

(B) provide financial assistance to at least five such joint ventures.

(2) The purpose of the joint ventures shall be to design, test, and demonstrate changes to industrial processes that will result in improved energy efficiency and productivity. The joint ventures may also demonstrate other improvements of benefit to such industries so long as demonstration of energy efficiency improvements is the principal objective of the joint venture.

(3) In evaluating proposals for financial assistance and joint ventures under this section, the Secretary shall consider—

(A) whether the activities conducted under this section improve the quality and energy efficiency of industries or industrial processes;

(B) the regional distribution of the energy-intensive industries and industrial processes; and

(C) whether the proposed joint venture project would be located in the region which has the energy-intensive industry and industrial processes that would benefit from the project.

(Pub. L. 102-486, title XXI, §2107, Oct. 24, 1992, 106 Stat. 3070.)

§ 13457. Energy efficient environmental program

(a) Program direction

The Secretary, in consultation with the Administrator of the Environmental Protection Agency, is authorized to continue to carry out a 5-year program to improve the energy efficiency and cost effectiveness of pollution prevention technologies and processes, including source reduction and waste minimization technologies and processes. The purposes of this section shall be to—

(1) apply a systems approach to minimizing adverse environmental effects of industrial production in the most cost effective and energy efficient manner; and

(2) incorporate consideration of the entire materials and energy cycle with the goal of minimizing adverse environmental impacts.

(b) Identification of opportunities

Within 9 months after October 24, 1992, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall identify opportunities for the demonstration of energy efficient pollution prevention technologies and processes.

(c) Report

Within 1 year after October 24, 1992, the Secretary shall submit a report to Congress evaluating the opportunities identified under subsection (b). Such report shall include—

(1) an assessment of the technologies available to increase productivity and simultaneously reduce the consumption of energy and material resources and the production of wastes;

(2) an assessment of the current use of such technologies by industry in the United States;

(3) the status of any such technologies currently being developed, together with projected schedules of their commercial availability;

(4) the energy savings resulting from the use of such technologies;

(5) the environmental benefits of such technologies;

(6) the costs of such technologies;

(7) an evaluation of any existing Federal or State regulatory disincentives for the employment of such technologies; and

(8) an evaluation of any other barriers to the use of such technologies.

In preparing the report required by this subsection, the Secretary shall consult with the Administrator of the Environmental Protection Agency, any other Federal, State, or local official the Secretary considers necessary, representatives of appropriate industries, members of organizations formed to further the goals of environmental protection or energy efficiency, and other appropriate interested members of the public, as determined by the Secretary.

(d) Proposals

Within 1 year after October 24, 1992, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall solicit proposals for activities under this section. Proposals selected under this subsection shall demonstrate—

(1) technical viability and cost effectiveness; and

(2) procedures for technology transfer and information outreach during and after completion of the project.

(Pub. L. 102-486, title XXI, §2108, Oct. 24, 1992, 106 Stat. 3071.)

§ 13458. Energy efficient lighting and building centers

(a) Purpose

The purpose of this section is to encourage energy efficiency in buildings through the establishment of regional centers to promote energy efficient lighting, heating and cooling, and building design.

(b) Grants for establishment

Not later than 18 months after October 24, 1992, the Secretary shall make grants to nonprofit institutions, or to consortiums that may include nonprofit institutions, State and local governments, universities, and utilities, to establish or enhance one regional building energy efficiency center (hereafter in this section referred to as a "regional center") in each of the 10 regions served by a Department of Energy regional support office.

(c) Permitted activities

Each regional center established under this section may—

(1) provide information, training, and technical assistance to building professionals such as architects, designers, engineers, contractors, and building code officials, on building energy efficiency methods and technologies, including lighting, heating and cooling, and passive solar;

(2) operate an outreach program to inform such building professionals of the benefits and opportunities of energy efficiency, and of the services of the center;

(3) provide displays demonstrating building energy efficiency methods and technologies, such as lighting, windows, and heating and cooling equipment;

(4) coordinate its activities and programs with other institutions within the region, such as State and local governments, utilities, and educational institutions, in order to support their efforts to promote building energy efficiency;

(5) serve as a clearinghouse to ensure that information about new building energy efficiency technologies, including case studies of successful applications, is disseminated to end-users in the region;

(6) study the building energy needs of the region and make available region-specific energy efficiency information to facilitate the adoption of cost-effective energy efficiency improvements;

(7) assist educational institutions in establishing building energy efficiency engineering and technical programs and curricula; and

(8) evaluate the performance of the center in promoting building energy efficiency.

(d) Application

Any nonprofit institution or consortium interested in receiving a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. A lighting or building energy center in existence on October 24, 1992, which is owned and operated by a nonprofit institution or a consortium as described in subsection (b) shall be eligible for a grant under this section.

(e) Selection criteria

The Secretary shall select recipients of grants under this section on the basis of the following criteria:

(1) The capability of the grant recipient to establish a board of directors for the regional center composed of representatives from utilities, State and local governments, building trade and professional organizations, manufacturers, and nonprofit energy and environmental organizations.

(2) The demonstrated or potential resources available to the grant recipient for carrying out this subsection.

(3) The demonstrated or potential ability of the grant recipient to promote building energy efficiency by carrying out the activities specified in subsection (c).

(4) The activities which the grant recipient proposes to carry out under the grant.

(f) Requirement of matching funds

(1) Federal share

The Federal share of a grant under this section shall be no more than 50 percent of the costs of establishing, and no more than 25 percent of the cost of operating the regional center.

