(B) for the capital modifications or construction of the facilities at the locations described in subsection (b).

(3) Evaluations

Not later than 3 years after August 8, 2005, the Secretary shall begin, at the facilities described in subsection (b), evaluation of the technical and commercial viability of different processes of producing Fischer-Tropsch transportation fuels, and other transportation fuels, from Illinois basin coal.

(4) Construction of facilities

(A) In general

The Secretary shall construct the facilities described in subsection (b) at the lowest cost practicable.

(B) Grants or agreements

The Secretary may make grants or enter into agreements or contracts with the institutions of higher education described in subsection (b).

(e) Cost sharing

The cost of making grants under this section shall be shared in accordance with section 16352 of this title.

(f) Authorization of appropriations

There is authorized to be appropriated to carry out this section $85,000,000 for the period of fiscal years 2006 through 2010.

(Pub. L. 109–58, title IV, § 417, Aug. 8, 2005, 119 Stat. 756.)

PART C—FEDERAL COAL LEASES

§ 15991. Inventory requirement

(a) Review of assessments

(1) In general

The Secretary of the Interior, in consultation with the Secretary of Agriculture and the Secretary, shall review coal assessments and other available data to identify—

(A) Federal lands with coal resources that are available for development;

(B) the extent and nature of any restrictions on the development of coal resources on Federal lands identified under paragraph (1); and

(C) with respect to areas of such lands for which sufficient data exists, resources of compliant coal and supercompliant coal.

(2) Definitions

For purposes of this subsection—

(A) the term ''compliant coal'' means coal that contains not less than 1.0 and not more than 1.2 pounds of sulfur dioxide per million Btu; and

(B) the term ''supercompliant coal'' means coal that contains less than 1.0 pounds of sulfur dioxide per million Btu.

(b) Completion and updating of the inventory

The Secretary—

(1) shall complete the inventory under subsection (a) by not later than 2 years after August 8, 2005; and

(2) shall update the inventory as the availability of data and developments in technology warrant.

(c) Report

The Secretary shall submit to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate and make publicly available—

(1) a report containing the inventory under this section, by not later than 2 years after the effective date of this section; and

(2) each update of such inventory.

(Pub. L. 109–58, title IV, § 437, Aug. 8, 2005, 119 Stat. 762.)

REFERENCES IN TEXT

The effective date of this section, referred to in subsec. (c)(1), probably means the date of enactment of Pub. L. 109–58, which enacted this section.

CHANGE OF NAME

Committee on Resources of House of Representatives changed to Committee on Natural Resources of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

SHORT TITLE

For short title of subtitle D of title IV of Pub. L. 109–58, which enacted this part, as the ''Coal Leasing Amendments Act of 2005'', see section 431 of Pub. L. 109–58, set out as a note under section 15801 of this title.

SUBCHAPTER V—INDIAN ENERGY

§ 16001. Energy efficiency in federally assisted housing

The Secretary of Housing and Urban Development shall promote energy conservation in housing that is located on Indian land and assisted with Federal resources through—

(1) the use of energy-efficient technologies and innovations (including the procurement of energy-efficient refrigerators and other appliances);

(2) the promotion of shared savings contracts; and

(3) the use and implementation of such other similar technologies and innovations as the Secretary of Housing and Urban Development considers to be appropriate.

(Pub. L. 109–58, title V, § 506(a), Aug. 8, 2005, 119 Stat. 779.)

SHORT TITLE

For short title of title V of Pub. L. 109–58, which enacted this subchapter, as the ''Indian Tribal Energy Development and Self-Determination Act of 2005'', see section 501 of Pub. L. 109–58, set out as a note under section 15801 of this title.

SUBCHAPTER VI—NUCLEAR MATTERS

PART A—GENERAL NUCLEAR MATTERS

§ 16011. Demonstration hydrogen production at existing nuclear power plants

(a) Demonstration projects

The Secretary shall provide for the establishment of 2 projects in geographic areas that are regionally and climatically diverse to demonstrate the commercial production of hydrogen at existing nuclear power plants.

(b) Economic analysis

Prior to making an award under subsection (a), the Secretary shall determine whether the use of existing nuclear power plants is a cost-effective means of producing hydrogen.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for the purposes of carrying out this section not more than $100,000,000.

(Pub. L. 109–58, title VI, § 634, Aug. 8, 2005, 119 Stat. 790.)

§ 16012. Prohibition on assumption by United States Government of liability for certain foreign incidents

(a) In general

Notwithstanding any other provision of law, no officer of the United States or of any department, agency, or instrumentality of the United States Government may enter into any contract or other arrangement, or into any amendment or modification of a contract or other arrangement, the purpose or effect of which would be to directly or indirectly impose liability on the United States Government, or any department, agency, or instrumentality of the United States Government, or to otherwise directly or indirectly require an indemnity by the United States Government, for nuclear incidents occurring in connection with the design, construction, or operation of a production facility or utilization facility in any country whose government has been identified by the Secretary of State as engaged in state sponsorship of terrorist activities (specifically including any country the government of which, as of September 11, 2001, had been determined by the Secretary of State under section 2371(a) of title 22, section 2405(j)(1) of title 50, Appendix, or section 2780(d) of title 22 to have repeatedly provided support for acts of international terrorism). This section shall not apply to nuclear incidents occurring as a result of missions, carried out under the direction of the Secretary, the Secretary of Defense, or the Secretary of State, that are necessary to safely secure, store, transport, or remove nuclear materials for nuclear safety or nonproliferation purposes.

(b) Definitions

The terms used in this section shall have the same meaning as those terms have under section 2014 of this title, unless otherwise expressly provided in this section.

(Pub. L. 109–58, title VI, § 635, Aug. 8, 2005, 119 Stat. 790.)

§ 16013. Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this subtitle and the amendments made by this subtitle.

(Pub. L. 109–58, title VI, § 636, Aug. 8, 2005, 119 Stat. 791.)

REFERENCES IN TEXT

This subtitle, referred to in text, is subtitle B (§§ 621–639) of title VI of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 782, which enacted this part and sections 2015b, 2210c, and 5853 of this title, amended sections 2133, 2135, 2158, 2160d, 2201, 2210a, 2214, 2297h–8, and 5851 of this title, repealed section 2213 of this title, and enacted provisions set out as notes under sections 2158 and 2214 of this title. For complete classification of this subtitle to the Code, see Tables.

§ 16014. Standby support for certain nuclear plant delays

(a) Definitions

In this section:

(1) Advanced nuclear facility

The term ''advanced nuclear facility'' means any nuclear facility the reactor design for which is approved after December 31, 1993, by the Commission (and such design or a substantially similar design of comparable capacity was not approved on or before that date).

(2) Combined license

The term ''combined license'' means a combined construction and operating license for an advanced nuclear facility issued by the Commission.

(3) Commission

The term ''Commission'' means the Nuclear Regulatory Commission.

(4) Sponsor

The term ''sponsor'' means a person who has applied for or been granted a combined license.

(b) Contract authority

(1) In general

The Secretary may enter into contracts under this section with sponsors of an advanced nuclear facility that cover a total of 6 reactors, with the 6 reactors consisting of not more than 3 different reactor designs, in accordance with paragraph (2).

(2) Requirement for contracts

(A) Definition of loan cost

In this paragraph, the term ''loan cost'' has the meaning given the term ''cost of a loan guarantee'' under section 661a(5)(C) of title 2.

(B) Establishment of accounts

There is established in the Department 2 separate accounts, which shall be known as the—

(i) ''Standby Support Program Account''; and

(ii) ''Standby Support Grant Account''.

(C) Requirement

The Secretary shall not enter into a contract under this section unless the Secretary deposits—

(i) in the Standby Support Program Account established under subparagraph (B), funds appropriated to the Secretary in advance of the contract or a combination of appropriated funds and loan guarantee fees that are in an amount sufficient to cover the loan costs described in subsection (d)(5)(A); and

(ii) in the Standby Support Grant Account established under subparagraph (B), funds appropriated to the Secretary in advance of the contract, paid to the Secretary by the sponsor of the advanced nuclear facility, or a combination of appropriations and payments that are in an amount sufficient[1] cover the costs described in subparagraphs (B), (C), and (D) of subsection (d)(5).

(c) Covered delays

(1) Inclusions

Under each contract authorized by this section, the Secretary shall pay the costs specified in subsection (d), using funds appropriated or collected for the covered costs, if full power operation of the advanced nuclear facility is delayed by—

(A) the failure of the Commission to comply with schedules for review and approval of inspections, tests, analyses, and acceptance criteria established under the combined license or the conduct of preoperational hearings by the Commission for the advanced nuclear facility; or

(B) litigation that delays the commencement of full-power operations of the advanced nuclear facility.

(2) Exclusions

The Secretary may not enter into any contract under this section that would obligate the Secretary to pay any costs resulting from—

(A) the failure of the sponsor to take any action required by law or regulation;

(B) events within the control of the sponsor; or

(C) normal business risks.

(d) Covered costs

(1) In general

Subject to paragraphs (2), (3), and (4), the costs that shall be paid by the Secretary pursuant to a contract entered into under this section are the costs that result from a delay covered by the contract.

(2) Initial 2 reactors

In the case of the first 2 reactors that receive combined licenses and on which construction is commenced, the Secretary shall pay—

(A) 100 percent of the covered costs of delay; but

(B) not more than $500,000,000 per contract.

(3) Subsequent 4 reactors

In the case of the next 4 reactors that receive a combined license and on which construction is commenced, the Secretary shall pay—

(A) 50 percent of the covered costs of delay that occur after the initial 180-day period of covered delay; but

(B) not more than $250,000,000 per contract.

(4) Conditions on payment of certain covered costs

(A) In general

The obligation of the Secretary to pay the covered costs described in subparagraph (B) of paragraph (5) is subject to the Secretary receiving from appropriations or payments from other non-Federal sources amounts sufficient to pay the covered costs.

(B) Non-Federal sources

The Secretary may receive and accept payments from any non-Federal source, which shall be made available without further appropriation for the payment of the covered costs.

(5) Types of covered costs

Subject to paragraphs (2), (3), and (4), the contract entered into under this section for an

[1] So in original. Probably should be followed by ''to''.

advanced nuclear facility shall include as covered costs those costs that result from a delay during construction and in gaining approval for fuel loading and full-power operation, including—

(A) principal or interest on any debt obligation of an advanced nuclear facility owned by a non-Federal entity; and

(B) the incremental difference between—

(i) the fair market price of power purchased to meet the contractual supply agreements that would have been met by the advanced nuclear facility but for the delay; and

(ii) the contractual price of power from the advanced nuclear facility subject to the delay.

(e) Requirements

Any contract between a sponsor and the Secretary covering an advanced nuclear facility under this section shall require the sponsor to use due diligence to shorten, and to end, the delay covered by the contract.

(f) Reports

For each advanced nuclear facility that is covered by a contract under this section, the Commission shall submit to Congress and the Secretary quarterly reports summarizing the status of licensing actions associated with the advanced nuclear facility.

(g) Regulations

(1) In general

Subject to paragraphs (2) and (3), the Secretary shall issue such regulations as are necessary to carry out this section.

(2) Interim final rulemaking

Not later than 270 days after August 8, 2005, the Secretary shall issue for public comment an interim final rule regulating contracts authorized by this section.

(3) Notice of final rulemaking

Not later than 1 year after August 8, 2005, the Secretary shall issue a notice of final rulemaking regulating the contracts.

(h) Authorization of appropriations

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

(Pub. L. 109–58, title VI, § 638, Aug. 8, 2005, 119 Stat. 791.)

PART B—NEXT GENERATION NUCLEAR PLANT PROJECT

§ 16021. Project establishment

(a) Establishment

The Secretary shall establish a project to be known as the ''Next Generation Nuclear Plant Project'' (referred to in this part as the ''Project'').

(b) Content

The Project shall consist of the research, development, design, construction, and operation of a prototype plant, including a nuclear reactor that—

(1) is based on research and development activities supported by the Generation IV Nuclear Energy Systems Initiative under section 16272(d)[1] of this title; and

(2) shall be used—

(A) to generate electricity;

(B) to produce hydrogen; or

(C) both to generate electricity and to produce hydrogen.

(Pub. L. 109–58, title VI, § 641, Aug. 8, 2005, 119 Stat. 794.)

REFERENCES IN TEXT

Section 16272(d) of this title, referred to in subsec. (b)(1), was in the original a reference to section 942(d) of Pub. L. 109–58, which is classified to section 16251(d) of this title but was translated as meaning section 952(d) of Pub. L. 109–58 to reflect the probable intent of Congress, because section 952(d) relates to Generation IV Nuclear Energy Systems Initiative and section 942(d) relates to limitations on production incentives for cellulosic biofuels.

§ 16022. Project management

(a) Departmental management

(1) In general

The Project shall be managed in the Department by the Office of Nuclear Energy, Science, and Technology.

(2) Generation IV Nuclear Energy Systems program

The Secretary may combine the Project with the Generation IV Nuclear Energy Systems Initiative.

(3) Existing DOE project management expertise

The Secretary may utilize capabilities for review of construction projects for advanced scientific facilities within the Office of Science to track the progress of the Project.

(b) Laboratory management

(1) Lead Laboratory

The Idaho National Laboratory shall be the lead National Laboratory for the Project and shall collaborate with other National Laboratories, institutions of higher education, other research institutes, industrial researchers, and international researchers to carry out the Project.

(2) Industrial partnerships

(A) In general

The Idaho National Laboratory shall organize a consortium of appropriate industrial partners that will carry out cost-shared research, development, design, and construction activities, and operate research facilities, on behalf of the Project.

(B) Cost-sharing

Activities of industrial partners funded by the Project shall be cost-shared in accordance with section 16352 of this title.

(C) Preference

Preference in determining the final structure of the consortium or any partnerships under this part shall be given to a structure (including designating as a lead industrial

[1] See References in Text note below.

partner an entity incorporated in the United States) that retains United States technological leadership in the Project while maximizing cost sharing opportunities and minimizing Federal funding responsibilities.

(3) Prototype plant siting

The prototype nuclear reactor and associated plant shall be sited at the Idaho National Laboratory in Idaho.

(4) Reactor test capabilities

The Project shall use, if appropriate, reactor test capabilities at the Idaho National Laboratory.

(5) Other Laboratory capabilities

The Project may use, if appropriate, facilities at other National Laboratories.

(Pub. L. 109–58, title VI, § 642, Aug. 8, 2005, 119 Stat. 795.)

§ 16023. Project organization

(a) Major project elements

The Project shall consist of the following major program elements:

(1) High-temperature hydrogen production technology development and validation.

(2) Energy conversion technology development and validation.

(3) Nuclear fuel development, characterization, and qualification.

(4) Materials selection, development, testing, and qualification.

(5) Reactor and balance-of-plant design, engineering, safety analysis, and qualification.

(b) Project phases

The Project shall be conducted in the following phases:

(1) First project phase

A first project phase shall be conducted to—

(A) select and validate the appropriate technology under subsection (a)(1);

(B) carry out enabling research, development, and demonstration activities on technologies and components under paragraphs (2) through (4) of subsection (a);

(C) determine whether it is appropriate to combine electricity generation and hydrogen production in a single prototype nuclear reactor and plant; and

(D) carry out initial design activities for a prototype nuclear reactor and plant, including development of design methods and safety analytical methods and studies under subsection (a)(5).

(2) Second project phase

A second project phase shall be conducted to—

(A) continue appropriate activities under paragraphs (1) through (5) of subsection (a);

(B) develop, through a competitive process, a final design for the prototype nuclear reactor and plant;

(C) apply for licenses to construct and operate the prototype nuclear reactor from the Nuclear Regulatory Commission; and

(D) construct and start up operations of the prototype nuclear reactor and its associated hydrogen or electricity production facilities.

(c) Project requirements

(1) In general

The Secretary shall ensure that the Project is structured so as to maximize the technical interchange and transfer of technologies and ideas into the Project from other sources of relevant expertise, including—

(A) the nuclear power industry, including nuclear powerplant construction firms, particularly with respect to issues associated with plant design, construction, and operational and safety issues;

(B) the chemical processing industry, particularly with respect to issues relating to—

(i) the use of process energy for production of hydrogen; and

(ii) the integration of technologies developed by the Project into chemical processing environments; and

(C) international efforts in areas related to the Project, particularly with respect to hydrogen production technologies.

(2) International collaboration

(A) In general

The Secretary shall seek international cooperation, participation, and financial contributions for the Project.

(B) Assistance from international partners

The Secretary, through the Idaho National Laboratory, may contract for assistance from specialists or facilities from member countries of the Generation IV International Forum, the Russian Federation, or other international partners if the specialists or facilities provide access to cost-effective and relevant skills or test capabilities.

(C) Partner nations

The Project may involve demonstration of selected project objectives in a partner country.

(D) Generation IV International Forum

The Secretary shall ensure that international activities of the Project are coordinated with the Generation IV International Forum.

(3) Review by Nuclear Energy Research Advisory Committee

(A) In general

The Nuclear Energy Research Advisory Committee of the Department (referred to in this paragraph as the ''NERAC'') shall—

(i) review all program plans for the Project and all progress under the Project on an ongoing basis; and

(ii) ensure that important scientific, technical, safety, and program management issues receive attention in the Project and by the Secretary.

(B) Additional expertise

The NERAC shall supplement the expertise of the NERAC or appoint subpanels to incorporate into the review by the NERAC the relevant sources of expertise described under paragraph (1).

(C) Initial review

Not later than 180 days after August 8, 2005, the NERAC shall—

(i) review existing program plans for the Project in light of the recommendations of the document entitled ''Design Features and Technology Uncertainties for the Next Generation Nuclear Plant,'' dated June 30, 2004; and

(ii) address any recommendations of the document not incorporated in program plans for the Project.

(D) First project phase review

On a determination by the Secretary that the appropriate activities under the first project phase under subsection (b)(1) are nearly complete, the Secretary shall request the NERAC to conduct a comprehensive review of the Project and to report to the Secretary the recommendation of the NERAC concerning whether the Project is ready to proceed to the second project phase under subsection (b)(2).

(E) Transmittal of reports to Congress

Not later than 60 days after receiving any report from the NERAC related to the Project, the Secretary shall submit to the appropriate committees of the Senate and the House of Representatives a copy of the report, along with any additional views of the Secretary that the Secretary may consider appropriate.

(Pub. L. 109–58, title VI, § 643, Aug. 8, 2005, 119 Stat. 795.)

§ 16024. Nuclear Regulatory Commission

(a) In general

In accordance with section 5842 of this title, the Nuclear Regulatory Commission shall have licensing and regulatory authority for any reactor authorized under this part.

(b) Licensing strategy

Not later than 3 years after August 8, 2005, the Secretary and the Chairman of the Nuclear Regulatory Commission shall jointly submit to the appropriate committees of the Senate and the House of Representatives a licensing strategy for the prototype nuclear reactor, including—

(1) a description of ways in which current licensing requirements relating to light-water reactors need to be adapted for the types of prototype nuclear reactor being considered by the Project;

(2) a description of analytical tools that the Nuclear Regulatory Commission will have to develop to independently verify designs and performance characteristics of components, equipment, systems, or structures associated with the prototype nuclear reactor;

(3) other research or development activities that may be required on the part of the Nuclear Regulatory Commission in order to review a license application for the prototype nuclear reactor; and

(4) an estimate of the budgetary requirements associated with the licensing strategy.

(c) Ongoing interaction

The Secretary shall seek the active participation of the Nuclear Regulatory Commission throughout the duration of the Project to—

(1) avoid design decisions that will compromise adequate safety margins in the design of the reactor or impair the accessibility of nuclear safety-related components of the prototype reactor for inspection and maintenance;

(2) develop tools to facilitate inspection and maintenance needed for safety purposes; and

(3) develop risk-based criteria for any future commercial development of a similar reactor architectures.

(Pub. L. 109–58, title VI, § 644, Aug. 8, 2005, 119 Stat. 797.)

§ 16025. Project timelines and authorization of appropriations

(a) Target date to complete the first project phase

Not later than September 30, 2011, the Secretary shall—

(1) select the technology to be used by the Project for high-temperature hydrogen production and the initial design parameters for the prototype nuclear plant; or

(2) submit to Congress a report establishing an alternative date for making the selection.

(b) Design competition for second project phase

(1) In general

The Secretary, acting through the Idaho National Laboratory, shall fund not more than 4 teams for not more than 2 years to develop detailed proposals for competitive evaluation and selection of a single proposal for a final design of the prototype nuclear reactor.

(2) Systems integration

The Secretary may structure Project activities in the second project phase to use the lead industrial partner of the competitively selected design under paragraph (1) in a systems integration role for final design and construction of the Project.

(c) Target date to complete project construction

Not later than September 30, 2021, the Secretary shall—

(1) complete construction and begin operations of the prototype nuclear reactor and associated energy or hydrogen facilities; or

(2) submit to Congress a report establishing an alternative date for completion.

(d) Authorization of appropriations

There is authorized to be appropriated to the Secretary for research and construction activities under this part (including for transfer to the Nuclear Regulatory Commission for activities under section 16024 of this title as appropriate)—

(1) $1,250,000,000 for the period of fiscal years 2006 through 2015; and

(2) such sums as are necessary for each of fiscal years 2016 through 2021.

(Pub. L. 109–58, title VI, § 645, Aug. 8, 2005, 119 Stat. 798.)

PART C—NUCLEAR SECURITY

§ 16041. Nuclear facility and materials security

(a) In general

(1), (2) Omitted

(3) Federal security coordinators

(A) Regional offices

Not later than 18 months after August 8, 2005, the Nuclear Regulatory Commission (referred to in this section as the ''Commission'') shall assign a Federal security coordinator, under the employment of the Commission, to each region of the Commission.

(B) Responsibilities

The Federal security coordinator shall be responsible for—

(i) communicating with the Commission and other Federal, State, and local authorities concerning threats, including threats against such classes of facilities as the Commission determines to be appropriate;

(ii) monitoring such classes of facilities as the Commission determines to be appropriate to ensure that they maintain security consistent with the security plan in accordance with the appropriate threat level; and

(iii) assisting in the coordination of security measures among the private security forces at such classes of facilities as the Commission determines to be appropriate and Federal, State, and local authorities, as appropriate.

(b) Backup power for certain emergency notification systems

For any licensed nuclear power plants located where there is a permanent population, as determined by the 2000 decennial census, in excess of 15,000,000 within a 50-mile radius of the power plant, not later than 18 months after August 8, 2005, the Commission shall require that backup power to be available for the emergency notification system of the power plant, including the emergency siren warning system, if the alternating current supply within the 10-mile emergency planning zone of the power plant is lost.

(c), (d) Omitted

(e) Final regulations; waivers

(1) to (3) Omitted

(4) Final regulations

(A) Regulations

(i) In general

Not later than 18 months after August 8, 2005, the Commission, after consultation with States and other stakeholders, shall issue final regulations establishing such requirements as the Commission determines to be necessary to carry out this section and the amendments made by this section.

(ii) Inclusions

The regulations shall include a definition of the term ''discrete source'' for purposes of paragraphs (3) and (4) of section 2014(e) of this title.

(B) Cooperation

In promulgating regulations under paragraph (1),[1] the Commission shall, to the maximum extent practicable—

(i) cooperate with States; and

(ii) use model State standards in existence on August 8, 2005.

(C) Transition plan

(i) Definition of byproduct material

In this paragraph, the term ''byproduct material'' has the meaning given the term in paragraphs (3) and (4) of section 2014(e) of this title.

(ii) Preparation and publication

To facilitate an orderly transition of regulatory authority with respect to byproduct material, the Commission, in issuing regulations under subparagraph (A), shall prepare and publish a transition plan for—

(I) States that have not, before the date on which the plan is published, entered into an agreement with the Commission under section 2021(b) of this title; and

(II) States that have entered into an agreement with the Commission under that section before the date on which the plan is published.

(iii) Inclusions

The transition plan under clause (ii) shall include—

(I) a description of the conditions under which a State may exercise authority over byproduct material; and

(II) a statement of the Commission that any agreement covering byproduct material, as defined in paragraph (1) or (2) of section 2014(e) of this title, entered into between the Commission and a State under section 2021(b) of this title before the date of publication of the transition plan shall be considered to include byproduct material, as defined in paragraph (3) or (4) of section 2014(e) of this title, if the Governor of the State certifies to the Commission on the date of publication of the transition plan that—

(aa) the State has a program for licensing byproduct material, as defined in paragraph (3) or (4) of section 2014(e) of this title, that is adequate to protect the public health and safety, as determined by the Commission; and

(bb) the State intends to continue to implement the regulatory responsibility of the State with respect to the byproduct material.

(D) Availability of radiopharmaceuticals

In promulgating regulations under subparagraph (A), the Commission shall consider the impact on the availability of radiopharmaceuticals to—

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

(i) physicians; and

(ii) patients the medical treatment of which relies on radiopharmaceuticals.

(5) Waivers

(A) In general

Except as provided in subparagraph (B), the Commission may grant a waiver to any entity of any requirement under this section or an amendment made by this section with respect to a matter relating to byproduct material (as defined in paragraphs (3) and (4) of section 2014(e) of this title) if the Commission determines that the waiver is in accordance with the protection of the public health and safety and the promotion of the common defense and security.

(B) Exceptions

(i) In general

The Commission may not grant a waiver under subparagraph (A) with respect to—

(I) any requirement under the amendments made by subsection (c)(1);

(II) a matter relating to an importation into, or exportation from, the United States for a period ending after the date that is 1 year after August 8, 2005; or

(III) any other matter for a period ending after the date that is 4 years after August 8, 2005.

(ii) Waivers to States

The Commission shall terminate any waiver granted to a State under subparagraph (A) if the Commission determines that—

(I) the State has entered into an agreement with the Commission under section 2021(b) of this title;

(II) the agreement described in subclause (I) covers byproduct material (as described in paragraph (3) or (4) of section 2014(e) of this title); and

(III) the program of the State for licensing such byproduct material is adequate to protect the public health and safety.

(C) Publication

The Commission shall publish in the Federal Register a notice of any waiver granted under this subsection.

(Pub. L. 109–58, title VI, § 651, Aug. 8, 2005, 119 Stat. 799.)

REFERENCES IN TEXT

For references to ''the amendments made by this section'', ''an amendment made by this section'', and ''the amendments made by subsection (c)(1)'', appearing in subsecs. (e)(4)(A)(i), (e)(5)(A), and (e)(5)(B)(i)(I), respectively, see Codification note below.

CODIFICATION

Section is comprised of section 651 of Pub. L. 109–58. Subsec. (a)(1), (2) of section 651 of Pub. L. 109–58 enacted sections 2210d and 2210e of this title, subsec. (c)(1) of section 651 of Pub. L. 109–58 amended section 2051 of this title, subsecs. (c)(2) to (5) and (d) of section 651 of Pub. L. 109–58 enacted sections 2210f to 2210h and 2015c of this title, and subsec. (e)(1) to (3) of section 651 of Pub. L. 109–58 amended sections 2014, 2021, 2021b, and 2111 of this title.

§ 16042. Department of Homeland Security consultation

Before issuing a license for a utilization facility, the Nuclear Regulatory Commission shall consult with the Department of Homeland Security concerning the potential vulnerabilities of the location of the proposed facility to terrorist attack.

(Pub. L. 109–58, title VI, § 657, Aug. 8, 2005, 119 Stat. 814.)

SUBCHAPTER VII—VEHICLES AND FUELS

PART A—EXISTING PROGRAMS

§ 16051. Joint flexible fuel/hybrid vehicle commercialization initiative

(a) Definitions

In this section:

(1) Eligible entity

The term ''eligible entity'' means—

(A) a for-profit corporation;

(B) a nonprofit corporation; or

(C) an institution of higher education.

(2) Program

The term ''program'' means a program established under subsection (b).

(b) Establishment

The Secretary shall establish a program to improve technologies for the commercialization of—

(1) a combination hybrid/flexible fuel vehicle; or

(2) a plug-in hybrid/flexible fuel vehicle.

(c) Grants

In carrying out the program, the Secretary shall provide grants that give preference to proposals that—

(1) achieve the greatest reduction in miles per gallon of petroleum fuel consumption;

(2) achieve not less than 250 miles per gallon of petroleum fuel consumption; and

(3) have the greatest potential of commercialization to the general public within 5 years.

(d) Verification

Not later than 90 days after August 8, 2005, the Secretary shall publish in the Federal Register procedures to verify—

(1) the hybrid/flexible fuel vehicle technologies to be demonstrated; and

(2) that grants are administered in accordance with this section.

(e) Report

Not later than 260 days after August 8, 2005, and annually thereafter, the Secretary shall submit to Congress a report that—

(1) identifies the grant recipients;

(2) describes the technologies to be funded under the program;

(3) assesses the feasibility of the technologies described in paragraph (2) in meeting the goals described in subsection (c);

(4) identifies applications submitted for the program that were not funded; and

(5) makes recommendations for Federal legislation to achieve commercialization of the technology demonstrated.

(f) Authorization of appropriations

There are authorized to be appropriated to carry out this section, to remain available until expended—

(1) $3,000,000 for fiscal year 2006;
(2) $7,000,000 for fiscal year 2007;
(3) $10,000,000 for fiscal year 2008; and
(4) $20,000,000 for fiscal year 2009.

(Pub. L. 109–58, title VII, § 706, Aug. 8, 2005, 119 Stat. 817.)

PART B—HYBRID VEHICLES, ADVANCED VEHICLES, AND FUEL CELL BUSES

SUBPART 1—HYBRID VEHICLES

§ 16061. Hybrid vehicles

The Secretary shall accelerate efforts directed toward the improvement of batteries and other rechargeable energy storage systems, power electronics, hybrid systems integration, and other technologies for use in hybrid vehicles.

(Pub. L. 109–58, title VII, § 711, Aug. 8, 2005, 119 Stat. 818.)

§ 16062. Domestic manufacturing conversion grant program

(a) Program

(1) In general

The Secretary shall establish a program to encourage domestic production and sales of efficient hybrid and advanced diesel vehicles and components of those vehicles.

(2) Inclusions

The program shall include grants and loan guarantees under section 16513 of this title to automobile manufacturers and suppliers and hybrid component manufacturers to encourage domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive, and advanced diesel vehicles.

(3) Priority

Priority shall be given to the refurbishment or retooling of manufacturing facilities that have recently ceased operation or will cease operation in the near future.

(b) Coordination with State and local programs

The Secretary may coordinate implementation of this section with State and local programs designed to accomplish similar goals, including the retention and retraining of skilled workers from the manufacturing facilities, including by establishing matching grant arrangements.

(c) Authorization of appropriations

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

(Pub. L. 109–58, title VII, § 712, Aug. 8, 2005, 119 Stat. 818; Pub. L. 110–140, title I, §§ 132, 134(a), Dec. 19, 2007, 121 Stat. 1511, 1513.)

AMENDMENTS

2007—Pub. L. 110–140, § 132, amended section generally. Prior to amendment, section related to program to encourage domestic production and sales of efficient hybrid and advanced diesel vehicles and authorization of appropriations.

Subsec. (a)(2). Pub. L. 110–140, § 134(a), inserted ''and loan guarantees under section 16513 of this title'' after ''grants''.

EFFECTIVE DATE OF 2007 AMENDMENT

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

SUBPART 2—ADVANCED VEHICLES

§ 16071. Pilot program

(a) Establishment

The Secretary, in consultation with the Secretary of Transportation, shall establish a competitive grant pilot program (referred to in this subpart as the ''pilot program''), to be administered through the Clean Cities Program of the Department, to provide not more than 30 geographically dispersed project grants to State governments, local governments, or metropolitan transportation authorities to carry out a project or projects for the purposes described in subsection (b).

(b) Grant purposes

A grant under this section may be used for the following purposes:

(1) The acquisition of alternative fueled vehicles or fuel cell vehicles, including—

(A) passenger vehicles (including neighborhood electric vehicles); and

(B) motorized 2-wheel bicycles or other vehicles for use by law enforcement personnel or other State or local government or metropolitan transportation authority employees.

(2) The acquisition of alternative fueled vehicles, hybrid vehicles, or fuel cell vehicles, including—

(A) buses used for public transportation or transportation to and from schools;

(B) delivery vehicles for goods or services; and

(C) ground support vehicles at public airports (including vehicles to carry baggage or push or pull airplanes toward or away from terminal gates).

(3) The acquisition of ultra-low sulfur diesel vehicles.

(4) Installation or acquisition of infrastructure necessary to directly support an alternative fueled vehicle, fuel cell vehicle, or hybrid vehicle project funded by the grant, including fueling and other support equipment.

(5) Operation and maintenance of vehicles, infrastructure, and equipment acquired as part of a project funded by the grant.

(c) Applications

(1) Requirements

(A) In general

The Secretary shall issue requirements for applying for grants under the pilot program.

(B) Minimum requirements

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

(i) be submitted by the head of a State or local government or a metropolitan transportation authority, or any combination thereof, and a registered participant in the Clean Cities Program of the Department; and

(ii) include—

(I) a description of the project proposed in the application, including how the project meets the requirements of this subpart;

(II) an estimate of the ridership or degree of use of the project;

(III) an estimate of the air pollution emissions reduced and fossil fuel displaced as a result of the project, and a plan to collect and disseminate environmental data, related to the project to be funded under the grant, over the life of the project;

(IV) a description of how the project will be sustainable without Federal assistance after the completion of the term of the grant;

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

(VI) a description of which costs of the project will be supported by Federal assistance under this subpart; and

(VII) documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the project, and a commitment by the applicant to use such fuel in carrying out the project.

(2) Partners

An applicant under paragraph (1) may carry out a project under the pilot program in partnership with public and private entities.

(d) Selection criteria

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

(1) consider each applicant's previous experience with similar projects; and

(2) give priority consideration to applications that—

(A) are most likely to maximize protection of the environment;

(B) 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 subpart is completed; and

(C) exceed the minimum requirements of subsection (c)(1)(B)(ii).

(e) Pilot project requirements

(1) Maximum amount

The Secretary shall not provide more than $15,000,000 in Federal assistance under the pilot program to any applicant.

(2) Cost sharing

The Secretary shall not provide more than 50 percent of the cost, incurred during the period of the grant, of any project under the pilot program.

(3) Maximum period of grants

The Secretary shall not fund any applicant under the pilot program for more than 5 years.

(4) Deployment and distribution

The Secretary shall seek to the maximum extent practicable to ensure a broad geographic distribution of project sites.

(5) 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.

(f) Schedule

(1) Publication

Not later than 90 days after August 8, 2005, the Secretary shall publish in the Federal Register, Commerce Business Daily, and elsewhere as appropriate, a request for applications to undertake projects under the pilot program. Applications shall be due not later than 180 days after the date of publication of the notice.

(2) Selection

Not later than 180 days after the date by which applications for grants are due, the Secretary shall select by competitive, peer reviewed proposal, all applications for projects to be awarded a grant under the pilot program.

(g) Definitions

For purposes of carrying out the pilot program, the Secretary shall issue regulations defining any term, as the Secretary determines to be necessary.

(Pub. L. 109–58, title VII, § 721, Aug. 8, 2005, 119 Stat. 818.)

§ 16072. Reports to Congress

(a) Initial report

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

(1) an identification of the grant recipients and a description of the projects to be funded;

(2) an identification of other applicants that submitted applications for the pilot program; and

(3) 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 3 years after August 8, 2005, and annually thereafter until the pilot program ends, the Secretary shall submit to Congress a report containing an evaluation of the effectiveness of the pilot program, including—

(1) an assessment of the benefits to the environment derived from the projects included in the pilot program; and

(2) an estimate of the potential benefits to the environment to be derived from widespread application of alternative fueled vehicles and ultra-low sulfur diesel vehicles.

(Pub. L. 109–58, title VII, § 722, Aug. 8, 2005, 119 Stat. 820.)

§ 16073. Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this subpart $200,000,000, to remain available until expended.

(Pub. L. 109–58, title VII, § 723, Aug. 8, 2005, 119 Stat. 821.)

SUBPART 3—FUEL CELL BUSES

§ 16081. Fuel cell transit bus demonstration

(a) In general

The Secretary, in consultation with the Secretary of Transportation, shall establish a transit bus demonstration program to make competitive, merit-based awards for 5-year projects to demonstrate not more than 25 fuel cell transit buses (and necessary infrastructure) in 5 geographically dispersed localities.

(b) Preference

In selecting projects under this section, the Secretary shall give preference to projects that are most likely to mitigate congestion and improve air quality.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $10,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title VII, § 731, Aug. 8, 2005, 119 Stat. 821.)

PART C—CLEAN SCHOOL BUSES

§ 16091. Clean school bus program [1]

(a) Definitions

In this section:

(1) Administrator

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

(2) Alternative fuel

The term ''alternative fuel'' means—

(A) liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, or propane;

(B) methanol or ethanol at no less than 85 percent by volume; or

(C) biodiesel conforming with standards published by the American Society for Testing and Materials as of August 8, 2005.

(3) Clean school bus

The term ''clean school bus'' means a school bus with a gross vehicle weight of greater than 14,000 pounds that—

(A) is powered by a heavy duty engine; and

(B) is operated solely on an alternative fuel or ultra-low sulfur diesel fuel.

(4) Eligible recipient

(A) In general

Subject to subparagraph (B), the term ''eligible recipient'' means—

(i) 1 or more local or State governmental entities responsible for—

(I) providing school bus service to 1 or more public school systems; or

(II) the purchase of school buses;

(ii) 1 or more contracting entities that provide school bus service to 1 or more public school systems; or

(iii) a nonprofit school transportation association.

(B) Special requirements

In the case of eligible recipients identified under clauses (ii) and (iii),[2] the Administrator shall establish timely and appropriate requirements for notice and may establish timely and appropriate requirements for approval by the public school systems that would be served by buses purchased or retrofit using grant funds made available under this section.

(5) Retrofit technology

The term ''retrofit technology'' means a particulate filter or other emissions control equipment that is verified or certified by the Administrator or the California Air Resources Board as an effective emission reduction technology when installed on an existing school bus.

(6) Ultra-low sulfur diesel fuel

The term ''ultra-low sulfur diesel fuel'' means diesel fuel that contains sulfur at not more than 15 parts per million.

(b) Program for retrofit or replacement of certain existing school buses with clean school buses

(1) Establishment

(A) In general

The Administrator, in consultation with the Secretary and other appropriate Federal departments and agencies, shall establish a program for awarding grants on a competitive basis to eligible recipients for the replacement, or retrofit (including repowering, aftertreatment, and remanufactured engines) of, certain existing school buses.

(B) Balancing

In awarding grants under this section, the Administrator shall, to the maximum extent practicable, achieve an appropriate balance between awarding grants—

(i) to replace school buses; and

(ii) to install retrofit technologies.

(2) Priority of grant applications

(A) Replacement

In the case of grant applications to replace school buses, the Administrator shall give

[1] This section is substantially identical to section 16091a of this title.

[2] So in original. Probably means clauses (ii) and (iii) of subparagraph (A).

priority to applicants that propose to replace school buses manufactured before model year 1977.

(B) Retrofitting

In the case of grant applications to retrofit school buses, the Administrator shall give priority to applicants that propose to retrofit school buses manufactured in or after model year 1991.

(3) Use of school bus fleet

(A) In general

All school buses acquired or retrofitted with funds provided under this section shall be operated as part of the school bus fleet for which the grant was made for not less than 5 years.

(B) Maintenance, operation, and fueling

New school buses and retrofit technology shall be maintained, operated, and fueled according to manufacturer recommendations or State requirements.

(4) Retrofit grants

The Administrator may award grants for up to 100 percent of the retrofit technologies and installation costs.

(5) Replacement grants

(A) Eligibility for 50 percent grants

The Administrator may award grants for replacement of school buses in the amount of up to one-half of the acquisition costs (including fueling infrastructure) for—

(i) clean school buses with engines manufactured in model year 2005 or 2006 that emit not more than—

(I) 1.8 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen; and

(II) .01 grams per brake horsepower-hour of particulate matter; or

(ii) clean school buses with engines manufactured in model year 2007, 2008, or 2009 that satisfy regulatory requirements established by the Administrator for emissions of oxides of nitrogen and particulate matter to be applicable for school buses manufactured in model year 2010.

(B) Eligibility for 25 percent grants

The Administrator may award grants for replacement of school buses in the amount of up to one-fourth of the acquisition costs (including fueling infrastructure) for—

(i) clean school buses with engines manufactured in model year 2005 or 2006 that emit not more than—

(I) 2.5 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen; and

(II) .01 grams per brake horsepower-hour of particulate matter; or

(ii) clean school buses with engines manufactured in model year 2007 or thereafter that satisfy regulatory requirements established by the Administrator for emissions of oxides of nitrogen and particulate matter from school buses manufactured in that model year.

(6) Ultra-low sulfur diesel fuel

(A)[3] In general

In the case of a grant recipient receiving a grant for the acquisition of ultra-low sulfur diesel fuel school buses with engines manufactured in model year 2005 or 2006, the grant recipient shall provide, to the satisfaction of the Administrator—

(i) documentation that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the purposes of the grant; and

(ii) a commitment by the applicant to use that fuel in carrying out the purposes of the grant.

(7) Deployment and distribution

The Administrator shall, to the maximum extent practicable—

(A) achieve nationwide deployment of clean school buses through the program under this section; and

(B) ensure a broad geographic distribution of grant awards, with no State receiving more than 10 percent of the grant funding made available under this section during a fiscal year.

(8) Annual report

(A)[3] In general

Not later than January 31 of each year, the Administrator shall submit to Congress a report that—

(i) evaluates the implementation of this section; and

(ii) describes—

(I) the total number of grant applications received;

(II) the number and types of alternative fuel school buses, ultra-low sulfur diesel fuel school buses, and retrofitted buses requested in grant applications;

(III) grants awarded and the criteria used to select the grant recipients;

(IV) certified engine emission levels of all buses purchased or retrofitted under this section;

(V) an evaluation of the in-use emission level of buses purchased or retrofitted under this section; and

(VI) any other information the Administrator considers appropriate.

(c) Education

(1) In general

Not later than 90 days after August 8, 2005, the Administrator shall develop an education outreach program to promote and explain the grant program.

(2) Coordination with stakeholders

The outreach program shall be designed and conducted in conjunction with national school bus transportation associations and other stakeholders.

(3) Components

The outreach program shall—

(A) inform potential grant recipients on the process of applying for grants;

[3] So in original. No subpar. (B) was enacted.

(B) describe the available technologies and the benefits of the technologies;

(C) explain the benefits of participating in the grant program; and

(D) include, as appropriate, information from the annual report required under subsection (b)(8).

(d) Authorization of appropriations

There are authorized to be appropriated to the Administrator to carry out this section, to remain available until expended—

(1) $55,000,000 for each of fiscal years 2006 and 2007; and

(2) such sums as are necessary for each of fiscal years 2008, 2009, and 2010.

(Pub. L. 109–58, title VII, § 741, Aug. 8, 2005, 119 Stat. 821.)

§ 16091a. Clean school bus program [1]

(a) Definitions

In this section, the following definitions apply:

(1) Administrator

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

(2) Alternative fuel

The term ''alternative fuel'' means—

(A) liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, or propane;

(B) methanol or ethanol at no less than 85 percent by volume; or

(C) biodiesel conforming with standards published by the American Society for Testing and Materials as of August 10, 2005.

(3) Clean school bus

The term ''clean school bus'' means a school bus with a gross vehicle weight of greater than 14,000 pounds that—

(A) is powered by a heavy duty engine; and

(B) is operated solely on an alternative fuel or ultra-low sulfur diesel fuel.

(4) Eligible recipient

(A) In general

Subject to subparagraph (B), the term ''eligible recipient'' means—

(i) one or more local or State governmental entities responsible for providing school bus service to one or more public school systems or the purchase of school buses;

(ii) one or more contracting entities that provide school bus service to one or more public school systems; or

(iii) a nonprofit school transportation association.

(B) Special requirements

In the case of eligible recipients identified under clauses (ii) and (iii) of subparagraph (A), the Administrator shall establish timely and appropriate requirements for notice and may establish timely and appropriate requirements for approval by the public school systems that would be served by buses purchased or retrofit using grant funds made available under this section.

(5) Retrofit technology

The term ''retrofit technology'' means a particulate filter or other emissions control equipment that is verified or certified by the Administrator or the California Air Resources Board as an effective emission reduction technology when installed on an existing school bus.

(6) Secretary

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

(7) Ultra-low sulfur diesel fuel

The term ''ultra-low sulfur diesel fuel'' means diesel fuel that contains sulfur at not more than 15 parts per million.

(b) Program for retrofit or replacement of certain existing school buses with clean school buses

(1) Establishment

(A) In general

The Administrator, in consultation with the Secretary and other appropriate Federal departments and agencies, shall establish a program for awarding grants on a competitive basis to eligible recipients for the replacement of, retrofit (including repowering, aftertreatment, and remanufactured engines) of, or purchase of alternative fuels for, certain existing school buses. The awarding of grants for the purchase of alternative fuels should be consistent with the historic funding levels of the program for such purchase.

(B) Balancing

In awarding grants under this section, the Administrator shall achieve, to the maximum extent practicable, achieve [2] an appropriate balance between awarding grants—

(i) to replace school buses;

(ii) to install retrofit technologies; and

(iii) to purchase and use alternative fuel.

(2) Priority of grant applications

(A) Replacement

In the case of grant applications to replace school buses, the Administrator shall give priority to applicants that propose to replace school buses manufactured before model year 1977.

(B) Retrofitting

In the case of grant applications to retrofit school buses, the Administrator shall give priority to applicants that propose to retrofit school buses manufactured in or after model year 1991.

(3) Use of school bus fleet

(A) In general

All school buses acquired or retrofitted with funds provided under this section shall

[1] This section is substantially identical to section 16091 of this title.

[2] So in original. The word ''achieve'' probably should not appear.

be operated as part of the school bus fleet for which the grant was made for not less than 5 years.

(B) Maintenance, operation, and fueling

New school buses and retrofit technology shall be maintained, operated, and fueled according to manufacturer recommendations or State requirements.

(4) Retrofit grants

The Administrator may award grants under this section for up to 100 percent of the retrofit technologies and installation costs.

(5) Replacement grants

(A) Eligibility for 50 percent grants

The Administrator may award grants under this section for replacement of school buses in the amount of up to one-half of the acquisition costs (including fueling infrastructure) for—

(i) clean school buses with engines manufactured in model year 2005 or 2006 that emit not more than—

(I) 1.8 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen; and

(II) .01 grams per brake horsepower-hour of particulate matter; or

(ii) clean school buses with engines manufactured in model year 2007, 2008, or 2009 that satisfy regulatory requirements established by the Administrator for emissions of oxides of nitrogen and particulate matter to be applicable for school buses manufactured in model year 2010.

(B) Eligibility for 25 percent grants

The Administrator may award grants under this section for replacement of school buses in the amount of up to one-fourth of the acquisition costs (including fueling infrastructure) for—

(i) clean school buses with engines manufactured in model year 2005 or 2006 that emit not more than—

(I) 2.5 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen; and

(II) .01 grams per brake horsepower-hour of particulate matter; or

(ii) clean school buses with engines manufactured in model year 2007 or thereafter that satisfy regulatory requirements established by the Administrator for emissions of oxides of nitrogen and particulate matter from school buses manufactured in that model year.

(6) Ultra-low sulfur diesel fuel

(A)[3] In general

In the case of a grant recipient receiving a grant for the acquisition of ultra-low sulfur diesel fuel school buses with engines manufactured in model year 2005 or 2006, the grant recipient shall provide, to the satisfaction of the Administrator—

(i) documentation that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the purposes of the grant; and

(ii) a commitment by the applicant to use that fuel in carrying out the purposes of the grant.

(7) Deployment and distribution

The Administrator, to the maximum extent practicable, shall—

(A) achieve nationwide deployment of clean school buses through the program under this section; and

(B) ensure a broad geographic distribution of grant awards, with no State receiving more than 10 percent of the grant funding made available under this section during a fiscal year.

(8) Annual report

(A)[3] In general

Not later than January 31 of each year, the Administrator shall submit to Congress a report that—

(i) evaluates the implementation of this section; and

(ii) describes—

(I) the total number of grant applications received;

(II) the number and types of alternative fuel school buses, ultra-low sulfur diesel fuel school buses, and retrofitted buses requested in grant applications;

(III) grants awarded and the criteria used to select the grant recipients;

(IV) certified engine emission levels of all buses purchased or retrofitted under this section;

(V) an evaluation of the in-use emission level of buses purchased or retrofitted under this section; and

(VI) any other information the Administrator considers appropriate.

(c) Education

(1) In general

Not later than 90 days after August 10, 2005, the Administrator shall develop an education outreach program to promote and explain the grant program.

(2) Coordination with stakeholders

The outreach program shall be designed and conducted in conjunction with national school bus transportation associations and other stakeholders.

(3) Components

The outreach program shall—

(A) inform potential grant recipients on the process of applying for grants;

(B) describe the available technologies and the benefits of the technologies;

(C) explain the benefits of participating in the grant program; and

(D) include, as appropriate, information from the annual report required under subsection (b)(8).

(d) Authorization of appropriations

There are authorized to be appropriated to the Administrator to carry out this section, to remain available until expended—

[3] So in original. No subpar. (B) was enacted.

(1) $55,000,000 for each of fiscal years 2006 and 2007; and

(2) such sums as are necessary for each of fiscal years 2008, 2009, and 2010.

(Pub. L. 109–59, title VI, § 6015, Aug. 10, 2005, 119 Stat. 1884.)

CODIFICATION

Section was enacted as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users or the SAFETEA–LU, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

§ 16092. Diesel truck retrofit and fleet modernization program

(a) Establishment

The Administrator, in consultation with the Secretary, shall establish a program for awarding grants on a competitive basis to public agencies and entities for fleet modernization programs including installation of retrofit technologies for diesel trucks.

(b) Eligible recipients

A grant shall be awarded under this section only to a State or local government or an agency or instrumentality of a State or local government or of two or more State or local governments who will allocate funds, with preference to ports and other major hauling operations.

(c) Awards

(1) In general

The Administrator shall seek, to the maximum extent practicable, to ensure a broad geographic distribution of grants under this section.

(2) Preferences

In making awards of grants under this section, the Administrator shall give preference to proposals that—

(A) will achieve the greatest reductions in emissions of nonmethane hydrocarbons, oxides of nitrogen, and/or particulate matter per proposal or per truck; or

(B) involve the use of Environmental Protection Agency or California Air Resources Board verified emissions control retrofit technology on diesel trucks that operate solely on ultra-low sulfur diesel fuel after September 2006.

(d) Conditions of grant

A grant shall be provided under this section on the conditions that—

(1) trucks which are replacing scrapped trucks and on which retrofit emissions-control technology are to be demonstrated—

(A) will operate on ultra-low sulfur diesel fuel where such fuel is reasonably available or required for sale by State or local law or regulation;

(B) were manufactured in model year 1998 and before; and

(C) will be used for the transportation of cargo goods especially in port areas or used in goods movement and major hauling operations;

(2) grant funds will be used for the purchase of emission control retrofit technology, including State taxes and contract fees; and

(3) grant recipients will provide at least 50 percent of the total cost of the retrofit, including the purchase of emission control retrofit technology and all necessary labor for installation of the retrofit, from any source other than this section.

(e) Verification

Not later than 90 days after August 8, 2005, the Administrator shall publish in the Federal Register procedures to—

(1) make grants pursuant to this section;

(2) verify that trucks powered by ultra-low sulfur diesel fuel on which retrofit emissions-control technology are to be demonstrated will operate on diesel fuel containing not more than 15 parts per million of sulfur after September 2006; and

(3) verify that grants are administered in accordance with this section.

