- (3) a five-year implementation schedule for program elements with associated budget and program management resources requirements;
- (4) a detailed description of the functional organization of the program management including identification of permanent test facilities and of a lead center responsible for technology support and project management;
- (5) the estimated relative financial contributions of the Federal Government and non-Federal participants in the pilot and demonstration projects;
- (6) supporting research needed to solve problems which may inhibit or limit development of ocean thermal energy conversion systems; and
- (7) an analysis of the environmental, economic, and societal impacts of ocean thermal energy conversion facilities.

(Pub. L. 96-310, §3, July 17, 1980, 94 Stat. 942; Pub. L. 104-66, title I, §1051(c), Dec. 21, 1995, 109 Stat. 716.)

Editorial Notes

AMENDMENTS

 $1995\mathrm{--Subsec.}$ (d). Pub. L. $104\mathrm{--}66$ struck out subsec. (d) which read as follows:

"(d)(1) Concurrently with the submission of the President's annual budget for each subsequent year, the Secretary shall transmit to the Congress a detailed description of modifications which may be necessary to revise appropriately the comprehensive plan as then in effect, setting forth any changes in circumstances which may have occurred since the plan or the last previous modification thereof was transmitted in accordance with this section.

"(2) Such description shall also include a detailed justification of any such changes, a detailed description of the progress made toward achieving the goals of this chapter, a statement on the status of interagency cooperation in meeting such goals, any comments on and recommendations for improvements in the comprehensive program management plan made by the Technical Panel established under section 9007 of this title, and any legislative or other recommendations which the Secretary may have to help attain such goals."

Statutory Notes and Related Subsidiaries

CHANGE OF NAME

Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

§ 9003. Research and development

(a) Initiation of research

The Secretary shall initiate research or accelerate existing research in areas in which the lack of knowledge limits development of ocean thermal energy conversion systems in order to achieve the purposes of this chapter.

(b) Evaluations, tests, and dissemination of information, data, and materials

The Secretary shall conduct evaluations, arrange for tests, and disseminate to developers information, data, and materials necessary to support the design efforts undertaken pursuant to section 9004 of this title. Specific technical areas to be addressed shall include, but not be limited to—

- (1) interface requirements between the platform and cold water pipe;
 - (2) cold water pipe deployment techniques;
 - (3) heat exchangers;
 - (4) control system simulation;
 - (5) stationkeeping requirements; and
- (6) energy delivery systems, such as electric cable or energy product transport.

(c) Consideration of new or improved technologies

The Secretary shall, for the purpose of performing his responsibilities pursuant to this chapter, solicit proposals and evaluate any reasonable new or improved technology, a description of which is submitted to the Secretary in writing, which could lead or contribute to the development of ocean thermal energy conversion system technology.

(Pub. L. 96-310, §4, July 17, 1980, 94 Stat. 943.)

§ 9004. Pilot and demonstration plants

(a) Initiation of program

The Secretary is authorized to initiate a program to design, construct, and operate well instrumented ocean thermal energy conversion facilities of sufficient size to demonstrate the technical feasibility and potential economic feasibility of utilizing the various forms of ocean thermal energy conversion to displace nonrenewable fuels. To achieve the goals of this section and to facilitate development of a strong industrial basis for the application of ocean thermal energy conversion system technology, at least two independent parallel demonstration projects shall be competitively selected.

(b) Demonstration program goals

The specific goals of the demonstration program shall include at a minimum—

- (1) the demonstration of ocean thermal energy conversion technical feasibility through multiple pilot and demonstration plants with a combined capacity of at least one hundred megawatts of electrical capacity or energy product equivalent by the year 1986;
- (2) the delivery of baseload electricity to utilities located on land or the production of commercially attractive quantities of energy product; and
- (3) the continuous operation of each pilot and demonstration facility for a sufficient period of time to collect and analyze system performance and reliability data.

(c) Financial assistance

In providing any financial assistance under this section, the Secretary shall (1) give full consideration to those projects which will provide energy to United States offshore States, its territories, and its possessions and (2) seek satisfactory cost-sharing arrangements when he deems such arrangements to be appropriate.

(Pub. L. 96-310, §5, July 17, 1980, 94 Stat. 943.)