(2) Non-Federal contributions

No grant may be made under this section in any fiscal year unless the recipient of such grant enters into such agreements with the Secretary as the Secretary may require to en-

sure that such recipient will provide the necessary non-Federal contributions. Such non-Federal contributions may be provided by utilities, State and local governments, nonprofit institutions, foundations, corporations, and other non-Federal entities.

(g) Task force

The Secretary shall establish a task force to—

(1) advise the Secretary on activities to be carried out by grant recipients;

(2) review and evaluate programs carried out by grant recipients; and

(3) make recommendations regarding the building energy efficiency center grant program.

(h) Membership terms and administration of task force

(1) In general

The task force shall be composed of approximately 20 members, appointed by the Secretary, with expertise in the area of building energy efficiency, including representatives from—

(A) State or local energy offices;

(B) utilities;

(C) building construction trade or professional associations;

(D) architecture, engineering or professional associations;

(E) building component or equipment manufacturers;

(F) from¹ national laboratories;

(G) building code officials or professional associations; and

(H) nonprofit energy or environmental organizations.

(2) Geographic representation

The Secretary shall ensure that there is broad geographical representation among task force members.

(3) Terms

Members shall be appointed for a term of 3 years. A vacancy in the task force shall be filled in the manner in which the original appointment was made.

(4) Pay

Members shall serve without pay. Each member shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5.

(5) Chairperson

The Chairperson and Vice Chairperson of the task force shall be elected by the members.

(6) Meetings

The task force shall meet biannually and at the call of the Chairperson.

(7) Inapplicability of termination date

Section 14 of the Federal Advisory Committee Act shall not apply to the task force.

(i) Omitted

(j) Authorization of appropriations

There is authorized to be appropriated for purposes of carrying out this section, to remain

¹ So in original. The word "from" probably should not appear.

available until expended, not more than \$10,000,000 for each of fiscal years 1994, 1995, and 1996.

(Pub. L. 102-486, title I, §103, Oct. 24, 1992, 106 Stat. 2789.)

REFERENCES IN TEXT

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (h)(7), is section 14 of Pub. L. 92-463, which is set out in the Appendix to Title 5, Government Organization and Employees.

CODIFICATION

Subsec. (i) of this section, which required the Secretary to transmit annually to Congress a report on the activities of regional centers established under this section, including the degree to which matching funds are being leveraged from private sources to establish and operate such centers, terminated, effective May 15, 2000, pursuant to section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance. See, also, the 6th item on page 88 of House Document No. 103-7.

Section was enacted as part of title I of the Energy Policy Act, and not as part of title XXI of that Act which comprises this subchapter.

PART B—ELECTRICITY GENERATION AND USE

§ 13471. Renewable energy

(a) Program direction

The Secretary shall conduct a comprehensive 5-year program, in accordance with sections 13541 and 13542 of this title, to provide cost-effective options for the generation of electricity from renewable energy sources for grid and nongrid application, including field demonstrations of sufficient scale and number in operating environments to prove technical and economic feasibility for providing cost effective generation and for meeting the goal stated in section 13401(3) of this title and section 13382(a)(4) of this title.

(b) Program plan

Within 180 days after October 24, 1992, the Secretary shall prepare and submit to the Congress a 5-year program plan to guide the activities under this section. In preparing the program plan, the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, including national laboratories, and professional and technical societies.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section, including all solar energy programs (other than activities under section 13431 of this title), geothermal systems, electric energy systems, and energy storage systems, \$208,975,000 for fiscal year 1993 and \$275,000,000 for fiscal year 1994.

(Pub. L. 102-486, title XXI, §2111, Oct. 24, 1992, 106 Stat. 3072.)

§ 13472. High efficiency heat engines

(a) Program direction

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, to improve the efficiency of heat engines. Such program shall—

(1) include field demonstrations of sufficient scale and number so as to demonstrate technical and economic feasibility;

(2) incorporate materials that increase engine efficiency; and

(3) cover advanced engine designs for electric and industrial power generation for a range of small-, mid-, and large-scale applications, including—

(A) mechanically recuperated gas turbines;

(B) intercooled gas turbines with steam injection or recuperation;

(C) gas turbines utilizing reformed fuels or hydrogen; and

(D) high efficiency, simple cycle gas turbines.

(b) Program goal

The goal of the program established under subsection (a) shall be to develop heat engines that can achieve over 50 percent efficiency in the mid-term.

(c) Program plan

Within 180 days after October 24, 1992, the Secretary shall prepare and submit to the Congress a 5-year program plan, to be included in the plan required under section 13451(c) of this title, to guide the activities under this section. In preparing the program plan, the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, including the Environmental Protection Agency and national laboratories, and professional and technical societies.

(d) Proposals

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(e) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section such sums as may be necessary to be derived from sums authorized under section 13451(e) of this title.

(Pub. L. 102-486, title XXI, §2112, Oct. 24, 1992, 106 Stat. 3072.)

§ 13473. Civilian nuclear waste

(a) Study

The Secretary shall conduct a study of the potential for minimizing the volume and toxic lifetime of nuclear waste, including an analysis of the viability of existing technologies and an assessment of the extent of research and development required for new technologies.

(b) Program

Based on the results of the study required under subsection (a), the Secretary shall prepare and submit to Congress a 5-year program plan for carrying out a program of research and development on new technologies for minimizing the volume and toxic lifetime of, and thereby mitigating hazards associated with, nuclear waste.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section \$4,700,000