(f) Authorization of appropriations

There are authorized to be appropriated to the Administrator to carry out this section, to remain available until expended the following sums:

(1) $20,000,000 for fiscal year 2006.

(2) $35,000,000 for fiscal year 2007.

(3) $45,000,000 for fiscal year 2008.

(4) Such sums as are necessary for each of fiscal years 2009 and 2010.

(Pub. L. 109–58, title VII, § 742, Aug. 8, 2005, 119 Stat. 824.)

§ 16093. Fuel cell school buses

(a) Establishment

The Secretary shall establish a program for entering into cooperative agreements—

(1) with private sector fuel cell bus developers for the development of fuel cell-powered school buses; and

(2) subsequently, with not less than 2 units of local government using natural gas-powered school buses and such private sector fuel cell bus developers to demonstrate the use of fuel cell-powered school buses.

(b) Cost sharing

The non-Federal contribution for activities funded under this section shall be not less than—

(1) 20 percent for fuel infrastructure development activities; and

(2) 50 percent for demonstration activities and for development activities not described in paragraph (1).

(c) Reports to Congress

Not later than 3 years after August 8, 2005, the Secretary shall transmit to Congress a report that—

(1) evaluates the process of converting natural gas infrastructure to accommodate fuel cell-powered school buses; and

(2) assesses the results of the development and demonstration program under this section.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section $25,000,000 for the period of fiscal years 2006 through 2009.

(Pub. L. 109–58, title VII, § 743, Aug. 8, 2005, 119 Stat. 826.)

PART D—MISCELLANEOUS

§ 16101. Railroad efficiency

(a) Establishment

The Secretary shall (in cooperation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency) establish a cost-shared, public-private research partnership involving the Federal Government, railroad carriers, locomotive manufacturers and equipment suppliers, and the Association of American Railroads, to develop and demonstrate railroad locomotive technologies that increase fuel economy, reduce emissions, and lower costs of operation.

(b) Authorization of appropriations

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

(1) $15,000,000 for fiscal year 2006;

(2) $20,000,000 for fiscal year 2007; and

(3) $30,000,000 for fiscal year 2008.

(Pub. L. 109–58, title VII, § 751, Aug. 8, 2005, 119 Stat. 826.)

ADVANCED TECHNOLOGY LOCOMOTIVE GRANT PILOT PROGRAM

Pub. L. 110–140, title XI, § 1111, Dec. 19, 2007, 121 Stat. 1757, provided that:

''(a) IN GENERAL.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall establish and carry out a pilot program for making grants to railroad carriers (as defined in section 20102 of title 49, United States Code) and State and local governments—

''(1) for assistance in purchasing hybrid or other energy-efficient locomotives, including hybrid switch and generator-set locomotives; and

''(2) to demonstrate the extent to which such locomotives increase fuel economy, reduce emissions, and lower costs of operation.

''(b) LIMITATION.—Notwithstanding subsection (a), no grant under this section may be used to fund the costs of emissions reductions that are mandated under Federal law.

''(c) GRANT CRITERIA.—In selecting applicants for grants under this section, the Secretary of Transportation shall consider—

''(1) the level of energy efficiency that would be achieved by the proposed project;

''(2) the extent to which the proposed project would assist in commercial deployment of hybrid or other energy-efficient locomotive technologies;

''(3) the extent to which the proposed project complements other private or governmental partnership efforts to improve air quality or fuel efficiency in a particular area; and

''(4) the extent to which the applicant demonstrates innovative strategies and a financial commitment to increasing energy efficiency and reducing greenhouse gas emissions of its railroad operations.

''(d) COMPETITIVE GRANT SELECTION PROCESS.—

''(1) APPLICATIONS.—A railroad carrier or State or local government seeking a grant under this section shall submit for approval by the Secretary of Transportation an application for the grant containing such information as the Secretary of Transportation may require.

''(2) COMPETITIVE SELECTION.—The Secretary of Transportation shall conduct a national solicitation for applications for grants under this section and shall select grantees on a competitive basis.

''(e) FEDERAL SHARE.—The Federal share of the cost of a project under this section shall not exceed 80 percent of the project cost.

''(f) REPORT.—Not later than 3 years after the date of enactment of this Act [Dec. 19, 2007], the Secretary of Transportation shall submit to Congress a report on the results of the pilot program carried out under this section.

''(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of Transportation $10,000,000 for each of the fiscal years 2008 through 2011 to carry out this section. Such funds shall remain available until expended.''

§ 16102. Diesel fueled vehicles

(a) Definition of tier 2 emission standards

In this section, the term ''tier 2 emission standards'' means the motor vehicle emission standards that apply to passenger cars, light trucks, and larger passenger vehicles manufactured after the 2003 model year, as issued on February 10, 2000, by the Administrator of the Environmental Protection Agency under sections 7521 and 7545 of this title.

(b) Diesel combustion and after-treatment technologies

The Secretary shall accelerate efforts to improve diesel combustion and after-treatment technologies for use in diesel fueled motor vehicles.

(c) Goals

The Secretary shall carry out subsection (b) with a view toward achieving the following goals:

(1) Developing and demonstrating diesel technologies that, not later than 2010, meet the following standards:

(A) Tier 2 emission standards.

(B) The heavy-duty emissions standards of 2007 that are applicable to heavy-duty vehicles under regulations issued by the Administrator of the Environmental Protection Agency as of August 8, 2005.

(2) Developing the next generation of low-emission, high efficiency diesel engine technologies, including homogeneous charge compression ignition technology.

(Pub. L. 109–58, title VII, § 754, Aug. 8, 2005, 119 Stat. 828.)

§ 16103. Conserve by Bicycling Program

(a) Definitions

In this section:

(1) Program

The term ''program'' means the Conserve by Bicycling Program established by subsection (b).

(2) Secretary

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

(b) Establishment

There is established within the Department of Transportation a program to be known as the ''Conserve by Bicycling Program''.

(c) Projects

(1) In general

In carrying out the program, the Secretary shall establish not more than 10 pilot projects that are—

(A) dispersed geographically throughout the United States; and

(B) designed to conserve energy resources by encouraging the use of bicycles in place of motor vehicles.

(2) Requirements

A pilot project described in paragraph (1) shall—

(A) use education and marketing to convert motor vehicle trips to bicycle trips;

(B) document project results and energy savings (in estimated units of energy conserved);

(C) facilitate partnerships among interested parties in at least 2 of the fields of—

(i) transportation;

(ii) law enforcement;

(iii) education;

(iv) public health;

(v) environment; and

(vi) energy;

(D) maximize bicycle facility investments;

(E) demonstrate methods that may be used in other regions of the United States; and

(F) facilitate the continuation of ongoing programs that are sustained by local resources.

(3) Cost sharing

At least 20 percent of the cost of each pilot project described in paragraph (1) shall be provided from non-Federal sources.

(d) Energy and bicycling research study

(1) In general

Not later than 2 years after August 8, 2005, the Secretary shall enter into a contract with the National Academy of Sciences for, and the National Academy of Sciences shall conduct and submit to Congress a report on, a study on the feasibility of converting motor vehicle trips to bicycle trips.

(2) Components

The study shall—

(A) document the results or progress of the pilot projects under subsection (c);

(B) determine the type and duration of motor vehicle trips that people in the United States may feasibly make by bicycle, taking into consideration factors such as—

(i) weather;

(ii) land use and traffic patterns;

(iii) the carrying capacity of bicycles; and

(iv) bicycle infrastructure;

(C) determine any energy savings that would result from the conversion of motor vehicle trips to bicycle trips;

(D) include a cost-benefit analysis of bicycle infrastructure investments; and

(E) include a description of any factors that would encourage more motor vehicle trips to be replaced with bicycle trips.

(e) Authorization of appropriations

There is authorized to be appropriated to the Secretary to carry out this section $6,200,000, to remain available until expended, of which—

(1) $5,150,000 shall be used to carry out pilot projects described in subsection (c);

(2) $300,000 shall be used by the Secretary to coordinate, publicize, and disseminate the results of the program; and

(3) $750,000 shall be used to carry out subsection (d).

(Pub. L. 109–58, title VII, § 755, Aug. 8, 2005, 119 Stat. 828.)

§ 16104. Reduction of engine idling

(a) Definitions

In this section:

(1) Administrator

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

(2) Advanced truck stop electrification system

The term ''advanced truck stop electrification system'' means a stationary system that delivers heat, air conditioning, electricity, or communications, and is capable of providing verifiable and auditable evidence of use of those services, to a heavy-duty vehicle and any occupants of the heavy-duty vehicle with or without relying on components mounted onboard the heavy-duty vehicle for delivery of those services.

(3) Auxiliary power unit

The term ''auxiliary power unit'' means an integrated system that—

(A) provides heat, air conditioning, engine warming, or electricity to components on a heavy-duty vehicle; and

(B) is certified by the Administrator under part 89 of title 40, Code of Federal Regulations (or any successor regulation), as meeting applicable emission standards.

(4) Heavy-duty vehicle

The term ''heavy-duty vehicle'' means a vehicle that—

(A) has a gross vehicle weight rating greater than 8,500 pounds; and

(B) is powered by a diesel engine.

(5) Idle reduction technology

The term ''idle reduction technology'' means an advanced truck stop electrification system, auxiliary power unit, or other technology that—

(A) is used to reduce long-duration idling; and

(B) allows for the main drive engine or auxiliary refrigeration engine to be shut down.

(6) Energy conservation technology

the[1] term ''energy conservation technology'' means any device, system of devices, or equipment that improves the fuel economy.

(7) Long-duration idling

(A) In general

The term ''long-duration idling'' means the operation of a main drive engine or auxiliary refrigeration engine, for a period greater than 15 consecutive minutes, at a time at which the main drive engine is not engaged in gear.

[1] So in original. Probably should be capitalized.

(B) Exclusions

The term ''long-duration idling'' does not include the operation of a main drive engine or auxiliary refrigeration engine during a routine stoppage associated with traffic movement or congestion.

(b) Idle reduction technology benefits, programs, and studies

(1) In general

Not later than 90 days after August 8, 2005, the Administrator shall—

(A)(i) commence a review of the mobile source air emission models of the Environmental Protection Agency used under the Clean Air Act (42 U.S.C. 7401 et seq.) to determine whether the models accurately reflect the emissions resulting from long-duration idling of heavy-duty vehicles and other vehicles and engines; and

(ii) update those models as the Administrator determines to be appropriate; and

(B)(i) commence a review of the emission reductions achieved by the use of idle reduction technology; and

(ii) complete such revisions of the regulations and guidance of the Environmental Protection Agency as the Administrator determines to be appropriate.

(2) Deadline for completion

Not later than 180 days after August 8, 2005, the Administrator shall—

(A) complete the reviews under subparagraphs (A)(i) and (B)(i) of paragraph (1); and

(B) prepare and make publicly available one or more reports on the results of the reviews.

(3) Discretionary inclusions

The reviews under subparagraphs (A)(i) and (B)(i) of paragraph (1) and the reports under paragraph (2)(B) may address the potential fuel savings resulting from use of idle reduction technology.

(4) Idle reduction and energy conservation deployment program

(A) Establishment

(i) In general

Not later than 90 days after August 8, 2005, the Administrator, in consultation with the Secretary of Transportation shall, through the Environmental Protection Agency's SmartWay Transport Partnership, establish a program to support deployment of idle reduction and energy conservation technologies.

(ii) Priority

The Administrator shall give priority to the deployment of idle reduction and energy conservation technologies based on the costs and beneficial effects on air quality and ability to lessen the emission of criteria air pollutants.

(B) Funding

(i) Authorization of appropriations

There are authorized to be appropriated to the Administrator to carry out subparagraph (A) for the purpose of reducing extended idling from heavy-duty vehicles $19,500,000 for fiscal year 2006, $30,000,000 for fiscal year 2007, and $45,000,000 for fiscal year 2008.

(ii) Locomotives

There are authorized to be appropriated to the administrator to carry out subparagraph (A) for the purpose of reducing extended idling from locomotives $10,000,000 for fiscal year 2006, $15,000,000 for fiscal year 2007, and $20,000,000 for fiscal year 2008.

(iii) Cost sharing

Subject to clause (iv), the Administrator shall require at least 50 percent of the costs directly and specifically related to any project under this section to be provided from non-Federal sources.

(iv) Necessary and appropriate reductions

The Administrator may reduce the non-Federal requirement under clause (iii) if the Administrator determines that the reduction is necessary and appropriate to meet the objectives of this section.

(5) Idling location study

(A) In general

Not later than 90 days after August 8, 2005, the Administrator, in consultation with the Secretary of Transportation, shall commence a study to analyze all locations at which heavy-duty vehicles stop for long-duration idling, including—

(i) truck stops;
(ii) rest areas;
(iii) border crossings;
(iv) ports;
(v) transfer facilities; and
(vi) private terminals.

(B) Deadline for completion

Not later than 180 days after August 8, 2005, the Administrator shall—

(i) complete the study under subparagraph (A); and

(ii) prepare and make publicly available one or more reports of the results of the study.

(c) Omitted

(d) Report

Not later than 60 days after the date on which funds are initially awarded under this section, and on an annual basis thereafter, the Administrator shall submit to Congress a report containing—

(1) an identification of the grant recipients, a description of the projects to be funded and the amount of funding provided; and

(2) an identification of all other applicants that submitted applications under the program.

(Pub. L. 109–58, title VII, § 756, Aug. 8, 2005, 119 Stat. 829.)

REFERENCES IN TEXT

The Clean Air Act, referred to in subsec. (b)(1)(A)(i), is act July 14, 1955, ch. 360, 69 Stat. 322, as amended,

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.

CODIFICATION

Section is comprised of section 756 of Pub. L. 109–58. Subsec. (c) of section 756 of Pub. L. 109–58 amended section 127 of Title 23, Highways.

§ 16105. Biodiesel engine testing program

(a) In general

Not later that[1] 180 days after August 8, 2005, the Secretary shall initiate a partnership with diesel engine, diesel fuel injection system, and diesel vehicle manufacturers and diesel and biodiesel fuel providers, to include biodiesel testing in advanced diesel engine and fuel system technology.

(b) Scope

The program shall provide for testing to determine the impact of biodiesel from different sources on current and future emission control technologies, with emphasis on—

(1) the impact of biodiesel on emissions warranty, in-use liability, and antitampering provisions;

(2) the impact of long-term use of biodiesel on engine operations;

(3) the options for optimizing these technologies for both emissions and performance when switching between biodiesel and diesel fuel; and

(4) the impact of using biodiesel in these fueling systems and engines when used as a blend with 2006 Environmental Protection Agency-mandated diesel fuel containing a maximum of 15-parts-per-million sulfur content.

(c) Report

Not later than 2 years after August 8, 2005, the Secretary shall provide an interim report to Congress on the findings of the program, including a comprehensive analysis of impacts from biodiesel on engine operation for both existing and expected future diesel technologies, and recommendations for ensuring optimal emissions reductions and engine performance with biodiesel.

(d) Authorization of appropriations

There are authorized to be appropriated $5,000,000 for each of fiscal years 2006 through 2010 to carry out this section.

(e) Definition

For purposes of this section, the term ''biodiesel'' means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title and that meets the American Society for Testing and Materials D6751–02a Standard Specification for Biodiesel Fuel (B100) Blend Stock for Distillate Fuels.

(Pub. L. 109–58, title VII, § 757, Aug. 8, 2005, 119 Stat. 832.)

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

§ 16106. Ultra-efficient engine technology for aircraft

(a) Ultra-efficient engine technology partnership

The Secretary shall enter into a cooperative agreement with the National Aeronautics and Space Administration for the development of ultra-efficient engine technology for aircraft.

(b) Performance objective

The Secretary shall establish the following performance objectives for the program set forth in subsection (a):

(1) A fuel efficiency increase of at least 10 percent.

(2) A reduction in the impact of landing and takeoff nitrogen oxides emissions on local air quality of 70 percent.

(3) Exploring advanced concepts, alternate propulsion, and power configurations, including hybrid fuel cell powered systems.

(4) Exploring the use of alternate fuel in conventional or nonconventional turbine-based systems.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $50,000,000 for each of the fiscal years 2006, 2007, 2008, 2009, and 2010.

(Pub. L. 109–58, title VII, § 758, Aug. 8, 2005, 119 Stat. 833.)

PART E—FEDERAL AND STATE PROCUREMENT

§ 16121. Definitions

In this part:

(1) Fuel cell

The term ''fuel cell'' means a device that directly converts the chemical energy of a fuel and an oxidant into electricity by electrochemical processes occurring at separate electrodes in the device.

(2) Light-duty or heavy-duty vehicle fleet

The term ''light-duty or heavy-duty vehicle fleet'' does not include any vehicle designed or procured for combat or combat-related missions.

(3) Stationary; portable

The terms ''stationary'' and ''portable'', when used in reference to a fuel cell, include—

(A) continuous electric power; and

(B) backup electric power.

(4) Task Force

The term ''Task Force'' means the Hydrogen and Fuel Cell Technical Task Force established under section 16155 of this title.

(5) Technical Advisory Committee

The term ''Technical Advisory Committee'' means the independent Technical Advisory Committee selected under section 16156 of this title.

(Pub. L. 109–58, title VII, § 781, Aug. 8, 2005, 119 Stat. 835.)

§ 16122. Federal and State procurement of fuel cell vehicles and hydrogen energy systems

(a) Purposes

The purposes of this section are—

(1) to stimulate acceptance by the market of fuel cell vehicles and hydrogen energy systems;

(2) to support development of technologies relating to fuel cell vehicles, public refueling stations, and hydrogen energy systems; and

(3) to require the Federal government,[1] which is the largest single user of energy in the United States, to adopt those technologies as soon as practicable after the technologies are developed, in conjunction with private industry partners.

(b) Federal leases and purchases

(1) Requirement

(A) In general

Not later than January 1, 2010, the head of any Federal agency that uses a light-duty or heavy-duty vehicle fleet shall lease or purchase fuel cell vehicles and hydrogen energy systems to meet any applicable energy savings goal described in subsection (c).

(B) Learning demonstration vehicles

The Secretary may lease or purchase appropriate vehicles developed under subsections (a)(10) and (b)(1)(A) of section 16157 of this title to meet the requirement in subparagraph (A).

(2) Costs of leases and purchases

(A) In general

The Secretary, in cooperation with the Task Force and the Technical Advisory Committee, shall pay to Federal agencies (or share the cost under interagency agreements) the difference in cost between—

(i) the cost to the agencies of leasing or purchasing fuel cell vehicles and hydrogen energy systems under paragraph (1); and

(ii) the cost to the agencies of a feasible alternative to leasing or purchasing fuel cell vehicles and hydrogen energy systems, as determined by the Secretary.

(B) Competitive costs and management structures

In carrying out subparagraph (A), the Secretary, in consultation with the agency, may use the General Services Administration or any commercial vendor to ensure—

(i) a cost-effective purchase of a fuel cell vehicle or hydrogen energy system; or

(ii) a cost-effective management structure of the lease of a fuel cell vehicle or hydrogen energy system.

(3) Exception

(A) In general

If the Secretary determines that the head of an agency described in paragraph (1) cannot find an appropriately efficient and reliable fuel cell vehicle or hydrogen energy system in accordance with paragraph (1), that agency shall be excepted from compliance with paragraph (1).

(B) Consideration

In making a determination under subparagraph (A), the Secretary shall consider—

(i) the needs of the agency; and

(ii) an evaluation performed by—

(I) the Task Force; or

(II) the Technical Advisory Committee.

(c) Energy savings goals

(1) In general

(A) Regulations

Not later than December 31, 2006, the Secretary shall—

(i) in cooperation with the Task Force, promulgate regulations for the period of 2008 through 2010 that extend and augment energy savings goals for each Federal agency, in accordance with any Executive order issued after March 2000; and

(ii) promulgate regulations to expand the minimum Federal fleet requirement and credit allowances for fuel cell vehicle systems under section 13212 of this title.

(B) Review, evaluation, and new regulations

Not later than December 31, 2010, the Secretary shall—

(i) review the regulations promulgated under subparagraph (A);

(ii) evaluate any progress made toward achieving energy savings by Federal agencies; and

(iii) promulgate new regulations for the period of 2011 through 2015 to achieve additional energy savings by Federal agencies relating to technical and cost-performance standards.

(2) Offsetting energy savings goals

An agency that leases or purchases a fuel cell vehicle or hydrogen energy system in accordance with subsection (b)(1) may use that lease or purchase to count toward an energy savings goal of the agency.

(d) Cooperative program with State agencies

(1) In general

The Secretary may establish a cooperative program with State agencies managing motor vehicle fleets to encourage purchase of fuel cell vehicles by the agencies.

(2) Incentives

In carrying out the cooperative program, the Secretary may offer incentive payments to a State agency to assist with the cost of planning, differential purchases, and administration.

(e) Authorization of appropriations

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

(1) $15,000,000 for fiscal year 2008;

(2) $25,000,000 for fiscal year 2009;

(3) $65,000,000 for fiscal year 2010; and

(4) such sums as are necessary for each of fiscal years 2011 through 2015.

(Pub. L. 109–58, title VII, § 782, Aug. 8, 2005, 119 Stat. 835.)

§ 16123. Federal procurement of stationary, portable, and micro fuel cells

(a) Purposes

The purposes of this section are—

[1] So in original. Probably should be capitalized.

(1) to stimulate acceptance by the market of stationary, portable, and micro fuel cells; and

(2) to support development of technologies relating to stationary, portable, and micro fuel cells.

(b) Federal leases and purchases

(1) In general

Not later than January 1, 2006, the head of any Federal agency that uses electrical power from stationary, portable, or microportable devices shall lease or purchase a stationary, portable, or micro fuel cell to meet any applicable energy savings goal described in subsection (c).

(2) Costs of leases and purchases

(A) In general

The Secretary, in cooperation with the Task Force and the Technical Advisory Committee, shall pay the cost to Federal agencies (or share the cost under interagency agreements) of leasing or purchasing stationary, portable, and micro fuel cells under paragraph (1).

(B) Competitive costs and management structures

In carrying out subparagraph (A), the Secretary, in consultation with the agency, may use the General Services Administration or any commercial vendor to ensure—

(i) a cost-effective purchase of a stationary, portable, or micro fuel cell; or

(ii) a cost-effective management structure of the lease of a stationary, portable, or micro fuel cell.

(3) Exception

(A) In general

If the Secretary determines that the head of an agency described in paragraph (1) cannot find an appropriately efficient and reliable stationary, portable, or micro fuel cell in accordance with paragraph (1), that agency shall be excepted from compliance with paragraph (1).

(B) Consideration

In making a determination under subparagraph (A), the Secretary shall consider—

(i) the needs of the agency; and

(ii) an evaluation performed by—

(I) the Task Force; or

(II) the Technical Advisory Committee of the Task Force.

(c) Energy savings goals

An agency that leases or purchases a stationary, portable, or micro fuel cell in accordance with subsection (b)(1) may use that lease or purchase to count toward an energy savings goal described in section 16157 of this title that is applicable to the agency.

(d) Authorization of appropriations

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

(1) $20,000,000 for fiscal year 2006;

(2) $50,000,000 for fiscal year 2007;

(3) $75,000,000 for fiscal year 2008;

(4) $100,000,000 for fiscal year 2009;

(5) $100,000,000 for fiscal year 2010; and

(6) such sums as are necessary for each of fiscal years 2011 through 2015.

(Pub. L. 109–58, title VII, § 783, Aug. 8, 2005, 119 Stat. 837.)

PART F—DIESEL EMISSIONS REDUCTION

§ 16131. Definitions

In this part:

(1) Administrator

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

(2) Certified engine configuration

The term ''certified engine configuration'' means a new, rebuilt, or remanufactured engine configuration—

(A) that has been certified or verified by—

(i) the Administrator; or

(ii) the California Air Resources Board;

(B) that meets or is rebuilt or remanufactured to a more stringent set of engine emission standards, as determined by the Administrator; and

(C) in the case of a certified engine configuration involving the replacement of an existing engine or vehicle, an engine configuration that replaced an engine that was—

(i) removed from the vehicle; and

(ii) returned to the supplier for remanufacturing to a more stringent set of engine emissions standards or for scrappage.

(3) Eligible entity

The term ''eligible entity'' means—

(A) a regional, State, local, or tribal agency or port authority with jurisdiction over transportation or air quality;

(B) a nonprofit organization or institution that—

(i) represents or provides pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or

(ii) has, as its principal purpose, the promotion of transportation or air quality; and

(C) any private individual or entity that—

(i) is the owner of record of a diesel vehicle or fleet operated pursuant to a contract, license, or lease with a Federal department or agency or an entity described in subparagraph (A); and

(ii) meets such timely and appropriate requirements as the Administrator may establish for vehicle use and for notice to and approval by the Federal department or agency or entity described in subparagraph (A) with respect to which the owner has entered into a contract, license, or lease as described in clause (i).

(4) Emerging technology

The term ''emerging technology'' means a technology that is not currently, or has not been previously, certified or verified by the Administrator or the California Air Resources

Board but for which an approvable application and test plan has been submitted for verification to the Administrator or the California Air Resources Board.

(5) Fleet

The term ''fleet'' means one or more diesel vehicles or mobile or stationary diesel engines.

(6) Heavy-duty truck

The term ''heavy-duty truck'' has the meaning given the term ''heavy duty vehicle'' in section 7521 of this title.

(7) Medium-duty truck

The term ''medium-duty truck'' has such meaning as shall be determined by the Administrator, by regulation.

(8) State

The term ''State'' means the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the United States Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(9) Verified technology

The term ''verified technology'' means a pollution control technology, including a retrofit technology or auxiliary power unit, that has been verified by—

(A) the Administrator; or

(B) the California Air Resources Board.

(Pub. L. 109–58, title VII, § 791, Aug. 8, 2005, 119 Stat. 838; Pub. L. 110–255, § 3(a), June 30, 2008, 122 Stat. 2423; Pub. L. 111–364, § 2(a), Jan. 4, 2011, 124 Stat. 4056.)

AMENDMENTS

2011—Par. (3)(C). Pub. L. 111–364, § 2(a)(1), added subpar. (C).

Par. (4). Pub. L. 111–364, § 2(a)(2), inserted ''currently, or has not been previously,'' after ''that is not''.

Par. (8). Pub. L. 111–364, § 2(a)(6), added par. (8). Former par. (8) redesignated (9).

Par. (9). Pub. L. 111–364, § 2(a)(5), struck out '', advanced truckstop electrification system,'' after ''retrofit technology'' in introductory provisions.

Pub. L. 111–364, § 2(a)(4), redesignated par. (8) as (9). Former par. (9) struck out.

Pub. L. 111–364, § 2(a)(3), struck out par. (9) which defined ''State'' to include the District of Columbia.

2008—Par. (9). Pub. L. 110–255 added par. (9).

EFFECTIVE DATE OF 2011 AMENDMENT

Pub. L. 111–364, § 4, Jan. 4, 2011, 124 Stat. 4061, provided that:

''(a) GENERAL RULE.—Except as provided in subsection (b), the amendments made by section 2 [amending this section and sections 16132 to 16134 and 16137 of this title] shall take effect on October 1, 2011.

''(b) EXCEPTION.—The amendments made by subsections (a)(4) and (6) and (c)(4) of section 2 [amending this section and section 16133 of this title] shall take effect on the date of enactment of this Act [Jan. 4, 2011].''

§ 16132. National grant, rebate, and loan programs

(a) In general

The Administrator shall use 70 percent of the funds made available to carry out this part for each fiscal year to provide grants, rebates, or low-cost revolving loans, as determined by the Administrator, on a competitive basis, to eligible entities, including through contracts entered into under subsection (e) of this section, to achieve significant reductions in diesel emissions in terms of—

(1) pollution produced; and

(2) diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas.

(b) Distribution

(1) In general

The Administrator shall distribute funds made available for a fiscal year under this part in accordance with this section.

(2) Engine configurations and technologies

(A) Certified engine configurations and verified technologies

The Administrator shall provide not less than 95 percent of funds available for a fiscal year under this section to eligible entities for projects using—

(i) a certified engine configuration; or

(ii) a verified technology.

(B) Emerging technologies

(i) In general

The Administrator shall provide not more than 5 percent of funds available for a fiscal year under this section to eligible entities for the development and commercialization of emerging technologies.

(ii) Application and test plan

To receive funds under clause (i), a manufacturer, in consultation with an eligible entity, shall submit for verification to the Administrator or the California Air Resources Board a test plan for the emerging technology, together with a verification application.

(c) Applications

(1) Expedited process

(A) In general

The Administrator shall develop a simplified application process for all applicants under this section to expedite the provision of funds.

(B) Requirements

In developing the expedited process under subparagraph (A), the Administrator—

(i) shall take into consideration the special circumstances affecting small fleet owners; and

(ii) to avoid duplicative procedures, may require applicants to include in an application under this section the results of a competitive bidding process for equipment and installation.

(2) Eligibility

(A) Grants

To be eligible to receive a grant under this section, an eligible entity shall submit to the Administrator an application at such time, in such manner, and containing such information as the Administrator may require.

(B) Rebates and low-cost loans

To be eligible to receive a rebate or a low-cost loan under this section, an eligible entity shall submit an application in accordance with such guidance as the Administrator may establish—

(i) to the Administrator; or

(ii) to an entity that has entered into a contract under subsection (e).

(3) Inclusions

An application under this subsection shall include—

(A) a description of the air quality of the area served by the eligible entity;

(B) the quantity of air pollution produced by the diesel fleets in the area served by the eligible entity;

(C) a description of the project proposed by the eligible entity, including—

(i) any certified engine configuration, verified technology, or emerging technology to be used or funded by the eligible entity; and

(ii) the means by which the project will achieve a significant reduction in diesel emissions;

(D) an evaluation (using methodology approved by the Administrator or the National Academy of Sciences) of the quantifiable and unquantifiable benefits of the emissions reductions of the proposed project;

(E) an estimate of the cost of the proposed project;

(F) a description of the age and expected lifetime control of the equipment used or funded by the eligible entity;

(G) in the case of an application relating to nonroad engines or vehicles, a description of the diesel fuel available in the areas to be served by the eligible entity, including the sulfur content of the fuel; and

(H) provisions for the monitoring and verification of the project.

(4) Priority

In providing a grant, rebate, or loan under this section, the Administrator shall give highest priority to proposed projects that, as determined by the Administrator—

(A) maximize public health benefits;

(B) are the most cost-effective;

(C) serve areas—

(i) with the highest population density;

(ii) that are poor air quality areas, including areas identified by the Administrator as—

(I) in nonattainment or maintenance of national ambient air quality standards for a criteria pollutant;

(II) Federal Class I areas; or

(III) areas with toxic air pollutant concerns;

(iii) that receive a disproportionate quantity of air pollution from diesel fleets, including truckstops, ports, rail yards, terminals, construction sites, schools, and distribution centers; or

(iv) that use a community-based multistakeholder collaborative process to reduce toxic emissions;

(D) include a certified engine configuration, verified technology, or emerging technology that has a long expected useful life;

(E) will maximize the useful life of any certified engine configuration, verified technology, or emerging technology used or funded by the eligible entity; and

(F) conserve diesel fuel.

(d) Use of funds

(1) In general

An eligible entity may use a grant, rebate, or loan provided under this section to fund the costs of—

(A) a retrofit technology (including any incremental costs of a repowered or new diesel engine) that significantly reduces emissions through development and implementation of a certified engine configuration, verified technology, or emerging technology for—

(i) a bus;

(ii) a medium-duty truck or a heavy-duty truck;

(iii) a marine engine;

(iv) a locomotive; or

(v) a nonroad engine or vehicle used in—

(I) construction;

(II) handling of cargo (including at a port or airport);

(III) agriculture;

(IV) mining; or

(V) energy production; or

(B) programs or projects to reduce long-duration idling using verified technology involving a vehicle or equipment described in subparagraph (A).

(2) Regulatory programs

(A) In general

Notwithstanding paragraph (1), no grant, rebate, or loan provided, or contract entered into, under this section shall be used to fund the costs of emissions reductions that are mandated under any Federal law, except that this subparagraph shall not apply to a mandate in a State implementation plan approved by the Administrator under the Clean Air Act [42 U.S.C. 7401 et seq.].

(B) Mandated

For purposes of subparagraph (A), voluntary or elective emission reduction measures shall not be considered ''mandated'', regardless of whether the reductions are included in the State implementation plan of a State.

(e) Contract programs

(1) Authority

In addition to the use of contracting authority otherwise available to the Administrator, the Administrator may enter into contracts with eligible contractors described in paragraph (2) for the administration of programs for providing rebates or loans, subject to the requirements of this part.

(2) Eligible contractors

The Administrator may enter into a contract under this subsection with a for-profit or nonprofit entity that has the capacity—

(A) to sell diesel vehicles or equipment to, or to arrange financing for, individuals or entities that own a diesel vehicle or fleet; or

(B) to upgrade diesel vehicles or equipment with verified or Environmental Protection Agency-certified engines or technologies, or to arrange financing for such upgrades.

(f) Public notification

Not later than 60 days after the date of the award of a grant, rebate, or loan, the Administrator shall publish on the website of the Environmental Protection Agency—

(1) for rebates and loans provided to the owner of a diesel vehicle or fleet, the total number and dollar amount of rebates or loans provided, as well as a breakdown of the technologies funded through the rebates or loans; and

(2) for other rebates and loans, and for grants, a description of each application for which the grant, rebate, or loan is provided.

(Pub. L. 109–58, title VII, § 792, Aug. 8, 2005, 119 Stat. 839; Pub. L. 111–364, § 2(b), Jan. 4, 2011, 124 Stat. 4056.)

REFERENCES IN TEXT

The Clean Air Act, referred to in subsec. (d)(2)(A), 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.

AMENDMENTS

2011—Pub. L. 111–364, § 2(b)(1), inserted ‘‘, rebate,’’ after ‘‘grant’’ in section catchline.

Subsec. (a). Pub. L. 111–364, § 2(b)(2)(A), substituted ‘‘to provide grants, rebates, or low-cost revolving loans, as determined by the Administrator, on a competitive basis, to eligible entities, including through contracts entered into under subsection (e) of this section,’’ for ‘‘to provide grants and low-cost revolving loans, as determined by the Administrator, on a competitive basis, to eligible entities’’ in introductory provisions.

Subsec. (a)(1). Pub. L. 111–364, § 2(b)(2)(B), struck out ‘‘tons of’’ before ‘‘pollution produced’’.

Subsec. (b)(2). Pub. L. 111–364, § 2(b)(3)(A), (B), redesignated par. (3) as (2) and struck out former par. (2). Prior to amendment, text read as follows: ‘‘The Administrator shall provide not less than 50 percent of funds available for a fiscal year under this section to eligible entities for the benefit of public fleets.’’

Subsec. (b)(2)(A). Pub. L. 111–364, § 2(b)(3)(C)(i), substituted ‘‘95’’ for ‘‘90’’ in introductory provisions.

Subsec. (b)(2)(B)(i). Pub. L. 111–364, § 2(b)(3)(C)(ii), substituted ‘‘5 percent’’ for ‘‘10 percent’’.

Subsec. (b)(2)(B)(ii). Pub. L. 111–364, § 2(b)(3)(C)(iii), substituted ‘‘a verification application’’ for ‘‘the application under subsection (c)’’.

Subsec. (b)(3). Pub. L. 111–364, § 2(b)(3)(B), redesignated par. (3) as (2).

Subsec. (c). Pub. L. 111–364, § 2(b)(4)(A), (B), added pars. (1) and (2), redesignated former pars. (2) and (3) as (3) and (4), respectively, and struck out former par. (1). Prior to amendment, text of par. (1) read as follows: ‘‘To receive a grant or loan under this section, an eligible entity shall submit to the Administrator an application at a time, in a manner, and including such information as the Administrator may require.’’

Subsec. (c)(3)(G). Pub. L. 111–364, § 2(b)(4)(C), inserted ‘‘in the case of an application relating to nonroad engines or vehicles,’’ before ‘‘a description of the diesel’’.

Subsec. (c)(4). Pub. L. 111–364, § 2(b)(4)(D)(i), inserted ‘‘, rebate,’’ after ‘‘grant’’ and ‘‘highest’’ before ‘‘priority’’ in introductory provisions.

Subsec. (c)(4)(C)(iii). Pub. L. 111–364, § 2(b)(4)(D)(ii), substituted ‘‘diesel fleets’’ for ‘‘a diesel fleets’’ and inserted ‘‘construction sites, schools,’’ after ‘‘terminals,’’.

Subsec. (c)(4)(E) to (G). Pub. L. 111–364, § 2(b)(4)(D)(iii)–(v), inserted ‘‘and’’ at end of subpar. (E), substituted a period for ‘‘; and’’ in subpar. (F), and struck out subpar. (G) which read as follows: ‘‘use diesel fuel with a sulfur content of less than or equal to 15 parts per million, as the Administrator determines to be appropriate.’’

Subsec. (d)(1). Pub. L. 111–364, § 2(b)(5)(A), inserted ‘‘, rebate,’’ after ‘‘grant’’ in introductory provisions.

Subsec. (d)(2)(A). Pub. L. 111–364, § 2(b)(5)(B), substituted ‘‘grant, rebate, or loan provided, or contract entered into,’’ for ‘‘grant or loan provided’’ and ‘‘any Federal law, except that this subparagraph shall not apply to a mandate in a State implementation plan approved by the Administrator under the Clean Air Act’’ for ‘‘Federal, State or local law’’.

Subsecs. (e), (f). Pub. L. 111–364, § 2(b)(6), added subsecs. (e) and (f).

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by Pub. L. 111–364 effective Oct. 1, 2011, except as otherwise provided, see section 4 of Pub. L. 111–364, set out as a note under section 16131 of this title.

§ 16133. State grant, rebate, and loan programs

(a) In general

Subject to the availability of adequate appropriations, the Administrator shall use 30 percent of the funds made available for a fiscal year under this part to support grant, rebate, and loan programs administered by States that are designed to achieve significant reductions in diesel emissions.

(b) Applications

The Administrator shall—

(1) provide to States guidance for use in applying for grant, rebate, or loan funds under this section, including information regarding—

(A) the process and forms for applications;

(B) permissible uses of funds received; and

(C) the cost-effectiveness of various emission reduction technologies eligible to be carried out using funds provided under this section; and

(2) establish, for applications described in paragraph (1)—

(A) an annual deadline for submission of the applications;

(B) a process by which the Administrator shall approve or disapprove each application; and

(C) a streamlined process by which a State may renew an application described in paragraph (1) for subsequent fiscal years.

(c) Allocation of funds

(1) In general

For each fiscal year, the Administrator shall allocate among States for which applications are approved by the Administrator under subsection (b)(2)(B) funds made available to carry out this section for the fiscal year.

(2) Allocation

(A) In general

Except as provided in subparagraphs (B) and (C), using not more than 20 percent of

the funds made available to carry out this part for a fiscal year, the Administrator shall provide to each State qualified for an allocation for the fiscal year an allocation equal to 1/53 of the funds made available for that fiscal year for distribution to States under this paragraph.

(B) Certain territories

(i) In general

Except as provided in clause (ii), Guam, the United States Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands shall collectively receive an allocation equal to 1/53 of the funds made available for that fiscal year for distribution to States under this subsection, divided equally among those 4 States.

(ii) Exception

If any State described in clause (i) does not qualify for an allocation under this paragraph, the share of funds otherwise allocated for that State under clause (i) shall be reallocated pursuant to subparagraph (C).

(C) Reallocation

If any State does not qualify for an allocation under this paragraph, the share of funds otherwise allocated for that State under this paragraph shall be reallocated to each remaining qualified State in an amount equal to the product obtained by multiplying—

(i) the proportion that the population of the State bears to the population of all States described in paragraph (1); by

(ii) the amount otherwise allocatable to the nonqualifying State under this paragraph.

(3) State matching incentive

(A) In general

If a State agrees to match the allocation provided to the State under paragraph (2) for a fiscal year, the Administrator shall provide to the State for the fiscal year an additional amount equal to 50 percent of the allocation of the State under paragraph (2).

(B) Requirements

A State—

(i) may not use funds received under this part to pay a matching share required under this subsection; and

(ii) shall not be required to provide a matching share for any additional amount received under subparagraph (A).

(4) Unclaimed funds

Any funds that are not claimed by a State for a fiscal year under this subsection shall be used to carry out section 16132 of this title.

(d) Administration

(1) In general

Subject to paragraphs (2) and (3) and, to the extent practicable, the priority areas listed in section 16132(c)(3) of this title, a State shall use any funds provided under this section to develop and implement such grant, rebate, and low-cost revolving loan programs in the State as are appropriate to meet State needs and goals relating to the reduction of diesel emissions.

(2) Apportionment of funds

The chief executive of a State that receives funding under this section may determine the portion of funds to be provided as grants, rebates, or loans.

(3) Use of funds

A grant, rebate, or loan provided under this section shall be used for a project relating to—

(A) a certified engine configuration; or

(B) a verified technology.

(4) Priority

In providing grants, rebates, and loans under this section, a State shall use the priorities in section 16132(c)(4) of this title.

(5) Public notification

Not later than 60 days after the date of the award of a grant, rebate, or loan by a State, the State shall publish on the Web site of the State—

(A) for rebates, grants, and loans provided to the owner of a diesel vehicle or fleet, the total number and dollar amount of rebates, grants, or loans provided, as well as a breakdown of the technologies funded through the rebates, grants, or loans; and

(B) for other rebates, grants, and loans, a description of each application for which the grant, rebate, or loan is provided.

(Pub. L. 109–58, title VII, § 793, Aug. 8, 2005, 119 Stat. 841; Pub. L. 110–255, § 3(b), June 30, 2008, 122 Stat. 2424; Pub. L. 111–364, § 2(c), Jan. 4, 2011, 124 Stat. 4059.)

AMENDMENTS

2011—Pub. L. 111–364, § 2(c)(1), inserted ‘‘, rebate,’’ after ‘‘grant’’ in section catchline.

Subsec. (a). Pub. L. 111–364, § 2(c)(2), inserted ‘‘, rebate,’’ after ‘‘grant’’.

Subsec. (b)(1). Pub. L. 111–364, § 2(c)(3), inserted ‘‘, rebate,’’ after ‘‘grant’’ in introductory provisions.

Subsec. (c)(2). Pub. L. 111–364, § 2(c)(4), amended par. (2) generally. Prior to amendment, par. (2) related to allocation of funds.

Subsec. (d)(1). Pub. L. 111–364, § 2(c)(5)(A), inserted ‘‘, rebate,’’ after ‘‘grant’’.

Subsec. (d)(2). Pub. L. 111–364, § 2(c)(5)(B), inserted ‘‘, rebates,’’ after ‘‘grants’’.

Subsec. (d)(3). Pub. L. 111–364, § 2(c)(5)(C), substituted ‘‘grant, rebate, or loan provided under this section shall be used’’ for ‘‘grant or loan provided under this section may be used’’ in introductory provisions.

Subsec. (d)(4), (5). Pub. L. 111–364, § 2(c)(5)(D), added pars. (4) and (5).

2008—Subsec. (c)(2)(A). Pub. L. 110–255, § 3(b)(2), substituted ‘‘51’’ for ‘‘50’’ and ‘‘1.96 percent’’ for ‘‘2 percent’’.

Subsec. (c)(2)(B). Pub. L. 110–255, § 3(b)(2), substituted ‘‘51’’ for ‘‘50’’ in introductory provisions.

Subsec. (c)(2)(B)(ii). Pub. L. 110–255, § 3(b)(2), which directed substitution of ‘‘1.96 percent’’ for ‘‘2 percent’’, was executed by making the substitution for ‘‘2-percent’’, to reflect the probable intent of Congress.

Subsec. (d)(2). Pub. L. 110–255, § 3(b)(1), substituted ‘‘chief executive’’ for ‘‘Governor’’.

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by Pub. L. 111–364 effective Oct. 1, 2011, except that amendment by section 2(c)(4) of Pub. L.

111–364 effective Jan. 4, 2011, see section 4 of Pub. L. 111–364, set out as a note under section 16131 of this title.

§ 16134. Evaluation and report

(a) In general

Not later than 1 year after the date on which funds are made available under this part, and biennially thereafter, the Administrator shall submit to Congress a report evaluating the implementation of the programs under this part.

(b) Inclusions

The report shall include a description of—

(1) the total number of grant applications received;

(2) each grant, rebate, or loan made under this part, including the amount of the grant, rebate, or loan;

(3) each project for which a grant, rebate, or loan is provided under this part, including the criteria used to select the grant, rebate, or loan recipients;

(4) the actual and estimated air quality and diesel fuel conservation benefits, cost-effectiveness, and cost-benefits of the grant, rebate, and loan programs under this part;

(5) the problems encountered by projects for which a grant, rebate, or loan is provided under this part;

(6) any other information the Administrator considers to be appropriate; and

(7) in the last report sent to Congress before January 1, 2016, an analysis of the need to continue the program, including an assessment of the size of the vehicle and engine fleet that could provide benefits from being retrofit under this program and a description of the number and types of applications that were not granted in the preceding year.

(Pub. L. 109–58, title VII, § 794, Aug. 8, 2005, 119 Stat. 843; Pub. L. 111–364, § 2(d), Jan. 4, 2011, 124 Stat. 4060.)

AMENDMENTS

2011—Subsec. (b)(2) to (5). Pub. L. 111–364, § 2(d)(1), inserted ‘‘, rebate,’’ after ‘‘grant’’ wherever appearing.

Subsec. (b)(7). Pub. L. 111–364, § 2(d)(2)–(4), added par. (7).

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by Pub. L. 111–364 effective Oct. 1, 2011, except as otherwise provided, see section 4 of Pub. L. 111–364, set out as a note under section 16131 of this title.

§ 16135. Outreach and incentives

(a) Definition of eligible technology

In this section, the term ‘‘eligible technology’’ means—

(1) a verified technology; or

(2) an emerging technology.

(b) Technology transfer program

(1) In general

The Administrator shall establish a program under which the Administrator—

(A) informs stakeholders of the benefits of eligible technologies; and

(B) develops nonfinancial incentives to promote the use of eligible technologies.

(2) Eligible stakeholders

Eligible stakeholders under this section include—

(A) equipment owners and operators;

(B) emission and pollution control technology manufacturers;

(C) engine and equipment manufacturers;

(D) State and local officials responsible for air quality management;

(E) community organizations; and

(F) public health, educational, and environmental organizations.

(c) State implementation plans

The Administrator shall develop appropriate guidance to provide credit to a State for emission reductions in the State created by the use of eligible technologies through a State implementation plan under section 7410 of this title.

(d) International markets

The Administrator, in coordination with the Department of Commerce and industry stakeholders, shall inform foreign countries with air quality problems of the potential of technology developed or used in the United States to provide emission reductions in those countries.

(Pub. L. 109–58, title VII, § 795, Aug. 8, 2005, 119 Stat. 843.)

§ 16136. Effect of part

Nothing in this part affects any authority under the Clean Air Act (42 U.S.C. 7401 et seq.) in existence on the day before August 8, 2005.

(Pub. L. 109–58, title VII, § 796, Aug. 8, 2005, 119 Stat. 844.)

REFERENCES IN TEXT

The Clean Air Act, referred to in text, is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, 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.

§ 16137. Authorization of appropriations

(a) In general

There is authorized to be appropriated to carry out this part $100,000,000 for each of fiscal years 2012 through 2016, to remain available until expended.

(b) Management and oversight

The Administrator may use not more than 1 percent of the amounts made available under subsection (a) for each fiscal year for management and oversight purposes.

(Pub. L. 109–58, title VII, § 797, Aug. 8, 2005, 119 Stat. 844; Pub. L. 111–364, § 2(e), Jan. 4, 2011, 124 Stat. 4060.)

AMENDMENTS

2011—Pub. L. 111–364 amended section generally. Prior to amendment, text read as follows: ‘‘There is authorized to be appropriated to carry out this part $200,000,000 for each of fiscal years 2007 through 2011, to remain available until expended.’’

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by Pub. L. 111–364 effective Oct. 1, 2011, except as otherwise provided, see section 4 of Pub. L.

111–364, set out as a note under section 16131 of this title.

§ 16138. EPA authority to accept diesel emissions reduction Supplemental Environmental Projects

The Administrator of the Environmental Protection Agency (hereinafter, the ''Agency'') may accept (notwithstanding sections 3302 and 1301 of title 31) diesel emissions reduction Supplemental Environmental Projects if the projects, as part of a settlement of any alleged violations of environmental law—

(1) protect human health or the environment;

(2) are related to the underlying alleged violations;

(3) do not constitute activities that the defendant would otherwise be legally required to perform; and

(4) do not provide funds for the staff of the Agency or for contractors to carry out the Agency's internal operations.

(Pub. L. 110–255, § 1, June 30, 2008, 122 Stat. 2423.)

CODIFICATION

Section was not enacted as part of the Energy Policy Act of 2005 which comprises this chapter.

§ 16139. Settlement agreement provisions

In any settlement agreement regarding alleged violations of environmental law in which a defendant agrees to perform a diesel emissions reduction Supplemental Environmental Project, the Administrator of the Environmental Protection Agency shall require the defendant to include in the settlement documents a certification under penalty of law that the defendant would have agreed to perform a comparably valued, alternative project other than a diesel emissions reduction Supplemental Environmental Project if the Administrator were precluded by law from accepting a diesel emission reduction Supplemental Environmental Project. A failure by the Administrator to include this language in such a settlement agreement shall not create a cause of action against the United States under the Clean Air Act [42 U.S.C. 7401 et seq.] or any other law or create a basis for overturning a settlement agreement entered into by the United States.

(Pub. L. 110–255, § 2, June 30, 2008, 122 Stat. 2423.)

REFERENCES IN TEXT

The Clean Air Act, referred to in text, 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.

CODIFICATION

Section was not enacted as part of the Energy Policy Act of 2005 which comprises this chapter.

SUBCHAPTER VIII—HYDROGEN

§ 16151. Purposes

The purposes of this subchapter are—

(1) to enable and promote comprehensive development, demonstration, and commercialization of hydrogen and fuel cell technology in partnership with industry;

(2) to make critical public investments in building strong links to private industry, institutions of higher education, National Laboratories, and research institutions to expand innovation and industrial growth;

(3) to build a mature hydrogen economy that creates fuel diversity in the massive transportation sector of the United States;

(4) to sharply decrease the dependency of the United States on imported oil, eliminate most emissions from the transportation sector, and greatly enhance our energy security; and

(5) to create, strengthen, and protect a sustainable national energy economy.

(Pub. L. 109–58, title VIII, § 802, Aug. 8, 2005, 119 Stat. 844.)

SHORT TITLE

For short title of title VIII of Pub. L. 109–58, which enacted this subchapter, as the ''Spark M. Matsunaga Hydrogen Act of 2005'', see section 801 of Pub. L. 109–58, set out as a note under section 15801 of this title.

§ 16152. Definitions

In this subchapter:

(1) Fuel cell

The term ''fuel cell'' means a device that directly converts the chemical energy of a fuel, which is supplied from an external source, and an oxidant into electricity by electrochemical processes occurring at separate electrodes in the device.

(2) Heavy-duty vehicle

The term ''heavy-duty vehicle'' means a motor vehicle that—

(A) is rated at more than 8,500 pounds gross vehicle weight;

(B) has a curb weight of more than 6,000 pounds; or

(C) has a basic vehicle frontal area in excess of 45 square feet.

(3) Infrastructure

The term ''infrastructure'' means the equipment, systems, or facilities used to produce, distribute, deliver, or store hydrogen (except for onboard storage).

