Editorial Notes

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (b)(1), is Pub. L. 94–163, Dec. 22, 1975, 89 Stat. 871. Part D of title III of the Act is classified generally to part B (§ 6321 et seq.) of subchapter III of chapter 77 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

The Energy Conservation and Production Act, referred to in subsec. (b)(2), is Pub. L. 94–385, Aug. 14, 1976, 90 Stat. 1125. Part A of title IV of the Act is classified generally to part A (§ 6861 et seq.) of subchapter III of chapter 81 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6801 of this title and Tables.

AMENDMENTS

2009—Subsec. (a)(1). Pub. L. 111–5 struck out ''; provided that 49 percent of the appropriated funds shall be distributed using the definition of eligible unit of local government-alternative 1 in section 17151(3)(A) of this title and 49 percent of the appropriated funds shall be distributed using the definition of eligible unit of local government-alternative 2 in section 17151(3)(B) of this title'' after ''2012''.

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

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

SUBCHAPTER V—ACCELERATED RESEARCH AND DEVELOPMENT

PART A—SOLAR ENERGY

§ 17171. Thermal energy storage research and development program

(a) Establishment

The Secretary shall establish a program of research and development to provide lower cost and more viable thermal energy storage technologies to enable the shifting of electric power loads on demand and extend the operating time of concentrating solar power electric generating plants.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $5,000,000 for fiscal year 2008, $7,000,000 for fiscal year 2009, $9,000,000 for fiscal year 2010, $10,000,000 for fiscal year 2011, and $12,000,000 for fiscal year 2012.

(Pub. L. 110–140, title VI, § 602, Dec. 19, 2007, 121 Stat. 1674.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

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

SHORT TITLE

This part known as the ''Solar Energy Research and Advancement Act of 2007'', see Short Title note set out under section 17001 of this title.

§ 17172. Solar energy curriculum development and certification grants

(a) Establishment

The Secretary shall establish in the Office of Solar Energy Technologies a competitive grant program to create and strengthen solar industry workforce training and internship programs in installation, operation, and maintenance of solar energy products. The goal of this program is to ensure a supply of well-trained individuals to support the expansion of the solar energy industry.

(b) Authorized activities

Grant funds may be used to support the following activities:

(1) Creation and development of a solar energy curriculum appropriate for the local educational, entrepreneurial, and environmental conditions, including curriculum for community colleges.

(2) Support of certification programs for individual solar energy system installers, instructors, and training programs.

(3) Internship programs that provide hands-on participation by students in commercial applications.

(4) Activities required to obtain certification of training programs and facilities by an industry-accepted quality-control certification program.

(5) Incorporation of solar-specific learning modules into traditional occupational training and internship programs for construction-related trades.

(6) The purchase of equipment necessary to carry out activities under this section.

(7) Support of programs that provide guidance and updates to solar energy curriculum instructors.

(c) Administration of grants

Grants may be awarded under this section for up to 3 years. The Secretary shall award grants to ensure sufficient geographic distribution of training programs nationally. Grants shall only be awarded for programs certified by an industry-accepted quality-control certification institution, or for new and growing programs with a credible path to certification. Due consideration shall be given to women, underrepresented minorities, and persons with disabilities.

(d) Report

The Secretary shall make public, on the website of the Department or upon request, information on the name and institution for all grants awarded under this section, including a brief description of the project as well as the grant award amount.

(e) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $10,000,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 604, Dec. 19, 2007, 121 Stat. 1675.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

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

§ 17173. Daylighting systems and direct solar light pipe technology

(a) Establishment

The Secretary shall establish a program of research and development to provide assistance in the demonstration and commercial application of direct solar renewable energy sources to provide alternatives to traditional power generation for lighting and illumination, including light pipe technology, and to promote greater energy conservation and improved efficiency. All direct solar renewable energy devices supported under this program shall have the capability to provide measurable data on the amount of kilowatt-hours saved over the traditionally powered light sources they have replaced.

(b) Reporting

The Secretary shall transmit to Congress an annual report assessing the measurable data derived from each project in the direct solar renewable energy sources program and the energy savings resulting from its use.

(c) Definitions

For purposes of this section—

(1) the term ''direct solar renewable energy'' means energy from a device that converts sunlight into useable light within a building, tunnel, or other enclosed structure, replacing artificial light generated by a light fixture and doing so without the conversion of the sunlight into another form of energy; and

(2) the term ''light pipe'' means a device designed to transport visible solar radiation from its collection point to the interior of a building while excluding interior heat gain in the nonheating season.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section $3,500,000 for each of the fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 605, Dec. 19, 2007, 121 Stat. 1676.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

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

§§ 17174, 17175. Repealed. Pub. L. 116–260, div. Z, title III, § 3006(g)(1), Dec. 27, 2020, 134 Stat. 2513

Section 17174, Pub. L. 110–140, title VI, § 606, Dec. 19, 2007, 121 Stat. 1676, related to solar air conditioning research and development program.

Section 17175, Pub. L. 110–140, title VI, § 607, Dec. 19, 2007, 121 Stat. 1677, related to photovoltaic demonstration program.

PART B—GEOTHERMAL ENERGY

§ 17191. Definitions

For purposes of this part:

(1) Engineered

When referring to enhanced geothermal systems, the term ''engineered'' means designed to access subsurface heat, including stimulation and nonstimulation technologies to address one or more of the following issues:

(A) Lack of effective permeability, porosity or open fracture connectivity within the heat reservoir.

(B) Insufficient contained geofluid in the heat reservoir.

(C) A low average geothermal gradient which necessitates deeper drilling, or the use of alternative heat sources or heat generation processes.

(2) Eligible entity

The term ''eligible entity'' means any of the following entities:

(A) An institution of higher education.

(B) A National laboratory.

(C) A Federal research agency.

(D) A State research agency.

(E) A nonprofit research organization.

(F) An industrial entity.

(G) A consortium of 2 or more entities described in subparagraphs (A) through (F).

(3) Enhanced geothermal systems

The term ''enhanced geothermal systems'' means geothermal reservoir systems that are engineered, as opposed to occurring naturally.

(4) Geofluid

The term ''geofluid'' means any fluid used to extract thermal energy from the Earth which is transported to the surface for direct use or electric power generation, except that such term shall not include oil or natural gas.

(5) Geopressured resources

The term ''geopressured resources'' mean geothermal deposits found in sedimentary rocks under higher than normal pressure and saturated with gas or methane.

(6) Geothermal

The term ''geothermal'' refers to heat energy stored in the Earth's crust that can be accessed for direct use or electric power generation.

(7) Hydrothermal

The term ''hydrothermal'' refers to naturally occurring subsurface reservoirs of hot water or steam.

(8) Systems approach

The term ''systems approach'' means an approach to solving problems or designing systems that attempts to optimize the performance of the overall system, rather than a particular component of the system.

(Pub. L. 110–140, title VI, § 612, Dec. 19, 2007, 121 Stat. 1679; Pub. L. 116–260, div. Z, title III, § 3002(a), Dec. 27, 2020, 134 Stat. 2487.)

Editorial Notes

AMENDMENTS

2020—Par. (1). Pub. L. 116–260, § 3002(a), amended par. (1) generally. Prior to amendment, par. (1) defined the term ''engineered''.

Pars. (2) to (8). Pub. L. 116–260, § 3002(a)(2), (3), added par. (2) and redesignated former pars. (2) to (7) as (3) to (8), respectively.