(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;

(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 En-

ergy 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 receive 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 travel-time) 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.)

#### Amendments

1978—Subsec. (b)(1). Pub. L. 95–238, §502(1)–(3), in subpar. (E) substituted "Assistant Administrator of the Energy Research and Development Administration for Solar, Geothermal, and Advanced Energy Systems;" for "General Manager of the Atomic Energy Commission; and", and added subpars. (G) to (I).

Subsec. (b)(2). Pub. L. 95–238, §502(4), substituted "the Assistant Administrator of the Energy Research and Development Administration for Solar, Geothermal, and Advanced Energy Systems" for "one member of the Project".

#### TRANSFER OF FUNCTIONS

Energy Research and Development Administration terminated and functions vested by law in Administrator thereof transferred to Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 of Title 42, The Public Health and Welfare.

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of Title 42. See,

also,  $\ensuremath{\mathrm{Transfer}}$  of Functions notes set out under those sections.

Federal Energy Administration terminated and all functions transferred to Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 of Title 42.

#### §1122. Program definition

(a)(1) The Chairman, acting through the Administrator of the National Aeronautics and Space Administration, is authorized and directed to prepare a comprehensive program definition of an integrated effort and commitment for effectively developing geothermal energy resources. Such Administrator, in preparing such comprehensive program definition, is authorized to consult with other Federal agencies and non-Federal entities.

(2) The Chairman shall transmit such comprehensive program definition to the President and to each House of the Congress. Interim reports shall be transmitted not later than November 30, 1974, and not later than January 31, 1975. Such comprehensive program definition shall be transmitted as soon as possible thereafter, but in any case not later than August 31, 1975.

(3) As part of the comprehensive program definition required by paragraph (1) of this subsection, the Chairman, acting through the United States Geological Survey, shall transmit to the President and to each House of the Congress a schedule and objectives for the inventorying of geothermal resources.

(b) The National Aeronautics and Space Administration is authorized to undertake and carry out those programs assigned to it by the Project.

(Pub. L. 93-410, title I, §102, Sept. 3, 1974, 88 Stat. 1081; Pub. L. 102-154, title I, Nov. 13, 1991, 105 Stat. 1000.)

### CHANGE OF NAME

"United States Geological Survey" substituted for "Geological Survey" in subsec. (a)(3) pursuant to provision of title I of Pub. L. 102–154, set out as a note under section 31 of Title 43, Public Lands.

### §1123. Resource inventory and assessment program

(a) The Chairman shall initiate a resource inventory and assessment program with the objective of making regional and national appraisals of all types of geothermal resources, including identification of promising target areas for industrial exploration and development. The specific goals shall include—

(1) the improvement of geophysical, geochemical, geological, and hydrological techniques necessary for locating and evaluating geothermal resources;

(2) the development of better methods for predicting the power potential and longevity of geothermal reservoirs;

(3) the determination and assessment of the nature and power potential of the deeper unexplored parts of high temperature geothermal convection systems; and

(4) the survey and assessment of regional and national geothermal resources of all types.