(4) Light-duty vehicle

The term ''light-duty vehicle'' means a motor vehicle that is rated at 8,500 or less pounds gross vehicle weight.

(5) Stationary; portable

The terms ''stationary'' and ''portable'', when used in reference to a fuel cell, include—

(A) continuous electric power; and

(B) backup electric power.

(6) Task Force

The term ''Task Force'' means the Hydrogen and Fuel Cell Technical Task Force established under section 16155 of this title.

(7) Technical Advisory Committee

The term ''Technical Advisory Committee'' means the independent Technical Advisory Committee established under section 16156 of this title.

(Pub. L. 109–58, title VIII, § 803, Aug. 8, 2005, 119 Stat. 844.)

§ 16153. Plan

Not later than 6 months after August 8, 2005, the Secretary shall transmit to Congress a coordinated plan for the programs described in this subchapter and any other programs of the Department that are directly related to fuel cells or hydrogen. The plan shall describe, at a minimum—

(1) the agenda for the next 5 years for the programs authorized under this subchapter, including the agenda for each activity enumerated in section 16154(e) of this title;

(2) the types of entities that will carry out the activities under this subchapter and what role each entity is expected to play;

(3) the milestones that will be used to evaluate the programs for the next 5 years;

(4) the most significant technical and nontechnical hurdles that stand in the way of achieving the goals described in section 16154 of this title, and how the programs will address those hurdles; and

(5) the policy assumptions that are implicit in the plan, including any assumptions that would affect the sources of hydrogen or the marketability of hydrogen-related products.

(Pub. L. 109–58, title VIII, § 804, Aug. 8, 2005, 119 Stat. 845.)

§ 16154. Programs

(a) In general

The Secretary, in consultation with other Federal agencies and the private sector, shall conduct a research and development program on technologies relating to the production, purification, distribution, storage, and use of hydrogen energy, fuel cells, and related infrastructure.

(b) Goal

The goal of the program shall be to demonstrate and commercialize the use of hydrogen for transportation (in light-duty vehicles and heavy-duty vehicles), utility, industrial, commercial, and residential applications.

(c) Focus

In carrying out activities under this section, the Secretary shall focus on factors that are common to the development of hydrogen infrastructure and the supply of vehicle and electric power for critical consumer and commercial applications, and that achieve continuous technical evolution and cost reduction, particularly for hydrogen production, the supply of hydrogen, storage of hydrogen, and end uses of hydrogen that—

(1) steadily increase production, distribution, and end use efficiency and reduce lifecycle emissions;

(2) resolve critical problems relating to catalysts, membranes, storage, lightweight materials, electronic controls, manufacturability, and other problems that emerge from the program;

(3) enhance sources of renewable fuels and biofuels for hydrogen production; and

(4) enable widespread use of distributed electricity generation and storage.

(d) Public education and research

In carrying out this section, the Secretary shall support enhanced public education and research conducted at institutions of higher education in fundamental sciences, application design, and systems concepts (including education and research relating to materials, subsystems, manufacturability, maintenance, and safety) relating to hydrogen and fuel cells.

(e) Activities

The Secretary, in partnership with the private sector, shall conduct programs to address—

(1) production of hydrogen from diverse energy sources, including—

(A) fossil fuels, which may include carbon capture and sequestration;

(B) hydrogen-carrier fuels (including ethanol and methanol);

(C) renewable energy resources, including biomass; and

(D) nuclear energy;

(2) use of hydrogen for commercial, industrial, and residential electric power generation;

(3) safe delivery of hydrogen or hydrogen-carrier fuels, including—

(A) transmission by pipeline and other distribution methods; and

(B) convenient and economic refueling of vehicles either at central refueling stations or through distributed onsite generation;

(4) advanced vehicle technologies, including—

(A) engine and emission control systems;

(B) energy storage, electric propulsion, and hybrid systems;

(C) automotive materials; and

(D) other advanced vehicle technologies;

(5) storage of hydrogen or hydrogen-carrier fuels, including development of materials for safe and economic storage in gaseous, liquid, or solid form at refueling facilities and onboard vehicles;

(6) development of safe, durable, affordable, and efficient fuel cells, including fuel-flexible fuel cell power systems, improved manufacturing processes, high-temperature membranes, cost-effective fuel processing for natural gas, fuel cell stack and system reliability, low temperature operation, and cold start capability; and

(7) the ability of domestic automobile manufacturers to manufacture commercially available competitive hybrid vehicle technologies in the United States.

(f) Program goals

(1) Vehicles

For vehicles, the goals of the program are—

(A) to enable a commitment by automakers no later than year 2015 to offer safe, affordable, and technically viable hydrogen fuel cell vehicles in the mass consumer market; and

(B) to enable production, delivery, and acceptance by consumers of model year 2020 hydrogen fuel cell and other hydrogen-powered vehicles that will have, when compared to light duty vehicles in model year 2005—

(i) fuel economy that is substantially higher;

(ii) substantially lower emissions of air pollutants; and

(iii) equivalent or improved vehicle fuel system crash integrity and occupant protection.

(2) Hydrogen energy and energy infrastructure

For hydrogen energy and energy infrastructure, the goals of the program are to enable a commitment not later than 2015 that will lead to infrastructure by 2020 that will provide—

(A) safe and convenient refueling;

(B) improved overall efficiency;

(C) widespread availability of hydrogen from domestic energy sources through—

(i) production, with consideration of emissions levels;

(ii) delivery, including transmission by pipeline and other distribution methods for hydrogen; and

(iii) storage, including storage in surface transportation vehicles;

(D) hydrogen for fuel cells, internal combustion engines, and other energy conversion devices for portable, stationary, micro, critical needs facilities, and transportation applications; and

(E) other technologies consistent with the Department's plan.

(3) Fuel cells

The goals for fuel cells and their portable, stationary, and transportation applications are to enable—

(A) safe, economical, and environmentally sound hydrogen fuel cells;

(B) fuel cells for light duty and other vehicles; and

(C) other technologies consistent with the Department's plan.

(g) Funding

(1) In general

The Secretary shall carry out the programs under this section using a competitive, merit-based review process and consistent with the generally applicable Federal laws and regulations governing awards of financial assistance, contracts, or other agreements.

(2) Research centers

Activities under this section may be carried out by funding nationally recognized university-based or Federal laboratory research centers.

(h) Hydrogen supply

There are authorized to be appropriated to carry out projects and activities relating to hydrogen production, storage, distribution and dispensing, transport, education and coordination, and technology transfer under this section—

(1) $160,000,000 for fiscal year 2006;

(2) $200,000,000 for fiscal year 2007;

(3) $220,000,000 for fiscal year 2008;

(4) $230,000,000 for fiscal year 2009;

(5) $250,000,000 for fiscal year 2010; and

(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(i) Fuel cell technologies

There are authorized to be appropriated to carry out projects and activities relating to fuel cell technologies under this section—

(1) $150,000,000 for fiscal year 2006;

(2) $160,000,000 for fiscal year 2007;

(3) $170,000,000 for fiscal year 2008;

(4) $180,000,000 for fiscal year 2009;

(5) $200,000,000 for fiscal year 2010; and

(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(Pub. L. 109–58, title VIII, § 805, Aug. 8, 2005, 119 Stat. 845.)

§ 16155. Hydrogen and Fuel Cell Technical Task Force

(a) Establishment

Not later than 120 days after August 8, 2005, the President shall establish an interagency task force chaired by the Secretary with representatives from each of the following:

(1) The Office of Science and Technology Policy within the Executive Office of the President.

(2) The Department of Transportation.

(3) The Department of Defense.

(4) The Department of Commerce (including the National Institute of Standards and Technology).

(5) The Department of State.

(6) The Environmental Protection Agency.

(7) The National Aeronautics and Space Administration.

(8) Other Federal agencies as the Secretary determines appropriate.

(b) Duties

(1) Planning

The Task Force shall work toward—

(A) a safe, economical, and environmentally sound fuel infrastructure for hydrogen and hydrogen-carrier fuels, including an infrastructure that supports buses and other fleet transportation;

(B) fuel cells in government and other applications, including portable, stationary, and transportation applications;

(C) distributed power generation, including the generation of combined heat, power, and clean fuels including hydrogen;

(D) uniform hydrogen codes, standards, and safety protocols; and

(E) vehicle hydrogen fuel system integrity safety performance.

(2) Activities

The Task Force may organize workshops and conferences, may issue publications, and may create databases to carry out its duties. The Task Force shall—

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

(B) develop and maintain an inventory and assessment of hydrogen, fuel cells, and other advanced technologies, including the commercial capability of each technology for the economic and environmentally safe production, distribution, delivery, storage, and use of hydrogen;

(C) integrate technical and other information made available as a result of the programs and activities under this subchapter;

(D) promote the marketplace introduction of infrastructure for hydrogen fuel vehicles; and

(E) conduct an education program to provide hydrogen and fuel cell information to potential end-users.

(c) Agency cooperation

The heads of all agencies, including those whose agencies are not represented on the Task Force, shall cooperate with and furnish information to the Task Force, the Technical Advisory Committee, and the Department.

(Pub. L. 109–58, title VIII, § 806, Aug. 8, 2005, 119 Stat. 848.)

§ 16156. Technical Advisory Committee

(a) Establishment

The Hydrogen Technical and Fuel Cell Advisory Committee is established to advise the Secretary on the programs and activities under this subchapter.

(b) Membership

(1) Members

The Technical Advisory Committee shall be comprised of not fewer than 12 nor more than 25 members. The members shall be appointed by the Secretary to represent domestic industry, academia, professional societies, government agencies, Federal laboratories, previous advisory panels, and financial, environmental, and other appropriate organizations based on the Department's assessment of the technical and other qualifications of Technical Advisory Committee members and the needs of the Technical Advisory Committee.

(2) Terms

The term of a member of the Technical Advisory Committee shall not be more than 3 years. The Secretary may appoint members of the Technical Advisory Committee in a manner that allows the terms of the members serving at any time to expire at spaced intervals so as to ensure continuity in the functioning of the Technical Advisory Committee. A member of the Technical Advisory Committee whose term is expiring may be reappointed.

(3) Chairperson

The Technical Advisory Committee shall have a chairperson, who shall be elected by the members from among their number.

(c) Review

The Technical Advisory Committee shall review and make recommendations to the Secretary on—

(1) the implementation of programs and activities under this subchapter;

(2) the safety, economical, and environmental consequences of technologies for the production, distribution, delivery, storage, or use of hydrogen energy and fuel cells; and

(3) the plan under section 16153 of this title.

(d) Response

(1) Consideration of recommendations

The Secretary shall consider, but need not adopt, any recommendations of the Technical Advisory Committee under subsection (c).

(2) Biennial report

The Secretary shall transmit a biennial report to Congress describing any recommendations made by the Technical Advisory Committee since the previous report. The report shall include a description of how the Secretary has implemented or plans to implement the recommendations, or an explanation of the reasons that a recommendation will not be implemented. The report shall be transmitted along with the President's budget proposal.

(e) Support

The Secretary shall provide resources necessary in the judgment of the Secretary for the Technical Advisory Committee to carry out its responsibilities under this subchapter.

(Pub. L. 109–58, title VIII, § 807, Aug. 8, 2005, 119 Stat. 849.)

§ 16157. Demonstration

(a) In general

In carrying out the programs under this section, the Secretary shall fund a limited number of demonstration projects, consistent with this subchapter and a determination of the maturity, cost-effectiveness, and environmental impacts of technologies supporting each project. In selecting projects under this subsection, the Secretary shall, to the extent practicable and in the public interest, select projects that—

(1) involve using hydrogen and related products at existing facilities or installations, such as existing office buildings, military bases, vehicle fleet centers, transit bus authorities, or units of the National Park System;

(2) depend on reliable power from hydrogen to carry out essential activities;

(3) lead to the replication of hydrogen technologies and draw such technologies into the marketplace;

(4) include vehicle, portable, and stationary demonstrations of fuel cell and hydrogen-based energy technologies;

(5) address the interdependency of demand for hydrogen fuel cell applications and hydrogen fuel infrastructure;

(6) raise awareness of hydrogen technology among the public;

(7) facilitate identification of an optimum technology among competing alternatives;

(8) address distributed generation using renewable sources;

(9) carry out demonstrations of evolving hydrogen and fuel cell technologies in national parks, remote island areas, and on Indian tribal land, as selected by the Secretary;

(10) carry out a program to demonstrate developmental hydrogen and fuel cell systems for mobile, portable, and stationary uses, using improved versions of the learning demonstrations program concept of the Department including demonstrations involving—

(A) light-duty vehicles;

(B) heavy-duty vehicles;

(C) fleet vehicles;

(D) specialty industrial and farm vehicles; and

(E) commercial and residential portable, continuous, and backup electric power generation;

(11) in accordance with any code or standards developed in a region, fund prototype,

pilot fleet, and infrastructure regional hydrogen supply corridors along the interstate highway system in varied climates across the United States; and

(12) fund demonstration programs that explore the use of hydrogen blends, hybrid hydrogen, and hydrogen reformed from renewable agricultural fuels, including the use of hydrogen in hybrid electric, heavier duty, and advanced internal combustion-powered vehicles.

The Secretary shall give preference to projects which address multiple elements contained in paragraphs (1) through (12).

(b) System demonstrations

(1)[1] In general

As a component of the demonstration program under this section, the Secretary shall provide grants, on a cost share basis as appropriate, to eligible entities (as determined by the Secretary) for use in—

(A) devising system design concepts that provide for the use of advanced composite vehicles in programs under section 16122 of this title that—

(i) have as a primary goal the reduction of drive energy requirements;

(ii) after 2010, add another research and development phase, as defined in subsection (c), including the vehicle and infrastructure partnerships developed under the learning demonstrations program concept of the Department; and

(iii) are managed through an enhanced FreedomCAR program within the Department that encourages involvement in cost-shared projects by manufacturers and governments; and

(B) designing a local distributed energy system that—

(i) incorporates renewable hydrogen production, off-grid electricity production, and fleet applications in industrial or commercial service;

(ii) integrates energy or applications described in clause (i), such as stationary, portable, micro, and mobile fuel cells, into a high-density commercial or residential building complex or agricultural community; and

(iii) is managed in cooperation with industry, State, tribal, and local governments, agricultural organizations, and nonprofit generators and distributors of electricity.

(c) Identification of new program requirements

In carrying out the demonstrations under subsection (a), the Secretary, in consultation with the Task Force and the Technical Advisory Committee, shall—

(1) after 2008 for stationary and portable applications, and after 2010 for vehicles, identify new requirements that refine technological concepts, planning, and applications; and

(2) during the second phase of the learning demonstrations under subsection (b)(1)(A)(ii), redesign subsequent program work to incorporate those requirements.

(d) Authorization of appropriations

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

(1) $185,000,000 for fiscal year 2006;
(2) $200,000,000 for fiscal year 2007;
(3) $250,000,000 for fiscal year 2008;
(4) $300,000,000 for fiscal year 2009;
(5) $375,000,000 for fiscal year 2010; and
(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(Pub. L. 109–58, title VIII, § 808, Aug. 8, 2005, 119 Stat. 850.)

§ 16158. Codes and standards

(a) In general

The Secretary, in cooperation with the Task Force, shall provide grants to, or offer to enter into contracts with, such professional organizations, public service organizations, and government agencies as the Secretary determines appropriate to support timely and extensive development of safety codes and standards relating to fuel cell vehicles, hydrogen energy systems, and stationary, portable, and micro fuel cells.

(b) Educational efforts

The Secretary shall support educational efforts by organizations and agencies described in subsection (a) to share information, including information relating to best practices, among those organizations and agencies.

(c) Authorization of appropriations

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

(1) $4,000,000 for fiscal year 2006;
(2) $7,000,000 for fiscal year 2007;
(3) $8,000,000 for fiscal year 2008;
(4) $10,000,000 for fiscal year 2009;
(5) $9,000,000 for fiscal year 2010; and
(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(Pub. L. 109–58, title VIII, § 809, Aug. 8, 2005, 119 Stat. 851.)

§ 16159. Disclosure

Section 13293 of this title shall apply to any project carried out through a grant, cooperative agreement, or contract under this subchapter.

(Pub. L. 109–58, title VIII, § 810, Aug. 8, 2005, 119 Stat. 852.)

§ 16160. Reports

(a) Secretary

Subject to subsection (c), not later than 2 years after August 8, 2005, and triennially thereafter, the Secretary shall submit to Congress a report describing—

(1) activities carried out by the Department under this subchapter,[1] for hydrogen and fuel cell technology;

(2) measures the Secretary has taken during the preceding 3 years to support the transition of primary industry (or a related industry) to a fully commercialized hydrogen economy;

[1] So in original. No par. (2) has been enacted.

[1] So in original. The comma probably should not appear.

(3) any change made to the strategy relating to hydrogen and fuel cell technology to reflect the results of a learning demonstrations;

(4) progress, including progress in infrastructure, made toward achieving the goal of producing and deploying not less than—

(A) 100,000 hydrogen-fueled vehicles in the United States by 2010; and

(B) 2,500,000 hydrogen-fueled vehicles in the United States by 2020;

(5) progress made toward achieving the goal of supplying hydrogen at a sufficient number of fueling stations in the United States by 2010 including by integrating—

(A) hydrogen activities; and

(B) associated targets and timetables for the development of hydrogen technologies;

(6) any problem relating to the design, execution, or funding of a program under this subchapter;

(7) progress made toward and goals achieved in carrying out this subchapter and updates to the developmental roadmap, including the results of the reviews conducted by the National Academy of Sciences under subsection (b) for the fiscal years covered by the report; and

(8) any updates to strategic plans that are necessary to meet the goals described in paragraph (4).

(b) External review

The Secretary shall enter into an arrangement with the National Academy of Sciences under which the Academy will review the programs under sections 16154 and 16157 of this title every fourth year following August 8, 2005. The Academy's review shall include the program priorities and technical milestones, and evaluate the progress toward achieving them. The first review shall be completed not later than 5 years after August 8, 2005. Not later than 45 days after receiving the review, the Secretary shall transmit the review to Congress along with a plan to implement the review's recommendations or an explanation for the reasons that a recommendation will not be implemented.

(c) Authorization of appropriations

There is authorized to be appropriated to carry out this section $1,500,000 for each of fiscal years 2006 through 2020.

(Pub. L. 109–58, title VIII, § 811, Aug. 8, 2005, 119 Stat. 852.)

§ 16161. Solar and wind technologies

(a) Solar energy technologies

The Secretary shall—

(1) prepare a detailed roadmap for carrying out the provisions in this subchapter related to solar energy technologies and for implementing the recommendations related to solar energy technologies that are included in the report transmitted under subsection (e);

(2) provide for the establishment of 5 projects in geographic areas that are regionally and climatically diverse to demonstrate the production of hydrogen at solar energy facilities, including one demonstration project at a National Laboratory or institution of higher education;

(3) establish a program—

(A) to develop optimized concentrating solar power devices that may be used for the production of both electricity and hydrogen; and

(B) to evaluate the use of thermochemical cycles for hydrogen production at the temperatures attainable with concentrating solar power devices;

(4) coordinate with activities sponsored by the Department's Office of Nuclear Energy, Science, and Technology on high-temperature materials, thermochemical cycles, and economic issues related to solar energy;

(5) provide for the construction and operation of new concentrating solar power devices or solar power cogeneration facilities that produce hydrogen either concurrently with, or independently of, the production of electricity;

(6) support existing facilities and programs of study related to concentrating solar power devices; and

(7) establish a program—

(A) to develop methods that use electricity from photovoltaic devices for the onsite production of hydrogen, such that no intermediate transmission or distribution infrastructure is required or used and future demand growth may be accommodated;

(B) to evaluate the economics of small-scale electrolysis for hydrogen production; and

(C) to study the potential of modular photovoltaic devices for the development of a hydrogen infrastructure, the security implications of a hydrogen infrastructure, and the benefits potentially derived from a hydrogen infrastructure.

(b) Wind energy technologies

The Secretary shall—

(1) prepare a detailed roadmap for carrying out the provisions in this subchapter related to wind energy technologies and for implementing the recommendations related to wind energy technologies that are included in the report transmitted under subsection (e); and

(2) provide for the establishment of 5 projects in geographic areas that are regionally and climatically diverse to demonstrate the production of hydrogen at existing wind energy facilities, including one demonstration project at a National Laboratory or institution of higher education.

(c) Program support

The Secretary shall support programs at institutions of higher education for the development of solar energy technologies and wind energy technologies for the production of hydrogen. The programs supported under this subsection shall—

(1) enhance fellowship and faculty assistance programs;

(2) provide support for fundamental research;

(3) encourage collaborative research among industry, National Laboratories, and institutions of higher education;

(4) support communication and outreach; and

(5) to the greatest extent possible—

(A) be located in geographic areas that are regionally and climatically diverse; and

(B) be located at part B institutions, minority institutions, and institutions of higher education located in States participating in the Experimental Program to Stimulate Competitive Research of the Department.

(d) Institutions of higher education and National Laboratory interactions

In conjunction with the programs supported under this section, the Secretary shall develop sabbatical, fellowship, and visiting scientist programs to encourage National Laboratories and institutions of higher education to share and exchange personnel.

(e) Report

The Secretary shall transmit to the Congress not later than 120 days after August 8, 2005, a report containing detailed summaries of the roadmaps prepared under subsections (a)(1) and (b)(1), descriptions of the Secretary's progress in establishing the projects and other programs required under this section, and recommendations for promoting the availability of advanced solar and wind energy technologies for the production of hydrogen.

(f) Definitions

For purposes of this section—

(1) the term ''concentrating solar power devices'' means devices that concentrate the power of the sun by reflection or refraction to improve the efficiency of a photovoltaic or thermal generation process;

(2) the term ''minority institution'' has the meaning given to that term in section 1067k of title 20;

(3) the term ''part B institution'' has the meaning given to that term in section 1061 of title 20; and

(4) the term ''photovoltaic devices'' means devices that convert light directly into electricity through a solid-state, semiconductor process.

(g) Authorization of appropriations

There is authorized to be appropriated such sums as are necessary for carrying out the activities under this section for each of fiscal years 2006 through 2020.

(Pub. L. 109–58, title VIII, § 812, Aug. 8, 2005, 119 Stat. 853.)

§ 16162. Technology transfer

In carrying out this subchapter, the Secretary shall carry out programs that—

(1) provide for the transfer of critical hydrogen and fuel cell technologies to the private sector;

(2) accelerate wider application of those technologies in the global market;

(3) foster the exchange of generic, nonproprietary information; and

(4) assess technical and commercial viability of technologies relating to the production, distribution, storage, and use of hydrogen energy and fuel cells.

(Pub. L. 109–58, title VIII, § 813, Aug. 8, 2005, 119 Stat. 855.)

§ 16163. Miscellaneous provisions

(a) Representation

The Secretary may represent the United States interests with respect to activities and programs under this subchapter, in coordination with the Department of Transportation, the National Institute of Standards and Technology, and other relevant Federal agencies, before governments and nongovernmental organizations including—

(1) other Federal, State, regional, and local governments and their representatives;

(2) industry and its representatives, including members of the energy and transportation industries; and

(3) in consultation with the Department of State, foreign governments and their representatives including international organizations.

(b) Regulatory authority

Nothing in this subchapter shall be construed to alter the regulatory authority of the Department.

(Pub. L. 109–58, title VIII, § 814, Aug. 8, 2005, 119 Stat. 855.)

§ 16164. Cost sharing

The costs of carrying out projects and activities under this subchapter shall be shared in accordance with section 16352 of this title.

(Pub. L. 109–58, title VIII, § 815, Aug. 8, 2005, 119 Stat. 855.)

§ 16165. Savings clause

Nothing in this subchapter shall be construed to affect the authority of the Secretary of Transportation that may exist prior to August 8, 2005, with respect to—

(1) research into, and regulation of, hydrogen-powered vehicles fuel systems integrity, standards, and safety under subtitle VI of title 49;

(2) regulation of hazardous materials transportation under chapter 51 of title 49;

(3) regulation of pipeline safety under chapter 601 of title 49;

(4) encouragement and promotion of research, development, and deployment activities relating to advanced vehicle technologies under section 5506 of title 49;

(5) regulation of motor vehicle safety under chapter 301 of title 49;

(6) automobile fuel economy under chapter 329 of title 49; or

(7) representation of the interests of the United States with respect to the activities and programs under the authority of title 49.

(Pub. L. 109–58, title VIII, § 816, Aug. 8, 2005, 119 Stat. 855.)

SUBCHAPTER IX—RESEARCH AND DEVELOPMENT

§ 16181. Goals

(a) In general

In order to achieve the purposes of this subchapter, the Secretary shall conduct a balanced

set of programs of energy research, development, demonstration, and commercial application with the general goals of—

(1) increasing the efficiency of all energy intensive sectors through conservation and improved technologies;

(2) promoting diversity of energy supply;

(3) decreasing the dependence of the United States on foreign energy supplies;

(4) improving the energy security of the United States; and

(5) decreasing the environmental impact of energy-related activities.

(b) Goals

The Secretary shall publish measurable cost and performance-based goals, comparable over time, with each annual budget submission in at least the following areas:

(1) Energy efficiency for buildings, energy-consuming industries, and vehicles.

(2) Electric energy generation (including distributed generation), transmission, and storage.

(3) Renewable energy technologies, including wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based systems, biofuels, and hydropower.

(4) Fossil energy, including power generation, onshore and offshore oil and gas resource recovery, and transportation fuels.

(5) Nuclear energy, including programs for existing and advanced reactors, and education of future specialists.

(c) Public comment

The Secretary shall provide mechanisms for input on the annually published goals from industry, institutions of higher education, and other public sources.

(d) Effect of goals

Nothing in subsection (a) or the annually published goals creates any new authority for any Federal agency, or may be used by any Federal agency, to support the establishment of regulatory standards or regulatory requirements.

(Pub. L. 109–58, title IX, § 902, Aug. 8, 2005, 119 Stat. 856.)

REFERENCES IN TEXT

This subchapter, referred to in subsec. (a), was in the original ''this title'', meaning title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 856, which enacted this subchapter, amended sections 8101 and 8102 of Title 7, Agriculture, and section 5523 of Title 15, Commerce and Trade, enacted provisions set out as notes under section 15801 of this title, section 8102 of Title 7, and section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as notes under section 8101 of Title 7 and section 1902 of Title 30. For complete classification of title IX to the Code, see Short Title note set out under section 15801 of this title and Tables.

SHORT TITLE

For short title of title IX of Pub. L. 109–58, which enacted this subchapter, as the ''Energy Research, Development, Demonstration, and Commercial Application Act of 2005'', see section 431 of Pub. L. 109–58, set out as a note under section 15801 of this title.

§ 16182. Definitions

In this subchapter:

(1) Departmental mission

The term ''departmental mission'' means any of the functions vested in the Secretary by the Department of Energy Organization Act (42 U.S.C. 7101 et seq.) or other law.

(2) Hispanic-serving institution

The term ''Hispanic-serving institution'' has the meaning given the term in section 1101a(a) of title 20.

(3) Nonmilitary energy laboratory

The term ''nonmilitary energy laboratory'' means a National Laboratory other than a National Laboratory listed in subparagraph (G), (H), or (N) of section 15801(3) of this title.

(4) Part B institution

The term ''part B institution'' has the meaning given the term in section 1061 of title 20.

(5) Single-purpose research facility

The term ''single-purpose research facility'' means—

(A) any of the primarily single-purpose entities owned by the Department; or

(B) any other organization of the Department designated by the Secretary.

(6) University

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

(Pub. L. 109–58, title IX, § 903, Aug. 8, 2005, 119 Stat. 856.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original ''this title'', meaning title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 856, which enacted this subchapter, amended sections 8101 and 8102 of Title 7, Agriculture, and section 5523 of Title 15, Commerce and Trade, enacted provisions set out as notes under section 15801 of this title, section 8102 of Title 7, and section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as notes under section 8101 of Title 7 and section 1902 of Title 30. For complete classification of title IX to the Code, see Short Title note set out under section 15801 of this title and Tables.

The Department of Energy Organization Act, referred to in par. (1), is Pub. L. 95–91, Aug. 4, 1977, 91 Stat. 565, as amended, which is classified principally to chapter 84 (§ 7101 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 7101 of this title and Tables.

PART A—ENERGY EFFICIENCY

§ 16191. Energy efficiency

(a) In general

(1) Objectives

The Secretary shall conduct programs of energy efficiency research, development, demonstration, and commercial application, including activities described in this part. Such programs shall take into consideration the following objectives:

(A) Increasing the energy efficiency of vehicles, buildings, and industrial processes.

(B) Reducing the demand of the United States for energy, especially energy from foreign sources.

(C) Reducing the cost of energy and making the economy more efficient and competitive.

(D) Improving the energy security of the United States.

(E) Reducing the environmental impact of energy-related activities.

(2) Programs

Programs under this part shall include research, development, demonstration, and commercial application of—

(A) advanced, cost-effective technologies to improve the energy efficiency and environmental performance of vehicles, including—

(i) hybrid and electric propulsion systems;

(ii) plug-in hybrid systems;

(iii) advanced combustion engines;

(iv) weight and drag reduction technologies;

(v) whole-vehicle design optimization; and

(vi) advanced drive trains;

(B) cost-effective technologies, for new construction and retrofit, to improve the energy efficiency and environmental performance of buildings, using a whole-buildings approach, including onsite renewable energy generation;

(C) advanced technologies to improve the energy efficiency, environmental performance, and process efficiency of energy-intensive and waste-intensive industries;

(D) advanced control devices to improve the energy efficiency of electric motors, including those used in industrial processes, heating, ventilation, and cooling; and

(E) technologies to improve the energy efficiency of appliances and mechanical systems for buildings in cold climates, including combined heat and power units and increased use of renewable resources, including fuel.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out energy efficiency and conservation research, development, demonstration, and commercial application activities, including activities authorized under this part—

(1) $783,000,000 for fiscal year 2007;

(2) $865,000,000 for fiscal year 2008; and

(3) $952,000,000 for fiscal year 2009.

(c) Allocations

From amounts authorized under subsection (b), the following sums are authorized:

(1) For activities under section 16192 of this title, $50,000,000 for each of fiscal years 2007 through 2009.

(2) For activities under section 16195 of this title, $7,000,000 for each of fiscal years 2007 through 2009.

(3) For activities under subsection (a)(2)(A)—

(A) $200,000,000 for fiscal year 2007;

(B) $270,000,000 for fiscal year 2008; and

(C) $310,000,000 for fiscal year 2009.

(4) For activities under subsection (a)(2)(D), $2,000,000 for each of fiscal years 2007 and 2008.

(d) Extended authorization

There are authorized to be appropriated to the Secretary to carry out section 16192 of this title $50,000,000 for each of fiscal years 2010 through 2013.

(e) Limitations

None of the funds authorized to be appropriated under this section may be used for—

(1) the issuance or implementation of energy efficiency regulations;

(2) the weatherization program established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.);

(3) 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

(4) a Federal energy management measure carried out under part 3 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8251 et seq.).

(Pub. L. 109–58, title IX, § 911, Aug. 8, 2005, 119 Stat. 857; Pub. L. 110–140, title III, § 315(a), Dec. 19, 2007, 121 Stat. 1571.)

REFERENCES IN TEXT

The Energy Conservation and Production Act, referred to in subsec. (e)(2), is Pub. L. 94–385, Aug. 14, 1976, 90 Stat. 1125, as amended. 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.

The Energy Policy and Conservation Act, referred to in subsec. (e)(3), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871, as amended. 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 National Energy Conservation Policy Act, referred to in subsec. (e)(4), is Pub. L. 95–619, Nov. 9, 1978, 92 Stat. 3206, as amended. Part 3 of title V of the Act is classified generally to part B (§ 8251 et seq.) of subchapter III of chapter 91 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 8201 of this title and Tables.

AMENDMENTS

2007—Subsec. (a)(2)(E). Pub. L. 110–140 added subpar. (E).

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16192. Next Generation Lighting Initiative

(a) Definitions

In this section:

(1) Advanced solid-state lighting

The term ''advanced solid-state lighting'' means a semiconducting device package and delivery system that produces white light using externally applied voltage.

(2) Industry Alliance

The term ''Industry Alliance'' means an entity selected by the Secretary under subsection (d).

(3) Initiative

The term ''Initiative'' means the Next Generation Lighting Initiative carried out under this section.

(4) Research

The term ''research'' includes research on the technologies, materials, and manufacturing processes required for white light emitting diodes.

(5) White light emitting diode

The term ''white light emitting diode'' means a semiconducting package, using either organic or inorganic materials, that produces white light using externally applied voltage.

(b) Initiative

The Secretary shall carry out a Next Generation Lighting Initiative in accordance with this section to support research, development, demonstration, and commercial application activities related to advanced solid-state lighting technologies based on white light emitting diodes.

(c) Objectives

The objectives of the Initiative shall be to develop advanced solid-state organic and inorganic lighting technologies based on white light emitting diodes that, compared to incandescent and fluorescent lighting technologies, are longer lasting, are more energy-efficient and cost-competitive, and have less environmental impact.

(d) Industry Alliance

Not later than 90 days after August 8, 2005, the Secretary shall competitively select an Industry Alliance to represent participants who are private, for-profit firms, open to large and small businesses, that, as a group, are broadly representative of United States solid-state lighting research, development, infrastructure, and manufacturing expertise as a whole.

(e) Research

(1) Grants

The Secretary shall carry out the research activities of the Initiative through competitively awarded grants to—

(A) researchers, including Industry Alliance participants;

(B) small businesses;

(C) National Laboratories; and

(D) institutions of higher education.

(2) Industry alliance

The Secretary shall annually solicit from the Industry Alliance—

(A) comments to identify solid-state lighting technology needs;

(B) an assessment of the progress of the research activities of the Initiative; and

(C) assistance in annually updating solid-state lighting technology roadmaps.

(3) Availability to public

The information and roadmaps under paragraph (2) shall be available to the public.

(f) Development, demonstration, and commercial application

(1) In general

The Secretary shall carry out a development, demonstration, and commercial application program for the Initiative through competitively selected awards.

(2) Preference

In making the awards, the Secretary may give preference to participants in the Industry Alliance.

(g) Cost sharing

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

(h) Intellectual property

The Secretary may require (in accordance with section 202(a)(ii) of title 35, section 2182 of this title, and section 5908 of this title) that for any new invention developed under subsection (e)—

(1) that the Industry Alliance participants who are active participants in research, development, and demonstration activities related to the advanced solid-state lighting technologies that are covered by this section shall be granted the first option to negotiate with the invention owner, at least in the field of solid-state lighting, nonexclusive licenses and royalties on terms that are reasonable under the circumstances;

(2)(A) that, for 1 year after a United States patent is issued for the invention, the patent holder shall not negotiate any license or royalty with any entity that is not a participant in the Industry Alliance described in paragraph (1); and

(B) that, during the year described in subparagraph (A), the patent holder shall negotiate nonexclusive licenses and royalties in good faith with any interested participant in the Industry Alliance described in paragraph (1); and

(3) such other terms as the Secretary determines are required to promote accelerated commercialization of inventions made under the Initiative.

(i) National Academy review

The Secretary shall enter into an arrangement with the National Academy of Sciences to conduct periodic reviews of the Initiative.

(Pub. L. 109–58, title IX, § 912, Aug. 8, 2005, 119 Stat. 858.)

§ 16193. National Building Performance Initiative

(a) Interagency group

(1) In general

Not later than 90 days after August 8, 2005, the Director of the Office of Science and Technology Policy shall establish an interagency group to develop, in coordination with the advisory committee established under subsection (e), a National Building Performance Initiative (referred to in this section as the ''Initiative'').

(2) Cochairs

The interagency group shall be co-chaired by appropriate officials of the Department and the Department of Commerce, who shall jointly arrange for the provision of necessary administrative support to the group.

(b) Integration of efforts

The Initiative shall integrate Federal, State, and voluntary private sector efforts to reduce

the costs of construction, operation, maintenance, and renovation of commercial, industrial, institutional, and residential buildings.

(c) Plan

(1) In general

Not later than 1 year after August 8, 2005, the interagency group shall submit to Congress a plan for carrying out the appropriate Federal role in the Initiative.

(2) Inclusions

The plan shall include—

(A) research, development, demonstration, and commercial application of energy technology systems and materials for new construction and retrofit relating to the building envelope and building system components;

(B) research, development, demonstration, and commercial application of energy technology and infrastructure enabling the energy efficient, automated operation of buildings and building equipment; and

(C) the collection, analysis, and dissemination of research results and other pertinent information on enhancing building performance to industry, government entities, and the public.

(d) Department of Energy role

Within the Federal portion of the Initiative, the Department shall be the lead agency for all aspects of building performance related to use and conservation of energy.

(e) Advisory committee

The Director of the Office of Science and Technology Policy shall establish an advisory committee to—

(1) analyze and provide recommendations on potential private sector roles and participation in the Initiative; and

(2) review and provide recommendations on the plan described in subsection (c).

(f) Administration

Nothing in this section provides any Federal agency with new authority to regulate building performance.

(Pub. L. 109–58, title IX, § 913, Aug. 8, 2005, 119 Stat. 860.)

§ 16194. Building standards

(a) Definition of high performance building

In this section, the term ''high performance building'' means a building that integrates and optimizes all major high-performance building attributes, including energy efficiency, durability, life-cycle performance, and occupant productivity.

(b) Assessment

Not later than 120 days after August 8, 2005, the Secretary shall enter into an agreement with the National Institute of Building Sciences to—

(1) conduct an assessment (in cooperation with industry, standards development organizations, and other entities, as appropriate) of whether the current voluntary consensus standards and rating systems for high performance buildings are consistent with the current technological state of the art, including relevant results from the research, development and demonstration activities of the Department;

(2) determine if additional research is required, based on the findings of the assessment; and

(3) recommend steps for the Secretary to accelerate the development of voluntary consensus-based standards for high performance buildings that are based on the findings of the assessment.

(c) Grant and technical assistance program

Consistent with subsection (b) and section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note), the Secretary shall establish a grant and technical assistance program to support the development of voluntary consensus-based standards for high performance buildings.

(Pub. L. 109–58, title IX, § 914, Aug. 8, 2005, 119 Stat. 861.)

REFERENCES IN TEXT

Section 12(d) of the National Technology Transfer and Advancement Act of 1995, referred to in subsec. (c), is section 12(d) of Pub. L. 104–113, as amended, which is set out as a note under section 272 of Title 15, Commerce and Trade.

§ 16195. Secondary electric vehicle battery use program

(a) Definitions

In this section:

(1) Battery

The term ''battery'' means an energy storage device that previously has been used to provide motive power in a vehicle powered in whole or in part by electricity.

(2) Associated equipment

The term ''associated equipment'' means equipment located where the batteries will be used that is necessary to enable the use of the energy stored in the batteries.

(b) Program

(1) In general

The Secretary shall establish and conduct a program of research, development, demonstration, and commercial application of energy technology for the secondary use of batteries, if the Secretary finds that there are sufficient numbers of batteries to support the program.

(2) Administration

The program shall be—

(A) designed to demonstrate the use of batteries in secondary applications, including utility and commercial power storage and power quality;

(B) structured to evaluate the performance, including useful service life and costs, of such batteries in field operations, and the necessary supporting infrastructure, including reuse and disposal of batteries; and

(C) coordinated with ongoing secondary battery use programs at the National Laboratories and in industry.

(c) Solicitation

(1) In general

Not later than 180 days after August 8, 2005, the Secretary shall solicit proposals to demonstrate the secondary use of batteries and associated equipment and supporting infrastructure in geographic locations throughout the United States.

(2) Additional solicitations

The Secretary may make additional solicitations for proposals if the Secretary determines that the solicitations are necessary to carry out this section.

(d) Selection of proposals

(1) In general

Not later than 90 days after the closing date established by the Secretary for receipt of proposals under subsection (c), the Secretary shall select up to five proposals that may receive financial assistance under this section once the Department receives appropriated funds to carry out this section.

(2) Factors

In selecting proposals, the Secretary shall consider—

(A) the diversity of battery type;

(B) geographic and climatic diversity; and

(C) life-cycle environmental effects of the approaches.

(3) Limitation

No one project selected under this section shall receive more than 25 percent of the funds made available to carry out the program under this section.

(4) Non-Federal involvement

In selecting proposals, the Secretary shall consider the extent of involvement of State or local government and other persons in each demonstration project to optimize use of Federal resources.

(5) Other criteria

In selecting proposals, the Secretary may consider such other criteria as the Secretary considers appropriate.

(e) Conditions

In carrying out this section, the Secretary shall require that—

(1) relevant information be provided to—

(A) the Department;

(B) the users of the batteries;

(C) the proposers of a project under this section; and

(D) the battery manufacturers; and

(2) the costs of carrying out projects and activities under this section are shared in accordance with section 16352 of this title.

(Pub. L. 109–58, title IX, § 915, Aug. 8, 2005, 119 Stat. 861.)

§ 16196. Energy Efficiency Science Initiative

(a) Establishment

The Secretary shall establish an Energy Efficiency Science Initiative to be managed by the Assistant Secretary in the Department with responsibility for energy conservation under section 7133(a)(9) of this title, in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to energy efficiency.

(b) Report

The Secretary shall submit to Congress, along with the annual budget request of the President submitted to Congress, a report on the activities of the Energy Efficiency Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to energy efficiency.

(Pub. L. 109–58, title IX, § 916, Aug. 8, 2005, 119 Stat. 862.)

§ 16197. Advanced Energy Technology Transfer Centers

(a) Grants

Not later than 18 months after May 8, 2008, the Secretary shall make grants to nonprofit institutions, State and local governments, cooperative extension services, or institutions of higher education (or consortia thereof), to establish a geographically dispersed network of Advanced Energy Technology Transfer Centers, to be located in areas the Secretary determines have the greatest need of the services of such Centers. In making awards under this section, the Secretary shall—

(1) give priority to applicants already operating or partnered with an outreach program capable of transferring knowledge and information about advanced energy efficiency methods and technologies;

(2) ensure that, to the extent practicable, the program enables the transfer of knowledge and information—

(A) about a variety of technologies; and

(B) in a variety of geographic areas;

(3) give preference to applicants that would significantly expand on or fill a gap in existing programs in a geographical region; and

(4) consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing, including construction, renovation, and retrofit.

(b) Activities

Each Center shall operate a program to encourage demonstration and commercial application of advanced energy methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use. Funds awarded under this section may be used for the following activities:

(1) Developing and distributing informational materials on technologies that could use energy more efficiently.

(2) Carrying out demonstrations of advanced energy methods and technologies.

(3) Developing and conducting seminars, workshops, long-distance learning sessions, and other activities to aid in the dissemination of knowledge and information on technologies that could use energy more efficiently.

(4) Providing or coordinating onsite energy evaluations, including instruction on the commissioning of building heating and cooling systems, for a wide range of energy end-users.

(5) Examining the energy efficiency needs of energy end-users to develop recommended research projects for the Department.

(6) Hiring experts in energy efficient technologies to carry out activities described in paragraphs (1) through (5).

(c) Application

A person seeking a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. The Secretary may award a grant under this section to an entity already in existence if the entity is otherwise eligible under this section. The application shall include, at a minimum—

(1) a description of the applicant's outreach program, and the geographic region it would serve, and of why the program would be capable of transferring knowledge and information about advanced energy technologies that increase efficiency of energy use;

(2) a description of the activities the applicant would carry out, of the technologies that would be transferred, and of any other organizations that will help facilitate a regional approach to carrying out those activities;

(3) a description of how the proposed activities would be appropriate to the specific energy needs of the geographic region to be served;

(4) an estimate of the number and types of energy end-users expected to be reached through such activities; and

(5) a description of how the applicant will assess the success of the program.

(d) Selection criteria

The Secretary shall award grants under this section on the basis of the following criteria, at a minimum:

(1) The ability of the applicant to carry out the proposed activities.

(2) The extent to which the applicant will coordinate the activities of the Center with other entities as appropriate, such as State and local governments, utilities, institutions of higher education, and National Laboratories.

(3) The appropriateness of the applicant's outreach program for carrying out the program described in this section.

(4) The likelihood that proposed activities could be expanded or used as a model for other areas.

(e) Cost-sharing

In carrying out this section, the Secretary shall require cost-sharing in accordance with the requirements of section 16352 of this title for commercial application activities.

(f) Duration

(1) Initial grant period

A grant awarded under this section shall be for a period of 5 years.

(2) Initial evaluation

Each grantee under this section shall be evaluated during its third year of operation under procedures established by the Secretary to determine if the grantee is accomplishing the purposes of this section described in subsection (a). The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for 3 additional years beyond the original term of the grant.

(3) Additional extension

If a grantee receives an extension under paragraph (2), the grantee shall be evaluated again during the second year of the extension. The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for a final additional period of 3 additional years beyond the original extension.

(4) Limitation

No grantee may receive more than 11 years of support under this section without reapplying for support and competing against all other applicants seeking a grant at that time.

(g) Prohibition

None of the funds awarded under this section may be used for the construction of facilities.

(h) Definitions

For purposes of this section:

(1) Advanced energy methods and technologies

The term ''advanced energy methods and technologies'' means all methods and technologies that promote energy efficiency and conservation, including distributed generation technologies, and life-cycle analysis of energy use.

(2) Center

The term ''Center'' means an Advanced Energy Technology Transfer Center established pursuant to this section.

(3) Distributed generation

The term ''distributed generation'' means an electric power generation technology, including photovoltaic, small wind, and micro-combined heat and power, that serves electric consumers at or near the site of production.

(4) Cooperative Extension

The term ''Cooperative Extension'' means the extension services established at the land-grant colleges and universities under the Smith-Lever Act of May 8, 1914 [7 U.S.C. 341 et seq.].

(5) Land-grant colleges and universities

The term ''land-grant colleges and universities'' means—

(A) 1862 Institutions (as defined in section 7601 of title 7);

(B) 1890 Institutions (as defined in section 7601 of title 7); and

(C) 1994 Institutions (as defined in section 7601 of title 7).

(i) Authorization of appropriations

In addition to amounts otherwise authorized to be appropriated in section 16191 of this title, there are authorized to be appropriated for the

program under this section such sums as may be appropriated.

(Pub. L. 109–58, title IX, § 917, Aug. 8, 2005, 119 Stat. 863; Pub. L. 110–229, title VI, § 601, May 8, 2008, 122 Stat. 850.)

REFERENCES IN TEXT

The Smith-Lever Act of May 8, 1914, referred to in subsec. (h)(4), is act May 8, 1914, ch. 79, 38 Stat. 372, which is classified generally to subchapter IV (§ 341 et seq.) of chapter 13 of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 341 of Title 7 and Tables.

CODIFICATION

May 8, 2008, referred to in subsec. (a), was in the original ''the date of enactment of the National Forests, Parks, Public Land, and Reclamation Projects Authorization Act of 2008'' and was translated as meaning the date of enactment of the Consolidated Natural Resources Act of 2008, Pub. L. 110–229, which amended this section generally, to reflect the probable intent of Congress. The National Forests, Parks, Public Land, and Reclamation Projects Authorization Act of 2008, was S. 2616, 110th Congress, introduced in the Senate on Feb. 8, 2008, with action thereon indefinitely postponed. The provisions of section 601 of that bill generally amended section 917 of Pub. L. 109–58 (this section) and was a predecessor version of section 601 of Pub. L. 109–229.

AMENDMENTS

2008—Pub. L. 110–229 amended section generally. Prior to amendment, section related to grants for the establishment of a network of Advanced Energy Efficiency Technology Transfer Centers.

PART B—DISTRIBUTED ENERGY AND ELECTRIC ENERGY SYSTEMS

§ 16211. Distributed energy and electric energy systems

(a) In general

The Secretary shall carry out programs of research, development, demonstration, and commercial application on distributed energy resources and systems reliability and efficiency, to improve the reliability and efficiency of distributed energy resources and systems, integrating advanced energy technologies with grid connectivity, including activities described in this part. The programs shall address advanced energy technologies and systems and advanced grid reliability technologies.

(b) Authorization of appropriations

(1) Distributed energy and electric energy systems activities

There are authorized to be appropriated to the Secretary to carry out distributed energy and electric energy systems activities, including activities authorized under this part—

(A) $240,000,000 for fiscal year 2007;

(B) $255,000,000 for fiscal year 2008; and

(C) $273,000,000 for fiscal year 2009.

(2) Power delivery research initiative

There are authorized to be appropriated to the Secretary to carry out the Power Delivery Research Initiative under subsection[1] 16215(e) of this title such sums as may be necessary for each of fiscal years 2007 through 2009.

(c) Micro-cogeneration energy technology

From amounts authorized under subsection (b), $20,000,000 for each of fiscal years 2007 and 2008 shall be available to carry out activities under section 16213 of this title.

(d) High-voltage transmission lines

From amounts authorized under subsection (b), $2,000,000 for fiscal year 2007 shall be available to carry out activities under section 16215(g) of this title.

(Pub. L. 109–58, title IX, § 921, Aug. 8, 2005, 119 Stat. 864.)

§ 16212. High power density industry program

(a) In general

The Secretary shall establish a comprehensive research, development, demonstration, and commercial application to improve the energy efficiency of high power density facilities, including data centers, server farms, and telecommunications facilities.

(b) Technologies

The program shall consider technologies that provide significant improvement in thermal controls, metering, load management, peak load reduction, or the efficient cooling of electronics.

(Pub. L. 109–58, title IX, § 922, Aug. 8, 2005, 119 Stat. 864.)

§ 16213. Micro-cogeneration energy technology

(a) In general

The Secretary shall make competitive, merit-based grants to consortia for the development of micro-cogeneration energy technology.

(b) Uses

The consortia shall explore—

(1) the use of small-scale combined heat and power in residential heating appliances;

(2) the use of excess power to operate other appliances within the residence; and

(3) the supply of excess generated power to the power grid.

(Pub. L. 109–58, title IX, § 923, Aug. 8, 2005, 119 Stat. 865.)

§ 16214. Distributed energy technology demonstration programs

(a) Coordinating consortia program

The Secretary may provide financial assistance to coordinating consortia of interdisciplinary participants for demonstrations designed to accelerate the use of distributed energy technologies (such as fuel cells, microturbines, reciprocating engines, thermally activated technologies, and combined heat and power systems) in high-energy intensive commercial applications.

(b) Small-scale portable power program

(1) In general

The Secretary shall—

(A) establish a research, development, and demonstration program to develop working

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

models of small scale portable power devices; and

(B) to the fullest extent practicable, identify and utilize the resources of universities that have shown expertise with respect to advanced portable power devices for either civilian or military use.

(2) Organization

The universities identified and utilized under paragraph (1)(B) are authorized to establish an organization to promote small scale portable power devices.

(3) Definition

For purposes of this subsection, the term ''small scale portable power device'' means a field-deployable portable mechanical or electromechanical device that can be used for applications such as communications, computation, mobility enhancement, weapons systems, optical devices, cooling, sensors, medical devices, and active biological agent detection systems.

(Pub. L. 109–58, title IX, § 924, Aug. 8, 2005, 119 Stat. 865.)

