

(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 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 for fiscal year 1993 and such sums as may be necessary for fiscal year 1994.

(Pub. L. 102-486, title XXI, §2113, Oct. 24, 1992, 106 Stat. 3073.)

§ 13474. Fusion energy**(a) Program**

The Secretary shall conduct a fusion energy 5-year program, in accordance with sections 13541 and 13542 of this title, that by the year 2010 will result in a technology demonstration which verifies the practicability of commercial electric power production.

(b) Program goals

The goals of the program established under subsection (a) shall include—

(1) a broad based fusion energy program;

(2) United States participation in the Engineering Design Activity of the International Thermonuclear Experimental Reactor (ITER) program and in the related research and technology development efforts;

(3) the development of technology for fusion power and industrial participation in the development of such technology;

(4) the design and construction of a major new machine for fusion research and technology development consistent with paragraphs (2) and (3); and

(5) research and development for Inertial Confinement Fusion Energy and development of a Heavy Ion Inertial Confinement Fusion experiment.

(c) Management plan

(1) Within 180 days after October 24, 1992, the Secretary shall prepare a comprehensive management plan for the fusion energy program.

The plan shall include specific program objectives, milestones and schedules for technology development, and cost estimates and program management resource requirements.

(2) The plan shall also include a description of—

(A) United States participation in the Engineering Design Activity of ITER, including industrial participation;

(B) potential United States participation in the construction and operation of an ITER facility; and

(C) the requirements needed to build and test an inertial fusion energy reactor for the purpose of power production.

(3) As part of the plan required under paragraph (1), the Secretary shall evaluate the status of international fusion programs and evaluate whether the Federal Government should initiate efforts to strengthen existing international cooperative agreements in fusion energy or enter into new cooperative agreements to accomplish the purposes of this section.

(4) The plan shall also evaluate the extent to which university or private sector participation is appropriate or necessary in order to carry out the purposes of this section.

(5) The President shall include in the budget submitted to the Congress each year under section 1105 of title 31 a report prepared by the Secretary describing the progress made in meeting the program objectives, milestones, and schedules established in the management plan. Each such report shall also describe the organization of the program, the personnel assigned and funds committed to the program, and expenditures made in carrying out the program objectives. The report shall be submitted with the plan required under section 13523 of this title.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section \$339,710,000 for fiscal year 1993 and \$380,000,000 for fiscal year 1994.

(Pub. L. 102-486, title XXI, §2114, Oct. 24, 1992, 106 Stat. 3073; Pub. L. 104-66, title I, §1052(i), Dec. 21, 1995, 109 Stat. 719.)

AMENDMENTS

1995—Subsec. (c)(5). Pub. L. 104-66 inserted first sentence and struck out former first sentence which read as follows: “Within 1 year after October 24, 1992, and every 2 years thereafter, the Secretary shall issue a report describing the progress made in meeting the program objectives, milestones, and schedules established in the management plan.”

§ 13475. Fuel cells**(a) Program direction**

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on efficient and environmentally benign power generation using fuel cells. The program may include activities on molten carbonate, solid oxide, including tubular, monolithic, and planar technologies, and advanced concepts.

(b) Program goal

The goal of the program established under subsection (a) is the development of cost-effec-