ment 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, 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.

(b) The Chairman, acting through the United States Geological Survey and other appropriate agencies, shall—

(1) develop and carry out a general plan for the orderly inventorying of all forms of geothermal resources of the Federal lands and, where consistent with property rights and determined by the Chairman to be in the national interest, of non-Federal lands;

(2) conduct regional surveys, based upon such a general plan, using innovative geological, geophysical, geochemical, and stratagraphic drilling techniques, which will lead to a national inventory of geothermal resources in the United States;

(3) publish and make available maps, reports, and other documents developed from such surveys to encourage and facilitate the commercial development of geothermal resources for beneficial use and consistent with the national interest;

(4) make such recommendations for legislation or administrative regulations as may from time to time appear to be necessary to

make Federal leasing, environmental and taxing policy for geothermal resources consistent with known inventories of various resource types, with the current state of technologies for geothermal energy development, and with current evaluations of the environmental impacts of such development; and

(5) participate with appropriate Federal agencies and non-Federal entities in research to develop, improve, and test technologies for the discovery and evaluation of all forms of geothermal resources, and conduct research into the principles controlling the location, occurrence, size, temperature, energy content, producibility, and economic lifetimes of geothermal reservoirs.

(Pub. L. 93–410, title I, § 103, Sept. 3, 1974, 88 Stat. 1082; Pub. L. 95–238, title V, § 503, Feb. 25, 1978, 92 Stat. 86; Pub. L. 102–154, title I, Nov. 13, 1991, 105 Stat. 1000.)

AMENDMENTS

1978—Subsec. (b)(4). Pub. L. 95–238 inserted ''or administrative regulations'' after ''legislation'' and '', environmental and taxing'' after ''leasing''.

CHANGE OF NAME

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

§ 1124. Research and development

(a) The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall initiate a research and development program for the purpose of resolving all major technical problems inhibiting the fullest possible commercial utilization of geothermal resources in the United States. The specific goals of such programs shall include—

(1) the development of effective and efficient drilling methods to operate at high temperatures in formations of geothermal interest;

(2) the development of reliable predictive methods and control techniques for the production of geothermal resources from reservoirs;

(3) the exploitation of new concepts for fracturing rock to permit recovery of contained heat reserves;

(4) the improvement of equipment and technology for the extraction of geothermal resources from reservoirs;

(5) the development of improved methods for converting geothermal resources and byproducts to useful forms;

(6) the development of improved methods for controlling emissions and wastes from geothermal utilization facilities, including new monitoring methods to any extent necessary;

(7) the development and evaluation of waste disposal control technologies and the evaluation of surface and subsurface environmental effects of geothermal development;

(8) the improvement of the technical capability to predict environmental impacts resulting from the development of geothermal resources, the preparation of environmental impact statements, and the assuring of compliance with applicable standards and criteria;

(9) the identification of social, legal, and economic problems associated with geothermal development (both locally and regionally) for the purpose of developing policy and providing a framework of policy alternatives for the commercial utilization of geothermal resources;

(10) the provision for an adequate supply of scientists to perform required geothermal research and development activities; and

(11) the establishment of a program to encourage States to establish and maintain geothermal resources clearinghouses, which shall serve to (A) provide geothermal resources developers with information with respect to applicable local, State, and Federal laws, rules, and regulations, (B) coordinate the processing of permit applications, impact statements, and other information which geothermal resources developers are required to provide, (C) encourage uniformity with respect to local and State laws, rules, and regulations with respect to geothermal resources development, and (D) encourage establishment of land use plans, which would include zoning for geothermal resources development and which would assure that geothermal resources developers will be able to carry out development programs to the production stage.

(b) The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall implement a coordinated program of research and development in order to demonstrate the technical means for the extraction and utilization of the resource base, including any by-products of such base, and in order to accomplish the goals established by subsection (a) of this section. Research authorized by this chapter having potential applications in matters other than geothermal energy may be pursued to the extent that the findings of such research can be published in a form for utilization by others.

(Pub. L. 93–410, title I, § 104, Sept. 3, 1974, 88 Stat. 1083.)

§ 1125. Geothermal demonstration plants and projects

(a) Design and construction

The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall initiate a program to design and construct geothermal demonstration plants. The specific goals of such program shall include—

(1) the development of economical geothermal resources production systems and components which meet environmental standards;

(2) the design of plants to produce electric power and, where appropriate, the large-scale production and utilization of any useful byproducts;

(3) the involvement of engineers, analysts, technicians, and managers from industry field and powerplant development, which shall lead to the early industrial exploitation of advanced geothermal resources;

(4) the provision for an adequate supply of trained geothermal engineers and technicians;