§ 16215. Electric transmission and distribution programs

(a) Program

The Secretary shall establish a comprehensive research, development, and demonstration program to ensure the reliability, efficiency, and environmental integrity of electrical transmission and distribution systems, which shall include—

(1) advanced energy delivery technologies, energy storage technologies, materials, and systems, giving priority to new transmission technologies, including composite conductor materials and other technologies that enhance reliability, operational flexibility, or power-carrying capability;

(2) advanced grid reliability and efficiency technology development;

(3) technologies contributing to significant load reductions;

(4) advanced metering, load management, and control technologies;

(5) technologies to enhance existing grid components;

(6) the development and use of high-temperature superconductors to—

(A) enhance the reliability, operational flexibility, or power-carrying capability of electric transmission or distribution systems; or

(B) increase the efficiency of electric energy generation, transmission, distribution, or storage systems;

(7) integration of power systems, including systems to deliver high-quality electric power, electric power reliability, and combined heat and power;

(8) supply of electricity to the power grid by small scale, distributed and residential-based power generators;

(9) the development and use of advanced grid design, operation, and planning tools;

(10) any other infrastructure technologies, as appropriate; and

(11) technology transfer and education.

(b) Program plan

(1) In general

Not later than 1 year after August 8, 2005, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and submit to Congress a 5-year program plan to guide activities under this section.

(2) Consultation

In preparing the program plan, the Secretary shall consult with—

(A) utilities;

(B) energy service providers;

(C) manufacturers;

(D) institutions of higher education;

(E) other appropriate State and local agencies;

(F) environmental organizations;

(G) professional and technical societies; and

(H) any other persons the Secretary considers appropriate.

(c) Implementation

The Secretary shall consider implementing the program under this section using a consortium of participants from industry, institutions of higher education, and National Laboratories.

(d) Report

Not later than 2 years after the submission of the plan under subsection (b), the Secretary shall submit to Congress a report—

(1) describing the progress made under this section; and

(2) identifying any additional resources needed to continue the development and commercial application of transmission and distribution of infrastructure technologies.

(e) Power delivery research initiative

(1) In general

The Secretary shall establish a research, development, and demonstration initiative specifically focused on power delivery using components incorporating high temperature superconductivity.

(2) Goals

The goals of the Initiative shall be—

(A) to establish world-class facilities to develop high temperature superconductivity power applications in partnership with manufacturers and utilities;

(B) to provide technical leadership for establishing reliability for high temperature superconductivity power applications, including suitable modeling and analysis;

(C) to facilitate the commercial transition toward direct current power transmission, storage, and use for high power systems using high temperature superconductivity; and

(D) to facilitate the integration of very low impedance high temperature superconducting wires and cables in existing electric networks to improve system performance, power flow control, and reliability.

(3) Inclusions

The Initiative shall include—

(A) feasibility analysis, planning, research, and design to construct demonstrations of superconducting links in high power, direct current, and controllable alternating current transmission systems;

(B) public-private partnerships to demonstrate deployment of high temperature superconducting cable into testbeds simulating a realistic transmission grid and under varying transmission conditions, including actual grid insertions; and

(C) testbeds developed in cooperation with National Laboratories, industries, and institutions of higher education to—

(i) demonstrate those technologies;

(ii) prepare the technologies for commercial introduction; and

(iii) address cost or performance roadblocks to successful commercial use.

(f) Transmission and distribution grid planning and operations initiative

(1) In general

The Secretary shall establish a research, development, and demonstration initiative specifically focused on tools needed to plan, operate, and expand the transmission and distribution grids in the presence of competitive market mechanisms for energy, load demand, customer response, and ancillary services.

(2) Goals

The goals of the Initiative shall be—

(A)(i) to develop and use a geographically distributed center, consisting of institutions of higher education, and National Laboratories, with expertise and facilities to develop the underlying theory and software for power system application; and

(ii) to ensure commercial development in partnership with software vendors and utilities;

(B) to provide technical leadership in engineering and economic analysis for the reliability and efficiency of power systems planning and operations in the presence of competitive markets for electricity;

(C) to model, simulate, and experiment with new market mechanisms and operating practices to understand and optimize those new methods before actual use; and

(D) to provide technical support and technology transfer to electric utilities and other participants in the domestic electric industry and marketplace.

(g) High-voltage transmission lines

As part of the program described in subsection (a), the Secretary shall award a grant to a university research program to design and test, in consultation with the Tennessee Valley Authority, state-of-the-art optimization techniques for power flow through existing high voltage transmission lines.

(Pub. L. 109–58, title IX, § 925, Aug. 8, 2005, 119 Stat. 865.)

PART C—RENEWABLE ENERGY

§ 16231. Renewable energy

(a) In general

(1) Objectives

The Secretary shall conduct programs of renewable energy research, development, demonstration, and commercial application, including activities described in this part. Such programs shall take into consideration the following objectives:

(A) Increasing the conversion efficiency of all forms of renewable energy through improved technologies.

(B) Decreasing the cost of renewable energy generation and delivery.

(C) Promoting the diversity of the energy supply.

(D) Decreasing the dependence of the United States on foreign energy supplies.

(E) Improving United States energy security.

(F) Decreasing the environmental impact of energy-related activities.

(G) Increasing the export of renewable generation equipment from the United States.

(2) Programs

(A) Solar energy

The Secretary shall conduct a program of research, development, demonstration, and commercial application for solar energy, including—

(i) photovoltaics;

(ii) solar hot water and solar space heating;

(iii) concentrating solar power;

(iv) lighting systems that integrate sunlight and electrical lighting in complement to each other in common lighting fixtures for the purpose of improving energy efficiency;

(v) manufacturability of low cost, high quality solar systems; and

(vi) development of products that can be easily integrated into new and existing buildings.

(B) Wind energy

The Secretary shall conduct a program of research, development, demonstration, and commercial application for wind energy, including—

(i) low speed wind energy;

(ii) offshore wind energy;

(iii) testing and verification (including construction and operation of a research and testing facility capable of testing wind turbines); and

(iv) distributed wind energy generation.

(C) Geothermal

The Secretary shall conduct a program of research, development, demonstration, and commercial application for geothermal energy. The program shall focus on developing improved technologies for reducing the costs of geothermal energy installations, including technologies for—

(i) improving detection of geothermal resources;

(ii) decreasing drilling costs;

(iii) decreasing maintenance costs through improved materials;

(iv) increasing the potential for other revenue sources, such as mineral production; and

(v) increasing the understanding of reservoir life cycle and management.

(D) Hydropower

The Secretary shall conduct a program of research, development, demonstration, and commercial application for cost competitive technologies that enable the development of new and incremental hydropower capacity, adding to the diversity of the energy supply of the United States, including:

(i) Fish-friendly large turbines.

(ii) Advanced technologies to enhance environmental performance and yield greater energy efficiencies.

(E) Miscellaneous projects

The Secretary shall conduct research, development, demonstration, and commercial application programs for—

(i) ocean energy, including wave energy;

(ii) the combined use of renewable energy technologies with one another and with other energy technologies, including the combined use of wind power and coal gasification technologies;

(iii) renewable energy technologies for cogeneration of hydrogen and electricity; and

(iv) kinetic hydro turbines.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out renewable energy research, development, demonstration, and commercial application activities, including activities authorized under this part—

(1) $632,000,000 for fiscal year 2007;

(2) $743,000,000 for fiscal year 2008;

(3) $852,000,000 for fiscal year 2009; and

(4) $963,000,000 for fiscal year 2010.

(c) Bioenergy

From the amounts authorized under subsection (b), there are authorized to be appropriated to carry out section 16232 of this title—

(1) $213,000,000 for fiscal year 2007, of which $100,000,000 shall be for section 16232(d) of this title;

(2) $377,000,000 for fiscal year 2008, of which $125,000,000 shall be for section 16232(d) of this title;

(3) $398,000,000 for fiscal year 2009, of which $150,000,000 shall be for section 16232(d) of this title; and

(4) $419,000,000 for fiscal year 2010, of which $150,000,000 shall be for section 16232(d) of this title.

(d) Solar power

From amounts authorized under subsection (b), there is authorized to be appropriated to carry out activities under subsection (a)(2)(A)—

(1) $140,000,000 for fiscal year 2007, of which $40,000,000 shall be for activities under section 16235 of this title;

(2) $200,000,000 for fiscal year 2008, of which $50,000,000 shall be for activities under section 16235 of this title; and

(3) $250,000,000 for fiscal year 2009, of which $50,000,000 shall be for activities under section 16235 of this title.

(e) Administration

Of the funds authorized under subsection (c), not less than $5,000,000 for each fiscal year shall be made available for grants to—

(1) part B institutions;

(2) Tribal Colleges or Universities (as defined in section 1059c(b) of title 20); and

(3) Hispanic-serving institutions.

(f) Rural demonstration projects

In carrying out this section, the Secretary, in consultation with the Secretary of Agriculture, shall demonstrate the use of renewable energy technologies to assist in delivering electricity to rural and remote locations including —

(1) advanced wind power technology, including combined use with coal gasification;

(2) biomass; and

(3) geothermal energy systems.

(g) Analysis and evaluation

(1) In general

The Secretary shall conduct analysis and evaluation in support of the renewable energy programs under this part. These activities shall be used to guide budget and program decisions, and shall include—

(A) economic and technical analysis of renewable energy potential, including resource assessment;

(B) analysis of past program performance, both in terms of technical advances and in market introduction of renewable energy; and

(C) any other analysis or evaluation that the Secretary considers appropriate.

(2) Funding

The Secretary may designate up to 1 percent of the funds appropriated for carrying out this part for analysis and evaluation activities under this subsection.

(Pub. L. 109–58, title IX, § 931, Aug. 8, 2005, 119 Stat. 868; Pub. L. 110–140, title II, § 231, Dec. 19, 2007, 121 Stat. 1536.)

AMENDMENTS

2007—Subsec. (b)(4). Pub. L. 110–140, § 231(1), added par. (4).

Subsec. (c)(2) to (4). Pub. L. 110–140, § 231(2), in par. (2), substituted ''$377,000,000'' for ''$251,000,000'', in par. (3), substituted ''$398,000,000'' for ''$274,000,000'', and added par. (4).

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16232. Bioenergy program

(a) Definitions

In this section:

(1) Biomass

The term ''biomass'' means—

(A) any organic material grown for the purpose of being converted to energy;

(B) any organic byproduct of agriculture (including wastes from food production and processing) that can be converted into energy; or

(C) any waste material that can be converted to energy, is segregated from other waste materials, and is derived from—

(i) any of the following forest-related resources: mill residues, precommercial thinnings, slash, brush, or otherwise nonmerchantable material; or

(ii) wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste, gas derived from the biodegradation of municipal solid waste, or paper that is commonly recycled.

(2) Lignocellulosic feedstock

The term ''lignocellulosic feedstock'' means any portion of a plant or coproduct from conversion, including crops, trees, forest residues, and agricultural residues not specifically grown for food, including from barley grain, grapeseed, rice bran, rice hulls, rice straw, soybean matter, and sugarcane bagasse.

(b) Program

The Secretary shall conduct a program of research, development, demonstration, and commercial application for bioenergy, including—

(1) biopower energy systems;

(2) biofuels;

(3) bioproducts;

(4) integrated biorefineries that may produce biopower, biofuels, and bioproducts;

(5) cross-cutting research and development in feedstocks; and

(6) economic analysis.

(c) Biofuels and bioproducts

The goals of the biofuels and bioproducts programs shall be to develop, in partnership with industry and institutions of higher education—

(1) advanced biochemical and thermochemical conversion technologies capable of making fuels from lignocellulosic feedstocks that are price-competitive with gasoline or diesel in either internal combustion engines or fuel cell-powered vehicles;

(2) advanced biotechnology processes capable of making biofuels and bioproducts with emphasis on development of biorefinery technologies using enzyme-based processing systems;

(3) advanced biotechnology processes capable of increasing energy production from lignocellulosic feedstocks, with emphasis on reducing the dependence of industry on fossil fuels in manufacturing facilities; and

(4) other advanced processes that will enable the development of cost-effective bioproducts, including biofuels.

(d) Integrated biorefinery demonstration projects

(1) In general

The Secretary shall carry out a program to demonstrate the commercial application of integrated biorefineries. The Secretary shall ensure geographical distribution of biorefinery demonstrations under this subsection. The Secretary shall not provide more than $100,000,000 under this subsection for any single biorefinery demonstration. In making awards under this subsection, the Secretary shall encourage—

(A) the demonstration of a wide variety of lignocellulosic feedstocks;

(B) the commercial application of biomass technologies for a variety of uses, including—

(i) liquid transportation fuels;

(ii) high-value biobased chemicals;

(iii) substitutes for petroleum-based feedstocks and products; and

(iv) energy in the form of electricity or useful heat; and

(C) the demonstration of the collection and treatment of a variety of biomass feedstocks.

(2) Proposals

Not later than 6 months after August 8, 2005, the Secretary shall solicit proposals for demonstration of advanced biorefineries. The Secretary shall select only proposals that—

(A) demonstrate that the project will be able to operate profitably without direct Federal subsidy after initial construction costs are paid; and

(B) enable the biorefinery to be easily replicated.

(e) University biodiesel program

The Secretary shall establish a demonstration program to determine the feasibility of the operation of diesel electric power generators, using biodiesel fuels with ratings as high as B100, at electric generation facilities owned by institutions of higher education. The program shall examine—

(1) heat rates of diesel fuels with large quantities of cellulosic content;

(2) the reliability of operation of various fuel blends;

(3) performance in cold or freezing weather;

(4) stability of fuel after extended storage; and

(5) other criteria, as determined by the Secretary.

(g)[1] Biorefinery energy efficiency

The Secretary shall establish a program of research, development, demonstration, and commercial application for increasing energy efficiency and reducing energy consumption in the operation of biorefinery facilities.

(h) Retrofit technologies for the development of ethanol from cellulosic materials

The Secretary shall establish a program of research, development, demonstration, and commercial application on technologies and processes to enable biorefineries that exclusively use corn grain or corn starch as a feedstock to produce ethanol to be retrofitted to accept a range of biomass, including lignocellulosic feedstocks.

[1] So in original. No subsec. (f) has been enacted.

(Pub. L. 109–58, title IX, § 932, Aug. 8, 2005, 119 Stat. 870; Pub. L. 110–140, title II, § 224, Dec. 19, 2007, 121 Stat. 1533.)

AMENDMENTS

2007—Subsecs. (g), (h). Pub. L. 110–140 added subsecs. (g) and (h).

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16233. Low-cost renewable hydrogen and infrastructure for vehicle propulsion

The Secretary shall—

(1) establish a research, development, and demonstration program to determine the feasibility of using hydrogen propulsion in lightweight vehicles and the integration of the associated hydrogen production infrastructure using off-the-shelf components; and

(2) identify universities and institutions that—

(A) have expertise in researching and testing vehicles fueled by hydrogen, methane, and other fuels;

(B) have expertise in integrating off-the-shelf components to minimize cost; and

(C) within 2 years can test a vehicle based on an existing commercially available platform with a curb weight of not less than 2,000 pounds before modifications, that—

(i) operates solely on hydrogen;

(ii) qualifies as a light-duty passenger vehicle; and

(iii) uses hydrogen produced from water using only solar energy.

(Pub. L. 109–58, title IX, § 933, Aug. 8, 2005, 119 Stat. 872.)

§ 16234. Concentrating solar power research program

(a) In general

The Secretary shall conduct a program of research and development to evaluate the potential for concentrating solar power for hydrogen production, including cogeneration approaches for both hydrogen and electricity.

(b) Administration

The program shall take advantage of existing facilities to the extent practicable and shall include—

(1) development of optimized technologies that are common to both electricity and hydrogen production;

(2) evaluation of thermochemical cycles for hydrogen production at the temperatures attainable with concentrating solar power;

(3) evaluation of materials issues for the thermochemical cycles described in paragraph (2);

(4) cogeneration of solar thermal electric power and photo-synthetic-based hydrogen production;

(5) system architectures and economics studies; and

(6) coordination with activities under the Next Generation Nuclear Plant Project established under part B of subchapter VI on high temperature materials, thermochemical cycles, and economic issues.

(c) Assessment

In carrying out the program under this section, the Secretary shall—

(1) assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council in the report entitled ''Renewable Power Pathways: A Review of the U.S. Department of Energy's Renewable Energy Programs'' and dated 2000 and subsequent reviews of that report funded by the Department; and

(2) provide an assessment of the potential impact of technology used to concentrate solar power for electricity before, or concurrent with, submission of the budget for fiscal year 2008.

(d) Report

Not later than 5 years after August 8, 2005, the Secretary shall provide to Congress a report on the economic and technical potential for electricity or hydrogen production, with or without cogeneration, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of electricity or hydrogen from concentrating solar power.

(Pub. L. 109–58, title IX, § 934, Aug. 8, 2005, 119 Stat. 872.)

§ 16235. Renewable energy in public buildings

(a) Demonstration and technology transfer program

The Secretary shall establish a program for the demonstration of innovative technologies for solar and other renewable energy sources in buildings owned or operated by a State or local government, and for the dissemination of information resulting from such demonstration to interested parties.

(b) Limit on Federal funding

Notwithstanding section 16352 of this title, the Secretary shall provide under this section no more than 40 percent of the incremental costs of the solar or other renewable energy source project funded.

(c) Requirements

As part of the application for awards under this section, the Secretary shall require all applicants—

(1) to demonstrate a continuing commitment to the use of solar and other renewable energy sources in buildings they own or operate; and

(2) to state how they expect any award to further their transition to the significant use of renewable energy.

(Pub. L. 109–58, title IX, § 935, Aug. 8, 2005, 119 Stat. 873.)

PART D—AGRICULTURAL BIOMASS RESEARCH AND DEVELOPMENT PROGRAMS

§ 16251. Production incentives for cellulosic biofuels

(a) Purpose

The purpose of this section is to—

(1) accelerate deployment and commercialization of biofuels;

(2) deliver the first 1,000,000,000 gallons in annual cellulosic biofuels production by 2015;

(3) ensure biofuels produced after 2015 are cost competitive with gasoline and diesel; and

(4) ensure that small feedstock producers and rural small businesses are full participants in the development of the cellulosic biofuels industry.

(b) Definitions

In this section:

(1) Cellulosic biofuels

The term ''cellulosic biofuels'' means any fuel that is produced from cellulosic feedstocks.

(2) Eligible entity

The term ''eligible entity'' means a producer of fuel from cellulosic biofuels the production facility of which—

(A) is located in the United States;

(B) meets all applicable Federal and State permitting requirements; and

(C) meets any financial criteria established by the Secretary.

(c) Program

(1) Establishment

The Secretary, in consultation with the Secretary of Agriculture, the Secretary of Defense, and the Administrator of the Environmental Protection Agency, shall establish an incentive program for the production of cellulosic biofuels.

(2) Basis of incentives

Under the program, the Secretary shall award production incentives on a per gallon basis of cellulosic biofuels from eligible entities, through—

(A) set payments per gallon of cellulosic biofuels produced in an amount determined by the Secretary, until initiation of the first reverse auction; and

(B) reverse auction thereafter.

(3) First reverse auction

The first reverse auction shall be held on the earlier of—

(A) not later than 1 year after the first year of annual production in the United States of 100,000,000 gallons of cellulosic biofuels, as determined by the Secretary; or

(B) not later than 3 years after August 8, 2005.

(4) Reverse auction procedure

(A) In general

On initiation of the first reverse auction, and each year thereafter until the earlier of the first year of annual production in the United States of 1,000,000,000 gallons of cellulosic biofuels, as determined by the Secretary, or 10 years after August 8, 2005, the Secretary shall conduct a reverse auction at which—

(i) the Secretary shall solicit bids from eligible entities;

(ii) eligible entities shall submit—

(I) a desired level of production incentive on a per gallon basis; and

(II) an estimated annual production amount in gallons; and

(iii) the Secretary shall issue awards for the production amount submitted, beginning with the eligible entity submitting the bid for the lowest level of production incentive on a per gallon basis and meeting such other criteria as are established by the Secretary, until the amount of funds available for the reverse auction is committed.

(B) Amount of incentive received

An eligible entity selected by the Secretary through a reverse auction shall receive the amount of performance incentive requested in the auction for each gallon produced and sold by the entity during the first 6 years of operation.

(C) Commencement of production of cellulosic biofuels

As a condition of the receipt of an award under this section, an eligible entity shall enter into an agreement with the Secretary under which the eligible entity agrees to begin production of cellulosic biofuels not later than 3 years after the date of the reverse auction in which the eligible entity participates.

(d) Limitations

Awards under this section shall be limited to—

(1) a per gallon amount determined by the Secretary during the first 4 years of the program;

(2) a declining per gallon cap over the remaining lifetime of the program, to be established by the Secretary so that cellulosic biofuels produced after the first year of annual cellulosic biofuels production in the United States in excess of 1,000,000,000 gallons are cost competitive with gasoline and diesel;

(3) not more than 25 percent of the funds committed within each reverse auction to any 1 project;

(4) not more than $100,000,000 in any 1 year; and

(5) not more than $1,000,000,000 over the lifetime of the program.

(e) Priority

In selecting a project under the program, the Secretary shall give priority to projects that—

(1) demonstrate outstanding potential for local and regional economic development;

(2) include agricultural producers or cooperatives of agricultural producers as equity partners in the ventures; and

(3) have a strategic agreement in place to fairly reward feedstock suppliers.

(f) Authorizations of appropriations

There is authorized to be appropriated to carry out this section $250,000,000.

(Pub. L. 109–58, title IX, § 942, Aug. 8, 2005, 119 Stat. 878.)

§ 16252. Education

(1) In general

The Architect of the Capitol shall establish in the Capitol Complex a program of public education regarding use by the Architect of the Capitol of biobased products.

(2) Purposes

The purposes of the program shall be—

(A) to establish the Capitol Complex as a showcase for the existence and benefits of biobased products; and

(B) to provide access to further information on biobased products to occupants and visitors.

(Pub. L. 109–58, title IX, § 943(c), Aug. 8, 2005, 119 Stat. 881.)

§ 16253. Small business bioproduct marketing and certification grants

(a) In general

Using amounts made available under subsection (g), the Secretary of Agriculture (referred to in this section as the ''Secretary'') shall make available on a competitive basis grants to eligible entities described in subsection (b) for the biobased product marketing and certification purposes described in subsection (c).

(b) Eligible entities

(1) In general

An entity eligible for a grant under this section is any manufacturer of biobased products that—

(A) proposes to use the grant for the biobased product marketing and certification purposes described in subsection (c); and

(B) has not previously received a grant under this section.

(2) Preference

In making grants under this section, the Secretary shall provide a preference to an eligible entity that has fewer than 50 employees.

(c) Biobased product marketing and certification grant purposes

A grant made under this section shall be used—

(1) to provide working capital for marketing of biobased products; and

(2) to provide for the certification of biobased products to—

(A) qualify for the label described in section 8102(h)(1) of title 7; or

(B) meet other biobased standards determined appropriate by the Secretary.

(d) Matching funds

(1) In general

Grant recipients shall provide matching non-Federal funds equal to the amount of the grant received.

(2) Expenditure

Matching funds shall be expended in advance of grant funding, so that for every dollar of grant that is advanced, an equal amount of matching funds shall have been funded prior to submitting the request for reimbursement.

(e) Amount

A grant made under this section shall not exceed $100,000.

(f) Administration

The Secretary shall establish such administrative requirements for grants under this section, including requirements for applications for the grants, as the Secretary considers appropriate.

(g) Authorizations of appropriations

There are authorized to be appropriated to make grants under this section—

(1) $1,000,000 for fiscal year 2006; and

(2) such sums as are necessary for each of fiscal years 2007 through 2015.

(Pub. L. 109–58, title IX, § 944, Aug. 8, 2005, 119 Stat. 881.)

§ 16254. Regional bioeconomy development grants

(a) In general

Using amounts made available under subsection (g), the Secretary of Agriculture (referred to in this section as the ''Secretary'') shall make available on a competitive basis grants to eligible entities described in subsection (b) for the purposes described in subsection (c).

(b) Eligible entities

An entity eligible for a grant under this section is any regional bioeconomy development association, agricultural or energy trade association, or Land Grant institution that—

(1) proposes to use the grant for the purposes described in subsection (c); and

(2) has not previously received a grant under this section.

(c) Regional bioeconomy development association grant purposes

A grant made under this section shall be used to support and promote the growth and development of the bioeconomy within the region served by the eligible entity, through coordination, education, outreach, and other endeavors by the eligible entity.

(d) Matching funds

(1) In general

Grant recipients shall provide matching non-Federal funds equal to the amount of the grant received.

(2) Expenditure

Matching funds shall be expended in advance of grant funding, so that for every dollar of grant that is advanced, an equal amount of matching funds shall have been funded prior to submitting the request for reimbursement.

(e) Administration

The Secretary shall establish such administrative requirements for grants under this section, including requirements for applications for the grants, as the Secretary considers appropriate.

(f) Amount

A grant made under this section shall not exceed $500,000.

(g) Authorizations of appropriations

There are authorized to be appropriated to make grants under this section—

(1) $1,000,000 for fiscal year 2006; and

(2) such sums as are necessary for each of fiscal years 2007 through 2015.

(Pub. L. 109–58, title IX, § 945, Aug. 8, 2005, 119 Stat. 882.)

§ 16255. Preprocessing and harvesting demonstration grants

(a) In general

The Secretary of Agriculture (referred to in this section as the ''Secretary'') shall make grants available on a competitive basis to enterprises owned by agricultural producers, for the purposes of demonstrating cost-effective, cellulosic biomass innovations in—

(1) preprocessing of feedstocks, including cleaning, separating and sorting, mixing or blending, and chemical or biochemical treatments, to add value and lower the cost of feedstock processing at a biorefinery; or

(2) 1-pass or other efficient, multiple crop harvesting techniques.

(b) Limitations on grants

(1) Number of grants

Not more than 5 demonstration projects per fiscal year shall be funded under this section.

(2) Non-Federal cost share

The non-Federal cost share of a project under this section shall be not less than 20 percent, as determined by the Secretary.

(c) Condition of grant

To be eligible for a grant for a project under this section, a recipient of a grant or a participating entity shall agree to use the material harvested under the project—

(1) to produce ethanol; or

(2) for another energy purpose, such as the generation of heat or electricity.

(d) Authorization for appropriations

There is authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title IX, § 946, Aug. 8, 2005, 119 Stat. 883.)

§ 16256. Education and outreach

(a) In general

The Secretary of Agriculture shall establish, within the Department of Agriculture or through an independent contracting entity, a program of education and outreach on biobased fuels and biobased products consisting of—

(1) training and technical assistance programs for feedstock producers to promote producer ownership, investment, and participation in the operation of processing facilities; and

(2) public education and outreach to familiarize consumers with the biobased fuels and biobased products.

(b) Authorization of appropriations

There is authorized to be appropriated to carry out this section $1,000,000 for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title IX, § 947, Aug. 8, 2005, 119 Stat. 883.)

PART E—NUCLEAR ENERGY

§ 16271. Nuclear energy

(a) In general

The Secretary shall conduct programs of civilian nuclear energy research, development, demonstration, and commercial application, including activities described in this part. Programs under this part shall take into consideration the following objectives:

(1) Enhancing nuclear power's viability as part of the United States energy portfolio.

(2) Providing the technical means to reduce the likelihood of nuclear proliferation.

(3) Maintaining a cadre of nuclear scientists and engineers.

(4) Maintaining National Laboratory and university nuclear programs, including their infrastructure.

(5) Supporting both individual researchers and multidisciplinary teams of researchers to pioneer new approaches in nuclear energy, science, and technology.

(6) Developing, planning, constructing, acquiring, and operating special equipment and facilities for the use of researchers.

(7) Supporting technology transfer and other appropriate activities to assist the nuclear energy industry, and other users of nuclear science and engineering, including activities addressing reliability, availability, productivity, component aging, safety, and security of nuclear power plants.

(8) Reducing the environmental impact of nuclear energy-related activities.

(b) Authorization of appropriations for core programs

There are authorized to be appropriated to the Secretary to carry out nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this part, other than those described in subsection (c)—

(1) $330,000,000 for fiscal year 2007;

(2) $355,000,000 for fiscal year 2008; and

(3) $495,000,000 for fiscal year 2009.

(c) Nuclear infrastructure and facilities

There are authorized to be appropriated to the Secretary to carry out activities under section 16275 of this title—

(1) $135,000,000 for fiscal year 2007;

(2) $140,000,000 for fiscal year 2008; and

(3) $145,000,000 for fiscal year 2009.

(d) Allocations

From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 16273 of this title—

(A) $150,000,000 for fiscal year 2007;

(B) $155,000,000 for fiscal year 2008; and

(C) $275,000,000 for fiscal year 2009.

(2) For activities under section 16274 of this title—

(A) $43,600,000 for fiscal year 2007;

(B) $50,100,000 for fiscal year 2008; and

(C) $56,000,000 for fiscal year 2009.

(3) For activities under section 16277 of this title, $6,000,000 for each of fiscal years 2007 through 2009.

(e) Limitation

None of the funds authorized under this section may be used to decommission the Fast Flux Test Facility.

(Pub. L. 109–58, title IX, § 951, Aug. 8, 2005, 119 Stat. 884.)

§ 16272. Nuclear energy research programs

(a) Nuclear Energy Research Initiative

The Secretary shall carry out a Nuclear Energy Research Initiative for research and development related to nuclear energy.

(b) Nuclear Energy Systems Support Program

The Secretary shall carry out a Nuclear Energy Systems Support Program to support research and development activities addressing reliability, availability, productivity, component aging, safety, and security of existing nuclear power plants.

(c) Nuclear Power 2010 Program

(1) In general

The Secretary shall carry out a Nuclear Power 2010 Program, consistent with recommendations of the Nuclear Energy Research Advisory Committee of the Department in the report entitled ''A Roadmap to Deploy New Nuclear Power Plants in the United States by 2010'' and dated October 2001.

(2) Administration

The Program shall include—

(A) use of the expertise and capabilities of industry, institutions of higher education, and National Laboratories in evaluation of advanced nuclear fuel cycles and fuels testing;

(B) consideration of a variety of reactor designs suitable for both developed and developing nations;

(C) participation of international collaborators in research, development, and design efforts, as appropriate; and

(D) encouragement for participation by institutions of higher education and industry.

(d) Generation IV Nuclear Energy Systems Initiative

(1) In general

The Secretary shall carry out a Generation IV Nuclear Energy Systems Initiative to develop an overall technology plan for and to support research and development necessary to make an informed technical decision about the most promising candidates for eventual commercial application.

(2) Administration

In conducting the Initiative, the Secretary shall examine advanced proliferation-resistant and passively safe reactor designs, including designs that—

(A) are economically competitive with other electric power generation plants;

(B) have higher efficiency, lower cost, and improved safety compared to reactors in operation on August 8, 2005;

(C) use fuels that are proliferation resistant and have substantially reduced production of high-level waste per unit of output; and

(D) use improved instrumentation.

(e) Reactor production of hydrogen

The Secretary shall carry out research to examine designs for high-temperature reactors capable of producing large-scale quantities of hydrogen.

(Pub. L. 109–58, title IX, § 952, Aug. 8, 2005, 119 Stat. 885.)

§ 16273. Advanced fuel cycle initiative

(a) In general

The Secretary, acting through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling technology research, development, and demonstration program (referred to in this section as the ''program'') to evaluate proliferation-resistant fuel recycling and transmutation technologies that minimize environmental and public health and safety impacts as an alternative to aqueous reprocessing technologies deployed as of August 8, 2005, in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts.

(b) Annual review

The program shall be subject to annual review by the Nuclear Energy Research Advisory Committee of the Department or other independent entity, as appropriate.

(c) International cooperation

In carrying out the program, the Secretary is encouraged to seek opportunities to enhance the progress of the program through international cooperation.

(d) Reports

The Secretary shall submit, as part of the annual budget submission of the Department, a report on the activities of the program.

(Pub. L. 109–58, title IX, § 953, Aug. 8, 2005, 119 Stat. 886.)

§ 16274. University nuclear science and engineering support

(a) In general

The Secretary shall conduct a program to invest in human resources and infrastructure in the nuclear sciences and related fields, including health physics, nuclear engineering, and radiochemistry, consistent with missions of the Department related to civilian nuclear research, development, demonstration, and commercial application.

(b) Requirements

In carrying out the program under this section, the Secretary shall—

(1) conduct a graduate and undergraduate fellowship program to attract new and talented students, which may include fellowships for students to spend time at National Laboratories in the areas of nuclear science, engi-

neering, and health physics with a member of the National Laboratory staff acting as a mentor;

(2) conduct a junior faculty research initiation grant program to assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering by awarding grants to junior faculty for research on issues related to nuclear energy engineering and science;

(3) support fundamental nuclear sciences, engineering, and health physics research through a nuclear engineering education and research program;

(4) encourage collaborative nuclear research among industry, National Laboratories, and universities; and

(5) support communication and outreach related to nuclear science, engineering, and health physics.

(c) University-National Laboratory interactions

The Secretary shall conduct—

(1) a fellowship program for professors at universities to spend sabbaticals at National Laboratories in the areas of nuclear science and technology; and

(2) a visiting scientist program in which National Laboratory staff can spend time in academic nuclear science and engineering departments.

(d) Strengthening university research and training reactors and associated infrastructure

In carrying out the program under this section, the Secretary may support—

(1) converting research reactors from high-enrichment fuels to low-enrichment fuels and upgrading operational instrumentation;

(2) consortia of universities to broaden access to university research reactors;

(3) student training programs, in collaboration with the United States nuclear industry, in relicensing and upgrading reactors, including through the provision of technical assistance; and

(4) reactor improvements as part of a taking into consideration effort that emphasizes research, training, and education, including through the Innovations in Nuclear Infrastructure and Education Program or any similar program.

(e) Operations and maintenance

Funding for a project provided under this section may be used for a portion of the operating and maintenance costs of a research reactor at a university used in the project.

(f) Definition

In this section, the term ''junior faculty'' means a faculty member who was awarded a doctorate less than 10 years before receipt of an award from the grant program described in subsection (b)(2).

(Pub. L. 109–58, title IX, § 954, Aug. 8, 2005, 119 Stat. 886.)

§ 16274a. Integrated University Program

(a) The Secretary of Energy, along with the Administrator of the National Nuclear Security Administration and the Chairman of the Nuclear Regulatory Commission, shall establish an Integrated University Program.

(b) For the purposes of carrying out this section, $45,000,000 is authorized to be appropriated in each of fiscal years 2009 to 2019 as follows:

(1) $15,000,000 for the Department of Energy;

(2) $15,000,000 for the Nuclear Regulatory Commission; and

(3) $15,000,000 for the National Nuclear Security Administration.

(c) Of the amounts authorized to carry out this section, $10,000,000 shall be used by each organization to support university research and development in areas relevant to their respective organization's mission, and $5,000,000 shall be used by each organization to support a jointly implemented Nuclear Science and Engineering Grant Program that will support multiyear research projects that do not align with programmatic missions but are critical to maintaining the discipline of nuclear science and engineering.

(Pub. L. 111–8, div. C, title III, § 313, Mar. 11, 2009, 123 Stat. 627.)

CODIFICATION

Section was enacted as part of the Energy and Water Development and Related Agencies Appropriations Act, 2009, and also as part of the Omnibus Appropriations Act, 2009, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

§ 16275. Department of Energy civilian nuclear infrastructure and facilities

(a) In general

The Secretary shall operate and maintain infrastructure and facilities to support the nuclear energy research, development, demonstration, and commercial application programs, including radiological facilities management, isotope production, and facilities management.

(b) Duties

In carrying out this section, the Secretary shall—

(1) develop an inventory of nuclear science and engineering facilities, equipment, expertise, and other assets at all of the National Laboratories;

(2) develop a prioritized list of nuclear science and engineering plant and equipment improvements needed at each of the National Laboratories;

(3) consider the available facilities and expertise at all National Laboratories and emphasize investments which complement rather than duplicate capabilities; and

(4) develop a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment, with the goal of ensuring that Department programs under this part will be generally recognized to be among the best in the world.

(c) Plan

The Secretary shall develop a comprehensive plan for the facilities at the Idaho National Laboratory, especially taking into account the resources available at other National Laboratories. In developing the plan, the Secretary shall—

(1) evaluate the facilities planning processes utilized by other physical science and engineering research and development institutions, both in the United States and abroad, that are generally recognized as being among the best in the world, and consider how those processes might be adapted toward developing such facilities plan;

(2) avoid duplicating, moving, or transferring nuclear science and engineering facilities, equipment, expertise, and other assets that currently exist at other National Laboratories;

(3) consider the establishment of a national transuranic analytic chemistry laboratory as a user facility at the Idaho National Laboratory;

(4) include a plan to develop, if feasible, the Advanced Test Reactor and Test Reactor Area into a user facility that is more readily accessible to academic and industrial researchers;

(5) consider the establishment of a fast neutron source as a user facility;

(6) consider the establishment of new hot cells and the configuration of hot cells most likely to advance research, development, demonstration, and commercial application in nuclear science and engineering, especially in the context of the condition and availability of these facilities elsewhere in the National Laboratories; and

(7) include a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment.

(d) Transmittal to Congress

Not later than 1 year after August 8, 2005, the Secretary shall transmit the plan under subsection (c) to Congress.

(Pub. L. 109–58, title IX, § 955, Aug. 8, 2005, 119 Stat. 887.)

§ 16276. Security of nuclear facilities

The Secretary, acting through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct a research and development program on cost-effective technologies for increasing—

(1) the safety of nuclear facilities from natural phenomena; and

(2) the security of nuclear facilities from deliberate attacks.

(Pub. L. 109–58, title IX, § 956, Aug. 8, 2005, 119 Stat. 888.)

§ 16277. Alternatives to industrial radioactive sources

(a) Survey

(1) In general

Not later than August 1, 2006, the Secretary shall submit to Congress the results of a survey of industrial applications of large radioactive sources.

(2) Administration

The survey shall—

(A) consider well-logging sources as one class of industrial sources;

(B) include information on current domestic and international Department, Department of Defense, State Department, and commercial programs to manage and dispose of radioactive sources; and

(C) analyze available disposal options for currently deployed or future sources and, if deficiencies are noted for either deployed or future sources, recommend legislative options that Congress may consider to remedy identified deficiencies.

(b) Plan

(1) In general

In conjunction with the survey conducted under subsection (a), the Secretary shall establish a research and development program to develop alternatives to sources described in subsection (a) that reduce safety, environmental, or proliferation risks to either workers using the sources or the public.

(2) Accelerators

Miniaturized particle accelerators for well-logging or other industrial applications and portable accelerators for production of short-lived radioactive materials at an industrial site shall be considered as part of the research and development efforts.

(3) Report

Not later than August 1, 2006, the Secretary shall submit to Congress a report describing the details of the program plan.

(Pub. L. 109–58, title IX, § 957, Aug. 8, 2005, 119 Stat. 888.)

PART F—FOSSIL ENERGY

§ 16291. Fossil energy

(a) In general

The Secretary shall carry out research, development, demonstration, and commercial application programs in fossil energy, including activities under this part, with the goal of improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption. Such programs take into consideration the following objectives:

(1) Increasing the energy conversion efficiency of all forms of fossil energy through improved technologies.

(2) Decreasing the cost of all fossil energy production, generation, and delivery.

(3) Promoting diversity of energy supply.

(4) Decreasing the dependence of the United States on foreign energy supplies.

(5) Improving United States energy security.

(6) Decreasing the environmental impact of energy-related activities.

(7) Increasing the export of fossil energy-related equipment, technology, and services from the United States.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this part—

(1) $611,000,000 for fiscal year 2007;

(2) $626,000,000 for fiscal year 2008; and

(3) $641,000,000 for fiscal year 2009.

(c) Allocations

From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 16292 of this title—

(A) $367,000,000 for fiscal year 2007;

(B) $376,000,000 for fiscal year 2008; and

(C) $394,000,000 for fiscal year 2009.

(2) For activities under section 16294 of this title—

(A) $20,000,000 for fiscal year 2007;

(B) $25,000,000 for fiscal year 2008; and

(C) $30,000,000 for fiscal year 2009.

(3) For activities under section 16296 of this title—

(A) $1,500,000 for fiscal year 2007; and

(B) $450,000 for each of fiscal years 2008 and 2009.

(4) For the Office of Arctic Energy under section 7144d of this title $25,000,000 for each of fiscal years 2007 through 2009.

(d) Extended authorization

There are authorized to be appropriated to the Secretary for the Office of Arctic Energy established under section 7144d of this title $25,000,000 for each of fiscal years 2010 through 2012.

(e) Limitations

(1) Uses

None of the funds authorized under this section may be used for Fossil Energy Environmental Restoration or Import/Export Authorization.

(2) Institutions of higher education

Of the funds authorized under subsection (c)(2), not less than 20 percent of the funds appropriated for each fiscal year shall be dedicated to research and development carried out at institutions of higher education.

(Pub. L. 109–58, title IX, § 961, Aug. 8, 2005, 119 Stat. 889.)

REFERENCES IN TEXT

This part, referred to in subsecs. (a) and (b), was in the original ''this subtitle'', meaning subtitle F (§§ 961–968) of title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 889, which enacted this part and provisions set out as notes under section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as a note under section 1902 of Title 30. For complete classification of subtitle F to the Code, see Tables.

§ 16292. Coal and related technologies program

(a) In general

In addition to the programs authorized under subchapter IV, the Secretary shall conduct a program of technology research, development, demonstration, and commercial application for coal and power systems, including programs to facilitate production and generation of coal-based power through—

(1) innovations for existing plants (including mercury removal);

(2) gasification systems;

(3) advanced combustion systems;

(4) turbines for synthesis gas derived from coal;

(5) carbon capture and sequestration research and development;

(6) coal-derived chemicals and transportation fuels;

(7) liquid fuels derived from low rank coal water slurry;

(8) solid fuels and feedstocks;

(9) advanced coal-related research;

(10) advanced separation technologies; and

(11) fuel cells for the operation of synthesis gas derived from coal.

(b) Cost and performance goals

(1) In general

In carrying out programs authorized by this section, during each of calendar years 2008, 2010, 2012, and 2016, and during each fiscal year beginning after September 30, 2021, the Secretary shall identify cost and performance goals for coal-based technologies that would permit the continued cost-competitive use of coal for the production of electricity, chemical feedstocks, and transportation fuels.

(2) Administration

In establishing the cost and performance goals, the Secretary shall—

(A) consider activities and studies undertaken as of August 8, 2005, by industry in cooperation with the Department in support of the identification of the goals;

(B) consult with interested entities, including—

(i) coal producers;

(ii) industries using coal;

(iii) organizations that promote coal and advanced coal technologies;

(iv) environmental organizations;

(v) organizations representing workers; and

(vi) organizations representing consumers;

(C) not later than 120 days after August 8, 2005, publish in the Federal Register proposed draft cost and performance goals for public comments; and

(D) not later than 180 days after August 8, 2005, and every 4 years thereafter, submit to Congress a report describing the final cost and performance goals for the technologies that includes—

(i) a list of technical milestones; and

(ii) an explanation of how programs authorized in this section will not duplicate the activities authorized under the Clean Coal Power Initiative authorized under subchapter IV.

(c) Powder River Basin and Fort Union lignite coal mercury removal

(1) In general

In addition to the programs authorized by subsection (a), the Secretary shall establish a program to test and develop technologies to control and remove mercury emissions from subbituminous coal mined in the Powder River Basin, and Fort Union lignite coals, that are used for the generation of electricity.

(2) Efficacy of mercury removal technology

In carrying out the program under paragraph (1), the Secretary shall examine the effi-

cacy of mercury removal technologies on coals described in that paragraph that are blended with other types of coal.

(d) Fuel cells

(1) In general

The Secretary shall conduct a program of research, development, demonstration, and commercial application on fuel cells for low-cost, high-efficiency, fuel-flexible, modular power systems.

(2) Demonstrations

The demonstrations referred to in paragraph (1) shall include solid oxide fuel cell technology for commercial, residential, and transportation applications, and distributed generation systems, using improved manufacturing production and processes.

(Pub. L. 109–58, title IX, § 962, Aug. 8, 2005, 119 Stat. 890.)

REFERENCES IN TEXT

Subchapter IV, referred to in subsecs. (a) and (b)(2)(D)(ii), was in the original ''title IV'', meaning title IV of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 749, which enacted subchapter IV of this chapter and subchapter XIII (§ 13571 et seq.) of chapter 134 of this title, amended sections 201, 202a, 203, and 207 of Title 30, Mineral Lands and Mining, and enacted provisions set out as notes under section 15801 of this title and section 201 of Title 30. For complete classification of title IV to the Code, see Tables.

§ 16293. Carbon capture and sequestration research, development, and demonstration program

(a) In general

The Secretary shall carry out a 10-year carbon capture and sequestration research, development, and demonstration program to develop carbon dioxide capture and sequestration technologies related to industrial sources of carbon dioxide for use—

(1) in new coal utilization facilities; and

(2) on the fleet of coal-based units in existence on August 8, 2005.

(b) Objectives

The objectives of the program under subsection (a) shall be—

(1) to develop carbon dioxide capture technologies, including adsorption and absorption techniques and chemical processes, to remove the carbon dioxide from gas streams containing carbon dioxide potentially amenable to sequestration;

(2) to develop technologies that would directly produce concentrated streams of carbon dioxide potentially amenable to sequestration;

(3) to increase the efficiency of the overall system to reduce the quantity of carbon dioxide emissions released from the system per megawatt generated;

(4) in accordance with the carbon dioxide capture program, to promote a robust carbon sequestration program and continue the work of the Department, in conjunction with the private sector, through regional carbon sequestration partnerships; and

(5) to expedite and carry out large-scale testing of carbon sequestration systems in a range of geologic formations that will provide information on the cost and feasibility of deployment of sequestration technologies.

(c) Programmatic activities

(1) Fundamental science and engineering research and development and demonstration supporting carbon capture and sequestration technologies and carbon use activities

(A) In general

The Secretary shall carry out fundamental science and engineering research (including laboratory-scale experiments, numeric modeling, and simulations) to develop and document the performance of new approaches to capture and sequester, or use carbon dioxide to lead to an overall reduction of carbon dioxide emissions.

(B) Program integration

The Secretary shall ensure that fundamental research carried out under this paragraph is appropriately applied to energy technology development activities, the field testing of carbon sequestration, and carbon use activities, including—

(i) development of new or advanced technologies for the capture and sequestration of carbon dioxide;

(ii) development of new or advanced technologies that reduce the cost and increase the efficacy of advanced compression of carbon dioxide required for the sequestration of carbon dioxide;

(iii) modeling and simulation of geologic sequestration field demonstrations;

(iv) quantitative assessment of risks relating to specific field sites for testing of sequestration technologies;

(v) research and development of new and advanced technologies for carbon use, including recycling and reuse of carbon dioxide; and

(vi) research and development of new and advanced technologies for the separation of oxygen from air.

(2) Field validation testing activities

(A) In general

The Secretary shall promote, to the maximum extent practicable, regional carbon sequestration partnerships to conduct geologic sequestration tests involving carbon dioxide injection and monitoring, mitigation, and verification operations in a variety of candidate geologic settings, including—

(i) operating oil and gas fields;

(ii) depleted oil and gas fields;

(iii) unmineable coal seams;

(iv) deep saline formations;

(v) deep geologic systems that may be used as engineered reservoirs to extract economical quantities of heat from geothermal resources of low permeability or porosity; and

(vi) deep geologic systems containing basalt formations.

(B) Objectives

The objectives of tests conducted under this paragraph shall be—

(i) to develop and validate geophysical tools, analysis, and modeling to monitor, predict, and verify carbon dioxide containment;

(ii) to validate modeling of geologic formations;

(iii) to refine sequestration capacity estimated for particular geologic formations;

(iv) to determine the fate of carbon dioxide concurrent with and following injection into geologic formations;

(v) to develop and implement best practices for operations relating to, and monitoring of, carbon dioxide injection and sequestration in geologic formations;

(vi) to assess and ensure the safety of operations related to geologic sequestration of carbon dioxide;

(vii) to allow the Secretary to promulgate policies, procedures, requirements, and guidance to ensure that the objectives of this subparagraph are met in large-scale testing and deployment activities for carbon capture and sequestration that are funded by the Department of Energy; and

(viii) to provide information to States, the Environmental Protection Agency, and other appropriate entities to support development of a regulatory framework for commercial-scale sequestration operations that ensure the protection of human health and the environment.

(3) Large-scale carbon dioxide sequestration testing

(A) In general

The Secretary shall conduct not less than 7 initial large-scale sequestration tests, not including the FutureGen project, for geologic containment of carbon dioxide to collect and validate information on the cost and feasibility of commercial deployment of technologies for geologic containment of carbon dioxide. These 7 tests may include any Regional Partnership projects awarded as of December 19, 2007.

(B) Diversity of formations to be studied

In selecting formations for study under this paragraph, the Secretary shall consider a variety of geologic formations across the United States, and require characterization and modeling of candidate formations, as determined by the Secretary.

(C) Source of carbon dioxide for large-scale sequestration tests

In the process of any acquisition of carbon dioxide for sequestration tests under subparagraph (A), the Secretary shall give preference to sources of carbon dioxide from industrial sources. To the extent feasible, the Secretary shall prefer tests that would facilitate the creation of an integrated system of capture, transportation and sequestration of carbon dioxide. The preference provided for under this subparagraph shall not delay the implementation of the large-scale sequestration tests under this paragraph.

(D) Definition

For purposes of this paragraph, the term ''large-scale'' means the injection of more than 1,000,000 tons of carbon dioxide from industrial sources annually or a scale that demonstrates the ability to inject and sequester several million metric tons of industrial source carbon dioxide for a large number of years.

(4) Preference in project selection from meritorious proposals

In making competitive awards under this subsection, subject to the requirements of section 16353 of this title, the Secretary shall—

(A) give preference to proposals from partnerships among industrial, academic, and government entities; and

(B) require recipients to provide assurances that all laborers and mechanics employed by contractors and subcontractors in the construction, repair, or alteration of new or existing facilities performed in order to carry out a demonstration or commercial application activity authorized under this subsection 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 subchapter IV of chapter 31 of title 40, and the Secretary of Labor shall, with respect to the labor standards in this paragraph, have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 Fed. Reg. 3176; 5 U.S.C. Appendix) and section 3145 of title 40.

(5) Cost sharing

Activities under this subsection shall be considered research and development activities that are subject to the cost sharing requirements of section 16352(b) of this title.

(6) Program review and report

During fiscal year 2011, the Secretary shall—

(A) conduct a review of programmatic activities carried out under this subsection; and

(B) make recommendations with respect to continuation of the activities.

(d) Authorization of appropriations

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

(1) $240,000,000 for fiscal year 2008;
(2) $240,000,000 for fiscal year 2009;
(3) $240,000,000 for fiscal year 2010;
(4) $240,000,000 for fiscal year 2011; and
(5) $240,000,000 for fiscal year 2012.

(Pub. L. 109–58, title IX, § 963, Aug. 8, 2005, 119 Stat. 891; Pub. L. 110–140, title VII, § 702(a), Dec. 19, 2007, 121 Stat. 1704.)

AMENDMENTS

2007—Pub. L. 110–140, § 702(a)(1), substituted ''and sequestration research, development, and demonstration'' for ''research and development'' in section catchline.

Subsec. (a). Pub. L. 110–140, § 702(a)(2), in introductory provisions, substituted ''and sequestration research, development, and demonstration'' for ''research and development'' and ''capture and sequestration technologies related to industrial sources of carbon dioxide'' for ''capture technologies on combustion-based systems''.

Subsec. (b)(5). Pub. L. 110–140, § 702(a)(3), added par. (5).

Subsecs. (c), (d). Pub. L. 110–140, § 702(a)(4), added subsecs. (c) and (d) and struck out former subsec. (c). Text of former subsec. (c) read as follows: ''From amounts authorized under section 16291(b) of this title, the following sums are authorized for activities described in subsection (a)(2):

''(1) $25,000,000 for fiscal year 2006;

''(2) $30,000,000 for fiscal year 2007; and

''(3) $35,000,000 for fiscal year 2008.''