§ 9005. Technology application

(a) Technology application and market development plan

The Secretary shall, in consultation with the Administrator of the National Oceanic and At-

mospheric Administration, the Administrator of the Maritime Administration, the Administrator of the National Aeronautics and Space Administration, and the Technical Panel established under section 9007 of this title, prepare a comprehensive technology application and market development plan that will permit realization of the ten-thousand-megawatt national goal by the year 1999. Such plans shall include at a minimum—

- (1) an assessment of those Government actions required to achieve a two-hundred- to four-hundred-megawatt electrical-commercial demonstration of ocean thermal energy conversion systems in time to have industry meet the goal contained in section 9001(b)(2) of this title including a listing of those financial, property, and patent right packages most likely to lead to early commercial demonstration at minimum cost to the Federal Government;
- (2) an assessment of further Government actions required to permit expansion of the domestic ocean thermal energy conversion industry to meet the goal contained in section 9001(b)(3) of this title;
- (3) an analysis of further Government actions necessary to aid the industry in minimizing and removing any legal and institutional barriers such as the designation of a lead agency; and
- (4) an assessment of the necessary Government actions to assist in eliminating economic uncertainties through financial incentives, such as loan guarantees, price supports, or other inducements.

(b) Transmittal of plan to Congress

The Secretary shall transmit such comprehensive technology application and market development plan to the Congress within three years after July 17, 1980, and update the plan on an annual basis thereafter.

(c) Respondent proposals

As part of the competitive procurement initiative for design and construction of the pilot and demonstration projects authorized in section 9009(c) of this title, each respondent shall include in its proposal (1) a plan leading to a full-scale, first-of-a-kind facility based on a proposed demonstration system; and (2) the financial and other contributions the respondent will make toward meeting the national goals.

(Pub. L. 96-310, §6, July 17, 1980, 94 Stat. 944.)

§ 9006. Program selection criteria

The Secretary shall, in fulfilling his responsibilities under this chapter, select program activities and set priorities which are consistent with the following criteria:

- (1) realization of energy production costs for ocean thermal energy conversion systems that are competitive with costs from conventional energy production systems;
- (2) encouragement of projects for which contributions to project costs are forthcoming from private, industrial, utility, or governmental entities for the purpose of sharing with the Federal Government the costs of purchasing and installing ocean thermal energy conversion systems;

- (3) promotion of ocean thermal energy conversion facilities for coastal areas, islands, and isolated military institutions which are vulnerable to interruption in the fossil fuel supply;
- (4) preference for and priority to persons and domestic firms whose base of operations is in the United States as will assure that the program under this chapter promotes the development of a United States domestic technology for ocean thermal energy conversion; and
- (5) preference for proposals for pilot and demonstration projects in which the respondents certify their intent to become an integral part of the industrial infrastructure necessary to meet the goals of this chapter.

(Pub. L. 96-310, §7, July 17, 1980, 94 Stat. 944.)

§ 9007. Technical Panel of Energy Research Advisory Board

(a) Establishment

A Technical Panel of the Energy Research Advisory Board shall be established to advise the Board on the conduct of the ocean thermal energy conversion program.

(b) Membership

- (1) The Technical Panel shall be comprised of such representatives from domestic industry, universities, Government laboratories, financial, environmental and other organizations as the Chairman of the Energy Research Advisory Board deems appropriate based on his assessment of the technical and other qualifications of such representative.
- (2) Members of the Technical Panel need not be members of the full Energy Research Advisory Board.

(c) Compliance with laws and regulations

The activities of the Technical Panel shall be in compliance with any laws and regulations guiding the activities of technical and fact-finding groups reporting to the Energy Research Advisory Board.

(d) Review and recommendations

The Technical Panel shall review and may make recommendations on the following items, among others:

- (1) implementation and conduct of the programs established by this chapter;
- (2) definition of ocean thermal energy conversion system performance requirements for various user applications; and
- (3) economic, technological, and environmental consequences of the deployment of ocean thermal energy conversion systems.

(e) Report

The Technical Panel shall submit to the Energy Research Advisory Board on at least an annual basis a written report of its findings and recommendations with regard to the program. Such report, shall include at a minimum—

- (1) a summary of the Panel's activities for the preceding year;
- (2) an assessment and evaluation of the status of the programs mandated by this chapter; and
- (3) comments on and recommendations for improvements in the comprehensive program