

(B) to facilitate the completion of submissions, by September 30, 1996, for preliminary design approvals by the Commission of standardized designs for the modular high-temperature gas-cooled reactor technology and the liquid metal reactor technology; and

(C) to evaluate by September 30, 1996, actinide burn technology to determine if it can reduce the volume of long-lived fission by-products;

(2) for the mid-term—

(A) to facilitate increased efficiency of enhanced safety, advanced light water reactors to produce electric power at the lowest cost to the customer;

(B) to develop advanced reactor concepts that are passively safe and environmentally acceptable; and

(C) to complete necessary research and development on high-temperature gas-cooled reactor technology and liquid metal reactor technology to support the selection, by September 30, 1998, of one or both of those technologies as appropriate for prototype demonstration; and

(3) for the long-term, to complete research and development and demonstration to support the design of advanced reactor technologies capable of providing electric power to a utility grid as soon as practicable but no later than the year 2010.

(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 guide the activities under this section. The program plan shall include schedule milestones, Federal funding requirements, and non-Federal cost sharing requirements. In preparing the program plan, the Secretary shall take into consideration—

(1) the need for, and the potential for future adoption by electric utilities or other entities of, advanced nuclear reactor technologies that are available, under development, or have the potential for being developed, for the generation of energy from nuclear fission;

(2) how the Federal Government, acting through the Secretary, can be effective in ensuring the availability of such technologies when they are needed;

(3) how the Federal Government can most effectively cooperate with the private sector in the accomplishment of the goals set forth in subsection (b); and

(4) potential alternative funding sources for carrying out 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. The Secretary shall update the program plan annually and submit such update to Congress. Each such update shall describe any activities that are behind schedule, any funding shortfalls, and any other circumstances that might affect the ability of the Secretary to meet the goals set forth in subsection (b).

(Pub. L. 102-486, title XXI, § 2122, Oct. 24, 1992, 106 Stat. 3082.)

REFERENCES IN TEXT

The Nuclear Non-Proliferation Act of 1978, referred to in subsec. (a)(4), is Pub. L. 95-242, Mar. 10, 1978, 92 Stat. 120, as amended, which is classified principally to chapter 47 (§ 3201 et seq.) of Title 22, Foreign Relations and Intercourse. For complete classification of this Act to the Code, see Short Title note set out under section 3201 of Title 22 and Tables.

§ 13493. Commercialization of advanced light water reactor technology

(a) Certification of designs

In order to achieve the goal of certification of completed standardized designs by the Commission by 1996 as set forth in section 13492(b) of this title, the Secretary shall conduct a 5-year program of technical and financial assistance to encourage the development and submission for certification of advanced light water reactor designs which, in the judgment of the Secretary, can be certified by the Commission by no later than the end of fiscal year 1996.

(b) First-of-a-kind engineering

(1) Establishment of program

The Secretary shall conduct a program of Federal financial and technical assistance for the first-of-a-kind engineering design of standardized commercial nuclear powerplants which are included, as of October 24, 1992, in the Department of Energy's program for certification of advanced light water reactor designs.

(2) Selection criteria

In order to be eligible for assistance under this subsection, an entity shall certify to the satisfaction of the Secretary that—

(A) the entity, or its members, are bona fide entities engaged in the design, engineering, manufacture, construction, or operation of nuclear reactors;

(B) the entity, or its members, have the financial resources necessary for, and fully intend to pursue the design, engineering, manufacture, construction, and operation in the United States of nuclear power plants¹ through completion of construction and into operation;

(C) the design proposed is scheduled for certification by the Commission under the Department of Energy's program for certification of light water reactor designs; and

(D) at least 50 percent of the funding for the project shall be obtained from non-Federal sources, and a substantial portion of that non-Federal funding shall be obtained from utilities or entities whose primary purpose is the production of electrical power for public consumption.

(3) Program documents

The Secretary shall prepare and submit to the Congress a program document for each design selected under this subsection, specifying goals and objectives, major milestones for achieving those goals and objectives, and the work products to be provided to the Secretary or made available for inspection.

(4) Funding limitations

(A) Before entering into an agreement with an entity under this subsection, the Secretary

¹ So in original. Probably should be "powerplants".

shall establish a cost ceiling for the contribution of the Federal Government for the project, and shall report such cost ceiling to the Congress.

(B) No entity shall receive assistance under this subsection for a period greater than 4 years.

(C) The aggregate funding provided by the Secretary for projects under this subsection shall not exceed \$100,000,000 for the period encompassing fiscal years 1993 through 1997.

(Pub. L. 102-486, title XXI, §2123, Oct. 24, 1992, 106 Stat. 3083.)

CODIFICATION

Subsec. (b)(5) of this section, which required the Secretary to submit annually to Congress a status report on each project receiving assistance under subsec. (b), 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 last item on page 85 of House Document No. 103-7.

§ 13494. Prototype demonstration of advanced nuclear reactor technology

(a) Solicitation of proposals

Within 3 years after October 24, 1992, the Secretary shall solicit proposals for carrying out the preliminary engineering design of not more than 2 prototype advanced nuclear reactor technologies developed by the Department of Energy, other than advanced light water reactor technologies, necessary to support a decision on whether to recommend construction of a prototype demonstration reactor with the characteristics described in section 13493(a) of this title. Proposals submitted under this subsection shall be for modular design concepts of sufficient size to address requirements related to the certification of a standardized design.

(b) Recommendation to Congress

(1) Not later than September 30, 1998, the Secretary shall submit to Congress recommendations on whether to build one or more prototype demonstration reactors under this section. Such recommendations shall—

(A) specify a preferred technology or technologies;

(B) include detailed information on milestones for construction and operation;

(C) include an estimate of the funding requirements; and

(D) specify the extent and type of non-Federal financial support anticipated.

In developing the recommendations under this paragraph, the Secretary shall provide for public notice and an opportunity for comment, and shall solicit the views of the Commission and other parties with technical expertise the Secretary considers useful in the development of such recommendations.

(2) The prototype demonstration program under this section shall be carried out to the maximum extent practicable with private sector funding. At least 50 percent of the funding for such program shall be non-Federal funding. The extent of non-Federal cost sharing proposed for any demonstration project shall be a criterion for the selection of the project.

(c) Selection of technology

Any technology selected by the Secretary for recommendation for prototype demonstration under this section shall to the maximum extent possible exhibit the characteristics set forth in section 13493(a) of this title.

(Pub. L. 102-486, title XXI, §2124, Oct. 24, 1992, 106 Stat. 3084.)

§ 13495. Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this part \$212,804,000 for fiscal year 1993 and such sums as may be necessary for fiscal year 1994. Amounts authorized or otherwise made available for program direction, space reactor power systems, advanced radioisotope 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;