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16294. Research and development for coal mining technologies

(a) Establishment

The Secretary shall carry out a program for research and development on coal mining technologies.

(b) Cooperation

In carrying out the program, the Secretary shall cooperate with appropriate Federal agencies, coal producers, trade associations, equipment manufacturers, institutions of higher education with mining engineering departments, and other relevant entities.

(c) Program

The research and development activities carried out under this section shall—

(1) be guided by the mining research and development priorities identified by the Mining Industry of the Future Program and in the recommendations from relevant reports of the National Academy of Sciences on mining technologies;

(2) include activities exploring minimization of contaminants in mined coal that contribute to environmental concerns including development and demonstration of electromagnetic wave imaging ahead of mining operations;

(3) develop and demonstrate coal bed electromagnetic wave imaging, spectroscopic reservoir analysis technology, and techniques for horizontal drilling in order to—

(A) identify areas of high coal gas content;

(B) increase methane recovery efficiency;

(C) prevent spoilage of domestic coal reserves; and

(D) minimize water disposal associated with methane extraction; and

(4) expand mining research capabilities at institutions of higher education.

(Pub. L. 109–58, title IX, § 964, Aug. 8, 2005, 119 Stat. 892.)

§ 16295. Oil and gas research programs

(a) In general

The Secretary shall conduct a program of research, development, demonstration, and commercial application of oil and gas, including—

(1) exploration and production;

(2) gas hydrates;

(3) reservoir life and extension;

(4) transportation and distribution infrastructure;

(5) ultraclean fuels;

(6) heavy oil, oil shale, and tar sands; and

(7) related environmental research.

(b) Objectives

The objectives of this program shall include advancing the science and technology available to domestic petroleum producers, particularly independent operators, to minimize the economic dislocation caused by the decline of domestic supplies of oil and natural gas resources.

(c) Natural gas and oil deposits report

Not later than 2 years after August 8, 2005, and every 2 years thereafter, the Secretary of the Interior, in consultation with other appropriate Federal agencies, shall submit to Congress a report on the latest estimates of natural gas and oil reserves, reserves growth, and undiscovered resources in Federal and State waters off the coast of Louisiana, Texas, Alabama, and Mississippi.

(d) Integrated clean power and energy research

(1) Establishment of center

The Secretary shall establish a national center or consortium of excellence in clean energy and power generation, using the resources of the Clean Power and Energy Research Consortium in existence on August 8, 2005, to address the critical dependence of the United States on energy and the need to reduce emissions.

(2) Focus areas

The center or consortium shall conduct a program of research, development, demonstration, and commercial application on integrating the following 6 focus areas:

(A) Efficiency and reliability of gas turbines for power generation.

(B) Reduction in emissions from power generation.

(C) Promotion of energy conservation issues.

(D) Effectively using alternative fuels and renewable energy.

(E) Development of advanced materials technology for oil and gas exploration and use in harsh environments.

(F) Education on energy and power generation issues.

(Pub. L. 109–58, title IX, § 965, Aug. 8, 2005, 119 Stat. 892.)

§ 16296. Low-volume oil and gas reservoir research program

(a) Definition of GIS

In this section, the term ''GIS'' means geographic information systems technology that facilitates the organization and management of data with a geographic component.

(b) Program

The Secretary shall establish a program of research, development, demonstration, and commercial application to maximize the productive capacity of marginal wells and reservoirs.

(c) Data collection

Under the program, the Secretary shall collect data on—

(1) the status and location of marginal wells and oil and gas reservoirs;

(2) the production capacity of marginal wells and oil and gas reservoirs;

(3) the location of low-pressure gathering facilities and pipelines; and

(4) the quantity of natural gas vented or flared in association with crude oil production.

(d) Analysis

Under the program, the Secretary shall—

(1) estimate the remaining producible reserves based on variable pipeline pressures; and

(2) recommend measures that will enable the continued production of those resources.

(e) Study

(1) In general

The Secretary may award a grant to an organization of States that contain significant numbers of marginal oil and natural gas wells to conduct an annual study of low-volume natural gas reservoirs.

(2) Organization with no GIS capabilities

If an organization receiving a grant under paragraph (1) does not have GIS capabilities, the organization shall contract with an institution of higher education with GIS capabilities.

(3) State geologists

The organization receiving a grant under paragraph (1) shall collaborate with the State geologist of each State being studied.

(f) Public information

The Secretary may use the data collected and analyzed under this section to produce maps and literature to disseminate to States to promote conservation of natural gas reserves.

(Pub. L. 109–58, title IX, § 966, Aug. 8, 2005, 119 Stat. 893.)

§ 16297. Complex Well Technology Testing Facility

The Secretary, in coordination with industry leaders in extended research drilling technology, shall establish a Complex Well Technology Testing Facility at the Rocky Mountain Oilfield Testing Center to increase the range of extended drilling technologies.

(Pub. L. 109–58, title IX, § 967, Aug. 8, 2005, 119 Stat. 894.)

PART G—SCIENCE

§ 16311. Science

(a) In general

The Secretary shall conduct, through the Office of Science, programs of research, development, demonstration, and commercial application in high energy physics, nuclear physics, biological and environmental research, basic energy sciences, advanced scientific computing research, and fusion energy sciences, including activities described in this part. The programs shall include support for facilities and infrastructure, education, outreach, information, analysis, and coordination activities.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out research, development, demonstration, and commercial application activities of the Office of Science, including activities authorized under this part (including the amounts authorized under the amendment made by section 976(b)[1] and including basic energy sciences, advanced scientific and computing research, biological and environmental research, fusion energy sciences, high energy physics, nuclear physics, research analysis, and infrastructure support)—

(1) $4,153,000,000 for fiscal year 2007;

(2) $4,586,000,000 for fiscal year 2008;

(3) $5,200,000,000 for fiscal year 2009;

(4) $5,814,000,000 for fiscal year 2010;

(5) $5,247,000,000 for fiscal year 2011;

(6) $5,614,000,000 for fiscal year 2012; and

(7) $6,007,000,000 for fiscal year 2013.

(c) Allocations

From amounts authorized under subsection (b), the following sums are authorized:

(1) For activities under the Fusion Energy Sciences program (including activities under section 16312 of this title)—

(A) $355,500,000 for fiscal year 2007;

(B) $369,500,000 for fiscal year 2008;

(C) $384,800,000 for fiscal year 2009; and

(D) in addition to the amounts authorized under subparagraphs (A), (B), and (C), such sums as may be necessary for ITER construction, consistent with the limitations of section 16312(c)(5) of this title.

(2) For activities under the catalysis research program under section 16313 of this title—

(A) $36,500,000 for fiscal year 2007;

(B) $38,200,000 for fiscal year 2008; and

(C) such sums as may be necessary for fiscal year 2009.

(3) For activities under the Systems Biology Program under section 16317 of this title such sums as may be necessary for each of fiscal years 2007 through 2009.

(4) For activities under the Energy and Water Supplies program under section 16319 of this title, $30,000,000 for each of fiscal years 2007 through 2009.

(5) For the energy research fellowships programs under section 16324 of this title, $40,000,000 for each of fiscal years 2007 through 2009.

(6) For the advanced scientific computing activities under section 976—[1]

(A) $270,000,000 for fiscal year 2007;

(B) $350,000,000 for fiscal year 2008; and

(C) $375,000,000 for fiscal year 2009.

(7) For the science and engineering education pilot program under section 16323 of this title—

(A) $4,000,000 for each of fiscal years 2007 and 2008; and

(B) $8,000,000 for fiscal year 2009.

(d) Integrated bioenergy research and development

In addition to amounts otherwise authorized by this section, there are authorized to be appropriated to the Secretary for integrated bio-

[1] See References in Text note below.

energy research and development programs, projects, and activities, $49,000,000 for each of the fiscal years 2005 through 2009. Activities funded under this subsection shall be coordinated with ongoing related programs of other Federal agencies, including the Plant Genome Program of the National Science Foundation. Of the funds authorized under this subsection, at least $5,000,000 for each fiscal year shall be for training and education targeted to minority and socially disadvantaged farmers and ranchers.

(Pub. L. 109–58, title IX, § 971, Aug. 8, 2005, 119 Stat. 898; Pub. L. 110–69, title V, § 5007, Aug. 9, 2007, 121 Stat. 617; Pub. L. 111–358, title IX, § 903, Jan. 4, 2011, 124 Stat. 4045.)

REFERENCES IN TEXT

This part, referred to in subsecs. (a) and (b), was in the original ''this subtitle'', meaning subtitle G (§§ 971–984A) of title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 898, which enacted this part and amended section 5523 of Title 15, Commerce and Trade. For complete classification of subtitle G to the Code, see Tables.

Section 976, referred to in subsecs. (b) and (c)(6), is section 976 of Pub. L. 109–58. Subsection (a) of section 976 is classified to section 16316 of this title and subsection (b) of section 976 amended section 5523 of Title 15, Commerce and Trade.

AMENDMENTS

2011—Subsec. (b)(5) to (7). Pub. L. 111–358 added pars. (5) to (7).

2007—Subsec. (b)(4). Pub. L. 110–69 added par. (4).

§ 16312. Fusion energy sciences program

(a) Declaration of policy

It shall be the policy of the United States to conduct research, development, demonstration, and commercial applications to provide for the scientific, engineering, and commercial infrastructure necessary to ensure that the United States is competitive with other countries in providing fusion energy for its own needs and the needs of other countries, including by demonstrating electric power or hydrogen production for the United States energy grid using fusion energy at the earliest date.

(b) Planning

(1) In general

Not later than 180 days after August 8, 2005, the Secretary shall submit to Congress a plan (with proposed cost estimates, budgets, and lists of potential international partners) for the implementation of the policy described in subsection (a) in a manner that ensures that—

(A) existing fusion research facilities are more fully used;

(B) fusion science, technology, theory, advanced computation, modeling, and simulation are strengthened;

(C) new magnetic and inertial fusion research and development facilities are selected based on scientific innovation and cost effectiveness, and the potential of the facilities to advance the goal of practical fusion energy at the earliest date practicable;

(D) facilities that are selected are funded at a cost-effective rate;

(E) communication of scientific results and methods between the fusion energy science community and the broader scientific and technology communities is improved;

(F) inertial confinement fusion facilities are used to the extent practicable for the purpose of inertial fusion energy research and development;

(G) attractive alternative inertial and magnetic fusion energy approaches are more fully explored; and

(H) to the extent practicable, the recommendations of the Fusion Energy Sciences Advisory Committee in the report on workforce planning, dated March 2004, are carried out, including periodic reassessment of program needs.

(2) Costs and schedules

The plan shall also address the status of and, to the extent practicable, costs and schedules for—

(A) the design and implementation of international or national facilities for the testing of fusion materials; and

(B) the design and implementation of international or national facilities for the testing and development of key fusion technologies.

(c) United States participation in ITER

(1) Definitions

In this subsection:

(A) Construction

(i) In general

The term ''construction'' means—

(I) the physical construction of the ITER facility; and

(II) the physical construction, purchase, or manufacture of equipment or components that are specifically designed for the ITER facility.

(ii) Exclusions

The term ''construction'' does not include the design of the facility, equipment, or components.

(B) ITER

The term ''ITER'' means the international burning plasma fusion research project in which the President announced United States participation on January 30, 2003, or any similar international project.

(2) Participation

The United States may participate in the ITER only in accordance with this subsection.

(3) Agreement

(A) In general

The Secretary may negotiate an agreement for United States participation in the ITER.

(B) Contents

Any agreement for United States participation in the ITER shall, at a minimum—

(i) clearly define the United States financial contribution to construction and operating costs, as well as any other costs associated with a project;

(ii) ensure that the share of high-technology components of the ITER manufac-

tured in the United States is at least proportionate to the United States financial contribution to the ITER;

(iii) ensure that the United States will not be financially responsible for cost overruns in components manufactured in other ITER participating countries;

(iv) guarantee the United States full access to all data generated by the ITER;

(v) enable United States researchers to propose and carry out an equitable share of the experiments at the ITER;

(vi) provide the United States with a role in all collective decisionmaking related to the ITER; and

(vii) describe the process for discontinuing or decommissioning the ITER and any United States role in that process.

(4) Plan

(A) Development

The Secretary, in consultation with the Fusion Energy Sciences Advisory Committee, shall develop a plan for the participation of United States scientists in the ITER that shall include—

(i) the United States research agenda for the ITER;

(ii) methods to evaluate whether the ITER is promoting progress toward making fusion a reliable and affordable source of power; and

(iii) a description of how work at the ITER will relate to other elements of the United States fusion program.

(B) Review

The Secretary shall request a review of the plan by the National Academy of Sciences.

(5) Limitation

No Federal funds shall be expended for the construction of the ITER until the Secretary has submitted to Congress—

(A) the agreement negotiated in accordance with paragraph (3) and 120 days have elapsed since that submission;

(B) a report describing the management structure of the ITER and providing a fixed dollar estimate of the cost of United States participation in the construction of the ITER, and 120 days have elapsed since that submission;

(C) a report describing how United States participation in the ITER will be funded without reducing funding for other programs in the Office of Science (including other fusion programs), and 60 days have elapsed since that submission; and

(D) the plan required by paragraph (4) (but not the National Academy of Sciences review of that plan), and 60 days have elapsed since that submission.

(6) Alternative to ITER

(A) In general

If at any time during the negotiations on the ITER, the Secretary determines that construction and operation of the ITER is unlikely or infeasible, the Secretary shall submit to Congress, along with the budget request of the President submitted to Congress for the following fiscal year, a plan for implementing a domestic burning plasma experiment such as the Fusion Ignition Research Experiment, including costs and schedules for the plan.

(B) Administration

The Secretary shall—

(i) refine the plan in full consultation with the Fusion Energy Sciences Advisory Committee; and

(ii) transmit the plan to the National Academy of Sciences for review.

(Pub. L. 109–58, title IX, § 972, Aug. 8, 2005, 119 Stat. 899.)

§ 16313. Catalysis research program

(a) Establishment

The Secretary, acting through the Office of Science, shall support a program of research and development in catalysis science consistent with the statutory authorities of the Department related to research and development.

(b) Components

The program shall include efforts to—

(1) enable catalyst design using combinations of experimental and mechanistic methodologies coupled with computational modeling of catalytic reactions at the molecular level;

(2) develop techniques for high throughput synthesis, assay, and characterization at nanometer and subnanometer scales in-situ under actual operating conditions;

(3) synthesize catalysts with specific site architectures;

(4) conduct research on the use of precious metals for catalysis; and

(5) translate molecular understanding to the design of catalytic compounds.

(c) Duties of the Office of Science

In carrying out the program, the Director of the Office of Science shall—

(1) support both individual investigators and multidisciplinary teams of investigators to pioneer new approaches in catalytic design;

(2) develop, plan, construct, acquire, share, or operate special equipment or facilities for the use of investigators in collaboration with national user facilities, such as nanoscience and engineering centers;

(3) support technology transfer activities to benefit industry and other users of catalysis science and engineering; and

(4) coordinate research and development activities with industry and other Federal agencies.

(d) Assessment

Not later than 3 years after August 8, 2005, the Secretary shall enter into an arrangement with the National Academy of Sciences to—

(1) review the catalysis program to measure—

(A) gains made in the fundamental science of catalysis; and

(B) progress towards developing new fuels for energy production and material fabrication processes; and

(2) submit to Congress a report describing the results of the review.

(Pub. L. 109–58, title IX, § 973, Aug. 8, 2005, 119 Stat. 902.)

§ 16314. Hydrogen

(a) In general

The Secretary shall conduct a program of fundamental research and development in support of programs authorized under subchapter VIII.

(b) Methods

The program shall include support for methods of generating hydrogen without the use of natural gas.

(Pub. L. 109–58, title IX, § 974, Aug. 8, 2005, 119 Stat. 903.)

§ 16315. Solid state lighting

The Secretary shall conduct a program of fundamental research on solid state lighting in support of the Next Generation Lighting Initiative carried out under section 16192 of this title.

(Pub. L. 109–58, title IX, § 975, Aug. 8, 2005, 119 Stat. 903.)

§ 16316. Advanced scientific computing research and development program

(1) In general

The Secretary shall conduct an advanced scientific computing research and development program that includes activities related to applied mathematics and activities authorized by the Department of Energy High-End Computing Revitalization Act of 2004 (15 U.S.C. 5541 et seq.).

(2) Goal

The Secretary shall carry out the program with the goal of supporting departmental missions, and providing the high-performance computational, networking, advanced visualization technologies, and workforce resources, that are required for world leadership in science.

(Pub. L. 109–58, title IX, § 976(a), Aug. 8, 2005, 119 Stat. 903.)

REFERENCES IN TEXT

The Department of Energy High-End Computing Revitalization Act of 2004, referred to in par. (1), is Pub. L. 108–423, Nov. 30, 2004, 118 Stat. 2400, which is classified principally to subchapter III (§ 5541 et seq.) of chapter 81 of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 5501 of Title 15 and Tables.

§ 16317. Systems biology program

(a) Program

(1) Establishment

The Secretary shall establish a research, development, and demonstration program in microbial and plant systems biology, protein science, computational biology, and environmental science to support the energy, national security, and environmental missions of the Department.

(2) Grants

The program shall support individual researchers and multidisciplinary teams of researchers through competitive, merit-reviewed grants.

(3) Consultation

In carrying out the program, the Secretary shall consult with other Federal agencies that conduct genetic and protein research.

(b) Goals

The program shall have the goal of developing technologies and methods based on the biological functions of genomes, microbes, and plants that—

(1) can facilitate the production of fuels, including hydrogen in sustainable production systems that reduce greenhouse gas emissions;

(2) convert carbon dioxide to organic carbon;

(3) detoxify soils and water, including at facilities of the Department, contaminated with heavy metals and radiological materials;

(4) develop cellulosic and other feedstocks that are less resource and land intensive and that promote sustainable use of resources, including soil, water, energy, forests, and land, and ensure protection of air, water, and soil quality; and

(5) address other Department missions as identified by the Secretary.

(c) Plan

(1) Development of plan

Not later than 1 year after August 8, 2005, the Secretary shall prepare and transmit to Congress a research plan describing how the program authorized pursuant to this section will be undertaken to accomplish the program goals established in subsection (b).

(2) Review of plan

The Secretary shall contract with the National Academy of Sciences to review the research plan developed under this subsection. The Secretary shall transmit the review to Congress not later than 18 months after transmittal of the research plan under paragraph (1), along with the Secretary's response to the recommendations contained in the review.

(d) User facilities and ancillary equipment

Within the funds authorized to be appropriated pursuant to this part, amounts shall be available for projects to develop, plan, construct, acquire, or operate special equipment, instrumentation, or facilities, including user facilities at National Laboratories, for researchers conducting research, development, demonstration, and commercial application in systems biology and proteomics and associated biological disciplines.

(e) Prohibition on biomedical and human cell and human subject research

(1) No biomedical research

In carrying out the program under this section, the Secretary shall not conduct biomedical research.

(2) Limitations

Nothing in this section shall authorize the Secretary to conduct any research or demonstrations—

(A) on human cells or human subjects; or

(B) designed to have direct application with respect to human cells or human subjects.

(f) Bioenergy research centers

(1) Establishment of centers

In carrying out the program under subsection (a), the Secretary shall establish at least 7 bioenergy research centers, which may be of varying size.

(2) Geographic distribution

The Secretary shall establish at least 1 bioenergy research center in each Petroleum Administration for Defense District or Subdistrict of a Petroleum Administration for Defense District.

(3) Goals

The goals of the centers established under this subsection shall be to accelerate basic transformational research and development of biofuels, including biological processes.

(4) Selection and duration

(A) In general

A center under this subsection shall be selected on a competitive basis for a period of 5 years.

(B) Reapplication

After the end of the period described in subparagraph (A), a grantee may reapply for selection on a competitive basis.

(5) Inclusion

A center that is in existence on December 19, 2007—

(A) shall be counted towards the requirement for establishment of at least 7 bioenergy research centers; and

(B) may continue to receive support for a period of 5 years beginning on the date of establishment of the center.

(Pub. L. 109–58, title IX, § 977, Aug. 8, 2005, 119 Stat. 903; Pub. L. 110–140, title II, §§ 232(a), 233, Dec. 19, 2007, 121 Stat. 1537.)

REFERENCES IN TEXT

This part, referred to in subsec. (d), was in the original ''this subtitle'', meaning subtitle G (§§ 971–984A) of title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 898, which enacted this part and amended section 5523 of Title 15, Commerce and Trade. For complete classification of subtitle G to the Code, see Tables.

AMENDMENTS

2007—Subsec. (a)(1). Pub. L. 110–140, § 232(a)(1), substituted ''computational biology, and environmental science'' for ''and computational biology''.

Subsec. (b)(1). Pub. L. 110–140, § 232(a)(2)(A), inserted ''in sustainable production systems that reduce greenhouse gas emissions'' after ''hydrogen''.

Subsec. (b)(4), (5). Pub. L. 110–140, § 232(a)(2)(B)–(D), added par. (4) and redesignated former par. (4) as (5).

Subsec. (f). Pub. L. 110–140, § 233, added subsec. (f).

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16318. Fission and fusion energy materials research program

(a) In general

Along with the budget request of the President submitted to Congress for fiscal year 2007, the Secretary shall establish a research and development program on material science issues presented by advanced fission reactors and the fusion energy program of the Department.

(b) Administration

In carrying out the program, the Secretary shall develop—

(1) a catalog of material properties required for applications described in subsection (a);

(2) theoretical models for materials possessing the required properties;

(3) benchmark models against existing data; and

(4) a roadmap to guide further research and development in the area covered by the program.

(Pub. L. 109–58, title IX, § 978, Aug. 8, 2005, 119 Stat. 904.)

§ 16319. Energy and water supplies

(a) In general

The Secretary shall carry out a program of research, development, demonstration, and commercial application to—

(1) address energy-related issues associated with provision of adequate water supplies, optimal management, and efficient use of water;

(2) address water-related issues associated with the provision of adequate supplies, optimal management, and efficient use of energy; and

(3) assess the effectiveness of existing programs within the Department and other Federal agencies to address these energy and water related issues.

(b) Program elements

The program under this section shall include—

(1) arsenic treatment;

(2) desalination; and

(3) planning, analysis, and modeling of energy and water supply and demand.

(c) Collaboration

In carrying out this section, the Secretary shall consult with the Administrator of the Environmental Protection Agency, the Secretary of the Interior, the Chief Engineer of the Army Corps of Engineers, the Secretary of Commerce, the Secretary of Defense, and other Federal agencies as appropriate.

(d) Facilities

The Secretary may utilize all existing facilities within the Department and may design and construct additional facilities as needed to carry out the purposes of this program.

(e) Advisory committee

The Secretary shall establish or utilize an advisory committee to provide independent advice and review of the program.

(f) Reports

Not later than 2 years after August 8, 2005, the Secretary shall submit to Congress a report on the assessment described in subsection (b) and recommendations for future actions.

(Pub. L. 109–58, title IX, § 979, Aug. 8, 2005, 119 Stat. 905.)

§ 16320. Spallation Neutron Source

(a) Definitions

In this section:

(1) SING

The term ''SING'' means the Spallation Neutron Source Instruments Next Generation major item of equipment.

(2) SNS power upgrade

The term ''SNS power upgrade'' means the Spallation Neutron Source power upgrade described in the 20-year facilities plan of the Office of Science of the Department.

(3) SNS second target station

The term ''SNS second target station'' means the Spallation Neutron Source second target station described in the 20-year facilities plan of the Office of Science of the Department.

(4) Spallation Neutron Source Facility

The terms ''Spallation Neutron Source Facility'' and ''Facility'' mean the completed Spallation Neutron Source scientific user facility located at Oak Ridge National Laboratory, Oak Ridge, Tennessee.

(5) Spallation Neutron Source Project

The terms ''Spallation Neutron Source Project'' and ''Project'' means Department Project 99–E–334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

(b) Spallation Neutron Source Project

(1) In general

The Secretary shall submit to Congress, as part of the annual budget request of the President submitted to Congress, a report on progress on the Spallation Neutron Source Project.

(2) Contents

The report shall include for the Project—

(A) a description of the achievement of milestones;

(B) a comparison of actual costs to estimated costs; and

(C) any changes in estimated Project costs or schedule.

(c) Spallation Neutron Source Facility plan

(1) In general

The Secretary shall develop an operational plan for the Spallation Neutron Source Facility that ensures that the Facility is employed to the full capability of the Facility in support of the study of advanced materials, nanoscience, and other missions of the Office of Science of the Department.

(2) Plan

The operational plan shall—

(A) include a plan for the operation of an effective scientific user program that—

(i) is based on peer review of proposals submitted for use of the Facility;

(ii) includes scientific and technical support to ensure that external users, including researchers based at institutions of higher education, are able to make full use of a variety of high quality scientific instruments; and

(iii) phases in systems upgrades to ensure that the Facility remains at the forefront of international scientific endeavors in the field of the Facility throughout the operating life of the Facility;

(B) include an ongoing program to develop new instruments that builds on the high performance neutron source and that allows neutron scattering techniques to be applied to a growing range of scientific problems and disciplines; and

(C) address the status of and, to the maximum extent practicable, costs and schedules for—

(i) full user mode operations of the Facility;

(ii) instrumentation built at the Facility during the operating phase through full use of the experimental hall, including the SING;

(iii) the SNS power upgrade; and

(iv) the SNS second target station.

(d) Authorization of appropriations

(1) Spallation Neutron Source Project

There is authorized to be appropriated to carry out the Spallation Neutron Source Project for the lifetime of the Project $1,411,700,000 for total project costs, of which—

(A) $1,192,700,000 shall be used for the costs of construction; and

(B) $219,000,000 shall be used for other Project costs.

(2) Spallation Neutron Source Facility

(A) In general

Except as provided in subparagraph (B), there is authorized to be appropriated for the Spallation Neutron Source Facility for—

(i) the SING, $75,000,000 for each of fiscal year 2007 through 2009; and

(ii) the SNS power upgrade, $160,000,000, to remain available until expended.

(B) Insufficient stockpiles of heavy water

If stockpiles of heavy water of the Department are insufficient to meet the needs of the Facility, there is authorized to be appropriated for the Facility $12,000,000 for fiscal year 2007.

(Pub. L. 109–58, title IX, § 980, Aug. 8, 2005, 119 Stat. 905.)

§ 16321. Rare Isotope Accelerator

(a) Establishment

The Secretary shall construct and operate a Rare Isotope Accelerator. The Secretary shall commence construction no later than September 30, 2008.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this section. The Secretary shall not spend more than $1,100,000,000 in Federal funds for all activities associated with the Rare Isotope Accelerator, prior to operation of the Accelerator.

(Pub. L. 109–58, title IX, § 981, Aug. 8, 2005, 119 Stat. 907.)

§ 16322. Office of Scientific and Technical Information

The Secretary, through the Office of Scientific and Technical Information, shall maintain within the Department publicly available collections of scientific and technical information resulting from research, development, demonstration, and commercial applications activities supported by the Department.

(Pub. L. 109–58, title IX, § 982, Aug. 8, 2005, 119 Stat. 907.)

§ 16323. Science and engineering education pilot program

(a) Establishment of pilot program

The Secretary shall award a grant to a Southeastern United States consortium of major research universities that currently advances science and education by partnering with National Laboratories, to establish a regional pilot program of its SEEK–16 program for enhancing scientific, technological, engineering, and mathematical literacy, creativity, and decision-making. The consortium shall include leading research universities, one or more universities that train substantial numbers of elementary and secondary school teachers, and (where appropriate) National Laboratories.

(b) Program elements

The regional pilot program shall include—

(1) expanding strategic, formal partnerships among universities with strength in research, universities that train substantial numbers of elementary and secondary school teachers, and the private sector;

(2) combining Department expertise with one or more National Aeronautics and Space Administration Educator Resource Centers;

(3) developing programs to permit current and future teachers to participate in ongoing research projects at National Laboratories and research universities and to adapt lessons learned to the classroom;

(4) designing and implementing course work;

(5) designing and implementing a strategy for measuring and assessing progress under the program; and

(6) developing models for transferring knowledge gained under the pilot program to other institutions and areas of the United States.

(c) Categorization

A grant under this section shall be considered an authorized activity under section 7381b of this title.

(d) Report

No later than 2 years after the award of the grant, the Secretary shall transmit to Congress a report outlining lessons learned and, if determined appropriate by the Secretary, containing a plan for expanding the program throughout the United States.

(Pub. L. 109–58, title IX, § 983, Aug. 8, 2005, 119 Stat. 907.)

§ 16324. Energy research fellowships

(a) Postdoctoral fellowship program

The Secretary shall establish a program under which the Secretary provides fellowships to encourage outstanding young scientists and engineers to pursue postdoctoral research appointments in energy research and development at institutions of higher education of their choice.

(b) Senior research fellowships

(1) In general

The Secretary shall establish a program under which the Secretary provides fellowships to allow outstanding senior researchers and their research groups in energy research and development to explore research and development topics of their choosing for a period of not less than 3 years, to be determined by the Secretary.

(2) Consideration

In providing a fellowship under the program described in paragraph (1), the Secretary shall consider—

(A) the past scientific or technical accomplishment of a senior researcher; and

(B) the potential for continued accomplishment by the researcher during the period of the fellowship.

(Pub. L. 109–58, title IX, § 984, Aug. 8, 2005, 119 Stat. 908.)

§ 16325. Science and Technology Scholarship Program

(a) In general

The Secretary is authorized to establish a Science and Technology Scholarship Program to award scholarships to individuals that is designed to recruit and prepare students for careers in the Department and National Laboratories.

(b) Service requirement

The Secretary may require that an individual receiving a scholarship under this section serve as a full-time employee of the Department or a National Laboratory for a fixed period in return for receiving the scholarship.

(Pub. L. 109–58, title IX, § 984A, Aug. 8, 2005, 119 Stat. 908.)

PART H—INTERNATIONAL COOPERATION

§ 16341. Western Hemisphere energy cooperation

(a) Program

The Secretary shall carry out a program to promote cooperation on energy issues with countries of the Western Hemisphere.

(b) Activities

Under the program, the Secretary shall fund activities to work with countries of the Western Hemisphere to—

(1) increase the production of energy supplies;

(2) improve energy efficiency; and

(3) assist in the development and transfer of energy supply and efficiency technologies that would have a beneficial impact on world energy markets.

(c) Participation by institutions of higher education

To the extent practicable, the Secretary shall carry out the program under this section with the participation of institutions of higher education so as to take advantage of the acceptance of institutions of higher education by countries of the Western Hemisphere as sources of unbiased technical and policy expertise when assisting the Secretary in—

(1) evaluating new technologies;

(2) resolving technical issues;

(3) working with those countries in the development of new policies; and

(4) training policymakers, particularly in the case of institutions of higher education that involve the participation of minority students, such as—

(A) Hispanic-serving institutions; and

(B) part B institutions.

(d) Authorization of appropriations

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

(1) $10,000,000 for fiscal year 2007;

(2) $13,000,000 for fiscal year 2008; and

(3) $16,000,000 for fiscal year 2009.

(Pub. L. 109–58, title IX, § 985, Aug. 8, 2005, 119 Stat. 908.)

§ 16342. International energy training

(a) In general

The Secretary, in consultation with the Secretary of Commerce, the Secretary of the Interior, and Secretary of State, and the Federal Energy Regulatory Commission, shall coordinate training and outreach efforts for international commercial energy markets in countries with developing and restructuring economies.

(b) Components

The training and outreach efforts referred to in subsection (a) may include—

(1) production-related fiscal regimes;

(2) grid and network issues;

(3) energy user and demand side response;

(4) international trade of energy; and

(5) international transportation of energy.

(c) Authorization of appropriations

There is authorized to be appropriated to carry out this section $1,500,000 for each of fiscal years 2007 through 2010.

(Pub. L. 109–58, title IX, § 986A, Aug. 8, 2005, 119 Stat. 910.)

PART I—RESEARCH ADMINISTRATION AND OPERATIONS

§ 16351. Availability of funds

Funds authorized to be appropriated to the Department under this Act or an amendment made by this Act shall remain available until expended.

(Pub. L. 109–58, title IX, § 987, Aug. 8, 2005, 119 Stat. 910.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 16352. Cost sharing

(a) Applicability

Notwithstanding any other provision of law, in carrying out a research, development, demonstration, or commercial application program or activity that is initiated after August 8, 2005, the Secretary shall require cost-sharing in accordance with this section.

(b) Research and development

(1) In general

Except as provided in paragraphs (2) and (3) and subsection (f), the Secretary shall require not less than 20 percent of the cost of a research or development activity described in subsection (a) to be provided by a non-Federal source.

(2) Exclusion

Paragraph (1) shall not apply to a research or development activity described in subsection (a) that is of a basic or fundamental nature, as determined by the appropriate officer of the Department.

(3) Reduction

The Secretary may reduce or eliminate the requirement of paragraph (1) for a research and development activity of an applied nature if the Secretary determines that the reduction is necessary and appropriate.

(c) Demonstration and commercial application

(1) In general

Except as provided in paragraph (2) and subsection (f), the Secretary shall require that not less than 50 percent of the cost of a demonstration or commercial application activity described in subsection (a) to[1] be provided by a non-Federal source.

(2) Reduction of non-Federal share

The Secretary may reduce the non-Federal share required under paragraph (1) if the Secretary determines the reduction to be necessary and appropriate, taking into consideration any technological risk relating to the activity.

(d) Calculation of amount

In calculating the amount of a non-Federal contribution under this section, the Secretary—

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

(A) cash;

(B) personnel costs;

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

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

[1] So in original. The word ''to'' probably should not appear.

(E) any funds received under the power program of the Tennessee Valley Authority (except to the extent that such funds are made available under an annual appropriation Act); and

(2) shall not include—

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

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

(C) other appropriated Federal funds.

(e) Repayment of Federal share

The Secretary shall not require repayment of the Federal share of a cost-shared activity under this section as a condition of making an award.

(f) Exclusions

This section shall not apply to—

(1) a cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.);

(2) a fee charged for the use of a Department facility; or

(3) an award under—

(A) the small business innovation research program under section 638 of title 15; or

(B) the small business technology transfer program under that section.

(Pub. L. 109–58, title IX, § 988, Aug. 8, 2005, 119 Stat. 910.)

REFERENCES IN TEXT

The Stevenson-Wydler Technology Innovation Act of 1980, referred to in subsec. (f)(1), is Pub. L. 96–480, Oct. 21, 1980, 94 Stat. 2311, as amended, which is classified generally to chapter 63 (§ 3701 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 3701 of Title 15 and Tables.

§ 16353. Merit review of proposals

(a) Awards

Awards of funds authorized under this Act or an amendment made by this Act shall be made only after an impartial review of the scientific and technical merit of the proposals for the awards has been carried out by or for the Department.

(b) Competition

Competitive awards under this Act shall involve competitions open to all qualified entities within one or more of the following categories:

(1) Institutions of higher education.

(2) National Laboratories.

(3) Nonprofit and for-profit private entities.

(4) State and local governments.

(5) Consortia of entities described in paragraphs (1) through (4).

(c) Sense of Congress

It is the sense of Congress that research, development, demonstration, and commercial application activities carried out by the Department should be awarded using competitive procedures, to the maximum extent practicable.

(Pub. L. 109–58, title IX, § 989, Aug. 8, 2005, 119 Stat. 911.)

REFERENCES IN TEXT

This Act, referred to in subsecs. (a) and (b), is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 16354. External technical review of departmental programs

(a) National energy research and development advisory boards

(1) Establishment

The Secretary shall establish one or more advisory boards to review research, development, demonstration, and commercial application programs of the Department in energy efficiency, renewable energy, nuclear energy, and fossil energy.

(2) Alternatives

The Secretary may—

(A) designate an existing advisory board within the Department to fulfill the responsibilities of an advisory board under this section; and

(B) enter into appropriate arrangements with the National Academy of Sciences to establish such an advisory board.

(b) Use of existing committees

The Secretary shall continue to use the scientific program advisory committees chartered under the Federal Advisory Committee Act (5 U.S.C. App.) by the Office of Science to oversee research and development programs under that Office.

(c) Membership

Each advisory board under this section shall consist of persons with appropriate expertise representing a diverse range of interests.

(d) Meetings and goals

(1) Meetings

Each advisory board under this section shall meet at least semiannually to review and advise on the progress made by the respective one or more research, development, demonstration, and commercial application programs.

(2) Goals

The advisory board shall review the measurable cost and performance-based goals for the programs as established under section 16181 of this title, and the progress on meeting the goals.

(e) Periodic reviews and assessments

(1) In general

The Secretary shall enter into appropriate arrangements with the National Academy of Sciences to conduct periodic reviews and assessments of—

(A) the research, development, demonstration, and commercial application programs authorized by this Act and amendments made by this Act;

(B) the measurable cost and performance-based goals for the programs as established under section 16181 of this title, if any; and

(C) the progress on meeting the goals.

(2) Timing

The reviews and assessments shall be conducted every 5 years or more often as the Secretary considers necessary.

(3) Reports

The Secretary shall submit to Congress reports describing the results of all the reviews and assessments.

(Pub. L. 109–58, title IX, § 990, Aug. 8, 2005, 119 Stat. 912.)

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (b), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, as amended, which is set out in the Appendix to Title 5, Government Organization and Employees.

This Act, referred to in subsec. (e)(1)(A), is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 16355. National Laboratory designation

After August 8, 2005, the Secretary shall not designate a facility that is not listed in section 15801(3) of this title as a National Laboratory.

(Pub. L. 109–58, title IX, § 991, Aug. 8, 2005, 119 Stat. 913.)

§ 16356. Report on equal employment opportunity practices

Not later than 12 months after August 8, 2005, and biennially thereafter, the Secretary shall transmit to Congress a report on the equal employment opportunity practices at National Laboratories. Such report shall include—

(1) a thorough review of each National Laboratory contractor's equal employment opportunity policies, including promotion to management and professional positions and pay raises;

(2) a statistical report on complaints and their disposition in the National Laboratories;

(3) a description of how equal employment opportunity practices at the National Laboratories are treated in the contract and in calculating award fees for each contractor;

(4) a summary of disciplinary actions and their disposition by either the Department or the relevant contractors for each National Laboratory;

(5) a summary of outreach efforts to attract women and minorities to the National Laboratories;

(6) a summary of efforts to retain women and minorities in the National Laboratories; and

(7) a summary of collaboration efforts with the Office of Federal Contract Compliance Programs to improve equal employment opportunity practices at the National Laboratories.

(Pub. L. 109–58, title IX, § 992, Aug. 8, 2005, 119 Stat. 913.)

§ 16357. Strategy and plan for science and energy facilities and infrastructure

(a) Facility and infrastructure policy

(1) In general

The Secretary shall develop and implement a strategy for facilities and infrastructure supported primarily from the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, or the Office of Nuclear Energy, Science and Technology Programs at all National Laboratories and single-purpose research facilities.

(2) Strategy

The strategy shall provide cost-effective means for—

(A) maintaining existing facilities and infrastructure;

(B) closing unneeded facilities;

(C) making facility modifications; and

(D) building new facilities.

(b) Report

(1) In general

The Secretary shall prepare and submit, along with the budget request of the President submitted to Congress for fiscal year 2008, a report describing the strategy developed under subsection (a).

(2) Contents

For each National Laboratory and single-purpose research facility that is primarily used for science and energy research, the report shall contain—

(A) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements;

(B) a current 10-year plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment;

(C) the total current budget for all facilities and infrastructure funding; and

(D) the current status of each facility and infrastructure project compared to the original baseline cost, schedule, and scope.

(Pub. L. 109–58, title IX, § 993, Aug. 8, 2005, 119 Stat. 913.)

§ 16358. Strategic research portfolio analysis and coordination plan

(a) In general

The Secretary shall periodically review all of the science and technology activities of the Department in a strategic framework that takes into account both the frontiers of science to which the Department can contribute and the national needs relevant to the Department's statutory missions.

(b) Coordination analysis and plan

As part of the review under subsection (a), the Secretary shall develop a coordination plan to improve coordination and collaboration in research, development, demonstration, and commercial application activities across Department organizational boundaries.

(c) Plan contents

The plan shall describe—

(1) cross-cutting scientific and technical issues and research questions that span more than one program or major office of the Department;

(2) how the applied technology programs of the Department are coordinating their activities, and addressing those questions;

(3) ways in which the technical interchange within the Department, particularly between the Office of Science and the applied technology programs, can be enhanced, including ways in which the research agendas of the Office of Science and the applied programs can interact and assist each other;

(4) a description of how the Secretary will ensure that the Department's overall research agenda include, in addition to fundamental, curiosity-driven research, fundamental research related to topics of concern to the applied programs, and applications in Departmental technology programs of research results generated by fundamental, curiosity-driven research.

(d) Plan transmittal

Not later than 12 months after August 8, 2005, and every 4 years thereafter, the Secretary shall transmit to Congress the results of the review under subsection (a) and the coordination plan under subsection (b).

(Pub. L. 109–58, title IX, § 994, Aug. 8, 2005, 119 Stat. 914.)

§ 16359. Competitive award of management contracts

None of the funds authorized to be appropriated to the Secretary by this subchapter may be used to award a management and operating contract for a National Laboratory (excluding those named in subparagraphs (G), (H), (N), and (O) of section 15801(3) of this title), unless such contract is competitively awarded, or the Secretary grants, on a case-by-case basis, a waiver. The Secretary may not delegate the authority to grant such a waiver and shall submit to Congress a report notifying it of the waiver, and setting forth the reasons for the waiver, at least 60 days prior to the date of the award of such contract.

(Pub. L. 109–58, title IX, § 995, Aug. 8, 2005, 119 Stat. 914.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original ''this title'', meaning title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 856, which enacted this subchapter, amended sections 8101 and 8102 of Title 7, Agriculture, and section 5523 of Title 15, Commerce and Trade, enacted provisions set out as notes under section 15801 of this title, section 8102 of Title 7, and section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as notes under section 8101 of Title 7 and section 1902 of Title 30. For complete classification of title IX to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16360. Western Michigan demonstration project

The Administrator of the Environmental Protection Agency, in consultation with the State of Michigan and affected local officials, shall conduct a demonstration project to address the effect of transported ozone and ozone precursors in Southwestern Michigan. The demonstration program shall address projected nonattainment areas in Southwestern Michigan that include counties with design values for ozone of less than .095 based on years 2000 to 2002 or the most current 3-year period of air quality data. The Administrator shall assess any difficulties such areas may experience in meeting the 8-hour national ambient air quality standard for ozone due to the effect of transported ozone or ozone precursors into the areas. The Administrator shall work with State and local officials to determine the extent of ozone and ozone precursor transport, to assess alternatives to achieve compliance with the 8-hour standard apart from local controls, and to determine the timeframe in which such compliance could take place. The Administrator shall complete this demonstration project no later than 2 years after August 8, 2005, and shall not impose any requirement or sanction under the Clean Air Act (42 U.S.C. 7401 et seq.) that might otherwise apply during the pendency of the demonstration project.

(Pub. L. 109–58, title IX, § 996, Aug. 8, 2005, 119 Stat. 915.)

REFERENCES IN TEXT

The Clean Air Act, referred to in text, is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, 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.

§ 16361. Arctic Engineering Research Center

(a) In general

The Secretary of Transportation, in consultation with the Secretary and the United States Arctic Research Commission, shall provide annual grants to a university located adjacent to the Arctic Energy Office of the Department of Energy, to establish and operate a university research center to be headquartered in Fairbanks and to be known as the ''Arctic Engineering Research Center'' (referred to in this section as the ''Center'').

(b) Purpose

The purpose of the Center shall be to conduct research on, and develop improved methods of, construction and use of materials to improve the overall performance of roads, bridges, residential, commercial, and industrial structures, and other infrastructure in the Arctic region, with an emphasis on developing—

(1) new construction techniques for roads, bridges, rail, and related transportation infrastructure and residential, commercial, and industrial infrastructure that are capable of withstanding the Arctic environment and using limited energy resources as efficiently as practicable;

(2) technologies and procedures for increasing road, bridge, rail, and related transportation infrastructure and residential, commercial, and industrial infrastructure safety, reliability, and integrity in the Arctic region;

(3) new materials and improving the performance and energy efficiency of existing ma-

terials for the construction of roads, bridges, rail, and related transportation infrastructure and residential, commercial, and industrial infrastructure in the Arctic region; and

(4) recommendations for new local, regional, and State permitting and building codes to ensure transportation and building safety and efficient energy use when constructing, using, and occupying such infrastructure in the Arctic region.

(c) Objectives

The Center shall carry out—

(1) basic and applied research in the subjects described in subsection (b), the products of which shall be judged by peers or other experts in the field to advance the body of knowledge in road, bridge, rail, and infrastructure engineering in the Arctic region; and

(2) an ongoing program of technology transfer that makes research results available to potential users in a form that can be implemented.

(d) Amount of grant

For each of fiscal years 2006 through 2011, the Secretary shall provide a grant in the amount of $3,000,000 to the institution specified in subsection (a) to carry out this section.

(e) Authorization of appropriations

There are authorized to be appropriated to carry out this section $3,000,000 for each of fiscal years 2006 through 2011.

(Pub. L. 109–58, title IX, § 997, Aug. 8, 2005, 119 Stat. 915.)

§ 16362. Barrow Geophysical Research Facility

(a) Establishment

The Secretary of Commerce, in consultation with the Secretaries of Energy and the Interior, the Director of the National Science Foundation, and the Administrator of the Environmental Protection Agency, shall establish a joint research facility in Barrow, Alaska, to be known as the ''Barrow Geophysical Research Facility'', to support scientific research activities in the Arctic.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretaries of Commerce, Energy, and the Interior, the Director of the National Science Foundation, and the Administrator of the Environmental Protection Agency for the planning, design, construction, and support of the Barrow Geophysical Research Facility, $61,000,000.

(Pub. L. 109–58, title IX, § 998, Aug. 8, 2005, 119 Stat. 916.)

PART J—ULTRA-DEEPWATER AND UNCONVENTIONAL NATURAL GAS AND OTHER PETROLEUM RESOURCES

§ 16371. Program authority

(a) In general

The Secretary shall carry out a program under this part of research, development, demonstration, and commercial application of technologies for ultra-deepwater and unconventional natural gas and other petroleum resource exploration and production, including addressing the technology challenges for small producers, safe operations, and environmental mitigation (including reduction of greenhouse gas emissions and sequestration of carbon).

(b) Program elements

The program under this part shall address the following areas, including improving safety and minimizing environmental impacts of activities within each area:

(1) Ultra-deepwater architecture and technology, including drilling to formations in the Outer Continental Shelf to depths greater than 15,000 feet.

(2) Unconventional natural gas and other petroleum resource exploration and production technology.

(3) The technology challenges of small producers.

(4) Complementary research performed by the National Energy Technology Laboratory for the Department.

(c) Limitation on location of field activities

Field activities under the program under this part shall be carried out only—

(1) in—

(A) areas in the territorial waters of the United States not under any Outer Continental Shelf moratorium as of September 30, 2002;

(B) areas onshore in the United States on public land administered by the Secretary of the Interior available for oil and gas leasing, where consistent with applicable law and land use plans; and

(C) areas onshore in the United States on State or private land, subject to applicable law; and

(2) with the approval of the appropriate Federal or State land management agency or private land owner.

(d) Activities at the National Energy Technology Laboratory

The Secretary, through the National Energy Technology Laboratory, shall carry out a program of research and other activities complementary to and supportive of the research programs under subsection (b).

(e) Consultation with Secretary of the Interior

In carrying out this part, the Secretary shall consult regularly with the Secretary of the Interior.

(Pub. L. 109–58, title IX, § 999A, Aug. 8, 2005, 119 Stat. 916.)

§ 16372. Ultra-deepwater and unconventional onshore natural gas and other petroleum research and development program

(a) In general

The Secretary shall carry out the activities under section 16371 of this title, to maximize the value of natural gas and other petroleum resources of the United States, by increasing the supply of such resources, through reducing the cost and increasing the efficiency of exploration for and production of such resources, while im-

proving safety and minimizing environmental impacts.

(b) Role of the Secretary

The Secretary shall have ultimate responsibility for, and oversight of, all aspects of the program under this section.

(c) Role of the program consortium

(1) In general

The Secretary shall contract with a corporation that is structured as a consortium to administer the programmatic activities outlined in this part.[1] The program consortium shall—

(A) administer the program pursuant to subsection (f)(3), utilizing program administration funds only;

(B) issue research project solicitations upon approval of the Secretary or the Secretary's designee;

(C) make project awards to research performers upon approval of the Secretary or the Secretary's designee;

(D) disburse research funds to research performers awarded under subsection (f) as directed by the Secretary in accordance with the annual plan under subsection (e); and

(E) carry out other activities assigned to the program consortium by this section.

(2) Limitation

The Secretary may not assign any activities to the program consortium except as specifically authorized under this section.

(3) Conflict of interest

(A) Procedures

The Secretary shall establish procedures—

(i) to ensure that each board member, officer, or employee of the program consortium who is in a decisionmaking capacity under subsection (f)(3) shall disclose to the Secretary any financial interests in, or financial relationships with, applicants for or recipients of awards under this section, including those of his or her spouse or minor child, unless such relationships or interests would be considered to be remote or inconsequential; and

(ii) to require any board member, officer, or employee with a financial relationship or interest disclosed under clause (i) to recuse himself or herself from any oversight under subsection (f)(4) with respect to such applicant or recipient.

(B) Failure to comply

The Secretary may disqualify an application or revoke an award under this section if a board member, officer, or employee has failed to comply with procedures required under subparagraph (A)(ii).

(d) Selection of the program consortium

(1) In general

The Secretary shall select the program consortium through an open, competitive process.

(2) Members

The program consortium may include corporations, trade associations, institutions of higher education, National Laboratories, or other research institutions. After submitting a proposal under paragraph (4), the program consortium may not add members without the consent of the Secretary.

(3) Requirement of section 501(c)(3) status

The Secretary shall not select a consortium under this section unless such consortium is an organization described in section 501(c)(3) of title 26 and exempt from tax under such section 501(a) of such title.

(4) Schedule

Not later than 90 days after August 8, 2005, the Secretary shall solicit proposals from eligible consortia to perform the duties in subsection (c)(1), which shall be submitted not later than 180 days after August 8, 2005. The Secretary shall select the program consortium not later than 270 days after August 8, 2005.

(5) Application

Applicants shall submit a proposal including such information as the Secretary may require. At a minimum, each proposal shall—

(A) list all members of the consortium;

(B) fully describe the structure of the consortium, including any provisions relating to intellectual property; and

(C) describe how the applicant would carry out the activities of the program consortium under this section.

(6) Eligibility

To be eligible to be selected as the program consortium, an applicant must be an entity whose members have collectively demonstrated capabilities and experience in planning and managing research, development, demonstration, and commercial application programs for ultra-deepwater and unconventional natural gas or other petroleum exploration or production.

(7) Focus areas for awards

(A) Ultra-deepwater resources

Awards from allocations under section 16378(d)(1) of this title shall focus on the development and demonstration of individual exploration and production technologies as well as integrated systems technologies including new architectures for production in ultra-deepwater.

(B) Unconventional resources

Awards from allocations under section 16378(d)(2) of this title shall focus on areas including advanced coalbed methane, deep drilling, natural gas production from tight sands, natural gas production from gas shales, stranded gas, innovative exploration and production techniques, enhanced recovery techniques, and environmental mitigation of unconventional natural gas and other petroleum resources exploration and production.

