tional projects with respect to the utilization of hot dry rock geothermal energy resources which will further the purposes of this section.

#### (b) Authorization of appropriations

There are authorized to be appropriated such sums as may be necesary 1 to carry out this section.

(Pub. L. 102–486, title XXV,  $\S 2501$ , Oct. 24, 1992, 106 Stat. 3101.)

#### CODIFICATION

Section was enacted as part of the Energy Policy Act of 1992, and not as part of the Geothermal Steam Act of 1970 which comprises this chapter.

# CHAPTER 24—GEOTHERMAL ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION

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#### § 1101. Congressional findings

The Congress hereby finds that—

- (1) the Nation is currently suffering a critical shortage of environmentally acceptable forms of energy:
- (2) the inadequate organizational structures and levels of funding for energy research have limited the Nation's current and future options for meeting energy needs;
- (3) electric energy is a clean and convenient form of energy at the location of its use and is the only practicable form of energy in some modern applications, but the demand for electric energy in every region of the United States is taxing all of the alternative energy sources presently available and is projected to increase; some of the sources available for electric power generation are already in short supply, and the development and use of other

sources presently involve undesirable environmental impacts;

- (4) the Nation's critical energy problems can be solved only if a national commitment is made to dedicate the necessary financial resources, and enlist the cooperation of the private and public sectors, in developing geothermal resources and other nonconventional sources of energy;
- (5) the conventional geothermal resources which are presently being used have limited total potential; but geothermal resources which are different from those presently being used, and which have extremely large energy content, are known to exist;
- (6) some geothermal resources contain energy in forms other than heat; examples are methane and extremely high pressures available upon release as kinetic energy;
- (7) some geothermal resources contain valuable byproducts such as potable water and mineral compounds which should be processed and recovered as national resources;
- (8) technologies are not presently available for the development of most of these geothermal resources, but technologies for the generation of electric energy from geothermal resources are potentially economical and environmentally desirable, and the development of geothermal resources offers possibilities of process energy and other nonelectric applications:
- (9) much of the known geothermal resources exist on the public lands;
- (10) Federal financial assistance is necessary to encourage the extensive exploration, research, and development in geothermal resources which will bring these technologies to the point of commercial application;
- (11) the advancement of technology with the cooperation of private industry for the production of useful forms of energy from geothermal resources is important with respect to the Federal responsibility for the general welfare, to facilitate commerce, to encourage productive harmony between man and his environment, and to protect the public interest; and
- (12) the Federal Government should encourage and assist private industry through Federal assistance for the development and demonstration of practicable means to produce useful energy from geothermal resources with environmentally acceptable processes.

(Pub. L. 93-410, §2, Sept. 3, 1974, 88 Stat. 1079.)

#### SHORT TITLE

Pub. L. 93–410, §1, Sept. 3, 1974, 88 Stat. 1079, provided that: "This Act [enacting this chapter] may be cited as the 'Geothermal Energy Research, Development, and Demonstration Act of 1974."

#### § 1102. Definitions

For the purposes of this chapter—

(1) the term "geothermal resources" means (A) all products of geothermal processes, embracing indigenous steam, hot water, and brines, (B) steam and other gases, hot water and hot brines, resulting from water, gas, or other fluids artificially introduced into geothermal formations, and (C) any byproduct derived from them;

<sup>&</sup>lt;sup>1</sup> So in original. Probably should be "necessary".

- (2) the term "byproduct" means any mineral or minerals which are found in solution or in association with geothermal resources and which have a value of less than 75 percent of the value of the geothermal steam and associated geothermal resources or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves:
- (3) "pilot plant" means an experimental unit of small size used for early evaluation and development of new or improved processes and to obtain technical, engineering, and cost data:
- (4) "demonstration plant" means a complete facility which produces electricity, heat energy, or useful byproducts for commercial disposal from geothermal resources and which will make a significant contribution to the knowledge of full-size technology, plant operation, and process economics;
- (5) the term "Project" means the Geothermal Energy Coordination and Management Project established by section 1121(a) of this title:
- (6) the term "fund" means the Geothermal Resources Development Fund established by section 1144(a) of this title; and
- (7) the term "Chairman" means the Chairman of the Project.

(Pub. L. 93-410, §3, Sept. 3, 1974, 88 Stat. 1080.)

SUBCHAPTER I—GEOTHERMAL ENERGY COORDINATION AND MANAGEMENT PROJECT

#### §1121. Formation of Project

#### (a) Establishment

There is hereby established the Geothermal Energy Coordination and Management Project.

#### (b) Composition; members and chairman

- (1) The Project shall be composed of six members as follows:
  - (A) one appointed by the President;
  - (B) an Assistant Director of the National Science Foundation;
  - (C) an Assistant Secretary of the Department of the Interior;
  - (D) an Associate Administrator of the National Aeronautics and Space Administration;
  - (E) the Assistant Administrator of the Energy Research and Development Administration for Solar, Geothermal, and Advanced Energy Systems;
  - (F) an Assistant Administrator of the Federal Energy Administration;
  - (G) an Assistant Administrator of the Environmental Protection Agency;
    - (H) an Assistant Secretary of Treasury; and
    - (I) an Assistant Secretary of Agriculture.
- (2) The President shall designate the Assistant Administrator of the Energy Research and Development Administration for Solar, Geothermal, and Advanced Energy Systems to serve as Chairman of the Project.
- (3) If the individual appointed under paragraph (1)(A) of this subsection is an officer or employee of the Federal Government, he shall re-

ceive no additional pay on account of his service as a member of the Project. If such individual is not an officer or employee of the Federal Government, he shall be entitled to receive the daily equivalent of the annual rate of basic pay in effect for level IV of the Executive Schedule (5 U.S.C. 5315) for each day (including traveltime) during which he is engaged in the actual performance of duties vested in the Project.

# (c) Responsibility for geothermal energy research, development, and demonstration program

The Project shall have overall responsibility for the provision of effective management and coordination with respect to a national geothermal energy research, development, and demonstration program. Such program shall include—

- (1) the determination and evaluation of the resource base:
- (2) research and development with respect to exploration, extraction, and utilization technologies:
- (3) the demonstration of appropriate technologies; and
- (4) the loan guaranty program under subchapter II.

## (d) Allocation of functions to certain agencies; loaning of personnel

- (1) The Project shall carry out its responsibilities under this section acting through the following Federal agencies:
  - (A) the Department of the Interior, the responsibilities of which shall include evaluation and assessment of the resource base, including development of exploration technologies;
- (B) the National Aeronautics and Space Administration, the responsibilities of which shall include the provision of contract management capability, evaluation and assessment of the resource base, and the development of technologies pursuant to section 1122(b) of this title:
- (C) the Atomic Energy Commission, the responsibilities of which shall include the development of technologies; and
- (D) the National Science Foundation, the responsibilities of which shall include basic and applied research.
- (2) Upon request of the Project, the head of any such agency is authorized to detail or assign, on a reimbursable basis or otherwise, any of the personnel of such agency to the Project to assist it in carrying out its responsibilities under this chapter.

### (e) Exclusive authority of the Project

The Project shall have exclusive authority with respect to the establishment or approval of programs or projects initiated under this chapter, except that the agency involved in any particular program or project shall be responsible for the operation and administration of such program or project.

(Pub. L. 93-410, title I, §101, Sept. 3, 1974, 88 Stat. 1080; Pub. L. 95-238, title V, §502, Feb. 25, 1978, 92 Stat. 86.)