

dioisotope power systems, and the space exploration initiative under nuclear energy research and development shall be in addition to the amounts authorized in the preceding sentence.

(Pub. L. 102-486, title XXI, §2126, Oct. 24, 1992, 106 Stat. 3085.)

SUBCHAPTER X—ENERGY AND ECONOMIC GROWTH

**§ 13501. National Advanced Materials Program**

**(a) Program direction**

The Secretary shall establish a 5-year National Advanced Materials Program, in accordance with sections 13541 and 13542 of this title. Such program shall foster the commercialization of techniques for processing, synthesizing, fabricating, and manufacturing advanced materials and associated components. At a minimum, the Program shall expedite the private sector deployment of advanced materials for use in high performance energy efficient and renewable energy technologies in the industrial, transportation, and buildings sectors that can foster economic growth and competitiveness. The Program shall include field demonstrations of sufficient scale and number to prove technical and economic feasibility.

**(b) Program plan**

Within 180 days after October 24, 1992, the Secretary, in consultation with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, and professional and technical societies, shall prepare and submit to the Congress a 5-year program plan to guide activities under this section. The Secretary shall biennially update and resubmit the program plan to Congress.

**(c) Proposals**

**(1) Solicitation**

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting activities consistent with the 5-year program plan. Such proposals may be submitted by one or more parties.

**(2) Contents of proposals**

Proposals submitted under this subsection shall include—

(A) an explanation of how the proposal will expedite the commercialization of advanced materials in energy efficiency or renewable energy in the near-term to mid-term;

(B) evidence of consideration of whether the unique capabilities of Department of Energy national laboratories warrants collaboration with such laboratories, and the extent of such collaboration proposed;

(C) a description of the extent to which the proposal includes collaboration with relevant industry or other groups or organizations; and

(D) evidence of the ability of the proposers to undertake and complete the proposed project.

**(d) General Services Administration demonstration program**

The Secretary, in consultation with the Administrator of General Services, shall establish

a program to expedite the use, in goods and services acquired by the General Services Administration, of advanced materials technologies. Such program shall include a demonstration of the use of advanced materials technologies as may be necessary to establish technical and economic feasibility. The Secretary shall transfer funds to the General Services Administration for carrying out this subsection.

**(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 for energy efficient applications from section 13451(e) of this title and for renewable applications from section 13471(c) of this title, including Department of Energy national laboratory participation in proposals submitted under subsection (c), and including transferring funds to the General Services Administration.

(Pub. L. 102-486, title XXII, §2201, Oct. 24, 1992, 106 Stat. 3085.)

**Statutory Notes and Related Subsidiaries**

**TERMINATION OF REPORTING REQUIREMENTS**

For termination, effective May 15, 2000, of provisions in subsec. (b) of this section relating to the biennial resubmittal of the program plan to Congress, see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and the 1st item on page 86 of House Document No. 103-7.

**§ 13502. National Advanced Manufacturing Technologies Program**

**(a) Program direction**

The Secretary shall establish a 5-year National Advanced Manufacturing Technologies Program, in accordance with sections 13541 and 13542 of this title. Such program shall foster the commercialization of advanced manufacturing technologies to improve energy efficiency and productivity in manufacturing. At a minimum, the Program shall expedite the private sector deployment of advanced manufacturing technologies to improve productivity, quality, and control in manufacturing processes that can foster economic growth, energy efficiency, and competitiveness. The program<sup>1</sup> shall include field demonstrations of sufficient scale and number to prove technical and economic feasibility.

**(b) Program plan**

Within 180 days after October 24, 1992, the Secretary, in consultation with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, and professional and technical societies, shall prepare and submit to the Congress a 5-year program plan to guide activities under this section. The Secretary shall biennially update and resubmit the program plan to Congress.

**(c) Proposals**

**(1) Solicitation**

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting

<sup>1</sup> So in original. Probably should be capitalized.

activities consistent with the 5-year program plan. Such proposals may be submitted by one or more parties.