(C) Small producers

Awards from allocations under section 16378(d)(3) of this title shall be made to consortia consisting of small producers or organized primarily for the benefit of small pro-

[1] See References in Text note below.

ducers, and shall focus on areas including complex geology involving rapid changes in the type and quality of the oil and gas reservoirs across the reservoir; low reservoir pressure; unconventional natural gas reservoirs in coalbeds, deep reservoirs, tight sands, or shales; and unconventional oil reservoirs in tar sands and oil shales.

(e) Annual plan

(1) In general

The program under this section shall be carried out pursuant to an annual plan prepared by the Secretary in accordance with paragraph (2).

(2) Development

(A) Solicitation of recommendations

Before drafting an annual plan under this subsection, the Secretary shall solicit specific written recommendations from the program consortium for each element to be addressed in the plan, including those described in paragraph (4). The program consortium shall submit its recommendations in the form of a draft annual plan.

(B) Submission of recommendations; other comment

The Secretary shall submit the recommendations of the program consortium under subparagraph (A) to the Ultra-Deepwater Advisory Committee established under section 16374(a) of this title and to the Unconventional Resources Technology Advisory Committee established under section 16374(b) of this title, and such Advisory Committees shall provide to the Secretary written comments by a date determined by the Secretary. The Secretary may also solicit comments from any other experts.

(C) Consultation

The Secretary shall consult regularly with the program consortium throughout the preparation of the annual plan.

(3) Publication

The Secretary shall transmit to Congress and publish in the Federal Register the annual plan, along with any written comments received under paragraph (2)(A) and (B).

(4) Contents

The annual plan shall describe the ongoing and prospective activities of the program under this section and shall include—

(A) a list of any solicitations for awards to carry out research, development, demonstration, or commercial application activities, including the topics for such work, who would be eligible to apply, selection criteria, and the duration of awards; and

(B) a description of the activities expected of the program consortium to carry out subsection (f)(3).

(5) Estimates of increased royalty receipts

The Secretary, in consultation with the Secretary of the Interior, shall provide an annual report to Congress with the President's budget on the estimated cumulative increase in Federal royalty receipts (if any) resulting from the implementation of this part. The initial report under this paragraph shall be submitted in the first President's budget following the completion of the first annual plan required under this subsection.

(f) Awards

(1) In general

Upon approval of the Secretary the program consortium shall make awards to research performers to carry out research, development, demonstration, and commercial application activities under the program under this section. The program consortium shall not be eligible to receive such awards, but provided that conflict of interest procedures in subsection (c)(3) are followed, entities who are members of the program consortium are not precluded from receiving research awards as either individual research performers or as research performers who are members of a research collaboration.

(2) Proposals

Upon approval of the Secretary the program consortium shall solicit proposals for awards under this subsection in such manner and at such time as the Secretary may prescribe, in consultation with the program consortium.

(3) Oversight

(A) In general

The program consortium shall oversee the implementation of awards under this subsection, consistent with the annual plan under subsection (e), including disbursing funds and monitoring activities carried out under such awards for compliance with the terms and conditions of the awards.

(B) Effect

Nothing in subparagraph (A) shall limit the authority or responsibility of the Secretary to oversee awards, or limit the authority of the Secretary to review or revoke awards.

(g) Administrative costs

(1) In general

To compensate the program consortium for carrying out its activities under this section, the Secretary shall provide to the program consortium funds sufficient to administer the program. This compensation may include a management fee consistent with Department of Energy contracting practices and procedures.

(2) Advance

The Secretary shall advance funds to the program consortium upon selection of the consortium, which shall be deducted from amounts to be provided under paragraph (1).

(h) Audit

The Secretary shall retain an independent auditor, which shall include a review by the General Accountability Office, to determine the extent to which funds provided to the program consortium, and funds provided under awards made under subsection (f), have been expended in a manner consistent with the purposes and re-

quirements of this part. The auditor shall transmit a report (including any review by the General Accountability Office) annually to the Secretary, who shall transmit the report to Congress, along with a plan to remedy any deficiencies cited in the report.

(i) Activities by the United States Geological Survey

The Secretary of the Interior, through the United States Geological Survey, shall, where appropriate, carry out programs of long-term research to complement the programs under this section.

(j) Program review and oversight

The National Energy Technology Laboratory, on behalf of the Secretary, shall (1) issue a competitive solicitation for the program consortium, (2) evaluate, select, and award a contract or other agreement to a qualified program consortium, and (3) have primary review and oversight responsibility for the program consortium, including review and approval of research awards proposed to be made by the program consortium, to ensure that its activities are consistent with the purposes and requirements described in this part. Up to 5 percent of program funds allocated under paragraphs (1) through (3) of section 16378(d) of this title may be used for this purpose, including program direction and the establishment of a site office if determined to be necessary to carry out the purposes of this subsection.

(Pub. L. 109–58, title IX, § 999B, Aug. 8, 2005, 119 Stat. 917.)

REFERENCES IN TEXT

This part, referred to in subsec. (c)(1), was in the original ''this chapter'', and was translated as meaning ''this subtitle'', which is subtitle J (§§ 999A to 999H) of title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 916, which enacted this part, to reflect the probable intent of Congress.

§ 16373. Additional requirements for awards

(a) Demonstration projects

An application for an award under this part for a demonstration project shall describe with specificity the intended commercial use of the technology to be demonstrated.

(b) Flexibility in locating demonstration projects

Subject to the limitation in section 16371(c) of this title, a demonstration project under this part relating to an ultra-deepwater technology or an ultra-deepwater architecture may be conducted in deepwater depths.

(c) Intellectual property agreements

If an award under this part is made to a consortium (other than the program consortium), the consortium shall provide to the Secretary a signed contract agreed to by all members of the consortium describing the rights of each member to intellectual property used or developed under the award.

(d) Technology transfer

Two and one-half percent of the amount of each award made under this part shall be designated for technology transfer and outreach activities under this part.

(e) Cost sharing reduction for independent producers

In applying the cost sharing requirements under section 16352 of this title to an award under this part the Secretary may reduce or eliminate the non-Federal requirement if the Secretary determines that the reduction is necessary and appropriate considering the technological risks involved in the project.

(f) Information sharing

All results of the research administered by the program consortium shall be made available to the public consistent with Department policy and practice on information sharing and intellectual property agreements.

(Pub. L. 109–58, title IX, § 999C, Aug. 8, 2005, 119 Stat. 921.)

§ 16374. Advisory committees

(a) Ultra-Deepwater Advisory Committee

(1) Establishment

Not later than 270 days after August 8, 2005, the Secretary shall establish an advisory committee to be known as the Ultra-Deepwater Advisory Committee.

(2) Membership

The Advisory Committee under this subsection shall be composed of members appointed by the Secretary, including—

(A) individuals with extensive research experience or operational knowledge of offshore natural gas and other petroleum exploration and production;

(B) individuals broadly representative of the affected interests in ultra-deepwater natural gas and other petroleum production, including interests in environmental protection and safe operations;

(C) no individuals who are Federal employees; and

(D) no individuals who are board members, officers, or employees of the program consortium.

(3) Duties

The Advisory Committee under this subsection shall—

(A) advise the Secretary on the development and implementation of programs under this part related to ultra-deepwater natural gas and other petroleum resources; and

(B) carry out section 16372(e)(2)(B) of this title.

(4) Compensation

A member of the Advisory Committee under this subsection shall serve without compensation but shall receive travel expenses in accordance with applicable provisions under subchapter I of chapter 57 of title 5.

(b) Unconventional Resources Technology Advisory Committee

(1) Establishment

Not later than 270 days after August 8, 2005, the Secretary shall establish an advisory committee to be known as the Unconventional Resources Technology Advisory Committee.

(2) Membership

The Secretary shall endeavor to have a balanced representation of members on the Advi-

sory Committee to reflect the breadth of geographic areas of potential gas supply. The Advisory Committee under this subsection shall be composed of members appointed by the Secretary, including—

(A) a majority of members who are employees or representatives of independent producers of natural gas and other petroleum, including small producers;

(B) individuals with extensive research experience or operational knowledge of unconventional natural gas and other petroleum resource exploration and production;

(C) individuals broadly representative of the affected interests in unconventional natural gas and other petroleum resource exploration and production, including interests in environmental protection and safe operations;

(D) individuals with expertise in the various geographic areas of potential supply of unconventional onshore natural gas and other petroleum in the United States;

(E) no individuals who are Federal employees; and

(F) no individuals who are board members, officers, or employees of the program consortium.

(3) Duties

The Advisory Committee under this subsection shall—

(A) advise the Secretary on the development and implementation of activities under this part related to unconventional natural gas and other petroleum resources; and

(B) carry out section 16372(e)(2)(B) of this title.

(4) Compensation

A member of the Advisory Committee under this subsection shall serve without compensation but shall receive travel expenses in accordance with applicable provisions under subchapter I of chapter 57 of title 5.

(c) Prohibition

No advisory committee established under this section shall make recommendations on funding awards to particular consortia or other entities, or for specific projects.

(Pub. L. 109–58, title IX, § 999D, Aug. 8, 2005, 119 Stat. 922.)

§ 16375. Limits on participation

An entity shall be eligible to receive an award under this part only if the Secretary finds—

(1) that the entity's participation in the program under this part would be in the economic interest of the United States; and

(2) that either—

(A) the entity is a United States-owned entity organized under the laws of the United States; or

(B) the entity is organized under the laws of the United States and has a parent entity organized under the laws of a country that affords—

(i) to United States-owned entities opportunities, comparable to those afforded to any other entity, to participate in any cooperative research venture similar to those authorized under this part;

(ii) to United States-owned entities local investment opportunities comparable to those afforded to any other entity; and

(iii) adequate and effective protection for the intellectual property rights of United States-owned entities.

(Pub. L. 109–58, title IX, § 999E, Aug. 8, 2005, 119 Stat. 923.)

§ 16376. Sunset

The authority provided by this part shall terminate on September 30, 2014.

(Pub. L. 109–58, title IX, § 999F, Aug. 8, 2005, 119 Stat. 923.)

§ 16377. Definitions

In this part:

(1) Deepwater

The term ''deepwater'' means a water depth that is greater than 200 but less than 1,500 meters.

(2) Independent producer of oil or gas

(A) In general

The term ''independent producer of oil or gas'' means any person that produces oil or gas other than a person to whom subsection (c) of section 613A of title 26 does not apply by reason of paragraph (2) (relating to certain retailers) or paragraph (4) (relating to certain refiners) of section 613A(d) of such title.

(B) Rules for applying paragraphs (2) and (4) of section 613A(d)

For purposes of subparagraph (A), paragraphs (2) and (4) of section 613A(d) of title 26 shall be applied by substituting ''calendar year'' for ''taxable year'' each place it appears in such paragraphs.

(3) Program administration funds

The term ''program administration funds'' means funds used by the program consortium to administer the program under this part, but not to exceed 10 percent of the total funds allocated under paragraphs (1) through (3) of section 16378(d) of this title.

(4) Program consortium

The term ''program consortium'' means the consortium selected under section 16372(d) of this title.

(5) Program research funds

The term ''program research funds'' means funds awarded to research performers by the program consortium consistent with the annual plan.

(6) Remote or inconsequential

The term ''remote or inconsequential'' has the meaning given that term in regulations issued by the Office of Government Ethics under section 208(b)(2) of title 18.

(7) Small producer

The term ''small producer'' means an entity organized under the laws of the United States

with production levels of less than 1,000 barrels per day of oil equivalent.

(8) Ultra-deepwater

The term ''ultra-deepwater'' means a water depth that is equal to or greater than 1,500 meters.

(9) Ultra-deepwater architecture

The term ''ultra-deepwater architecture'' means the integration of technologies for the exploration for, or production of, natural gas or other petroleum resources located at ultra-deepwater depths.

(10) Ultra-deepwater technology

The term ''ultra-deepwater technology'' means a discrete technology that is specially suited to address one or more challenges associated with the exploration for, or production of, natural gas or other petroleum resources located at ultra-deepwater depths.

(11) Unconventional natural gas and other petroleum resource

The term ''unconventional natural gas and other petroleum resource'' means natural gas and other petroleum resource located onshore in an economically inaccessible geological formation, including resources of small producers.

(Pub. L. 109–58, title IX, § 999G, Aug. 8, 2005, 119 Stat. 923.)

§ 16378. Funding

(a) Oil and gas lease income

For each of fiscal years 2007 through 2017, from any Federal royalties, rents, and bonuses derived from Federal onshore and offshore oil and gas leases issued under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) and the Mineral Leasing Act (30 U.S.C. 181 et seq.) which are deposited in the Treasury, and after distribution of any such funds as described in subsection (c), $50,000,000 shall be deposited into the Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Fund (in this section referred to as the ''Fund''). For purposes of this section, the term ''royalties'' excludes proceeds from the sale of royalty production taken in kind and royalty production that is transferred under section 27(a)(3) of the Outer Continental Shelf Lands Act (43 U.S.C. 1353(a)(3)).

(b) Obligational authority

Monies in the Fund shall be available to the Secretary for obligation under this part without fiscal year limitation, to remain available until expended.

(c) Prior distributions

The distributions described in subsection (a) are those required by law—

(1) to States and to the Reclamation Fund under the Mineral Leasing Act (30 U.S.C. 191(a)); and

(2) to other funds receiving monies from Federal oil and gas leasing programs, including—

(A) any recipients pursuant to section 8(g) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(g));

(B) the Land and Water Conservation Fund, pursuant to section 460*l*–5(c) of title 16;

(C) the Historic Preservation Fund, pursuant to section 470h of title 16; and

(D) the coastal impact assistance program established under section 31 of the Outer Continental Shelf Lands Act [43 U.S.C. 1356a].

(d) Allocation

Amounts obligated from the Fund under subsection (a)(1) in each fiscal year shall be allocated as follows:

(1) 35 percent shall be for activities under section 16371(b)(1) of this title.

(2) 32.5 percent shall be for activities under section 16371(b)(2) of this title.

(3) 7.5 percent shall be for activities under section 16371(b)(3) of this title.

(4) 25 percent shall be for complementary research under section 16371(b)(4) of this title and other activities under section 16371(b) of this title to include program direction funds, overall program oversight, contract management, and the establishment and operation of a technical committee to ensure that in-house research activities funded under section 16371(b)(4) of this title are technically complementary to, and not duplicative of, research conducted under paragraphs (1), (2), and (3) of section 16371(b) of this title.

(e) Authorization of appropriations

In addition to other amounts that are made available to carry out this section, there is authorized to be appropriated to carry out this section $100,000,000 for each of fiscal years 2007 through 2016.

(f) Fund

There is hereby established in the Treasury of the United States a separate fund to be known as the ''Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Fund''.

(Pub. L. 109–58, title IX, § 999H, Aug. 8, 2005, 119 Stat. 924.)

REFERENCES IN TEXT

The Outer Continental Shelf Lands Act, referred to in subsec. (a), is act Aug. 7, 1953, ch. 345, 67 Stat. 462, as amended, which is classified generally to subchapter III (§ 1331 et seq.) of chapter 29 of Title 43, Public Lands. For complete classification of this Act to the Code, see Short Title note set out under section 1331 of Title 43 and Tables.

The Mineral Leasing Act, referred to in subsecs. (a) and (c)(1), is act Feb. 25, 1920, ch. 85, 41 Stat. 437, as amended, which is classified generally to chapter 3A (§ 181 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 181 of Title 30 and Tables.

SUBCHAPTER X—DEPARTMENT OF ENERGY MANAGEMENT

§ 16391. Improved technology transfer of energy technologies

(a) Technology Transfer Coordinator

The Secretary shall appoint a Technology Transfer Coordinator to be the principal advisor

to the Secretary on all matters relating to technology transfer and commercialization.

(b) Qualifications

The Coordinator shall be an individual who, by reason of professional background and experience, is specially qualified to advise the Secretary on matters pertaining to technology transfer at the Department.

(c) Duties of the Coordinator

The Coordinator shall oversee—

(1) the activities of the Technology Transfer Working Group established under subsection (d);

(2) the expenditure of funds allocated for technology transfer within the Department;

(3) the activities of each technology partnership ombudsman appointed under section 7261c of this title; and

(4) efforts to engage private sector entities, including venture capital companies.

(d) Technology Transfer Working Group

The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to—

(1) coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;

(2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and

(3) develop and disseminate to the public and prospective technology partners information about opportunities and procedures for technology transfer with the Department, including opportunities and procedures related to alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters.

(e) Technology Commercialization Fund

The Secretary shall establish an Energy Technology Commercialization Fund, using 0.9 percent of the amount made available to the Department for applied energy research, development, demonstration, and commercial application for each fiscal year, to be used to provide matching funds with private partners to promote promising energy technologies for commercial purposes.

(f) Technology transfer responsibility

Nothing in this section affects the technology transfer responsibilities of Federal employees under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.).

(g) Planning and reporting

(1) In general

Not later than 180 days after August 8, 2005, the Secretary shall submit to Congress a technology transfer execution plan.

(2) Updates

Each year after the submission of the plan under paragraph (1), the Secretary shall submit to Congress an updated execution plan and reports that describe progress toward meeting goals set forth in the execution plan and the funds expended under subsection (e).

(Pub. L. 109–58, title X, § 1001, Aug. 8, 2005, 119 Stat. 926.)

REFERENCES IN TEXT

The Stevenson-Wydler Technology Innovation Act of 1980, referred to in subsec. (f), is Pub. L. 96–480, Oct. 21, 1980, 94 Stat. 2311, as amended, which is classified generally to chapter 63 (§ 3701 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 3701 of Title 15 and Tables.

§ 16392. Technology Infrastructure Program

(a) Definitions

In this section:

(1) Program

The term ''Program'' means the Technology Infrastructure Program established under subsection (b).

(2) Technology cluster

The term ''technology cluster'' means a concentration of technology-related business concerns, institutions of higher education, or nonprofit institutions, that reinforce each other's performance in the areas of technology development through formal or informal relationships.

(3) Technology-related business concern

The term ''technology-related business concern'' means a for-profit corporation, company, association, firm, partnership, or small business concern that—

(A) conducts scientific or engineering research;

(B) develops new technologies;

(C) manufactures products based on new technologies; or

(D) performs technological services.

(b) Establishment

The Secretary shall establish a Technology Infrastructure Program in accordance with this section.

(c) Purpose

The purpose of the Program shall be to improve the ability of National Laboratories and single-purpose research facilities to support departmental missions by—

(1) stimulating the development of technology clusters that can support departmental missions at the National Laboratories or single-purpose research facilities;

(2) improving the ability of National Laboratories and single-purpose research facilities to leverage and benefit from commercial research, technology, products, processes, and services; and

(3) encouraging the exchange of scientific and technological expertise between—

(A) National Laboratories or single-purpose research facilities; and

(B) entities that can support departmental missions at the National Laboratories or single-purpose research facilities, such as—

(i) institutions of higher education;

(ii) technology-related business concerns;

(iii) nonprofit institutions; and

(iv) agencies of State, tribal, or local governments.

(d) Projects

The Secretary shall authorize the director of each National Laboratory or single-purpose research facility to implement the Program at the National Laboratory or facility through one or more projects that meet the requirements of subsections (e) and (f).

(e) Program requirements

(1) In general

Each project funded under this section shall meet the requirements of this subsection.

(2) Entities

Each project shall include at least one of each of the following entities:

(A) A business.

(B) An institution of higher education.

(C) A nonprofit institution.

(D) An agency of a State, local, or tribal government.

(3) Cost-sharing

(A) In general

The costs of carrying out projects under this section shall be shared in accordance with section 16352 of this title.

(B) Sources

The calculation of costs paid by the non-Federal sources for a project shall include cash, personnel, services, equipment, and other resources expended on the project after the commencement of the project.

(C) Research and development expenses

Independent research and development expenses of Government contractors that qualify for reimbursement under section 31.205–18(e) of title 48, Code of Federal Regulations, issued pursuant to section 1303(a)(1) of title 41, may be credited towards costs paid by non-Federal sources to a project, if the expenses meet the other requirements of this section.

(4) Competitive selection

A project under this section shall be competitively selected using procedures determined by the Secretary.

(5) Accounting

Any participant that receives funds under this section may use generally accepted accounting principles for maintaining accounts, books, and records relating to the project.

(6) Duration

No Federal funds shall be made available under this section for a construction project or for any project with a duration of more than 5 years.

(f) Selection criteria

(1) Departmental missions

The Secretary shall allocate funds under this section only if the Director of the National Laboratory or single-purpose research facility managing the project determines that the project is likely to improve the ability of the National Laboratory or single-purpose research facility to achieve technical success in meeting departmental missions.

(2) Other criteria

In selecting a project to receive Federal funds, the Secretary shall consider—

(A) the potential of the project to promote the development of a commercially sustainable technology cluster following the period of investment by the Department, which will derive most of the demand for its products or services from the private sector, and which will support departmental missions at the participating National Laboratory or single-purpose research facility;

(B) the potential of the project to promote the use of commercial research, technology, products, processes, and services by the participating National Laboratory or single-purpose research facility to achieve its mission or the commercial development of technological innovations made at the participating National Laboratory or single-purpose research facility;

(C) the extent to which the project involves a wide variety and number of institutions of higher education, nonprofit institutions, and technology-related business concerns that can support the missions of the participating National Laboratory or single-purpose research facility and that will make substantive contributions to achieving the goals of the project;

(D) the extent to which the project focuses on promoting the development of technology-related business concerns that are small businesses or involves such small businesses substantively in the project; and

(E) such other criteria as the Secretary determines to be appropriate.

(g) Allocation

In allocating funds for projects approved under this section, the Secretary shall provide—

(1) the Federal share of the project costs; and

(2) additional funds to the National Laboratory or single-purpose research facility managing the project to permit the National Laboratory or single-purpose research facility to carry out activities relating to the project, and to coordinate the activities with the project.

(h) Report to Congress

Not later than July 1, 2008, the Secretary shall submit to Congress a report on whether the Program should be continued and, if so, how the program should be managed.

(i) Authorization of appropriations

There are authorized to be appropriated to the Secretary for activities under this section $10,000,000 for each of fiscal years 2006 through 2008.

(Pub. L. 109–58, title X, § 1002, Aug. 8, 2005, 119 Stat. 927.)

CODIFICATION

In subsec. (e)(3)(C), ''section 1303(a)(1) of title 41'' substituted for ''section 25(c)(1) of the Office of Federal

Procurement Policy Act (41 U.S.C. 421(c)(1))'' on authority of Pub. L. 111–350, § 6(c), Jan. 4, 2011, 124 Stat. 3854, which Act enacted Title 41, Public Contracts.

§ 16393. Small business advocacy and assistance

(a) Small business advocate

The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to designate a small business advocate to—

(1) increase the participation of small business concerns, including socially and economically disadvantaged small business concerns (as defined in section 637(a)(4) of title 15), in procurement, collaborative research, technology licensing, and technology transfer activities conducted by the National Laboratory or single-purpose research facility;

(2) report to the Director of the National Laboratory or single-purpose research facility on the actual participation of small business concerns in procurement and collaborative research along with recommendations, if appropriate, on how to improve participation;

(3) make available to small business concerns training, mentoring, and information on how to participate in procurement and collaborative research activities;

(4) increase the awareness inside the National Laboratory or single-purpose research facility of the capabilities and opportunities presented by small business concerns; and

(5) establish guidelines for the program under subsection (b) and report on the effectiveness of the program to the Director of the National Laboratory or single-purpose research facility.

(b) Establishment of small business assistance program

The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to establish a program to provide small business concerns with—

(1) assistance directed at making the small business concerns more effective and efficient subcontractors or suppliers to the National Laboratory or single-purpose research facilities; or

(2) general technical assistance, the cost of which shall not exceed $10,000 per instance of assistance, to improve the products or services of the small business concern.

(c) Use of funds

None of the funds expended under subsection (b) may be used for direct grants to small business concerns.

(d) Authorization of appropriations

There is authorized to be appropriated to the Secretary for activities under this section $5,000,000 for each of fiscal years 2006 through 2008.

(Pub. L. 109–58, title X, § 1003, Aug. 8, 2005, 119 Stat. 929.)

§ 16394. Outreach

The Secretary shall ensure that each program authorized by this Act or an amendment made by this Act includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, institutions of higher education, facility planners and managers, State and local governments, and other entities.

(Pub. L. 109–58, title X, § 1004, Aug. 8, 2005, 119 Stat. 930.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

§ 16395. Relationship to other laws

Except as otherwise provided in this Act or an amendment made by this Act, the Secretary shall carry out the research, development, demonstration, and commercial application programs, projects, and activities authorized by this Act or an amendment made by this Act in accordance with the applicable provisions of—

(1) the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(2) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.);

(3) the Energy Policy Act of 1992 (42 U.S.C. 13201 et seq.);

(4) the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.);

(5) chapter 18 of title 35 (commonly known as the ''Bayh-Dole Act''); and

(6) any other Act under which the Secretary is authorized to carry out the programs, projects, and activities.

(Pub. L. 109–58, title X, § 1005, Aug. 8, 2005, 119 Stat. 930.)

REFERENCES IN TEXT

This Act, referred to in text, is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594, as amended, known as the Energy Policy Act of 2005, which enacted this chapter and enacted, amended, and repealed 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 15801 of this title and Tables.

The Atomic Energy Act of 1954, referred to in par. (1), is act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 921, and amended, which is classified generally to chapter 23 (§ 2011 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

The Federal Nonnuclear Energy Research and Development Act of 1974, referred to in par. (2), is Pub. L. 93–577, Dec. 31, 1974, 88 Stat. 1878, as amended, which is classified generally to chapter 74 (§ 5901 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 5901 of this title and Tables.

The Energy Policy Act of 1992, referred to in par. (3), is Pub. L. 102–486, Oct. 24, 1992, 106 Stat. 2776, as amended. For complete classification of this Act to the Code, see Short Title note set out under section 13201 of this title and Tables.

The Stevenson-Wydler Technology Innovation Act of 1980, referred to in par. (4), is Pub. L. 96–480, Oct. 21, 1980, 94 Stat. 2311, as amended, which is classified gen-

erally to chapter 63 (§ 3701 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 3701 of Title 15 and Tables.

§ 16396. Prizes for achievement in grand challenges of science and technology

(a) Authority

The Secretary may carry out a program to award cash prizes in recognition of breakthrough achievements in research, development, demonstration, and commercial application that have the potential for application to the performance of the mission of the Department.

(b) Competition requirements

The program under subsection (a) may include prizes for the achievement of goals articulated by the Secretary in a specific area through a widely advertised solicitation of submission of results for research, development, demonstration, or commercial application projects.

(c) Prizes for processes and technologies to reduce dependence on imported oil

The Secretary, in cooperation with the Freedom Prize Foundation, shall support a program of awarding prizes, to be known as Freedom Prizes, to encourage and recognize the development and deployment of processes and technologies that serve to reduce the dependence of the United States on imported oil.

(d) Relationship to other authority

The program under subsection (a) may be carried out in conjunction with or in addition to the exercise of any other authority of the Secretary to acquire, support, or stimulate research, development, demonstration, or commercial application projects.

(e) Authorization of appropriations

There are authorized to be appropriated—

(1) $10,000,000 to carry out the program under subsection (a); and

(2) $5,000,000 to carry out the program under subsection (c).

(f) H-prize

(1) Prize authority

(A) In general

As part of the program under this section, the Secretary shall carry out a program to competitively award cash prizes in conformity with this subsection to advance the research, development, demonstration, and commercial application of hydrogen energy technologies.

(B) Advertising and solicitation of competitors

(i) Advertising

The Secretary shall widely advertise prize competitions under this subsection to encourage broad participation, including by individuals, universities (including historically Black colleges and universities and other minority serving institutions), and large and small businesses (including businesses owned or controlled by socially and economically disadvantaged persons).

(ii) Announcement through Federal Register notice

The Secretary shall announce each prize competition under this subsection by publishing a notice in the Federal Register. This notice shall include essential elements of the competition such as the subject of the competition, the duration of the competition, the eligibility requirements for participation in the competition, the process for participants to register for the competition, the amount of the prize, and the criteria for awarding the prize.

(C) Administering the competitions

The Secretary shall enter into an agreement with a private, nonprofit entity to administer the prize competitions under this subsection, subject to the provisions of this subsection (in this subsection referred to as the ''administering entity''). The duties of the administering entity under the agreement shall include—

(i) advertising prize competitions under this subsection and their results;

(ii) raising funds from private entities and individuals to pay for administrative costs and to contribute to cash prizes, including funds provided in exchange for the right to name a prize awarded under this subsection;

(iii) developing, in consultation with and subject to the final approval of the Secretary, the criteria for selecting winners in prize competitions under this subsection, based on goals provided by the Secretary;

(iv) determining, in consultation with the Secretary, the appropriate amount and funding sources for each prize to be awarded under this subsection, subject to the final approval of the Secretary with respect to Federal funding;

(v) providing advice and consultation to the Secretary on the selection of judges in accordance with paragraph (2)(D), using criteria developed in consultation with and subject to the final approval of the Secretary; and

(vi) protecting against the administering entity's unauthorized use or disclosure of a registered participant's trade secrets and confidential business information. Any information properly identified as trade secrets or confidential business information that is submitted by a participant as part of a competitive program under this subsection may be withheld from public disclosure.

(D) Funding sources

Prizes under this subsection shall consist of Federal appropriated funds and any funds provided by the administering entity (including funds raised pursuant to subparagraph (C)(ii)) for such cash prize programs. The Secretary may accept funds from other Federal agencies for such cash prizes and, notwithstanding section 3302(b) of title 31, may use such funds for the cash prize pro-

gram under this subsection. Other than publication of the names of prize sponsors, the Secretary may not give any special consideration to any private sector entity or individual in return for a donation to the Secretary or administering entity.

(E) Announcement of prizes

The Secretary may not issue a notice required by subparagraph (B)(ii) until all the funds needed to pay out the announced amount of the prize have been appropriated or committed in writing by the administering entity. The Secretary may increase the amount of a prize after an initial announcement is made under subparagraph (B)(ii) if—

(i) notice of the increase is provided in the same manner as the initial notice of the prize; and

(ii) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by the administering entity.

(F) Sunset

The authority to announce prize competitions under this subsection shall terminate on September 30, 2018.

(2) Prize categories

(A) Categories

The Secretary shall establish prizes under this subsection for—

(i) advancements in technologies, components, or systems related to—

(I) hydrogen production;

(II) hydrogen storage;

(III) hydrogen distribution; and

(IV) hydrogen utilization;

(ii) prototypes of hydrogen-powered vehicles or other hydrogen-based products that best meet or exceed objective performance criteria, such as completion of a race over a certain distance or terrain or generation of energy at certain levels of efficiency; and

(iii) transformational changes in technologies for the distribution or production of hydrogen that meet or exceed far-reaching objective criteria, which shall include minimal carbon emissions and which may include cost criteria designed to facilitate the eventual market success of a winning technology.

(B) Awards

(i) Advancements

To the extent permitted under paragraph (1)(E), the prizes authorized under subparagraph (A)(i) shall be awarded biennially to the most significant advance made in each of the four subcategories described in subclauses (I) through (IV) of subparagraph (A)(i) since the submission deadline of the previous prize competition in the same category under subparagraph (A)(i) or December 19, 2007, whichever is later, unless no such advance is significant enough to merit an award. No one such prize may exceed $1,000,000. If less than $4,000,000 is available for a prize competition under subparagraph (A)(i), the Secretary may omit one or more subcategories, reduce the amount of the prizes, or not hold a prize competition.

(ii) Prototypes

To the extent permitted under paragraph (1)(E), prizes authorized under subparagraph (A)(ii) shall be awarded biennially in alternate years from the prizes authorized under subparagraph (A)(i). The Secretary is authorized to award up to one prize in this category in each 2-year period. No such prize may exceed $4,000,000. If no registered participants meet the objective performance criteria established pursuant to subparagraph (C) for a competition under this clause, the Secretary shall not award a prize.

(iii) Transformational technologies

To the extent permitted under paragraph (1)(E), the Secretary shall announce one prize competition authorized under subparagraph (A)(iii) as soon after December 19, 2007, as is practicable. A prize offered under this clause shall be not less than $10,000,000, paid to the winner in a lump sum, and an additional amount paid to the winner as a match for each dollar of private funding raised by the winner for the hydrogen technology beginning on the date the winner was named. The match shall be provided for 3 years after the date the prize winner is named or until the full amount of the prize has been paid out, whichever occurs first. A prize winner may elect to have the match amount paid to another entity that is continuing the development of the winning technology. The Secretary shall announce the rules for receiving the match in the notice required by paragraph (1)(B)(ii). The Secretary shall award a prize under this clause only when a registered participant has met the objective criteria established for the prize pursuant to subparagraph (C) and announced pursuant to paragraph (1)(B)(ii). Not more than $10,000,000 in Federal funds may be used for the prize award under this clause. The administering entity shall seek to raise $40,000,000 toward the matching award under this clause.

(C) Criteria

In establishing the criteria required by this subsection, the Secretary—

(i) shall consult with the Department's Hydrogen Technical and Fuel Cell Advisory Committee;

(ii) shall consult with other Federal agencies, including the National Science Foundation; and

(iii) may consult with other experts such as private organizations, including professional societies, industry associations, and the National Academy of Sciences and the National Academy of Engineering.

(D) Judges

For each prize competition under this subsection, the Secretary in consultation with

the administering entity shall assemble a panel of qualified judges to select the winner or winners on the basis of the criteria established under subparagraph (C). Judges for each prize competition shall include individuals from outside the Department, including from the private sector. A judge, spouse, minor children, and members of the judge's household may not—

(i) have personal or financial interests in, or be an employee, officer, director, or agent of, any entity that is a registered participant in the prize competition for which he or she will serve as a judge; or

(ii) have a familial or financial relationship with an individual who is a registered participant in the prize competition for which he or she will serve as a judge.

(3) Eligibility

To be eligible to win a prize under this subsection, an individual or entity—

(A) shall have complied with all the requirements in accordance with the Federal Register notice required under paragraph (1)(B)(ii);

(B) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States; and

(C) shall not be a Federal entity, a Federal employee acting within the scope of his employment, or an employee of a national laboratory acting within the scope of his employment.

(4) Intellectual property

The Federal Government shall not, by virtue of offering or awarding a prize under this subsection, be entitled to any intellectual property rights derived as a consequence of, or direct relation to, the participation by a registered participant in a competition authorized by this subsection. This paragraph shall not be construed to prevent the Federal Government from negotiating a license for the use of intellectual property developed for a prize competition under this subsection.

(5) Liability

(A) Waiver of liability

The Secretary may require registered participants to waive claims against the Federal Government and the administering entity (except claims for willful misconduct) for any injury, death, damage, or loss of property, revenue, or profits arising from the registered participants' participation in a competition under this subsection. The Secretary shall give notice of any waiver required under this subparagraph in the notice required by paragraph (1)(B)(ii). The Secretary may not require a registered participant to waive claims against the administering entity arising out of the unauthorized use or disclosure by the administering entity of the registered participant's trade secrets or confidential business information.

(B) Liability insurance

(i) Requirements

Registered participants in a prize competition under this subsection shall be required to obtain liability insurance or demonstrate financial responsibility, in amounts determined by the Secretary, for claims by—

(I) a third party for death, bodily injury, or property damage or loss resulting from an activity carried out in connection with participation in a competition under this subsection; and

(II) the Federal Government for damage or loss to Government property resulting from such an activity.

(ii) Federal Government insured

The Federal Government shall be named as an additional insured under a registered participant's insurance policy required under clause (i)(I), and registered participants shall be required to agree to indemnify the Federal Government against third party claims for damages arising from or related to competition activities under this subsection.

(6) Report to Congress

Not later than 60 days after the awarding of the first prize under this subsection, and annually thereafter, the Secretary shall transmit to the Congress a report that—

(A) identifies each award recipient;

(B) describes the technologies developed by each award recipient; and

(C) specifies actions being taken toward commercial application of all technologies with respect to which a prize has been awarded under this subsection.

(7) Authorization of appropriations

(A) In general

(i) Awards

There are authorized to be appropriated to the Secretary for the period encompassing fiscal years 2008 through 2017 for carrying out this subsection—

(I) $20,000,000 for awards described in paragraph (2)(A)(i);

(II) $20,000,000 for awards described in paragraph (2)(A)(ii); and

(III) $10,000,000 for the award described in paragraph (2)(A)(iii).

(ii) Administration

In addition to the amounts authorized in clause (i), there are authorized to be appropriated to the Secretary for each of fiscal years 2008 and 2009 $2,000,000 for the administrative costs of carrying out this subsection.

(B) Carryover of funds

Funds appropriated for prize awards under this subsection shall remain available until expended, and may be transferred, reprogrammed, or expended for other purposes only after the expiration of 10 fiscal years after the fiscal year for which the funds were originally appropriated. No provision in this

subsection permits obligation or payment of funds in violation of section 1341 of title 31 (commonly referred to as the Anti-Deficiency Act).

(8) Nonsubstitution

The programs created under this subsection shall not be considered a substitute for Federal research and development programs.

(Pub. L. 109–58, title X, § 1008, Aug. 8, 2005, 119 Stat. 933; Pub. L. 110–140, title VI, § 654, Dec. 19, 2007, 121 Stat. 1695.)

AMENDMENTS

2007—Subsec. (f). Pub. L. 110–140 added subsec. (f).

EFFECTIVE DATE OF 2007 AMENDMENT

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

SUBCHAPTER XI—PERSONNEL AND TRAINING

§ 16411. Workforce trends and traineeship grants

(a) Definitions

In this section:

(1) Energy technology industry

The term ''energy technology industry'' includes—

(A) a renewable energy industry;

(B) a company that develops or commercializes a device to increase energy efficiency;

(C) the oil and gas industry;

(D) the nuclear power industry;

(E) the coal industry;

(F) the electric utility industry; and

(G) any other industrial sector, as the Secretary determines to be appropriate.

(2) Skilled technical personnel

The term ''skilled technical personnel'' means—

(A) journey- and apprentice-level workers who are enrolled in, or have completed, a federally-recognized or State-recognized apprenticeship program; and

(B) other skilled workers in energy technology industries, as determined by the Secretary.

(b) Workforce trends

(1) Monitoring

The Secretary, in consultation with, and using data collected by, the Secretary of Labor, shall monitor trends in the workforce of—

(A) skilled technical personnel that support energy technology industries; and

(B) electric power and transmission engineers.

(2) Report on trends

Not later than 1 year after August 8, 2005, the Secretary shall submit to Congress a report on current trends under paragraph (1), with recommendations (as appropriate) to meet the future labor requirements for the energy technology industries.

(3) Report on shortage

As soon as practicable after the date on which the Secretary identifies or predicts a significant national shortage of skilled technical personnel in one or more energy technology industries, the Secretary shall submit to Congress a report describing the shortage.

(c) Traineeship grants for skilled technical personnel

The Secretary, in consultation with the Secretary of Labor, may establish programs in the appropriate offices of the Department under which the Secretary provides grants to enhance training (including distance learning) for any workforce category for which a shortage is identified or predicted under subsection (b)(2).

(d) Authorization of appropriations

There is authorized to be appropriated to carry out this section $20,000,000 for each of fiscal years 2006 through 2008.

(Pub. L. 109–58, title XI, § 1101, Aug. 8, 2005, 119 Stat. 937.)

§ 16412. Training guidelines for nonnuclear electric energy industry personnel

(a) In general

The Secretary of Labor, in consultation with the Secretary and in conjunction with the electric industry and recognized employee representatives, shall develop model personnel training guidelines to support the reliability and safety of the nonnuclear electric system.

(b) Requirements

The training guidelines under subsection (a) shall, at a minimum—

(1) include training requirements for workers engaged in the construction, operation, inspection, or maintenance of nonnuclear electric generation, transmission, or distribution systems, including requirements relating to—

(A) competency;

(B) certification; and

(C) assessment, including—

(i) initial and continuous evaluation of workers;

(ii) recertification procedures; and

(iii) methods for examining or testing the qualification of an individual who performs a covered task; and

(2) consolidate training guidelines in existence on the date on which the guidelines under subsection (a) are developed relating to the construction, operation, maintenance, and inspection of nonnuclear electric generation, transmission, and distribution facilities, such as guidelines established by the National Electric Safety Code and other industry consensus standards.

(Pub. L. 109–58, title XI, § 1103, Aug. 8, 2005, 119 Stat. 939.)

§ 16413. National Center for Energy Management and Building Technologies

The Secretary shall support the ongoing activities of and explore opportunities for expansion of the National Center for Energy Manage-

ment and Building Technologies to carry out research, education, and training activities to facilitate the improvement of energy efficiency, indoor environmental quality, and security of industrial, commercial, residential, and public buildings.

(Pub. L. 109–58, title XI, § 1104, Aug. 8, 2005, 119 Stat. 939.)

§ 16414. National Power Plant Operations Technology and Educational Center

(a) Establishment

The Secretary shall support the establishment of a National Power Plant Operations Technology and Education Center (referred to in this section as the ''Center''), to address the need for training and educating certified operators and technicians for the electric power industry.

(b) Location of Center

The Secretary shall support the establishment of the Center at an institution of higher education that has—

(1) expertise in providing degree programs in electric power generation, transmission, and distribution technologies;

(2) expertise in providing onsite and Internet-based training; and

(3) demonstrated responsiveness to workforce and training requirements in the electric power industry.

(c) Training and continuing education

(1) In general

The Center shall provide training and continuing education in electric power generation, transmission, and distribution technologies and operations.

(2) Location

The Center shall carry out training and education activities under paragraph (1)—

(A) at the Center; and

(B) through Internet-based information technologies that allow for learning at remote sites.

(Pub. L. 109–58, title XI, § 1106, Aug. 8, 2005, 119 Stat. 940.)

SUBCHAPTER XII—ELECTRICITY

PART A—TRANSMISSION INFRASTRUCTURE MODERNIZATION

§ 16421. Third-party finance

(a) Existing facilities

The Secretary, acting through the Administrator of the Western Area Power Administration (hereinafter in this section referred to as ''WAPA''), or through the Administrator of the Southwestern Power Administration (hereinafter in this section referred to as ''SWPA''), or both, may design, develop, construct, operate, maintain, or own, or participate with other entities in designing, developing, constructing, operating, maintaining, or owning, an electric power transmission facility and related facilities (''Project'') needed to upgrade existing transmission facilities owned by SWPA or WAPA if the Secretary, in consultation with the applicable Administrator, determines that the proposed Project—

(1)(A) is located in a national interest electric transmission corridor designated under section 216(a) of the Federal Power Act [16 U.S.C. 824p(a)] and will reduce congestion of electric transmission in interstate commerce; or

(B) is necessary to accommodate an actual or projected increase in demand for electric transmission capacity;

(2) is consistent with—

(A) transmission needs identified, in a transmission expansion plan or otherwise, by the appropriate Transmission Organization (as defined in the Federal Power Act [16 U.S.C. 791a et seq.]), if any, or approved regional reliability organization; and

(B) efficient and reliable operation of the transmission grid; and

(3) would be operated in conformance with prudent utility practice.

(b) New facilities

The Secretary, acting through WAPA or SWPA, or both, may design, develop, construct, operate, maintain, or own, or participate with other entities in designing, developing, constructing, operating, maintaining, or owning, a new electric power transmission facility and related facilities (''Project'') located within any State in which WAPA or SWPA operates if the Secretary, in consultation with the applicable Administrator, determines that the proposed Project—

(1)(A) is located in an area designated under section 216(a) of the Federal Power Act [16 U.S.C. 824p(a)] and will reduce congestion of electric transmission in interstate commerce; or

(B) is necessary to accommodate an actual or projected increase in demand for electric transmission capacity;

(2) is consistent with—

(A) transmission needs identified, in a transmission expansion plan or otherwise, by the appropriate Transmission Organization (as defined in the Federal Power Act [16 U.S.C. 791a et seq.]) if any, or approved regional reliability organization; and

(B) efficient and reliable operation of the transmission grid;

(3) will be operated in conformance with prudent utility practice;

(4) will be operated by, or in conformance with the rules of, the appropriate (A) Transmission Organization, if any, or (B) if such an organization does not exist, regional reliability organization; and

(5) will not duplicate the functions of existing transmission facilities or proposed facilities which are the subject of ongoing or approved siting and related permitting proceedings.

(c) Other funds

(1) In general

In carrying out a Project under subsection (a) or (b), the Secretary may accept and use funds contributed by another entity for the purpose of carrying out the Project.

(2) Availability

The contributed funds shall be available for expenditure for the purpose of carrying out the Project—

(A) without fiscal year limitation; and

(B) as if the funds had been appropriated specifically for that Project.

(3) Allocation of costs

In carrying out a Project under subsection (a) or (b), any costs of the Project not paid for by contributions from another entity shall be collected through rates charged to customers using the new transmission capability provided by the Project and allocated equitably among these project beneficiaries using the new transmission capability.

(d) Relationship to other laws

Nothing in this section affects any requirement of—

(1) any Federal environmental law, including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(2) any Federal or State law relating to the siting of energy facilities; or

(3) any existing authorizing statutes.

(e) Savings clause

Nothing in this section shall constrain or restrict an Administrator in the utilization of other authority delegated to the Administrator of WAPA or SWPA.

(f) Secretarial determinations

Any determination made pursuant to subsections[1] (a) or (b) shall be based on findings by the Secretary using the best available data.

(g) Maximum funding amount

The Secretary shall not accept and use more than $100,000,000 under subsection (c)(1) for the period encompassing fiscal years 2006 through 2015.

(Pub. L. 109–58, title XII, § 1222, Aug. 8, 2005, 119 Stat. 952.)

REFERENCES IN TEXT

The Federal Power Act, referred to in subsecs. (a)(2)(A) and (b)(2)(A), is act June 10, 1920, ch. 285, 41 Stat. 1063, as amended, which is classified generally to chapter 12 (§ 791a et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see section 791a of Title 16 and Tables.

The National Environmental Policy Act of 1969, referred to in subsec. (d)(1), is Pub. L. 91–190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified generally to chapter 55 (§ 4321 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 4321 of this title and Tables.

SHORT TITLE

For short title of title XII of Pub. L. 109–58, which enacted this subchapter, as the ''Electricity Modernization Act of 2005'', see section 1201 of Pub. L. 109–58, set out as a note under section 15801 of this title.

§ 16421a. Western Area Power Administration borrowing authority

(a) Definitions

In this section:

(1) Administrator

The term ''Administrator'' means the Administrator of the Western Area Power Administration.

(2) Secretary

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

(b) Authority

(1) In general

Notwithstanding any other provision of law, subject to paragraphs (2) through (5)—

(A) the Western Area Power Administration may borrow funds from the Treasury; and

(B) the Secretary shall, without further appropriation and without fiscal year limitation, loan to the Western Area Power Administration, on such terms as may be fixed by the Administrator and the Secretary, such sums (not to exceed, in the aggregate (including deferred interest), $3,250,000,000 in outstanding repayable balances at any one time) as, in the judgment of the Administrator, are from time to time required for the purpose of—

(i) constructing, financing, facilitating, planning, operating, maintaining, or studying construction of new or upgraded electric power transmission lines and related facilities with at least one terminus within the area served by the Western Area Power Administration; and

(ii) delivering or facilitating the delivery of power generated by renewable energy resources constructed or reasonably expected to be constructed after February 17, 2009.

(2) Interest

The rate of interest to be charged in connection with any loan made pursuant to this subsection shall be fixed by the Secretary, taking into consideration market yields on outstanding marketable obligations of the United States of comparable maturities as of the date of the loan.

(3) Refinancing

The Western Area Power Administration may refinance loans taken pursuant to this section within the Treasury.

(4) Participation

The Administrator may permit other entities to participate in the financing, construction and ownership projects financed under this section.

(5) Congressional review of disbursement

Effective upon February 17, 2009, the Administrator shall have the authority to have utilized $1,750,000,000 at any one time. If the Administrator seeks to borrow funds above $1,750,000,000, the funds will be disbursed unless there is enacted, within 90 calendar days of the first such request, a joint resolution that rescinds the remainder of the balance of the borrowing authority provided in this section.

[1] So in original. Probably should be singular.

(c) Transmission line and related facility projects

(1) In general

For repayment purposes, each transmission line and related facility project in which the Western Area Power Administration participates pursuant to this section shall be treated as separate and distinct from—

(A) each other such project; and

(B) all other Western Area Power Administration power and transmission facilities.

(2) Proceeds

The Western Area Power Administration shall apply the proceeds from the use of the transmission capacity from an individual project under this section to the repayment of the principal and interest of the loan from the Treasury attributable to that project, after reserving such funds as the Western Area Power Administration determines are necessary—

(A) to pay for any ancillary services that are provided; and

(B) to meet the costs of operating and maintaining the new project from which the revenues are derived.

(3) Source of revenue

Revenue from the use of projects under this section shall be the only source of revenue for—

(A) repayment of the associated loan for the project; and

(B) payment of expenses for ancillary services and operation and maintenance.

(4) Limitation on authority

Nothing in this section confers on the Administrator any additional authority or obligation to provide ancillary services to users of transmission facilities developed under this section.

(5) Treatment of certain revenues

Revenue from ancillary services provided by existing Federal power systems to users of transmission projects funded pursuant to this section shall be treated as revenue to the existing power system that provided the ancillary services.

(d) Certification

(1) In general

For each project in which the Western Area Power Administration participates pursuant to this section, the Administrator shall certify, prior to committing funds for any such project, that—

(A) the project is in the public interest;

(B) the project will not adversely impact system reliability or operations, or other statutory obligations; and

(C) it is reasonable to expect that the proceeds from the project shall be adequate to make repayment of the loan.

(2) Forgiveness of balances

(A) In general

If, at the end of the useful life of a project, there is a remaining balance owed to the Treasury under this section, the balance shall be forgiven.

(B) Unconstructed projects

Funds expended to study projects that are considered pursuant to this section but that are not constructed shall be forgiven.

(C) Notification

The Administrator shall notify the Secretary of such amounts as are to be forgiven under this paragraph.

(e) Public processes

(1) Policies and practices

Prior to requesting any loans under this section, the Administrator shall use a public process to develop practices and policies that implement the authority granted by this section.

(2) Requests for interest

In the course of selecting potential projects to be funded under this section, the Administrator shall seek Requests For Interest from entities interested in identifying potential projects through one or more notices published in the Federal Register.

(Pub. L. 98–381, title III, § 301, as added Pub. L. 111–5, div. A, title IV, § 402, Feb. 17, 2009, 123 Stat. 141.)

CODIFICATION

Section was enacted as part of the Hoover Power Plant Act of 1984, and not as part of the Electricity Modernization Act of 2005, which comprises this subchapter, or the Energy Policy Act of 2005, which comprises this chapter.

§ 16422. Advanced transmission technologies

(a) Definition of advanced transmission technology

In this section, the term ''advanced transmission technology'' means a technology that increases the capacity, efficiency, or reliability of an existing or new transmission facility, including—

(1) high-temperature lines (including superconducting cables);

(2) underground cables;

(3) advanced conductor technology (including advanced composite conductors, high-temperature low-sag conductors, and fiber optic temperature sensing conductors);

(4) high-capacity ceramic electric wire, connectors, and insulators;

(5) optimized transmission line configurations (including multiple phased transmission lines);

(6) modular equipment;

(7) wireless power transmission;

(8) ultra-high voltage lines;

(9) high-voltage DC technology;

(10) flexible AC transmission systems;

(11) energy storage devices (including pumped hydro, compressed air, superconducting magnetic energy storage, flywheels, and batteries);

(12) controllable load;

(13) distributed generation (including PV, fuel cells, and microturbines);

(14) enhanced power device monitoring;

(15) direct system state sensors;

(16) fiber optic technologies;

(17) power electronics and related software (including real time monitoring and analytical software);

(18) mobile transformers and mobile substations; and

(19) any other technologies the Commission considers appropriate.

