Sec.

9009.

#### §8912. Authorization of appropriations

For the expenses of carrying out the carbon dioxide study authorized by section 8911 of this title (as determined by the Office of Science and Technology Policy) there are authorized to be appropriated such sums, not exceeding \$3,000,000 in the aggregate, as may be necessary. At least 80 percent of any amounts appropriated pursuant to the preceding sentence shall be provided to the National Academy of Sciences.

(Pub. L. 96–294, title VII, §712, June 30, 1980, 94 Stat. 775.)

# CHAPTER 98—OCEAN THERMAL ENERGY CONVERSION RESEARCH AND DEVELOPMENT

9001. Congressional findings and declaration of pur-Comprehensive program management plan. 9002 Research and development. 9003. Pilot and demonstration plants. 9004. 9005. Technology application. Program selection criteria. 9006. Technical Panel of Energy Research Advisory 9007 Board. 9008 Definitions.

### § 9001. Congressional findings and declaration of

Authorization of appropriations.

- (a) The Congress finds that—
- (1) the supply of nonrenewable fuels in the United States is slowly being depleted;
- (2) alternative sources of energy must be developed;
- (3) ocean thermal energy is a renewable energy resource that can make a significant contribution to the energy needs of the United States;
- (4) the technology base for ocean thermal energy conversion has improved over the past two years, and has consequently lowered the technical risk involved in constructing moderate-sized pilot plants with an electrical generating capacity of about ten to forty megawatts:
- (5) while the Federal ocean thermal energy conversion program has grown in size and scope over the past several years, it is in the national interest to accelerate efforts to commercialize ocean thermal energy conversion by building pilot and demonstration facilities and to begin planning for the commercial demonstration of ocean thermal energy conversion technology;
- (6) a strong and innovative domestic industry committed to the commercialization of ocean thermal energy conversion must be established, and many competent domestic industrial groups are already involved in ocean thermal energy conversion research and development activity; and
- (7) consistent with the findings of the Domestic Policy Review on Solar Energy, ocean thermal energy conversion energy can potentially contribute at least one-tenth of quad of energy per year by the year 2000.
- (b) Therefore, the purpose of this chapter is to accelerate ocean thermal energy conversion

technology development to provide a technical base for meeting the following goals:

- (1) demonstration by 1986 of at least one hundred megawatts of electrical capacity or energy product equivalent from ocean thermal energy conversion systems;
- (2) demonstration by 1989 of at least five hundred megawatts of electrical capacity or energy product equivalent from ocean thermal energy conversion systems;
- (3) achievement in the mid-1990's, for the gulf coast region of the continental United States and for islands in the United States, its possessions and its territories, an average cost of electricity or energy product equivalent produced by installed ocean thermal energy conversion systems that is competitive with conventional energy sources; and
- (4) establish as a national goal ten thousand megawatts of electrical capacity or energy product equivalent from ocean thermal energy conversion systems by the year 1999.

(Pub. L. 96-310, §2, July 17, 1980, 94 Stat. 941.)

#### Statutory Notes and Related Subsidiaries

SHORT TITLE

Pub. L. 96–310, §1, July 17, 1980, 94 Stat. 941, provided: "That this Act [enacting this chapter] may be cited as the 'Ocean Thermal Energy Conversion Research, Development, and Demonstration Act'."

## § 9002. Comprehensive program management plan

#### (a) Preparation of plan

- (1) The Secretary is authorized and directed to prepare a comprehensive program management plan for the conduct under this chapter of research, development, and demonstration activities consistent with the provisions of sections 9003, 9004, and 9005 of this title.
- (2) In the preparation of such plan, the Secretary shall consult with the Administrator of the National Oceanic and Atmospheric Administration, the Administrator of the Maritime Administration, the Administrator of the National Aeronautics and Space Administration, and the heads of such other Federal agencies and such public and private organizations as he deems appropriate.

#### (b) Transmittal of plan to Congress

The Secretary shall transmit the comprehensive program management plan to the Committee on Science and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate within nine months after July 17, 1980.

#### (c) Requisite provisions of plan

The detailed description of the comprehensive plan under this section shall include, but need not be limited to—

- (1) the anticipated research, development, and demonstration objectives to be achieved by the program;
- (2) the program strategies and technology application and market development plans, including detailed milestone goals to be achieved during the next fiscal year for all major activities and projects;

- (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-