**(2) Contents of proposals**

Proposals submitted under this subsection shall include—

(A) an explanation of how the proposal will expedite the commercialization of advanced manufacturing technologies to improve energy efficiency in the building, industry, and transportation sectors;

(B) evidence of consideration of whether the unique capabilities of Department of Energy national laboratories warrants collaboration with such laboratories, and the extent of such collaboration proposed;

(C) a description of the extent to which the proposal includes collaboration with relevant industry or other groups or organizations; and

(D) evidence of the ability of the proposers to undertake and complete the proposed project.

**(d) 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, including Department of Energy national laboratory participation in proposals submitted under subsection (c).

(Pub. L. 102-486, title XXII, §2202, Oct. 24, 1992, 106 Stat. 3086.)

**Statutory Notes and Related Subsidiaries**

**TERMINATION OF REPORTING REQUIREMENTS**

For termination, effective May 15, 2000, of provisions in subsec. (b) of this section relating to the biennial re-submittal of the program plan to Congress, see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and the 2nd item on page 86 of House Document No. 103-7.

**§ 13503. Supporting research and technical analysis**

**(a) Basic energy sciences**

**(1) Program direction**

The Secretary shall continue to support a vigorous program of basic energy sciences to provide basic research support for the development of energy technologies. Such program shall focus on the efficient production and use of energy, and the expansion of our knowledge of materials, chemistry, geology, and other related areas of advancing technology development.

**(2) User facilities**

(A) As part of the program referred to in paragraph (1), the Secretary shall carry out planning, construction, and operation of user facilities to provide special scientific and research capabilities, including technical expertise and support as appropriate, to serve the research needs of our Nation's universities, industry, private laboratories, Federal laboratories, and others. Research institutions or individuals from other nations shall be accom-

modated at such user facilities in cases where reciprocal accommodations are provided to United States research institutions and individuals or where the Secretary considers such accommodation to be in the national interest.

(B) The construction of the Advanced Photon Source at the Argonne National Laboratory is hereby authorized.

(C) The Secretary shall not change the user fee practice in effect as of October 1, 1991, with respect to user facilities unless the Secretary notifies Congress 90 days before the effective date of any change.

(D) The Secretary shall expedite the design for construction of the Advanced Neutron Source at the Oak Ridge National Laboratory, in order to provide critical research capabilities in support of our national research initiatives for advanced materials and biotechnology, as well as a broad range of research. Such action shall be consistent with the Basic Energy Sciences Advisory Committee's Technical Evaluation of accelerator and reactor neutron source technologies. Within 90 days after October 24, 1992, the Secretary shall submit to the Congress a plan for such design, including a schedule for construction.

**(3) Cost sharing**

The Secretary shall not require cost sharing for research and development pursuant to this subsection, except—

(A) as otherwise provided for in cooperative research and development agreements or other agreements entered into under existing law;

(B) for fees for user facilities, as determined by the Secretary; or

(C) in the case of specific projects, where the Secretary determines that the benefits of such research and development accrue to a specific industry or group of industries, in which case cost sharing under section 13542 of this title shall apply.

**(b) University and science education**

**(1) University research reactors**

The Secretary shall support programs for improvements and upgrading of university research reactors and associated instrumentation and equipment. Within 1 year after October 24, 1992, the Secretary shall submit to the Congress a report on the condition and status of university research reactors, which includes a 5-year plan for upgrading and improving such facilities, instrumentation capabilities, and related equipment.

**(2) Method to evaluate effectiveness of education programs**

The Secretary shall develop a method to evaluate the effectiveness of science and mathematics education programs provided by the Department of Energy and its laboratories, including specific evaluation criteria.

**(3) Established program to stimulate competitive research**

**(A) Definitions**

In this paragraph:

**(i) Eligible jurisdiction**

The term "eligible jurisdiction" means a State that is determined to be eligible for