(b) Authority

In carrying out the Federal Power Act (16 U.S.C. 791a et seq.) and the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.), the Commission shall encourage, as appropriate, the deployment of advanced transmission technologies.

(Pub. L. 109–58, title XII, § 1223, Aug. 8, 2005, 119 Stat. 953.)

REFERENCES IN TEXT

The Federal Power Act, referred to in subsec. (b), is act June 10, 1920, ch. 285, 41 Stat. 1063, as amended, which is classified generally to chapter 12 (§ 791a et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see section 791a of Title 16 and Tables.

The Public Utility Regulatory Policies Act of 1978, referred to in subsec. (b), is Pub. L. 95–617, Nov. 9, 1978, 92 Stat. 3117, as amended. For complete classification of this Act to the Code, see Short Title note set out under section 2601 of Title 16, Conservation, and Tables.

§ 16423. Advanced Power System Technology Incentive Program

(a) Program

The Secretary is authorized to establish an Advanced Power System Technology Incentive Program to support the deployment of certain advanced power system technologies and to improve and protect certain critical governmental, industrial, and commercial processes. Funds provided under this section shall be used by the Secretary to make incentive payments to eligible owners or operators of advanced power system technologies to increase power generation through enhanced operational, economic, and environmental performance. Payments under this section may only be made upon receipt by the Secretary of an incentive payment application establishing an applicant as either—

(1) a qualifying advanced power system technology facility; or

(2) a qualifying security and assured power facility.

(b) Incentives

Subject to availability of funds, a payment of 1.8 cents per kilowatt-hour shall be paid to the owner or operator of a qualifying advanced power system technology facility under this section for electricity generated at such facility. An additional 0.7 cents per kilowatt-hour shall be paid to the owner or operator of a qualifying security and assured power facility for electricity generated at such facility. Any facility qualifying under this section shall be eligible for an incentive payment for up to, but not more than, the first 10,000,000 kilowatt-hours produced in any fiscal year.

(c) Eligibility

For purposes of this section:

(1) Qualifying advanced power system technology facility

The term ''qualifying advanced power system technology facility'' means a facility using an advanced fuel cell, turbine, or hybrid power system or power storage system to generate or store electric energy.

(2) Qualifying security and assured power facility

The term ''qualifying security and assured power facility'' means a qualifying advanced power system technology facility determined by the Secretary, in consultation with the Secretary of Homeland Security, to be in critical need of secure, reliable, rapidly available, high-quality power for critical governmental, industrial, or commercial applications.

(d) Authorization

There are authorized to be appropriated to the Secretary for the purposes of this section, $10,000,000 for each of the fiscal years 2006 through 2012.

(Pub. L. 109–58, title XII, § 1224, Aug. 8, 2005, 119 Stat. 954.)

PART B—TRANSMISSION OPERATION IMPROVEMENTS

§ 16431. Federal utility participation in transmission organizations

(a) Definitions

In this section:

(1) Appropriate Federal regulatory authority

The term ''appropriate Federal regulatory authority'' means—

(A) in the case of a Federal power marketing agency, the Secretary, except that the Secretary may designate the Administrator of a Federal power marketing agency to act as the appropriate Federal regulatory authority with respect to the transmission system of the Federal power marketing agency; and

(B) in the case of the Tennessee Valley Authority, the Board of Directors of the Tennessee Valley Authority.

(2) Federal power marketing agency

The term ''Federal power marketing agency'' has the meaning given the term in section 796 of title 16.

(3) Federal utility

The term ''Federal utility'' means—

(A) a Federal power marketing agency; or

(B) the Tennessee Valley Authority.

(4) Transmission Organization

The term ''Transmission Organization'' has the meaning given the term in section 796 of title 16.

(5) Transmission system

The term ''transmission system'' means an electric transmission facility owned, leased, or contracted for by the United States and operated by a Federal utility.

(b) Transfer

The appropriate Federal regulatory authority may enter into a contract, agreement, or other

arrangement transferring control and use of all or part of the transmission system of a Federal utility to a Transmission Organization.

(c) Contents

The contract, agreement, or arrangement shall include—

(1) performance standards for operation and use of the transmission system that the head of the Federal utility determines are necessary or appropriate, including standards that ensure—

(A) recovery of all of the costs and expenses of the Federal utility related to the transmission facilities that are the subject of the contract, agreement, or other arrangement;

(B) consistency with existing contracts and third-party financing arrangements; and

(C) consistency with the statutory authorities, obligations, and limitations of the Federal utility;

(2) provisions for monitoring and oversight by the Federal utility of the Transmission Organization's terms and conditions of the contract, agreement, or other arrangement, including a provision for the resolution of disputes through arbitration or other means with the Transmission Organization or with other participants, notwithstanding the obligations and limitations of any other law regarding arbitration; and

(3) a provision that allows the Federal utility to withdraw from the Transmission Organization and terminate the contract, agreement, or other arrangement in accordance with its terms.

(d) Commission

Neither this section, actions taken pursuant to this section, nor any other transaction of a Federal utility participating in a Transmission Organization shall confer on the Commission jurisdiction or authority over—

(1) the electric generation assets, electric capacity, or energy of the Federal utility that the Federal utility is authorized by law to market; or

(2) the power sales activities of the Federal utility.

(e) Existing statutory and other obligations

(1) System operation requirements

No statutory provision requiring or authorizing a Federal utility to transmit electric power or to construct, operate, or maintain the transmission system of the Federal utility prohibits a transfer of control and use of the transmission system pursuant to, and subject to, the requirements of this section.

(2) Other obligations

This subsection does not—

(A) suspend, or exempt any Federal utility from, any provision of Federal law in effect on August 8, 2005, including any requirement or direction relating to the use of the transmission system of the Federal utility, environmental protection, fish and wildlife protection, flood control, navigation, water delivery, or recreation; or

(B) authorize abrogation of any contract or treaty obligation.

(Pub. L. 109–58, title XII, § 1232, Aug. 8, 2005, 119 Stat. 956.)

CODIFICATION

Section is comprised of section 1232 of Pub. L. 109–58. Subsec. (e)(3) of section 1232 of Pub. L. 109–58 repealed section 824n of Title 16, Conservation.

§ 16432. Study on the benefits of economic dispatch

(a) Study

The Secretary, in coordination and consultation with the States, shall conduct a study on—

(1) the procedures currently used by electric utilities to perform economic dispatch;

(2) identifying possible revisions to those procedures to improve the ability of nonutility generation resources to offer their output for sale for the purpose of inclusion in economic dispatch; and

(3) the potential benefits to residential, commercial, and industrial electricity consumers nationally and in each State if economic dispatch procedures were revised to improve the ability of nonutility generation resources to offer their output for inclusion in economic dispatch.

(b) Definition

The term ''economic dispatch'' when used in this section means the operation of generation facilities to produce energy at the lowest cost to reliably serve consumers, recognizing any operational limits of generation and transmission facilities.

(c) Report to Congress and the States

Not later than 90 days after August 8, 2005, and on a yearly basis following, the Secretary shall submit a report to Congress and the States on the results of the study conducted under subsection (a), including recommendations to Congress and the States for any suggested legislative or regulatory changes.

(Pub. L. 109–58, title XII, § 1234, Aug. 8, 2005, 119 Stat. 960.)

PART C—TRANSMISSION RATE REFORM

§ 16441. Funding new interconnection and transmission upgrades

The Commission may approve a participant funding plan that allocates costs related to transmission upgrades or new generator interconnection, without regard to whether an applicant is a member of a Commission-approved Transmission Organization, if the plan results in rates that—

(1) are just and reasonable;

(2) are not unduly discriminatory or preferential; and

(3) are otherwise consistent with sections 824d and 824e of title 16.

(Pub. L. 109–58, title XII, § 1242, Aug. 8, 2005, 119 Stat. 962.)

PART D—REPEAL OF PUBLIC UTILITY HOLDING COMPANY ACT OF 1935

§ 16451. Definitions

For purposes of this part:

(1) Affiliate

The term ''affiliate'' of a company means any company, 5 percent or more of the outstanding voting securities of which are owned, controlled, or held with power to vote, directly or indirectly, by such company.

(2) Associate company

The term ''associate company'' of a company means any company in the same holding company system with such company.

(3) Commission

The term ''Commission'' means the Federal Energy Regulatory Commission.

(4) Company

The term ''company'' means a corporation, partnership, association, joint stock company, business trust, or any organized group of persons, whether incorporated or not, or a receiver, trustee, or other liquidating agent of any of the foregoing.

(5) Electric utility company

The term ''electric utility company'' means any company that owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale.

(6) Exempt wholesale generator and foreign utility company

The terms ''exempt wholesale generator'' and ''foreign utility company'' have the same meanings as in sections 79z–5a and 79z–5b of title 15, as those sections existed on the day before the effective date of this part.

(7) Gas utility company

The term ''gas utility company'' means any company that owns or operates facilities used for distribution at retail (other than the distribution only in enclosed portable containers or distribution to tenants or employees of the company operating such facilities for their own use and not for resale) of natural or manufactured gas for heat, light, or power.

(8) Holding company

(A) In general

The term ''holding company'' means—

(i) any company that directly or indirectly owns, controls, or holds, with power to vote, 10 percent or more of the outstanding voting securities of a public-utility company or of a holding company of any public-utility company; and

(ii) any person, determined by the Commission, after notice and opportunity for hearing, to exercise directly or indirectly (either alone or pursuant to an arrangement or understanding with one or more persons) such a controlling influence over the management or policies of any public-utility company or holding company as to make it necessary or appropriate for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this part upon holding companies.

(B) Exclusions

The term ''holding company'' shall not include—

(i) a bank, savings association, or trust company, or their operating subsidiaries that own, control, or hold, with the power to vote, public utility or public utility holding company securities so long as the securities are—

(I) held as collateral for a loan;

(II) held in the ordinary course of business as a fiduciary; or

(III) acquired solely for purposes of liquidation and in connection with a loan previously contracted for and owned beneficially for a period of not more than two years; or

(ii) a broker or dealer that owns, controls, or holds with the power to vote public utility or public utility holding company securities so long as the securities are—

(I) not beneficially owned by the broker or dealer and are subject to any voting instructions which may be given by customers or their assigns; or

(II) acquired within 12 months in the ordinary course of business as a broker, dealer, or underwriter with the bona fide intention of effecting distribution of the specific securities so acquired.

(9) Holding company system

The term ''holding company system'' means a holding company, together with its subsidiary companies.

(10) Jurisdictional rates

The term ''jurisdictional rates'' means rates accepted or established by the Commission for the transmission of electric energy in interstate commerce, the sale of electric energy at wholesale in interstate commerce, the transportation of natural gas in interstate commerce, and the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.

(11) Natural gas company

The term ''natural gas company'' means a person engaged in the transportation of natural gas in interstate commerce or the sale of such gas in interstate commerce for resale.

(12) Person

The term ''person'' means an individual or company.

(13) Public utility

The term ''public utility'' means any person who owns or operates facilities used for transmission of electric energy in interstate commerce or sales of electric energy at wholesale in interstate commerce.

(14) Public-utility company

The term ''public-utility company'' means an electric utility company or a gas utility company.

(15) State commission

The term ''State commission'' means any commission, board, agency, or officer, by whatever name designated, of a State, municipality, or other political subdivision of a State

that, under the laws of such State, has jurisdiction to regulate public utility companies.

(16) Subsidiary company

The term ''subsidiary company'' of a holding company means—

(A) any company, 10 percent or more of the outstanding voting securities of which are directly or indirectly owned, controlled, or held with power to vote, by such holding company; and

(B) any person, the management or policies of which the Commission, after notice and opportunity for hearing, determines to be subject to a controlling influence, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) so as to make it necessary for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this part upon subsidiary companies of holding companies.

(17) Voting security

The term ''voting security'' means any security presently entitling the owner or holder thereof to vote in the direction or management of the affairs of a company.

(Pub. L. 109–58, title XII, § 1262, Aug. 8, 2005, 119 Stat. 972.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under this section and section 15801 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

For the effective date of this part, referred to in par. (6), see Effective Date note set out below.

EFFECTIVE DATE

Pub. L. 109–58, title XII, § 1274, Aug. 8, 2005, 119 Stat. 977, provided that:

''(a) IN GENERAL.—Except for section 1272 [42 U.S.C. 16460] (relating to implementation), this subtitle [subtitle F (§§ 1261 to 1277) of title XII of Pub. L. 109–58, enacting this part, amending sections 824 and 824m of Title 16, Conservation, repealing chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacting provisions set out as a note under section 15801 of this title] shall take effect 6 months after the date of enactment of this subtitle [Aug. 8, 2005].

''(b) COMPLIANCE WITH CERTAIN RULES.—If the [Federal Energy Regulatory] Commission approves and makes effective any final rulemaking modifying the standards of conduct governing entities that own, operate, or control facilities for transmission of electricity in interstate commerce or transportation of natural gas in interstate commerce prior to the effective date of this subtitle, any action taken by a public-utility company or utility holding company to comply with the requirements of such rulemaking shall not subject such public-utility company or utility holding company to any regulatory requirement applicable to a holding company under the Public Utility Holding Company Act of 1935 (15 U.S.C. 79 et seq.).''

SHORT TITLE

For short title of subtitle F of title XII of Pub. L. 109–58, which enacted this part, as the ''Public Utility Holding Company Act of 2005'', see section 1261 of Pub. L. 109–58, set out as a note under section 15801 of this title.

§ 16452. Federal access to books and records

(a) In general

Each holding company and each associate company thereof shall maintain, and shall make available to the Commission, such books, accounts, memoranda, and other records as the Commission determines are relevant to costs incurred by a public utility or natural gas company that is an associate company of such holding company and necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(b) Affiliate companies

Each affiliate of a holding company or of any subsidiary company of a holding company shall maintain, and shall make available to the Commission, such books, accounts, memoranda, and other records with respect to any transaction with another affiliate, as the Commission determines are relevant to costs incurred by a public utility or natural gas company that is an associate company of such holding company and necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(c) Holding company systems

The Commission may examine the books, accounts, memoranda, and other records of any company in a holding company system, or any affiliate thereof, as the Commission determines are relevant to costs incurred by a public utility or natural gas company within such holding company system and necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(d) Confidentiality

No member, officer, or employee of the Commission shall divulge any fact or information that may come to his or her knowledge during the course of examination of books, accounts, memoranda, or other records as provided in this section, except as may be directed by the Commission or by a court of competent jurisdiction.

(Pub. L. 109–58, title XII, § 1264, Aug. 8, 2005, 119 Stat. 974.)

§ 16453. State access to books and records

(a) In general

Upon the written request of a State commission having jurisdiction to regulate a public-utility company in a holding company system, the holding company or any associate company or affiliate thereof, other than such public-utility company, wherever located, shall produce for inspection books, accounts, memoranda, and other records that—

(1) have been identified in reasonable detail in a proceeding before the State commission;

(2) the State commission determines are relevant to costs incurred by such public-utility company; and

(3) are necessary for the effective discharge of the responsibilities of the State commission with respect to such proceeding.

(b) Limitation

Subsection (a) does not apply to any person that is a holding company solely by reason of ownership of one or more qualifying facilities under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.).

(c) Confidentiality of information

The production of books, accounts, memoranda, and other records under subsection (a) shall be subject to such terms and conditions as may be necessary and appropriate to safeguard against unwarranted disclosure to the public of any trade secrets or sensitive commercial information.

(d) Effect on State law

Nothing in this section shall preempt applicable State law concerning the provision of books, accounts, memoranda, and other records, or in any way limit the rights of any State to obtain books, accounts, memoranda, and other records under any other Federal law, contract, or otherwise.

(e) Court jurisdiction

Any United States district court located in the State in which the State commission referred to in subsection (a) is located shall have jurisdiction to enforce compliance with this section.

(Pub. L. 109–58, title XII, § 1265, Aug. 8, 2005, 119 Stat. 975.)

REFERENCES IN TEXT

The Public Utility Regulatory Policies Act of 1978, referred to in subsec. (b), is Pub. L. 95–617, Nov. 9, 1978, 92 Stat. 3117, as amended. For complete classification of this Act to the Code, see Short Title note set out under section 2601 of Title 16, Conservation, and Tables.

§ 16454. Exemption authority

(a) Rulemaking

Not later than 90 days after the effective date of this part, the Commission shall issue a final rule to exempt from the requirements of section 16452 of this title (relating to Federal access to books and records) any person that is a holding company, solely with respect to one or more—

(1) qualifying facilities under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.);

(2) exempt wholesale generators; or

(3) foreign utility companies.

(b) Other authority

The Commission shall exempt a person or transaction from the requirements of section 16452 of this title (relating to Federal access to books and records) if, upon application or upon the motion of the Commission—

(1) the Commission finds that the books, accounts, memoranda, and other records of any person are not relevant to the jurisdictional rates of a public utility or natural gas company; or

(2) the Commission finds that any class of transactions is not relevant to the jurisdictional rates of a public utility or natural gas company.

(Pub. L. 109–58, title XII, § 1266, Aug. 8, 2005, 119 Stat. 975.)

REFERENCES IN TEXT

For the effective date of this part, referred to in subsec. (a), see Effective Date note set out under section 16451 of this title.

The Public Utility Regulatory Policies Act of 1978, referred to in subsec. (a)(1), is Pub. L. 95–617, Nov. 9, 1978, 92 Stat. 3117, as amended. For complete classification of this Act to the Code, see Short Title note set out under section 2601 of Title 16, Conservation, and Tables.

§ 16455. Affiliate transactions

(a) Commission authority unaffected

Nothing in this part shall limit the authority of the Commission under the Federal Power Act (16 U.S.C. 791a et seq.) to require that jurisdictional rates are just and reasonable, including the ability to deny or approve the pass through of costs, the prevention of cross-subsidization, and the issuance of such rules and regulations as are necessary or appropriate for the protection of utility consumers.

(b) Recovery of costs

Nothing in this part shall preclude the Commission or a State commission from exercising its jurisdiction under otherwise applicable law to determine whether a public-utility company, public utility, or natural gas company may recover in rates any costs of an activity performed by an associate company, or any costs of goods or services acquired by such public-utility company from an associate company.

(Pub. L. 109–58, title XII, § 1267, Aug. 8, 2005, 119 Stat. 976.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

The Federal Power Act, referred to in subsec. (a), is act June 10, 1920, ch. 285, 41 Stat. 1063, as amended, which is classified generally to chapter 12 (§ 791a et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see section 791a of Title 16 and Tables.

§ 16456. Applicability

Except as otherwise specifically provided in this part, no provision of this part shall apply to, or be deemed to include—

(1) the United States;

(2) a State or any political subdivision of a State;

(3) any foreign governmental authority not operating in the United States;

(4) any agency, authority, or instrumentality of any entity referred to in paragraph (1), (2), or (3); or

(5) any officer, agent, or employee of any entity referred to in paragraph (1), (2), (3), or (4) acting as such in the course of his or her official duty.

(Pub. L. 109–58, title XII, § 1268, Aug. 8, 2005, 119 Stat. 976.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16457. Effect on other regulations

Nothing in this part precludes the Commission or a State commission from exercising its jurisdiction under otherwise applicable law to protect utility customers.

(Pub. L. 109–58, title XII, § 1269, Aug. 8, 2005, 119 Stat. 976.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16458. Enforcement

The Commission shall have the same powers as set forth in sections 825e through 825p of title 16 to enforce the provisions of this part.

(Pub. L. 109–58, title XII, § 1270, Aug. 8, 2005, 119 Stat. 976.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16459. Savings provisions

(a) In general

Nothing in this part, or otherwise in the Public Utility Holding Company Act of 1935, or rules, regulations, or orders thereunder, prohibits a person from engaging in or continuing to engage in activities or transactions in which it is legally engaged or authorized to engage on August 8, 2005, if that person continues to comply with the terms (other than an expiration date or termination date) of any such authorization, whether by rule or by order.

(b) Effect on other Commission authority

Nothing in this part limits the authority of the Commission under the Federal Power Act (16 U.S.C. 791a et seq.) or the Natural Gas Act (15 U.S.C. 717 et seq.).

(c) Tax treatment

Tax treatment under section 1081[1] of title 26 as a result of transactions ordered in compliance with the Public Utility Holding Company Act of 1935 (15 U.S.C. 79 et seq.) shall not be affected in any manner due to the repeal of that Act and the enactment of the Public Utility Holding Company Act of 2005 [42 U.S.C. 16451 et seq.].

(Pub. L. 109–58, title XII, § 1271, Aug. 8, 2005, 119 Stat. 976.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, known as the Public Utility Holding Company Act of 2005, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

The Public Utility Holding Company Act of 1935, referred to in subsecs. (a) and (c), is title I of act Aug. 26, 1935, ch. 687, 49 Stat. 803, as amended, which was classified generally to chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, prior to repeal by Pub. L. 109–58, title XII, § 1263, Aug. 8, 2005, 119 Stat. 974. For complete classification of this Act to the Code, see Tables.

The Federal Power Act, referred to in subsec. (b), is act June 10, 1920, ch. 285, 41 Stat. 1063, as amended, which is classified generally to chapter 12 (§ 791a et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see section 791a of Title 16 and Tables.

The Natural Gas Act, referred to in subsec. (b), is act June 21, 1938, ch. 556, 52 Stat. 821, as amended, which is classified generally to chapter 15B (§ 717 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see section 717w of Title 15 and Tables.

Section 1081 of title 26, referred to in subsec. (c), was repealed by Pub. L. 109–135, title IV, § 402(a)(1), Dec. 21, 2005, 119 Stat. 2610.

The Public Utility Holding Company Act of 2005, referred to in subsec. (c), is subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58. See note for this part above.

§ 16460. Implementation

Not later than 4 months after August 8, 2005, the Commission shall—

(1) issue such regulations as may be necessary or appropriate to implement this part (other than section 16453 of this title, relating to State access to books and records); and

(2) submit to Congress detailed recommendations on technical and conforming amendments to Federal law necessary to carry out this part and the amendments made by this part.

(Pub. L. 109–58, title XII, § 1272, Aug. 8, 2005, 119 Stat. 977.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16461. Transfer of resources

All books and records that relate primarily to the functions transferred to the Commission

[1] See References in Text note below.

under this part shall be transferred from the Securities and Exchange Commission to the Commission.

(Pub. L. 109–58, title XII, § 1273, Aug. 8, 2005, 119 Stat. 977.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

§ 16462. Service allocation

(a) Definition of public utility

In this section, the term ''public utility'' has the meaning given the term in section 824(e) of title 16.

(b) FERC review

In the case of non-power goods or administrative or management services provided by an associate company organized specifically for the purpose of providing such goods or services to any public utility in the same holding company system, at the election of the system or a State commission having jurisdiction over the public utility, the Commission, after the effective date of this part, shall review and authorize the allocation of the costs for such goods or services to the extent relevant to that associate company.

(c) Effect on Federal and State law

Nothing in this section shall affect the authority of the Commission or a State commission under other applicable law.

(d) Rules

Not later than 4 months after August 8, 2005, the Commission shall issue rules (which rules shall be effective no earlier than the effective date of this part) to exempt from the requirements of this section any company in a holding company system whose public utility operations are confined substantially to a single State and any other class of transactions that the Commission finds is not relevant to the jurisdictional rates of a public utility.

(Pub. L. 109–58, title XII, § 1275, Aug. 8, 2005, 119 Stat. 977.)

REFERENCES IN TEXT

For the effective date of this part, referred to in subsecs. (b) and (d), see Effective Date note set out under section 16451 of this title.

§ 16463. Authorization of appropriations

There are authorized to be appropriated such funds as may be necessary to carry out this part.

(Pub. L. 109–58, title XII, § 1276, Aug. 8, 2005, 119 Stat. 978.)

REFERENCES IN TEXT

This part, referred to in text, was in the original ''this subtitle'', meaning subtitle F (§§ 1261–1277) of title XII of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 972, which enacted this part, amended sections 824 and 824m of Title 16, Conservation, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and section 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title. For complete classification of subtitle F to the Code, see Short Title note set out under section 15801 of this title and Tables.

PART E—MARKET TRANSPARENCY, ENFORCEMENT, AND CONSUMER PROTECTION

§ 16471. Consumer privacy and unfair trade practices

(a) Privacy

The Federal Trade Commission may issue rules protecting the privacy of electric consumers from the disclosure of consumer information obtained in connection with the sale or delivery of electric energy to electric consumers.

(b) Slamming

The Federal Trade Commission may issue rules prohibiting the change of selection of an electric utility except with the informed consent of the electric consumer or if approved by the appropriate State regulatory authority.

(c) Cramming

The Federal Trade Commission may issue rules prohibiting the sale of goods and services to an electric consumer unless expressly authorized by law or the electric consumer.

(d) Rulemaking

The Federal Trade Commission shall proceed in accordance with section 553 of title 5 when prescribing a rule under this section.

(e) State authority

If the Federal Trade Commission determines that a State's regulations provide equivalent or greater protection than the provisions of this section, such State regulations shall apply in that State in lieu of the regulations issued by the Commission under this section.

(f) Definitions

For purposes of this section:

(1) State regulatory authority

The term ''State regulatory authority'' has the meaning given that term in section 796(21) of title 16.

(2) Electric consumer and electric utility

The terms ''electric consumer'' and ''electric utility'' have the meanings given those terms in section 2602 of title 16.

(Pub. L. 109–58, title XII, § 1287, Aug. 8, 2005, 119 Stat. 981.)

PART F—DEFINITIONS

§ 16481. Commission defined

In this subchapter, the term ''Commission'' means the Federal Energy Regulatory Commission.

(Pub. L. 109–58, title XII, § 1291(a), Aug. 8, 2005, 119 Stat. 984.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original ''this title'', meaning title XII of Pub. L. 109–58,

Aug. 8, 2005, 119 Stat. 941, which enacted this subchapter and sections 824j–1 and 824*o* to 824w of Title 16, Conservation, amended sections 796, 824, 824a–3, 824b, 824e, 824j, 824m, 825e, 825f, 825*l* to 825*o*, 825*o*–1, 2621, 2622, 2625, 2634, and 2642 of Title 16, repealed chapter 2C (§ 79 et seq.) of Title 15, Commerce and Trade, and sections 824n and 825q of Title 16, and enacted provisions set out as notes under sections 15801 and 16451 of this title and sections 824b, 824*o*, 824q, and 2642 of Title 16. For complete classification of title XII to the Code, see Short Title note set out under section 15801 of this title and Tables.

SUBCHAPTER XIII—MISCELLANEOUS

§ 16491. Energy production incentives

(a) In general

A State may provide to any entity—

(1) a credit against any tax or fee owed to the State under a State law, or

(2) any other tax incentive,

determined by the State to be appropriate, in the amount calculated under and in accordance with a formula determined by the State, for production described in subsection (b) in the State by the entity that receives such credit or such incentive.

(b) Eligible entities

Subsection (a) shall apply with respect to the production in the State of electricity from coal mined in the State and used in a facility, if such production meets all applicable Federal and State laws and if such facility uses scrubbers or other forms of clean coal technology.

(c) Effect on interstate commerce

Any action taken by a State in accordance with this section with respect to a tax or fee payable, or incentive applicable, for any period beginning after August 8, 2005, shall—

(1) be considered to be a reasonable regulation of commerce; and

(2) not be considered to impose an undue burden on interstate commerce or to otherwise impair, restrain, or discriminate, against interstate commerce.

(Pub. L. 109–58, title XIV, § 1402, Aug. 8, 2005, 119 Stat. 1061.)

§ 16492. Regulation of certain oil used in transformers

Notwithstanding any other provision of law, or rule promulgated by the Environmental Protection Agency, vegetable oil made from soybeans and used in electric transformers as thermal insulation shall not be regulated as an oil identified under section 2720(a)(1)(B) of title 33.

(Pub. L. 109–58, title XIV, § 1403, Aug. 8, 2005, 119 Stat. 1061.)

§ 16493. National Priority Project Designation

(a) Designation of National Priority Projects

(1) In general

There is established the National Priority Project Designation (referred to in this section as the ''Designation''), which shall be evidenced by a medal bearing the inscription ''National Priority Project''.

(2) Design and materials

The medal shall be of such design and materials and bear such additional inscriptions as the President may prescribe.

(b) Making and presentation of Designation

(1) In general

The President, on the basis of recommendations made by the Secretary, shall annually designate organizations that have—

(A) advanced the field of renewable energy technology and contributed to North American energy independence; and

(B) been certified by the Secretary under subsection (e).

(2) Presentation

The President shall designate projects with such ceremonies as the President may prescribe.

(3) Use of Designation

An organization that receives a Designation under this section may publicize the Designation of the organization as a National Priority Project in advertising.

(4) Categories in which the Designation may be given

Separate Designations shall be made to qualifying projects in each of the following categories:

(A) Wind and biomass energy generation projects.

(B) Photovoltaic and fuel cell energy generation projects.

(C) Energy efficient building and renewable energy projects.

(D) First-in-Class projects.

(c) Selection criteria

(1) In general

Certification and selection of the projects to receive the Designation shall be based on criteria established under this subsection.

(2) Wind, biomass, and building projects

In the case of a wind, biomass, or building project, the project shall demonstrate that the project will install not less than 30 megawatts of renewable energy generation capacity.

(3) Solar photovoltaic and fuel cell projects

In the case of a solar photovoltaic or fuel cell project, the project shall demonstrate that the project will install not less than 3 megawatts of renewable energy generation capacity.

(4) Energy efficient building and renewable energy projects

In the case of an energy efficient building or renewable energy project, in addition to meeting the criteria established under paragraph (2), each building project shall demonstrate that the project will—

(A) comply with third-party certification standards for high-performance, sustainable buildings;

(B) use whole-building integration of energy efficiency and environmental performance design and technology, including advanced building controls;

(C) use renewable energy for at least 50 percent of the energy consumption of the project;

(D) comply with applicable Energy Star standards; and

(E) include at least 5,000,000 square feet of enclosed space.

(5) First-in-Class use

Notwithstanding paragraphs (2) through (4), a new building project may qualify under this section if the Secretary determines that the project—

(A) represents a First-In-Class use of renewable energy; or

(B) otherwise establishes a new paradigm of building integrated renewable energy use or energy efficiency.

(d) Application

(1) Initial applications

No later than 120 days after August 8, 2005, and annually thereafter, the Secretary shall publish in the Federal Register an invitation and guidelines for submitting applications, consistent with this section.

(2) Contents

The application shall describe the project, or planned project, and the plans to meet the criteria established under subsection (c).

(e) Certification

(1) In general

Not later than 60 days after the application period described in subsection (d), and annually thereafter, the Secretary shall certify projects that are reasonably expected to meet the criteria established under subsection (c).

(2) Certified projects

The Secretary shall designate personnel of the Department to work with persons carrying out each certified project and ensure that the personnel—

(A) provide each certified project with guidance in meeting the criteria established under subsection (c);

(B) identify programs of the Department, including National Laboratories and Technology Centers, that will assist each project in meeting the criteria established under subsection (c); and

(C) ensure that knowledge and transfer of the most current technology between the applicable resources of the Federal Government (including the National Laboratories and Technology Centers, the Department, and the Environmental Protection Agency) and the certified projects is being facilitated to accelerate commercialization of work developed through those resources.

(f) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2006 through 2010.

(Pub. L. 109–58, title XIV, § 1405, Aug. 8, 2005, 119 Stat. 1062.)

§ 16494. Oxygen-fuel

(a) Program

The Secretary shall establish a program on oxygen-fuel systems. If feasible, the program shall include renovation of at least one existing large unit and one existing small unit, and construction of one new large unit and one new small unit.

(b) Authorization of appropriations

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

(1) $100,000,000 for fiscal year 2006;

(2) $100,000,000 for fiscal year 2007; and

(3) $100,000,000 for fiscal year 2008.

(c) Definitions

For purposes of this section—

(1) the term ''large unit'' means a unit with a generating capacity of 100 megawatts or more;

(2) the term ''oxygen-fuel systems'' means systems that utilize fuel efficiency benefits of oil, gas, coal, and biomass combustion using substantially pure oxygen, with high flame temperatures and the exclusion of air from the boiler, in industrial or electric utility steam generating units; and

(3) the term ''small unit'' means a unit with a generating capacity in the 10–50 megawatt range.

(Pub. L. 109–58, title XIV, § 1407, Aug. 8, 2005, 119 Stat. 1064.)

SUBCHAPTER XIV—ETHANOL AND MOTOR FUELS

§ 16501. Commercial byproducts from municipal solid waste and cellulosic biomass loan guarantee program

(a) Definition of municipal solid waste

In this section, the term ''municipal solid waste'' has the meaning given the term ''solid waste'' in section 6903 of this title.

(b) Establishment of program

The Secretary shall establish a program to provide guarantees of loans by private institutions for the construction of facilities for the processing and conversion of municipal solid waste and cellulosic biomass into fuel ethanol and other commercial byproducts.

(c) Requirements

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

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

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

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

(d) 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 because of—

(A) the limited availability of land for waste disposal;

(B) the availability of sufficient quantities of cellulosic biomass; or

(C) a high level of demand for fuel ethanol or other commercial byproducts of the facility.

(e) Maturity

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

(f) Terms and conditions

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

(g) Assurance of repayment

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

(h) Guarantee fee

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

(i) 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.

(j) 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.

(k) Authorization of appropriations

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

(*l*) Termination of authority

The authority of the Secretary to issue a loan guarantee under subsection (b) terminates on the date that is 10 years after August 8, 2005.

(Pub. L. 109–58, title XV, § 1510, Aug. 8, 2005, 119 Stat. 1085.)

§ 16502. Advanced Biofuel Technologies Program

(a) In general

Subject to the availability of appropriations under subsection (d), the Administrator of the Environmental Protection Agency shall, in consultation with the Secretary of Agriculture and the Biomass Research and Development Technical Advisory Committee established under section 8605[1] of title 7, establish a program, to be known as the ''Advanced Biofuel Technologies Program'', to demonstrate advanced technologies for the production of alternative transportation fuels.

(b) Priority

In carrying out the program under subsection (a), the Administrator shall give priority to projects that enhance the geographical diversity of alternative fuels production and utilize feedstocks that represent 10 percent or less of ethanol or biodiesel fuel production in the United States during the previous fiscal year.

(c) Demonstration projects

(1) In general

As part of the program under subsection (a), the Administrator shall fund demonstration projects—

(A) to develop not less than 4 different conversion technologies for producing cellulosic biomass ethanol; and

(B) to develop not less than 5 technologies for coproducing value-added bioproducts (such as fertilizers, herbicides, and pesticides) resulting from the production of biodiesel fuel.

(2) Administration

Demonstration projects under this subsection shall be—

(A) conducted based on a merit-reviewed, competitive process; and

(B) subject to the cost-sharing requirements of section 16352 of this title.

(d) Authorization of appropriations

There are authorized to be appropriated to carry out this section $110,000,000 for each of fiscal years 2005 through 2009.

(Pub. L. 109–58, title XV, § 1514, Aug. 8, 2005, 119 Stat. 1090.)

REFERENCES IN TEXT

Section 8605 of title 7, referred to in subsec. (a), was repealed by Pub. L. 110–246, title IX, § 9001(b), June 18, 2008, 122 Stat. 2095. Provisions relating to a Biomass Research and Development Technical Advisory Committee are now contained in section 8108(d) of title 7, Agriculture.

§ 16503. Sugar ethanol loan guarantee program

(a) In general

Funds may be provided for the cost (as defined in section 661a of title 2) of loan guarantees issued under title XIV[1] to carry out commercial demonstration projects for ethanol derived from sugarcane, bagasse, and other sugarcane byproducts.

(b) Demonstration projects

The Secretary may issue loan guarantees under this section to projects to demonstrate commercially the feasibility and viability of producing ethanol using sugarcane, sugarcane bagasse, and other sugarcane byproducts as a feedstock.

[1] See References in Text note below.

[1] See References in Text note below.

(c) Requirements

An applicant for a loan guarantee under this section may provide assurances, satisfactory to the Secretary, that—

(1) the project design has been validated through the operation of a continuous process facility;

(2) the project has been subject to a full technical review;

(3) the project, with the loan guarantee, is economically viable; and

(4) there is a reasonable assurance of repayment of the guaranteed loan.

(d) Limitations

(1) Maximum guarantee

Except as provided in paragraph (2), a loan guarantee under this section—

(A) may be issued for up to 80 percent of the estimated cost of a project; but

(B) shall not exceed $50,000,000 for any 1 project.

(2) Additional guarantees

(A) In general

The Secretary may issue additional loan guarantees for a project to cover—

(i) up to 80 percent of the excess of actual project costs; but

(ii) not to exceed 15 percent of the amount of the original loan guarantee.

(B) Principal and interest

Subject to subparagraph (A), the Secretary shall guarantee 100 percent of the principal and interest of a loan guarantee made under subparagraph (A).

(Pub. L. 109–58, title XV, § 1516, Aug. 8, 2005, 119 Stat. 1091.)

REFERENCES IN TEXT

Title XIV, referred to in subsec. (a), is title XIV of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 1061, which enacted subchapter XIII of this chapter and section 13557 of this title.

SUBCHAPTER XV—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

§ 16511. Definitions

In this subchapter:

(1) Commercial technology

(A) In general

The term ''commercial technology'' means a technology in general use in the commercial marketplace.

(B) Inclusions

The term ''commercial technology'' does not include a technology solely by use of the technology in a demonstration project funded by the Department.

(2) Cost

The term ''cost'' has the meaning given the term ''cost of a loan guarantee'' within the meaning of section 661a(5)(C) of title 2.

(3) Eligible project

The term ''eligible project'' means a project described in section 16513 of this title.

(4) Guarantee

(A) In general

The term ''guarantee'' has the meaning given the term ''loan guarantee'' in section 661a of title 2.

(B) Inclusion

The term ''guarantee'' includes a loan guarantee commitment (as defined in section 661a of title 2).

(5) Obligation

The term ''obligation'' means the loan or other debt obligation that is guaranteed under this section.

(Pub. L. 109–58, title XVII, § 1701, Aug. 8, 2005, 119 Stat. 1117.)

§ 16512. Terms and conditions

(a) In general

Except for division C of Public Law 108–324 [15 U.S.C. 720 et seq.], the Secretary shall make guarantees under this or any other Act for projects on such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, only in accordance with this section.

(b) Specific appropriation or contribution

No guarantee shall be made unless—

(1) an appropriation for the cost has been made; or

(2) the Secretary has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.

(c) Amount

Unless otherwise provided by law, a guarantee by the Secretary shall not exceed an amount equal to 80 percent of the project cost of the facility that is the subject of the guarantee, as estimated at the time at which the guarantee is issued.

(d) Repayment

(1) In general

No guarantee shall be made unless the Secretary determines that there is reasonable prospect of repayment of the principal and interest on the obligation by the borrower.

(2) Amount

No guarantee shall be made unless the Secretary determines that the amount of the obligation (when combined with amounts available to the borrower from other sources) will be sufficient to carry out the project.

(3) Subordination

The obligation shall be subject to the condition that the obligation is not subordinate to other financing.

(e) Interest rate

An obligation shall bear interest at a rate that does not exceed a level that the Secretary determines appropriate, taking into account the prevailing rate of interest in the private sector for similar loans and risks.

(f) Term

The term of an obligation shall require full repayment over a period not to exceed the lesser of—

(1) 30 years; or

(2) 90 percent of the projected useful life of the physical asset to be financed by the obligation (as determined by the Secretary).

(g) Defaults

(1) Payment by Secretary

(A) In general

If a borrower defaults on the obligation (as defined in regulations promulgated by the Secretary and specified in the guarantee contract), the holder of the guarantee shall have the right to demand payment of the unpaid amount from the Secretary.

(B) Payment required

Within such period as may be specified in the guarantee or related agreements, the Secretary shall pay to the holder of the guarantee the unpaid interest on, and unpaid principal of the obligation as to which the borrower has defaulted, unless the Secretary finds that there was no default by the borrower in the payment of interest or principal or that the default has been remedied.

(C) Forbearance

Nothing in this subsection precludes any forbearance by the holder of the obligation for the benefit of the borrower which may be agreed upon by the parties to the obligation and approved by the Secretary.

(2) Subrogation

(A) In general

If the Secretary makes a payment under paragraph (1), the Secretary shall be subrogated to the rights of the recipient of the payment as specified in the guarantee or related agreements including, where appropriate, the authority (notwithstanding any other provision of law) to—

(i) complete, maintain, operate, lease, or otherwise dispose of any property acquired pursuant to such guarantee or related agreements; or

(ii) permit the borrower, pursuant to an agreement with the Secretary, to continue to pursue the purposes of the project if the Secretary determines this to be in the public interest.

(B) Superiority of rights

The rights of the Secretary, with respect to any property acquired pursuant to a guarantee or related agreements, shall be superior to the rights of any other person with respect to the property.

(C) Terms and conditions

A guarantee agreement shall include such detailed terms and conditions as the Secretary determines appropriate to—

(i) protect the interests of the United States in the case of default; and

(ii) have available all the patents and technology necessary for any person selected, including the Secretary, to complete and operate the project.

(3) Payment of principal and interest by Secretary

With respect to any obligation guaranteed under this section, the Secretary may enter into a contract to pay, and pay, holders of the obligation, for and on behalf of the borrower, from funds appropriated for that purpose, the principal and interest payments which become due and payable on the unpaid balance of the obligation if the Secretary finds that—

(A)(i) the borrower is unable to meet the payments and is not in default;

(ii) it is in the public interest to permit the borrower to continue to pursue the purposes of the project; and

(iii) the probable net benefit to the Federal Government in paying the principal and interest will be greater than that which would result in the event of a default;

(B) the amount of the payment that the Secretary is authorized to pay shall be no greater than the amount of principal and interest that the borrower is obligated to pay under the agreement being guaranteed; and

(C) the borrower agrees to reimburse the Secretary for the payment (including interest) on terms and conditions that are satisfactory to the Secretary.

(4) Action by Attorney General

(A) Notification

If the borrower defaults on an obligation, the Secretary shall notify the Attorney General of the default.

(B) Recovery

On notification, the Attorney General shall take such action as is appropriate to recover the unpaid principal and interest due from—

(i) such assets of the defaulting borrower as are associated with the obligation; or

(ii) any other security pledged to secure the obligation.

(h) Fees

(1) In general

The Secretary shall charge and collect fees for guarantees in amounts the Secretary determines are sufficient to cover applicable administrative expenses.

(2) Availability

Fees collected under this subsection shall—

(A) be deposited by the Secretary into the Treasury; and

(B) remain available until expended, subject to such other conditions as are contained in annual appropriations Acts.

(i) Records; audits

(1) In general

A recipient of a guarantee shall keep such records and other pertinent documents as the Secretary shall prescribe by regulation, including such records as the Secretary may require to facilitate an effective audit.

(2) Access

The Secretary and the Comptroller General of the United States, or their duly authorized representatives, shall have access, for the purpose of audit, to the records and other pertinent documents.

(j) Full faith and credit

The full faith and credit of the United States is pledged to the payment of all guarantees is-

sued under this section with respect to principal and interest.

(k) Wage rate requirements

All laborers and mechanics employed by contractors and subcontractors in the performance of construction work financed in whole or in part by a loan guaranteed under this subchapter shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40. With respect to the labor standards in this subsection, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40.

(Pub. L. 109–58, title XVII, § 1702, Aug. 8, 2005, 119 Stat. 1117; Pub. L. 111–85, title III, § 310, Oct. 28, 2009, 123 Stat. 2873.)

REFERENCES IN TEXT

Division C of Public Law 108–324, referred to in subsec. (a), is division C of Pub. L. 108–324, Oct. 13, 2004, 118 Stat. 1255, known as the Alaska Natural Gas Pipeline Act, which is classified principally to chapter 15D (§ 720 et seq.) of Title 15, Commerce and Trade. For complete classification of division C to the Code, see Short Title note set out under section 720 of Title 15 and Tables.

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

AMENDMENTS

2009—Subsec. (k). Pub. L. 111–85 added subsec. (k).

§ 16513. Eligible projects

(a) In general

The Secretary may make guarantees under this section only for projects that—

(1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and

(2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.

(b) Categories

Projects from the following categories shall be eligible for a guarantee under this section:

(1) Renewable energy systems.

(2) Advanced fossil energy technology (including coal gasification meeting the criteria in subsection (d)).

(3) Hydrogen fuel cell technology for residential, industrial, or transportation applications.

(4) Advanced nuclear energy facilities.

(5) Carbon capture and sequestration practices and technologies, including agricultural and forestry practices that store and sequester carbon.

(6) Efficient electrical generation, transmission, and distribution technologies.

(7) Efficient end-use energy technologies.

(8) Production facilities for the manufacture of fuel efficient vehicles or parts of those vehicles, including electric drive vehicles and advanced diesel vehicles.

(9) Pollution control equipment.

(10) Refineries, meaning facilities at which crude oil is refined into gasoline.

(c) Gasification projects

The Secretary may make guarantees for the following gasification projects:

(1) Integrated gasification combined cycle projects

Integrated gasification combined cycle plants meeting the emission levels under subsection (d), including—

(A) projects for the generation of electricity—

(i) for which, during the term of the guarantee—

(I) coal, biomass, petroleum coke, or a combination of coal, biomass, and petroleum coke will account for at least 65 percent of annual heat input; and

(II) electricity will account for at least 65 percent of net useful annual energy output;

(ii) that have a design that is determined by the Secretary to be capable of accommodating the equipment likely to be necessary to capture the carbon dioxide that would otherwise be emitted in flue gas from the plant;

(iii) that have an assured revenue stream that covers project capital and operating costs (including servicing all debt obligations covered by the guarantee) that is approved by the Secretary and the relevant State public utility commission; and

(iv) on which construction commences not later than the date that is 3 years after the date of the issuance of the guarantee;

(B) a project to produce energy from coal (of not more than 13,000 Btu/lb and mined in the western United States) using appropriate advanced integrated gasification combined cycle technology that minimizes and offers the potential to sequester carbon dioxide emissions and that—

(i) may include repowering of existing facilities;

(ii) may be built in stages;

(iii) shall have a combined output of at least 100 megawatts;

(iv) shall be located in a western State at an altitude greater than 4,000 feet; and

(v) shall demonstrate the ability to use coal with an energy content of not more than 9,000 Btu/lb;

(C) a project located in a taconite-producing region of the United States that is entitled under the law of the State in which the plant is located to enter into a long-term contract approved by a State public utility commission to sell at least 450 megawatts of output to a utility;

(D) facilities that—

(i) generate one or more hydrogen-rich and carbon monoxide-rich product streams from the gasification of coal or coal waste; and

(ii) use those streams to facilitate the production of ultra clean premium fuels through the Fischer-Tropsch process; and

(E) a project to produce energy and clean fuels, using appropriate coal liquefaction technology, from Western bituminous or subbituminous coal, that—

(i) is owned by a State government; and

(ii) may include tribal and private coal resources.

(2) Industrial gasification projects

Facilities that gasify coal, biomass, or petroleum coke in any combination to produce synthesis gas for use as a fuel or feedstock and for which electricity accounts for less than 65 percent of the useful energy output of the facility.

(3) Petroleum coke gasification projects

The Secretary is encouraged to make loan guarantees under this subchapter available for petroleum coke gasification projects.

(4) Liquefaction project

Notwithstanding any other provision of law, funds awarded under the Department of Energy's Clean Coal Power Initiative for Fischer-Tropsch coal-to-oil liquefaction projects may be used to finance the cost of loan guarantees for projects awarded such funds.

(d) Emission levels

In addition to any other applicable Federal or State emission limitation requirements, a project shall attain at least—

(1) total sulfur dioxide emissions in flue gas from the project that do not exceed 0.05 lb/MMBtu;

(2) a 90-percent removal rate (including any fuel pretreatment) of mercury from the coal-derived gas, and any other fuel, combusted by the project;

(3) total nitrogen oxide emissions in the flue gas from the project that do not exceed 0.08 lb/MMBtu; and

(4) total particulate emissions in the flue gas from the project that do not exceed 0.01 lb/MMBtu.

(e) Qualification of facilities receiving tax credits

A project that receives tax credits for clean coal technology shall not be disqualified from receiving a guarantee under this subchapter.

(Pub. L. 109–58, title XVII, § 1703, Aug. 8, 2005, 119 Stat. 1120; Pub. L. 109–168, § 1(b)(1), Jan. 10, 2006, 119 Stat. 3580; Pub. L. 110–140, title I, § 134(b), Dec. 19, 2007, 121 Stat. 1513.)

AMENDMENTS

2007—Subsec. (b)(8). Pub. L. 110–140 added par. (8) and struck out former par. (8) which read as follows: ''Production facilities for fuel efficient vehicles, including hybrid and advanced diesel vehicles.''

2006—Subsec. (c)(4). Pub. L. 109–168 substituted ''Department of Energy's Clean Coal Power Initiative for Fischer-Tropsch'' for ''clean coal power initiative under part A of subchapter IV for''.

EFFECTIVE DATE OF 2007 AMENDMENT

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

§ 16514. Authorization of appropriations

(a) In general

There are authorized to be appropriated such sums as are necessary to provide the cost of guarantees under this subchapter.

(b) Use of other appropriated funds

The Department may use amounts awarded under the Clean Coal Power Initiative to carry out the project described in section 16513(c)(1)(C) of this title, on the request of the recipient of such award, for a loan guarantee, to the extent that the amounts have not yet been disbursed to, or have been repaid by, the recipient.

(Pub. L. 109–58, title XVII, § 1704, Aug. 8, 2005, 119 Stat. 1122; Pub. L. 109–168, § 1(b)(2), Jan. 10, 2006, 119 Stat. 3580.)

AMENDMENTS

2006—Subsec. (b). Pub. L. 109–168 substituted ''Clean Coal Power Initiative'' for ''clean coal power initiative under part A of subchapter IV''.

§ 16515. Limitation on commitments to guarantee loans

(a) Notwithstanding section 101,[1] subject to the Federal Credit Reform Act of 1990, as amended [2 U.S.C. 661 et seq.], commitments to guarantee loans under title XVII of the Energy Policy Act of 2005 [42 U.S.C. 16501 et seq.] shall not exceed a total principal amount, any part of which is to be guaranteed, of $4,000,000,000: *Provided*, That there are appropriated for the cost of the guaranteed loans such sums as are hereafter derived from amounts received from borrowers pursuant to section 16512(b)(2) of this title, to remain available until expended: *Provided further*, That the source of payments received from borrowers for the subsidy cost shall not be a loan or other debt obligation that is made or guaranteed by the Federal government.[2] In addition, fees collected pursuant to section 16512(h) of this title in fiscal year 2007 shall be credited as offsetting collections to the Departmental Administration account for administrative expenses of the Loan Guarantee Program: *Provided further*, That the sum appropriated for administrative expenses for the Loan Guarantee Program shall be reduced by the amount of fees received during fiscal year 2007: *Provided further*, That any fees collected under section 16512(h) of this title in excess of the amount appropriated for administrative expenses shall not be available until appropriated.

(b) No loan guarantees may be awarded under title XVII of the Energy Policy Act of 2005 [42 U.S.C. 16501 et seq.] until final regulations are issued that include—

(1) programmatic, technical, and financial factors the Secretary will use to select projects for loan guarantees;

(2) policies and procedures for selecting and monitoring lenders and loan performance; and

(3) any other policies, procedures, or information necessary to implement title XVII of the Energy Policy Act of 2005.

(c) The Secretary of Energy shall enter into an arrangement with an independent auditor for

[1] See References in Text note below.

[2] So in original. Probably should be capitalized.

annual evaluations of the program under title XVII of the Energy Policy Act of 2005 [42 U.S.C. 16501 et seq.]. In addition to the independent audit, the Comptroller General shall conduct an annual review of the Department's execution of the program under title XVII of the Energy Policy Act of 2005. The results of the independent audit and the Comptroller General's review shall be provided directly to the Committees on Appropriations of the House of Representatives and the Senate.

(d) The Secretary of Energy shall promulgate final regulations for loan guarantees under title XVII of the Energy Policy Act of 2005 [42 U.S.C. 16501 et seq.] within 6 months of February 15, 2007.

(e) Not later than 120 days after February 15, 2007, and annually thereafter, the Secretary of Energy shall transmit to the Committees on Appropriations of the House of Representatives and the Senate a report containing a summary of all activities under title XVII of the Energy Policy Act of 2005 [42 U.S.C. 16501 et seq.], beginning in fiscal year 2007, with a listing of responses to loan guarantee solicitations under this subchapter, describing the technologies, amount of loan guarantee sought, and the applicants' assessment of risk.

(Pub. L. 109–289, div. B, title II, § 20320, as added Pub. L. 110–5, § 2, Feb. 15, 2007, 121 Stat. 21.)

REFERENCES IN TEXT

Section 101, referred to in subsec. (a), is section 101 of title I of div. B of Pub. L. 109–289, as added by Pub. L. 110–5, § 2, Feb. 15, 2007, 121 Stat. 8. Subsec. (b) of section 101 is classified as a note under section 12651i of this title. Subsecs. (a) and (c) of section 101 are not classified to the Code.

The Federal Credit Reform Act of 1990, referred to in subsec. (a), is title V of Pub. L. 93–344, as added by Pub. L. 101–508, title XIII, § 13201(a), Nov. 5, 1990, 104 Stat. 1388–609, which is classified generally to subchapter III (§ 661 et seq.) of chapter 17A of Title 2, The Congress. For complete classification of this Act to the Code, see Short Title note set out under section 621 of Title 2 and Tables.

The Energy Policy Act of 2005, referred to in text, is Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 594. Title XVII of the Act is classified generally to this subchapter. For complete classification of this Act to the Code, see Short Title note set out under section 15801 of this title and Tables.

CODIFICATION

Section was enacted as part of the Continuing Appropriations Resolution, 2007, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

§ 16516. Temporary program for rapid deployment of renewable energy and electric power transmission projects

(a) In general

Notwithstanding section 16513 of this title, the Secretary may make guarantees under this section only for the following categories of projects that commence construction not later than September 30, 2011:

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

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

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

(b) Factors relating to electric power transmission systems

In determining to make guarantees to projects described in subsection (a)(2), the Secretary may consider the following factors:

(1) The viability of the project without guarantees.

(2) The availability of other Federal and State incentives.

(3) The importance of the project in meeting reliability needs.

(4) The effect of the project in meeting a State or region's environment (including climate change) and energy goals.

(c) Wage rate requirements

The Secretary shall require that each recipient of support under this section provide reasonable assurance that all laborers and mechanics employed in the performance of the project for which the assistance is provided, including those employed by contractors or subcontractors, will be paid wages at rates not less than those prevailing on similar work in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of part A of subtitle II of title 40 (commonly referred to as the ''Davis-Bacon Act'').

(d) Limitation

Funding under this section for projects described in subsection (a)(3) shall not exceed $500,000,000.

(e) Sunset

The authority to enter into guarantees under this section shall expire on September 30, 2011.

(Pub. L. 109–58, title XVII, § 1705, as added Pub. L. 111–5, div. A, title IV, § 406(a), Feb. 17, 2009, 123 Stat. 145.)

SUBCHAPTER XVI—STUDIES

§ 16521. Report on energy integration with Latin America

The Secretary shall submit an annual report to the Committee on Energy and Commerce of the United States House of Representatives and to the Committee on Energy and Natural Resources of the Senate concerning the status of energy export development in Latin America and efforts by the Secretary and other departments and agencies of the United States to promote energy integration with Latin America. The report shall contain a detailed analysis of the status of energy export development in Mexico and a description of all significant efforts by the Secretary and other departments and agencies to promote a constructive relationship with Mexico regarding the development of that nation's energy capacity. In particular this report shall outline efforts the Secretary and other departments and agencies have made to ensure

that regulatory approval and oversight of United States/Mexico border projects that result in the expansion of Mexican energy capacity are effectively coordinated across departments and with the Mexican government.

(Pub. L. 109–58, title XVIII, § 1807, Aug. 8, 2005, 119 Stat. 1124.)

§ 16522. Low-volume gas reservoir study

(a) Study

The Secretary shall make a grant to an organization of oil and gas producing States, specifically those containing significant numbers of marginal oil and natural gas wells, for conducting an annual study of low-volume natural gas reservoirs. Such organization shall work with the State geologist of each State being studied.

(b) Contents

The studies under this section shall—

(1) determine the status and location of marginal wells and gas reservoirs;

(2) gather the production information of these marginal wells and reservoirs;

(3) estimate the remaining producible reserves based on variable pipeline pressures;

(4) locate low-pressure gathering facilities and pipelines;

(5) recommend incentives which will enable the continued production of these resources;

(6) produce maps and literature to disseminate to States to promote conservation of natural gas reserves; and

(7) evaluate the amount of natural gas that is being wasted through the practice of venting or flaring of natural gas produced in association with crude oil well production.

(c) Data analysis

Data development and analysis under this section shall be performed by an institution of higher education with GIS capabilities. If the organization receiving the grant under subsection (a) does not have GIS capabilities, such organization shall contract with one or more entities with—

(1) technological capabilities and resources to perform advanced image processing, GIS programming, and data analysis; and

(2) the ability to—

(A) process remotely sensed imagery with high spatial resolution;

(B) deploy global positioning systems;

(C) process and synthesize existing, variable-format gas well, pipeline, gathering facility, and reservoir data;

(D) create and query GIS databases with infrastructure location and attribute information;

(E) write computer programs to customize relevant GIS software;

(F) generate maps, charts, and graphs which summarize findings from data research for presentation to different audiences; and

(G) deliver data in a variety of formats, including Internet Map Server for query and display, desktop computer display, and access through handheld personal digital assistants.

(d) Authorization of appropriations

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

(1) $1,500,000 for fiscal year 2006; and

(2) $450,000 for each of the fiscal years 2007 through 2010.

(e) Definitions

For purposes of this section, the term ''GIS'' means geographic information systems technology that facilitates the organization and management of data with a geographic component.

(Pub. L. 109–58, title XVIII, § 1808, Aug. 8, 2005, 119 Stat. 1124.)

§ 16523. Alaska natural gas pipeline

Not later than 180 days after August 8, 2005, and every 180 days thereafter until the Alaska natural gas pipeline commences operation, the Federal Energy Regulatory Commission shall submit to Congress a report describing—

(1) the progress made in licensing and constructing the pipeline; and

(2) any issue impeding that progress.

(Pub. L. 109–58, title XVIII, § 1810, Aug. 8, 2005, 119 Stat. 1126.)

§ 16524. Study on the benefits of economic dispatch

(a) Study

The Secretary, in coordination and consultation with the States, shall conduct a study on—

(1) the procedures currently used by electric utilities to perform economic dispatch;

(2) identifying possible revisions to those procedures to improve the ability of nonutility generation resources to offer their output for sale for the purpose of inclusion in economic dispatch; and

(3) the potential benefits to residential, commercial, and industrial electricity consumers nationally and in each state[1] if economic dispatch procedures were revised to improve the ability of nonutility generation resources to offer their output for inclusion in economic dispatch.

(b) Definition

The term ''economic dispatch'' when used in this section means the operation of generation facilities to produce energy at the lowest cost to reliably serve consumers, recognizing any operational limits of generation and transmission facilities.

(c) Report to Congress and the States

Not later than 90 days after August 8, 2005, and on a yearly basis following, the Secretary shall submit a report to Congress and the States on the results of the study conducted under subsection (a), including recommendations to Congress and the States for any suggested legislative or regulatory changes.

(Pub. L. 109–58, title XVIII, § 1832, Aug. 8, 2005, 119 Stat. 1138.)

SUBCHAPTER XVII—PROTECTING AMERICA'S COMPETITIVE EDGE THROUGH ENERGY

CODIFICATION

This subchapter was enacted as part of the America COMPETES Act, also known as the America Creating

[1] So in original. Probably should be capitalized.

Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Act, and also as part of the Protecting America's Competitive Edge Through Energy Act, also known as the PACE–Energy Act, and not as part of the Energy Policy Act of 2005, which enacted subchapters I to XVI of this chapter.

§ 16531. Definitions

In this subchapter:

(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) National Laboratory

The term ''National Laboratory'' has the meaning given the term in section 15801 of this title.

(4) Secretary

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

(Pub. L. 110–69, title V, § 5002, Aug. 9, 2007, 121 Stat. 600.)

REFERENCES IN TEXT

This subchapter, referred to in introductory provisions, was in the original ''this title'', meaning title V of Pub. L. 110–69, Aug. 9, 2007, 121 Stat. 600, known as the Protecting America's Competitive Edge Through Energy Act and also as the PACE–Energy Act, which is classified principally to this subchapter. For complete classification of this title to the Code, see Short Title of 2007 Amendment note set out under section 15801 of this title and Tables.

SHORT TITLE

For short title of title V of Pub. L. 110–69, which enacted this subchapter, as the ''Protecting America's Competitive Edge Through Energy Act'' or the ''PACE–Energy Act'', see section 5001 of Pub. L. 110–69, set out as a note under section 15801 of this title .

§ 16532. Nuclear science talent expansion program for institutions of higher education

(a) Purposes

The purposes of this section are—

(1) to address the decline in the number of and resources available to nuclear science programs at institutions of higher education; and

(2) to increase the number of graduates with degrees in nuclear science, an area of strategic importance to the economic competitiveness and energy security of the United States.

(b) Definition of nuclear science

In this section, the term ''nuclear science'' includes—

(1) nuclear science;
(2) nuclear engineering;
(3) nuclear chemistry;
(4) radio chemistry; and
(5) health physics.

(c) Establishment

The Secretary shall establish, in accordance with this section, a program to expand and enhance institution of higher education nuclear science educational capabilities.

(d) Nuclear science program expansion grants for institutions of higher education

(1) In general

The Secretary shall award up to 3 competitive grants for each fiscal year to institutions of higher education that establish new academic degree programs in nuclear science.

(2) Priority

In evaluating grants under this subsection, the Secretary shall give priority to proposals that involve partnerships with a National Laboratory or other eligible nuclear-related entity, as determined by the Secretary.

(3) Criteria

Criteria for a grant awarded under this subsection shall be based on—

(A) the potential to attract new students to the program;

(B) academic rigor; and

(C) the ability to offer hands-on learning opportunities.

(4) Duration and amount

(A) Duration

A grant under this subsection may be up to 5 years in duration.

(B) Amount

An institution of higher education that receives a grant under this subsection shall be eligible for up to $1,000,000 for each year of the grant period.

(5) Use of funds

An institution of higher education that receives a grant under this subsection may use the grant to—

(A) recruit and retain new faculty;

(B) develop core and specialized course content;

(C) encourage collaboration between faculty and researchers in the nuclear science field; and

(D) support outreach efforts to recruit students.

(e) Nuclear science competitiveness grants for institutions of higher education

(1) In general

The Secretary shall award up to 5 competitive grants for each fiscal year to institutions of higher education with existing academic degree programs that produce graduates in nuclear science.

(2) Criteria

Criteria for a grant awarded under this subsection shall be based on the potential for increasing the number and academic quality of graduates in the nuclear sciences who enter into careers in nuclear-related fields.

(3) Duration and amount

(A) Duration

A grant under this subsection may be up to 5 years in duration.

(B) Amount

An institution of higher education that receives a grant under this subsection shall be

eligible for up to $500,000 for each year of the grant period.

(4) Use of funds

An institution of higher education that receives a grant under this subsection may use the grant to—

(A) increase the number of graduates in nuclear science that enter into careers in the nuclear science field;

(B) enhance the teaching of advanced nuclear technologies;

(C) aggressively pursue collaboration opportunities with industry and National Laboratories;

(D) bolster or sustain nuclear infrastructure and research facilities of the institution of higher education, such as research and training reactors or laboratories; and

(E) provide tuition assistance and stipends to undergraduate and graduate students.

(f) Authorization of appropriations

(1) Nuclear science program expansion grants for institutions of higher education

There are authorized to be appropriated to carry out subsection (d)—

(A) $3,500,000 for fiscal year 2008;
(B) $6,500,000 for fiscal year 2009;
(C) $9,500,000 for fiscal year 2010;
(D) $9,800,000 for fiscal year 2011;
(E) $10,100,000 for fiscal year 2012; and
(F) $10,400,000 for fiscal year 2013.

(2) Nuclear science competitiveness grants for institutions of higher education

There are authorized to be appropriated to carry out subsection (e)—

(A) $3,000,000 for fiscal year 2008;
(B) $5,500,000 for fiscal year 2009;
(C) $8,000,000 for fiscal year 2010;
(D) $8,240,000 for fiscal year 2011;
(E) $8,500,000 for fiscal year 2012; and
(F) $8,750,000 for fiscal year 2013.

(Pub. L. 110–69, title V, § 5004, Aug. 9, 2007, 121 Stat. 612; Pub. L. 111–358, title IX, § 902(a), Jan. 4, 2011, 124 Stat. 4044.)

AMENDMENTS

2011—Subsec. (f)(1)(D) to (F). Pub. L. 111–358, § 902(a)(1), added subpars. (D) to (F).

Subsec. (f)(2)(D) to (F). Pub. L. 111–358, § 902(a)(2), added subpars. (D) to (F).

§ 16533. Hydrocarbon systems science talent expansion program for institutions of higher education

(a) Purposes

The purposes of this section are—

(1) to address the decline in the number of and resources available to hydrocarbon systems science programs at institutions of higher education; and

(2) to increase the number of graduates with degrees in hydrocarbon systems science, an area of strategic importance to the economic competitiveness and energy security of the United States.

(b) Definition of hydrocarbon systems science

In this section:

(1) In general

The term ''hydrocarbon systems science'' means a science involving natural gas or other petroleum exploration, development, or production.

(2) Inclusions

The term ''hydrocarbon systems science'' includes—

(A) petroleum or reservoir engineering;
(B) environmental geoscience;
(C) petrophysics;
(D) geophysics;
(E) geochemistry;
(F) petroleum geology;
(G) ocean engineering;
(H) environmental engineering;

(I) computer science, as computer science relates to a science described in this subsection; and

(J) hydrocarbon spill response and remediation.

(c) Establishment

The Secretary shall establish, in accordance with this section, a program to expand and enhance institution of higher education hydrocarbon systems science educational capabilities.

(d) Hydrocarbon systems science program expansion grants for institutions of higher education

(1) In general

The Secretary shall award up to 3 competitive grants for each fiscal year to institutions of higher education that establish new academic degree programs in hydrocarbon systems science.

(2) Eligibility

In evaluating grants under this subsection, the Secretary shall give priority to proposals that involve partnerships with the National Laboratories, including the National Energy Technology Laboratory, or other hydrocarbon systems scientific entities, as determined by the Secretary.

(3) Criteria

Criteria for a grant awarded under this subsection shall be based on—

(A) the potential to attract new students to the program;

(B) academic rigor; and

(C) the ability to offer hands-on learning opportunities.

(4) Duration and amount

(A) Duration

A grant under this subsection may be up to 5 years in duration.

(B) Amount

An institution of higher education that receives a grant under this subsection shall be eligible for up to $1,000,000 for each year of the grant period.

(5) Use of funds

An institution of higher education that receives a grant under this subsection may use the grant to—

(A) recruit and retain new faculty;

(B) develop core and specialized course content;

(C) encourage collaboration between faculty and researchers in the hydrocarbon systems science field; and

(D) support outreach efforts to recruit students.

(e) Hydrocarbon systems science competitiveness grants for institutions of higher education

(1) In general

The Secretary shall award up to 5 competitive grants for each fiscal year to institutions of higher education with existing academic degree programs that produce graduates in hydrocarbon systems science.

(2) Criteria

Criteria for a grant awarded under this subsection shall be based on the potential for increasing the number and academic quality of graduates in hydrocarbon systems sciences who enter into careers in natural gas and other petroleum exploration, development, and production related fields.

(3) Duration and amount

(A) Duration

A grant under this subsection may be up to 5 years in duration.

(B) Amount

An institution of higher education that receives a grant under this subsection shall be eligible for up to $500,000 for each year of the grant period.

(4) Use of funds

An institution of higher education that receives a grant under this subsection may use the grant to—

(A) increase the number of graduates in the hydrocarbon systems sciences that enter into careers in the natural gas and other petroleum exploration, development, and production science fields;

(B) enhance the teaching of advanced natural gas and other petroleum exploration, development, and production technologies;

(C) aggressively pursue collaboration opportunities with industry and the National Laboratories, including the National Energy Technology Laboratory;

(D) bolster or sustain natural gas and other petroleum exploration, development, and production infrastructure and research facilities of the institution of higher education, such as research and training or laboratories; and

(E) provide tuition assistance and stipends to undergraduate and graduate students.

(f) Authorization of appropriations

(1) Hydrocarbon systems science program expansion grants for institutions of higher education

There are authorized to be appropriated to carry out subsection (d)—

(A) $3,500,000 for fiscal year 2008;

(B) $6,500,000 for fiscal year 2009;

(C) $9,500,000 for fiscal year 2010;

(D) $9,800,000 for fiscal year 2011;

(E) $10,000,000 for fiscal year 2012; and

(F) $10,400,000 for fiscal year 2013.

(2) Hydrocarbon systems science competitiveness grants for institutions of higher education

There are authorized to be appropriated to carry out subsection (e)—

(A) $3,000,000 for fiscal year 2008;

(B) $5,500,000 for fiscal year 2009; and

(C) $8,000,000 for fiscal year 2010.

(Pub. L. 110–69, title V, § 5005, Aug. 9, 2007, 121 Stat. 613; Pub. L. 111–358, title IX, § 902(b), Jan. 4, 2011, 124 Stat. 4044.)

AMENDMENTS

2011—Subsec. (b)(2)(J). Pub. L. 111–358, § 902(b)(1), added subpar. (J).

Subsec. (f)(1)(D) to (F). Pub. L. 111–358, § 902(b)(2), added subpars. (D) to (F).

§ 16534. Department of Energy early career awards for science, engineering, and mathematics researchers

(a) Grant awards

The Director of the Office of Science of the Department (referred to in this section as the ''Director'') shall carry out a program to award grants to scientists and engineers at an early career stage at institutions of higher education and organizations described in subsection (c) to conduct research in fields relevant to the mission of the Department.

(b) Amount and duration

(1) Amount

The amount of a grant awarded under this section shall be—

(A) not less than $80,000; and

(B) not more than $125,000.

(2) Duration

The term of a grant awarded under this section shall be not more than 5 years.

(c) Eligibility

(1) In general

To be eligible to receive a grant under this section, an individual shall, as determined by the Director—

(A) subject to paragraph (2), have completed a doctorate or other terminal degree not more than 10 years before the date on which the proposal for a grant is submitted under subsection (e)(1);

(B) have demonstrated promise in a science, engineering, or mathematics field relevant to the missions of the Department; and

(C) be employed—

(i) in a tenure track-position as an assistant professor or equivalent title at an institution of higher education in the United States;

(ii) at an organization in the United States that is a nonprofit, nondegree-granting research organization such as a museum, observatory, or research laboratory; or

(iii) as a scientist at a National Laboratory.

(2) Waiver

Notwithstanding paragraph (1)(A), the Director may determine that an individual who has completed a doctorate more than 10 years before the date of submission of a proposal under subsection (e)(1) is eligible to receive a grant under this section if the individual was unable to conduct research for a period of time because of extenuating circumstances, including military service or family responsibilities, as determined by the Director.

(d) Selection

Grant recipients shall be selected on a competitive, merit-reviewed basis.

(e) Selection process and criteria

(1) Proposal

To be eligible to receive a grant under this section, an individual shall submit to the Director a proposal at such time, in such manner, and containing such information as the Director may require.

(2) Evaluation

In evaluating the proposals submitted under paragraph (1), the Director shall take into consideration, at a minimum—

(A) the intellectual merit of the proposed project;

(B) the innovative or transformative nature of the proposed research;

(C) the extent to which the proposal integrates research and education, including undergraduate education in science and engineering disciplines; and

(D) the potential of the applicant for leadership at the frontiers of knowledge.

(f) Diversity requirement

(1) In general

In awarding grants under this section, the Director shall endeavor to ensure that the grant recipients represent a variety of types of institutions of higher education and nonprofit, nondegree-granting research organizations.

(2) Requirement

In support of the goal described in paragraph (1), the Director shall broadly disseminate information regarding the deadlines applicable to, and manner in which to submit, proposals for grants under this section, including by conducting outreach activities for—

(A) part B institutions, as defined in section 1061 of title 20; and

(B) minority institutions, as defined in section 1067k of title 20.

(g) Report on recruiting and retaining early career science and engineering researchers at National Laboratories

(1) In general

Not later than 90 days after August 9, 2007, the Director 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 a report describing efforts of the Director to recruit and retain young scientists and engineers at early career stages at the National Laboratories.

(2) Inclusions

The report under paragraph (1) shall include—

(A) a description of applicable Department and National Laboratory policies and procedures, including policies and procedures relating to financial incentives, awards, promotions, time reserved for independent research, access to equipment or facilities, and other forms of recognition, designed to attract and retain young scientists and engineers;

(B) an evaluation of the impact of the incentives described in subparagraph (A) on—

(i) the careers of young scientists and engineers at the National Laboratories; and

(ii) the quality of the research at the National Laboratories and in Department programs;

(C) a description of barriers, if any, that exist with respect to efforts to recruit and retain young scientists and engineers, including the limited availability of full-time equivalent positions, legal and procedural requirements, and pay grading systems; and

(D) the amount of funding devoted to efforts to recruit and retain young researchers, and the source of the funds.

(h) Authorization of appropriations

There is authorized to be appropriated to the Secretary, acting through the Director, to carry out this section $25,000,000 for each of fiscal years 2008 through 2013.

(Pub. L. 110–69, title V, § 5006, Aug. 9, 2007, 121 Stat. 615; Pub. L. 111–358, title IX, § 902(c), Jan. 4, 2011, 124 Stat. 4045.)

AMENDMENTS

2011—Subsec. (h). Pub. L. 111–358 substituted ''2013'' for ''2010''.

§ 16535. Discovery science and engineering innovation institutes

(a) In general

The Secretary shall establish distributed, multidisciplinary institutes (referred to in this section as ''Institutes'') centered at National Laboratories to apply fundamental science and engineering discoveries to technological innovations relating to—

(1) the missions of the Department; and

(2) the global competitiveness of the United States.

(b) Topical areas

The Institutes shall support scientific and engineering research and education activities on critical emerging technologies determined by the Secretary to be essential to global competitiveness, including activities relating to—

(1) sustainable energy technologies;

(2) multiscale materials and processes;

(3) micro- and nano-engineering;

(4) computational and information engineering; and

(5) genomics and proteomics.

(c) Partnerships

In carrying out this section, the Secretary shall establish partnerships between the Institutes and—

(1) institutions of higher education—

(A) to train undergraduate and graduate science and engineering students;

(B) to develop innovative undergraduate and graduate educational curricula; and

(C) to conduct research within the topical areas described in subsection (b); and

(2) private industry to develop innovative technologies within the topical areas described in subsection (b).

(d) Grants

(1) In general

For each fiscal year, the Secretary may select not more than 3 Institutes to receive a grant under this section.

(2) Merit-based selection

The selection of Institutes under paragraph (1) shall be—

(A) merit-based; and

(B) made through an open, competitive selection process.

(3) Term

An Institute shall receive a grant under this section for not more than 3 fiscal years.

(e) Review

The Secretary shall offer to enter into an agreement with the National Academy of Sciences under which the Academy shall, by not later than 3 years after August 9, 2007—

(1) review the performance of the Institutes under this section; and

(2) submit to Congress and the Secretary a report describing the results of the review.

(f) Authorization of appropriations

There is authorized to be appropriated to provide grants to each Institute selected under this section $10,000,000 for each of fiscal years 2008 through 2010.

(Pub. L. 110–69, title V, § 5008, Aug. 9, 2007, 121 Stat. 618.)

§ 16536. Protecting America's Competitive Edge (PACE) graduate fellowship program

(a) Definition of eligible student

In this section, the term ''eligible student'' means a student who attends an institution of higher education that offers a doctoral degree in a field relevant to a mission area of the Department.

(b) Establishment

The Secretary shall establish a graduate fellowship program for eligible students pursuing a doctoral degree in a mission area of the Department.

(c) Selection

(1) In general

The Secretary shall award fellowships to eligible students under this section through a competitive merit review process, involving written and oral interviews, that will result in a wide distribution of awards throughout the United States, as determined by the Secretary.

(2) Criteria

The Secretary shall establish selection criteria for awarding fellowships under this section that require an eligible student—

(A) to pursue a field of science or engineering of importance to a mission area of the Department;

(B) to demonstrate to the Secretary—

(i) the capacity of the eligible student to understand technical topics relating to the fellowship that can be derived from the first principles of the technical topics;

(ii) imagination and creativity;

(iii) leadership skills in organizations or intellectual endeavors, demonstrated through awards and past experience; and

(iv) excellent verbal and communication skills to explain, defend, and demonstrate an understanding of technical subjects relating to the fellowship; and

(C) to be a citizen or legal permanent resident of the United States.

(d) Awards

(1) Amount

A fellowship awarded under this section shall—

(A) provide an annual living stipend; and

(B) cover—

(i) graduate tuition at an institution of higher education described in subsection (a); and

(ii) incidental expenses associated with curricula and research at the institution of higher education (including books, computers, and software).

(2) Duration

A fellowship awarded under this section shall be up to 3 years duration within a 5-year period.

(3) Portability

A fellowship awarded under this section shall be portable with the eligible student.

(e) Administration

The Secretary, acting through the Director of Science, Engineering, and Mathematics Education—

(1) shall administer the program established under this section; and

(2) may enter into a contract with a nonprofit entity to administer the program, including the selection and award of fellowships.

(f) Authorization of appropriations

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

(1) $7,500,000 for fiscal year 2008;

(2) $12,000,000 for fiscal year 2009, including nonexpiring fellowships for the preceding fiscal year;

(3) $20,000,000 for fiscal year 2010, including nonexpiring fellowships for preceding fiscal years;

(4) $20,600,000 for fiscal year 2011;

(5) $21,200,000 for fiscal year 2012; and

(6) $21,900,000 for fiscal year 2013.

(Pub. L. 110–69, title V, § 5009, Aug. 9, 2007, 121 Stat. 618; Pub. L. 111–358, title IX, § 902(d), Jan. 4, 2011, 124 Stat. 4045.)

AMENDMENTS

2011—Subsec. (f)(4) to (6). Pub. L. 111–358 added pars. (4) to (6).

§ 16537. Distinguished scientist program

(a) Purpose

The purpose of this section is to promote scientific and academic excellence through collaborations between institutions of higher education and National Laboratories.

(b) Establishment

The Secretary shall establish a program to support the joint appointment of distinguished scientists by institutions of higher education and National Laboratories.

(c) Qualifications

To be eligible for appointment as a distinguished scientist under this section, an individual, by reason of professional background and experience, shall be able to bring international recognition to the appointing institution of higher education or National Laboratory in the field of scientific endeavor of the individual.

(d) Selection

A distinguished scientist appointed under this section shall be selected through an open, competitive process.

(e) Appointment

(1) Institution of higher education

An appointment by an institution of higher education under this section shall be filled within the tenure allotment of the institution of higher education, at a minimum rank of professor.

(2) National Laboratory

An appointment by a National Laboratory under this section shall be at the rank of the highest grade of distinguished scientist or technical staff of the National Laboratory.

(f) Duration

An appointment under this section shall—

(1) be for a term of 6 years; and

(2) consist of 2 3-year funding allotments.

(g) Use of funds

Funds made available under this section may be used for—

(1) the salary of the distinguished scientist and support staff;

(2) undergraduate, graduate, and post-doctoral appointments;

(3) research-related equipment;

(4) professional travel; and

(5) such other requirements as the Secretary determines to be necessary to carry out the purpose of the program.

(h) Review

(1) In general

The appointment of a distinguished scientist under this section shall be reviewed at the end of the first 3-year allotment for the distinguished scientist through an open peer-review process to determine whether the appointment is meeting the purpose of this section under subsection (a).

(2) Funding

Funding of the appointment of the distinguished scientist for the second 3-year allotment shall be determined based on the review conducted under paragraph (1).

(i) Cost sharing

To be eligible for assistance under this section, an appointing institution of higher education shall pay at least 50 percent of the total costs of the appointment.

(j) Authorization of appropriations

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

(1) $15,000,000 for fiscal year 2008;

(2) $20,000,000 for fiscal year 2009;

(3) $30,000,000 for fiscal year 2010;

(4) $31,000,000 for fiscal year 2011;

(5) $32,000,000 for fiscal year 2012; and

(6) $33,000,000 for fiscal year 2013.

(Pub. L. 110–69, title V, § 5011, Aug. 9, 2007, 121 Stat. 620; Pub. L. 111–358, title IX, § 902(e), Jan. 4, 2011, 124 Stat. 4045.)

AMENDMENTS

2011—Subsec. (j)(4) to (6). Pub. L. 111–358 added pars. (4) to (6).

§ 16538. Advanced Research Projects Agency—Energy

(a) Definitions

In this section:

(1) ARPA-E

The term ''ARPA–E'' means the Advanced Research Projects Agency—Energy established by subsection (b).

(2) Director

The term ''Director'' means the Director of ARPA-E appointed under subsection (d).

(3) Fund

The term ''Fund'' means the Energy Transformation Acceleration Fund established under subsection (n)(1).

(b) Establishment

There is established the Advanced Research Projects Agency—Energy within the Department to overcome the long-term and high-risk technological barriers in the development of energy technologies.

(c) Goals

(1) In general

The goals of ARPA-E shall be—

(A) to enhance the economic and energy security of the United States through the development of energy technologies that result in—

(i) reductions of imports of energy from foreign sources;

(ii) reductions of energy-related emissions, including greenhouse gases; and

(iii) improvement in the energy efficiency of all economic sectors; and

(B) to ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.

(2) Means

ARPA-E shall achieve the goals established under paragraph (1) through energy technology projects by—

(A) identifying and promoting revolutionary advances in fundamental and applied sciences;

(B) translating scientific discoveries and cutting-edge inventions into technological innovations; and

(C) accelerating transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

(d) Director

(1) Appointment

There shall be in the Department of Energy a Director of ARPA-E, who shall be appointed by the President, by and with the advice and consent of the Senate.

(2) Qualifications

The Director shall be an individual who, by reason of professional background and experience, is especially qualified to advise the Secretary on, and manage research programs addressing, matters pertaining to long-term and high-risk technological barriers to the development of energy technologies.

(3) Relationship to Secretary

The Director shall report to the Secretary.

(4) Relationship to other programs

No other programs within the Department shall report to the Director.

(e) Responsibilities

The responsibilities of the Director shall include—

(1) approving all new programs within ARPA-E;

(2) developing funding criteria and assessing the success of programs through the establishment of technical milestones;

(3) administering the Fund through awards to institutions of higher education, companies, research foundations, trade and industry research collaborations, or consortia of such entities, which may include federally-funded research and development centers, to achieve the goals described in subsection (c) through targeted acceleration of—

(A) novel early-stage energy research with possible technology applications;

(B) development of techniques, processes, and technologies, and related testing and evaluation;

(C) research and development of advanced manufacturing process and technologies for the domestic manufacturing of novel energy technologies; and

(D) coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer;

(4) terminating programs carried out under this section that are not achieving the goals of the programs; and

(5) pursuant to subsection (c)(2)(C)—

(A) ensuring that applications for funding disclose the extent of current and prior efforts, including monetary investments as appropriate, in pursuit of the technology area for which funding is being requested;

(B) adopting measures to ensure that, in making awards, program managers adhere to the purposes of subsection (c)(2)(C); and

(C) providing as part of the annual report required by subsection (h)(1) a summary of the instances of and reasons for ARPA–E funding projects in technology areas already being undertaken by industry.

(f) Awards

In carrying out this section, the Director may provide awards in the form of grants, contracts, cooperative agreements, cash prizes, and other transactions.

(g) Personnel

(1) In general

The Director shall establish and maintain within ARPA–E a staff with sufficient qualifications and expertise to enable ARPA–E to carry out the responsibilities of ARPA–E under this section in conjunction with other operations of the Department.

(2) Program directors

(A) In general

The Director shall designate employees to serve as program directors for the programs established pursuant to the responsibilities established for ARPA-E under subsection (e).

(B) Responsibilities

A program director of a program shall be responsible for—

(i) establishing research and development goals for the program, including through the convening of workshops and conferring with outside experts, and publicizing the goals of the program to the public and private sectors;

(ii) soliciting applications for specific areas of particular promise, especially areas that the private sector or the Federal Government are not likely to undertake alone;

(iii) building research collaborations for carrying out the program;

(iv) selecting on the basis of merit each of the projects to be supported under the program after considering—

(I) the novelty and scientific and technical merit of the proposed projects;

(II) the demonstrated capabilities of the applicants to successfully carry out the proposed project;

(III) the consideration by the applicant of future commercial applications of the project, including the feasibility of partnering with 1 or more commercial entities; and

(IV) such other criteria as are established by the Director;

(v) identifying innovative cost-sharing arrangements for ARPA–E projects, including through use of the authority provided under section 16352(b)(3) of this title;

(vi) monitoring the progress of projects supported under the program;

(vii) identifying mechanisms for commercial application of successful energy technology development projects, includ-

ing through establishment of partnerships between awardees and commercial entities; and

(viii) recommending program restructure or termination of research partnerships or whole projects.

(C) Term

The term of a program manager shall be not more than 3 years and may be renewed.

(3) Hiring and management

(A) In general

The Director shall have the authority to—

(i) make appointments of scientific, engineering, and professional personnel without regard to the civil service laws;

(ii) fix the basic pay of such personnel at a rate to be determined by the Director at rates not in excess of Level II of the Executive Schedule (EX–II) without regard to the civil service laws; and

(iii) pay any employee appointed under this subpart[1] payments in addition to basic pay, except that the total amount of additional payments paid to an employee under this subpart[1] for any 12-month period shall not exceed the least of the following amounts:

(I) $25,000.

(II) The amount equal to 25 percent of the annual rate of basic pay of the employee.

(III) The amount of the limitation that is applicable for a calendar year under section 5307(a)(1) of title 5.

(B) Number

The Director shall appoint not more than 120 personnel under this section.

(C) Private recruiting firms

The Secretary, or the Director serving as an agent of the Secretary, may contract with private recruiting firms for the hiring of qualified technical staff to carry out this section.

(D) Additional staff

The Director may use all authorities in existence on August 9, 2007, that are provided to the Secretary to hire administrative, financial, and clerical staff as necessary to carry out this section.

(h) Reports and roadmaps

(1) Annual report

As part of the annual budget request submitted for each fiscal year, the Director shall provide to the relevant authorizing and appropriations committees of Congress a report describing projects supported by ARPA-E during the previous fiscal year.

(2) Strategic vision roadmap

Not later than October 1, 2010, and October 1, 2013, the Director shall provide to the relevant authorizing and appropriations committees of Congress a roadmap describing the strategic vision that ARPA-E will use to guide the choices of ARPA-E for future technology investments over the following 3 fiscal years.

[1] So in original.

(i) Coordination and nonduplication

(1) In general

To the maximum extent practicable, the Director shall ensure that the activities of ARPA-E are coordinated with, and do not duplicate the efforts of, programs and laboratories within the Department and other relevant research agencies.

(2) Technology Transfer Coordinator

To the extent appropriate, the Director may coordinate technology transfer efforts with the Technology Transfer Coordinator appointed under section 16391 of this title.

(j) Federal demonstration of technologies

The Director shall seek opportunities to partner with purchasing and procurement programs of Federal agencies to demonstrate energy technologies resulting from activities funded through ARPA–E.

(k) Advice

(1) Advisory committees

The Director may seek advice on any aspect of ARPA-E from—

(A) an existing Department of Energy advisory committee; and

(B) a new advisory committee organized to support the programs of ARPA-E and to provide advice and assistance on—

(i) specific program tasks; or

(ii) overall direction of ARPA-E.

(2) Additional sources of advice

In carrying out this section, the Director may seek advice and review from—

(A) the President's Committee of Advisors on Science and Technology; and

(B) any professional or scientific organization with expertise in specific processes or technologies under development by ARPA-E.

(*l*) ARPA-E evaluation

(1) In general

After ARPA-E has been in operation for 6 years, the Secretary shall offer to enter into a contract with the National Academy of Sciences under which the National Academy shall conduct an evaluation of how well ARPA-E is achieving the goals and mission of ARPA-E.

(2) Inclusions

The evaluation shall include—

(A) the recommendation of the National Academy of Sciences on whether ARPA-E should be continued or terminated; and

(B) a description of lessons learned from operation of ARPA-E, and the manner in which those lessons may apply to the operation of other programs of the Department.

(3) Availability

On completion of the evaluation, the evaluation shall be made available to Congress and the public.

(m) Existing authorities

The authorities granted by this section are—

(1) in addition to existing authorities granted to the Secretary; and

(2) are not intended to supersede or modify any existing authorities.

(n) Funding

(1) Fund

There is established in the Treasury of the United States a fund, to be known as the ''Energy Transformation Acceleration Fund'', which shall be administered by the Director for the purposes of carrying out this section.

(2) Authorization of appropriations

Subject to paragraphs (4) and (5),[2] there are authorized to be appropriated to the Director for deposit in the Fund, without fiscal year limitation—

(A) $300,000,000 for fiscal year 2008;

(B) such sums as are necessary for each of fiscal years 2009 and 2010;

(C) $300,000,000 for fiscal year 2011;

(D) $306,000,000 for fiscal year 2012; and

(E) $312,000,000 for fiscal year 2013.

(3) Separate budget and appropriation

(A) Budget request

The budget request for ARPA-E shall be separate from the rest of the budget of the Department.

(B) Appropriations

Appropriations to the Fund shall be separate and distinct from the rest of the budget for the Department.

(4) Allocation

Of the amounts appropriated for a fiscal year under paragraph (2)—

(A) not more than 50 percent of the amount shall be used to carry out subsection (e)(3)(D);

(B) at least 5 percent of the amount shall be used for technology transfer and outreach activities, consistent with the goal described in subsection (c)(2)(D) and within the responsibilities of program directors described in subsection (g)(2)(B)(vii); and

(C) no funds may be used for construction of new buildings or facilities during the 5-year period beginning on August 9, 2007.

(Pub. L. 110–69, title V, § 5012, Aug. 9, 2007, 121 Stat. 621; Pub. L. 111–358, title IX, § 904, Jan. 4, 2011, 124 Stat. 4045.)

REFERENCES IN TEXT

Level II of the Executive Schedule, referred to in subsec. (g)(3)(A)(ii), is set out in section 5313 of Title 5, Government Organization and Employees.

Par. (5), referred to in subsec. (n)(2), was redesignated par. (4) of this section and former par. (4) was struck out by Pub. L. 111–358, title IX, § 904(10)(B), (C), Jan. 4, 2011, 124 Stat. 4048.

AMENDMENTS

2011—Subsec. (a)(3). Pub. L. 111–358, § 904(1), substituted ''subsection (n)(1)'' for ''subsection (m)(1)''.

Subsec. (c)(2)(A). Pub. L. 111–358, § 904(2), inserted ''and applied'' after ''advances in fundamental''.

Subsec. (e)(3)(C). Pub. L. 111–358, § 904(3)(A)(i), added subpar. (C) and struck out former subpar. (C) which read as follows: ''research and development of manufacturing processes for novel energy technologies; and''.

Subsec. (e)(5). Pub. L. 111–358, § 904(3)(A)(ii)–(C), added par. (5).

Subsec. (f). Pub. L. 111–358, § 904(5), added subsec. (f). Former subsec. (f) redesignated (g).

Subsec. (g). Pub. L. 111–358, § 904(4), redesignated subsec. (f) as (g). Former subsec. (g) redesignated (h).

Subsec. (g)(1). Pub. L. 111–358, § 904(6)(B), added par. (1). Former par. (1) redesignated (2).

Subsec. (g)(2). Pub. L. 111–358, § 904(6)(A),(C)(i), redesignated par. (1) as (2) and substituted ''Program directors'' for ''Program managers'' in heading.

Subsec. (g)(2)(A). Pub. L. 111–358, § 904(6)(C)(ii), substituted ''program directors for'' for ''program managers for each of''.

Subsec. (g)(2)(B). Pub. L. 111–358, § 904(6)(C)(iii)(I), substituted ''program director'' for ''program manager'' in introductory provisions.

Subsec. (g)(2)(B)(iv). Pub. L. 111–358, § 904(6)(C)(iii)(II), struck out '', with advice under subsection (j) as appropriate,'' after ''basis of merit'' in introductory provisions.

Subsec. (g)(2)(B)(v) to (viii). Pub. L. 111–358, § 904(6)(C)(iii)(III)–(VI), added cls. (v) and (vii) and redesignated former cls. (v) and (vi) as (vi) and (viii), respectively.

Subsec. (g)(2)(C). Pub. L. 111–358, § 904(6)(C)(iv), inserted ''not more than'' after ''shall be''.

Subsec. (g)(3). Pub. L. 111–358, § 904(6)(A), redesignated par. (2) as (3).

Subsec. (g)(3)(A)(ii), (iii). Pub. L. 111–358, § 904(6)(D)(i), added cls. (ii) and (iii) and struck out former cl. (ii) which read as follows: ''fix the compensation of such personnel at a rate to be determined by the Director.''

Subsec. (g)(3)(B). Pub. L. 111–358, § 904(6)(D)(ii), substituted ''not more than 120'' for ''not less than 70, and not more than 120,''.

Subsec. (h). Pub. L. 111–358, § 904(4), redesignated subsec. (g) as (h). Former subsec. (h) redesignated (i).

Subsec. (h)(2). Pub. L. 111–358, § 904(7), substituted ''2010'' for ''2008'' and ''2013'' for ''2011''.

Subsec. (i). Pub. L. 111–358, § 904(4), redesignated subsec. (h) as (i). Former subsec. (i) redesignated (j).

Subsec. (j). Pub. L. 111–358, § 904(8), added subsec. (j) and struck out former subsec. (j). Prior to amendment, text read as follows: ''The Secretary shall make information available to purchasing and procurement programs of Federal agencies regarding the potential to demonstrate technologies resulting from activities funded through ARPA-E.''

Pub. L. 111–358, § 904(4), redesignated subsec. (i) as (j). Former subsec. (j) redesignated (k).

Subsecs. (k), (*l*). Pub. L. 111–358, § 904(4), redesignated subsecs. (j) and (k) as (k) and (*l*), respectively. Former subsec. (*l*) redesignated (m).

Subsec. (*l*)(1). Pub. L. 111–358, § 904(9)(A), substituted ''6 years'' for ''4 years''.

Subsec. (*l*)(2)(B). Pub. L. 111–358, § 904(9)(B), inserted '', and the manner in which those lessons may apply to the operation of other programs of the Department'' after ''ARPA-E''.

Subsecs. (m), (n). Pub. L. 111–358, § 904(4), redesignated subsecs. (*l*) and (m) as (m) and (n), respectively.

Subsec. (n)(2)(C) to (E). Pub. L. 111–358, § 904(10)(A), added subpars. (C) to (E).

Subsec. (n)(4). Pub. L. 111–358, § 904(10)(B), (C), redesignated par. (5) as (4) and struck out former par. (4). Prior to amendment, text read as follows: ''No amounts may be appropriated for ARPA-E for fiscal year 2008 unless the amount appropriated for the activities of the Office of Science of the Department for fiscal year 2008 exceeds the amount appropriated for the Office for fiscal year 2007, as adjusted for inflation in accordance with the Consumer Price Index published by the Bureau of Labor Statistics of the Department of Labor.''

Subsec. (n)(4)(B). Pub. L. 111–358, § 904(10)(D), substituted ''5 percent'' for ''2.5 percent'' and inserted '', consistent with the goal described in subsection (c)(2)(D) and within the responsibilities of program directors described in subsection (g)(2)(B)(vii)'' after ''outreach activities''.

Subsec. (n)(5). Pub. L. 111–358, § 904(10)(C), redesignated par. (5) as (4).

[2] See References in Text note below.

CHAPTER 150—NATIONAL AERONAUTICS AND SPACE PROGRAMS, 2005

§ 16601. Transferred

CODIFICATION

Section, Pub. L. 109–155, §2, Dec. 30, 2005, 119 Stat. 2897, which related to definitions, was transferred and is set out as a note under section 10101 of Title 51, National and Commercial Space Programs.

SUBCHAPTER I—GENERAL PRINCIPLES AND REPORTS

§§ 16611, 16611a. Repealed or Omitted

CODIFICATION

Section 16611, Pub. L. 109–155, title I, §101, Dec. 30, 2005, 119 Stat. 2897, which related to responsibilities, policies, and plans, was repealed in part and omitted in part. Subsecs. (a) and (b) were repealed and reenacted as sections 20301 and 20302, respectively, of Title 51, National and Commercial Space Programs, by Pub. L. 111–314, §§3, 6, Dec. 18, 2010, 124 Stat. 3328, 3444, which Act enacted Title 51. Subsecs. (c) to (g), requiring certain reports and studies by past dates, were omitted from the Code following the enactment of Title 51. Subsec. (h)(1) was repealed and reenacted as subsec. (a) of section 30103 of Title 51. Subsec. (h)(2), providing sense of Congress regarding budget evaluation, was omitted from the Code following the enactment of Title 51. Subsec. (i) was repealed and reenacted as subsec. (b) of section 30103 of Title 51. Subsec. (j), providing for independent review of strategic need for aeronautics test facilities, was omitted from the Code following the enactment of Title 51.

Section 16611a, Pub. L. 110–69, title II, §2001, Aug. 9, 2007, 121 Stat. 582, which related to NASA's contribution to innovation, was repealed in part and omitted in part. Subsecs. (a), (b), (c), and (e) were repealed and reenacted as subsecs. (a), (b), (c), and (d), respectively, of section 20303 of Title 51 by Pub. L. 111–314, §§3, 6, Dec. 18, 2010, 124 Stat. 3328, 3444, which Act enacted Title 51. Subsec. (d), which provided sense of Congress regarding NASA funding, and subsec. (f), requiring report by Administrator regarding assessments of educational program effectiveness not later than one year after Aug. 9, 2007, were omitted from the Code following the enactment of Title 51.

§ 16611b. Repealed. Pub. L. 111–314, § 6, Dec. 18, 2010, 124 Stat. 3444

Section, Pub. L. 110–161, div. B, title III, Dec. 26, 2007, 121 Stat. 1919, related to NASA annual budget justification. See subsec. (c) of section 30103 of Title 51, National and Commercial Space Programs.

ESTIMATES OF RECEIPTS AND COLLECTIONS AND PROPOSED USE OF FUNDS FROM LEASES OF NON-EXCESS PROPERTY

Pub. L. 111–8, div. B, title III, Mar. 11, 2009, 123 Stat. 589, which provided in part that each annual budget request shall include an annual estimate of gross receipts and collections and proposed use of all funds collected pursuant to section 315 of the National Aeronautics and Space Act of 1958 ([former] 42 U.S.C. 2459j), was repealed and reenacted as subsec. (d) of section 30103 of Title 51, National and Commercial Space Programs, by Pub. L. 111–314, §§3, 6, Dec. 18, 2010, 124 Stat. 3328, 3444, which Act enacted Title 51.

§ 16612. Transferred

CODIFICATION

Section, Pub. L. 109–155, title I, §102, Dec. 30, 2005, 119 Stat. 2905, which related to national awareness campaign to encourage young Americans to enter the fields of science, mathematics, and engineering, budget information, space communications plan, Joint Dark Energy Mission, and Office of Science and Technology Policy, and related reports, was transferred and is set out as a note preceding section 40901 of Title 51, National and Commercial Space Programs.

§§ 16613 to 16615. Repealed. Pub. L. 111–314, § 6, Dec. 18, 2010, 124 Stat. 3444

Section 16613, Pub. L. 109–155, title I, §103, Dec. 30, 2005, 119 Stat. 2907, related to baselines and cost controls. See section 30104 of Title 51, National and Commercial Space Programs.

Section 16614, Pub. L. 109–155, title I, §105, Dec. 30, 2005, 119 Stat. 2912, related to foreign launch vehicles. See section 30703 of Title 51.

Section 16615, Pub. L. 109–155, title I, §107, Dec. 30, 2005, 119 Stat. 2912, related to implementation plan describing lessons learned and best practices for major programs and projects. See section 30501 of Title 51.

§§ 16616, 16617. Omitted

CODIFICATION

Section 16616, Pub. L. 109–155, title I, §108, Dec. 30, 2005, 119 Stat. 2913, which related to commercialization plan for missions to the Moon and Mars, and required plan submission to Congress not later than 180 days after Dec. 30, 2005, was omitted from the Code following the enactment of Title 51, National and Commercial Space Programs, by Pub. L. 111–314.

Section 16617, Pub. L. 109–155, title I, §109, Dec. 30, 2005, 119 Stat. 2913, which related to study on the feasibility of use of ground source heat pumps and required study transmission to Congress not later than one year after Dec. 30, 2005, was omitted from the Code following the enactment of Title 51.

§ 16618. Repealed. Pub. L. 111–314, § 6, Dec. 18, 2010, 124 Stat. 3444

Section, Pub. L. 109–155, title I, §110, Dec. 30, 2005, 119 Stat. 2914, related to whistleblower protection. See section 30502 of Title 51, National and Commercial Space Programs.

SUBCHAPTER II—AUTHORIZATION OF APPROPRIATIONS

§§ 16631 to 16634. Repealed. Pub. L. 111–314, § 6, Dec. 18, 2010, 124 Stat. 3444

Section 16631, Pub. L. 109–155, title II, §202, Dec. 30, 2005, 119 Stat. 2915, related to appropriations for fiscal year 2007.

Section 16632, Pub. L. 109–155, title II, §203, Dec. 30, 2005, 119 Stat. 2915, related to appropriations for fiscal year 2008.

Section 16633, Pub. L. 109–155, title II, §204, Dec. 30, 2005, 119 Stat. 2916, related to ISS research. See section 70902 of Title 51, National and Commercial Space Programs.

Section 16634, Pub. L. 109–155, title II, §205, Dec. 30, 2005, 119 Stat. 2916, related to charges and funding account for test facilities. See section 50505 of Title 51.

§§ 16635, 16636. Omitted

Section 16635, Pub. L. 109–155, title II, §206, Dec. 30, 2005, 119 Stat. 2916, which related to limitation on use of appropriated funds for official representation, was omitted from the Code following the enactment of Title 51, National and Commercial Space Programs, by Pub. L. 111–314.

Section 16636, Pub. L. 109–155, title II, §207, Dec. 30, 2005, 119 Stat. 2916, which required Administrator to report ISS development costs and related matters to Congress and provided for repeal of section 202 of Pub. L. 106–391 thirty days after transmission of report, was omitted from the Code following the enactment of Title 51.