Public Law 93-409

AN ACT

September 3, 1974
[H. R. 11864]

To provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That this Act may be cited as the "Solar Heating and Cooling Demonstration Act of 1974".

Solar Heating and Cooling Demonstration Act of 1974.
42 USC 5501 note.

FINDINGS AND POLICY

42 USC 5501.

SEC. 2. (a) The Congress hereby finds that—

(1) the current imbalance between supply and demand for fuels and energy is likely to persist for some time;

(2) the early demonstration of the feasibility of using solar energy for the heating and cooling of buildings could help to relieve the demand upon present fuel and energy supplies;

(3) the technologies for solar heating are close to the point of commercial application in the United States;

(4) the technologies for combined solar heating and cooling still require research, development, testing and demonstration, but no insoluble technical problem is now foreseen in achieving commercial use of such technologies;

(5) the early development and export of viable solar heating equipment and combined solar heating and cooling equipment, consistent with the established preeminence of the United States in the field of high technology products, can make a valuable contribution to our balance of trade;

(6) the widespread use of solar energy in place of conventional methods for the heating and cooling of buildings would have a significantly beneficial effect upon the environment;

(7) the mass production and use of solar heating and cooling equipment will help to eliminate the dependence of the United States upon foreign energy sources and promote the national defense;

(8) the widespread introduction of low-cost solar energy will be beneficial to consumers in a period of rapidly rising fuel cost;

(9) innovation and creativity in the development of solar heating and combined solar heating and cooling components and systems can be fostered through encouraging direct contact between the manufacturers of such systems and the architects, engineers, developers, contractors, and other persons interested in installing such systems in buildings;

(10) evaluation of the performance and reliability of solar heating and combined solar heating and cooling technologies can be expedited by testing under carefully controlled conditions; and

(11) commercial application of solar heating and combined solar heating and cooling technologies can be expedited by early commercial demonstration under practical conditions.

(b) It is therefore declared to be the policy of the United States and the purpose of this Act to provide for the demonstration within a three-year period of the practical use of solar heating technology, and to provide for the development and demonstration within a five-year period of the practical use of combined heating and cooling technology.

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DEFINITIONS

42 USC 5502.

SEC. 3. For purposes of this Act—

(1) the term "solar heating", with respect to any building, means the use of solar energy to meet such portion of the total heating needs of such building (including hot water), or such portion of the needs of such building for hot water (where its remaining heating needs are met by other methods), as may be required under performance criteria prescribed by the Secretary of Housing and Urban Development utilizing the services of the Director of the National Bureau of Standards, and in consultation with the Director of the National Science Foundation, and the Administrator of the National Aeronautics and Space Administration;

(2) the terms "solar heating and cooling" and "combined solar heating and cooling", with respect to any building, mean the use of solar energy to provide both such portion of the total heating needs of such building (including hot water) and such portion of the total cooling needs of such building, or such portion of the needs of such building for hot water (where its remaining heating needs are met by other methods) and such portion of the total cooling needs of a building, as may be required under performance criteria prescribed by the Secretary of Housing and Urban Development utilizing the services of the Director of the National Bureau of Standards, and in consultation with the Director of the National Science Foundation, and the Administrator of the National Aeronautics and Space Administration, and such term includes cooling by means of nocturnal heat radiation, by evaporation, or by other methods of meeting peakload energy requirements at nonpeakload times;

(3) the term "residential dwellings" includes previously occupied and new single family and multifamily dwellings, mobile homes, and publicly assisted housing owned by a private sponsor or a State or local housing authority not covered by section 17;

(4) the term "Administrator" means the Administrator of the National Aeronautics and Space Administration;

(5) the term "Secretary" means the Secretary of Housing and Urban Development; and

(6) the term "Director" means the Director of the National Science Foundation.

CONDUCT OF ACTIVITIES IN SOLAR HEATING AND COOLING TECHNOLOGIES BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

SEC. 4. Section 203 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2473) is amended by redesignating subsection (b) as subsection (c), and by inserting immediately after subsection (a) the following new subsection:

"(b) The Administration shall initiate, support, and carry out such research, development, demonstrations, and other related activities in solar heating and cooling technologies (to the extent that funds are appropriated therefor) as are provided for in sections 5, 6, and 9 of the Solar Heating and Cooling Demonstration Act of 1974.".

DEVELOPMENT AND DEMONSTRATION OF SOLAR HEATING SYSTEMS TO BE USED IN RESIDENTIAL DWELLINGS

42 USC 5503.

SEC. 5. (a) The Administrator and the Secretary shall promptly initiate and carry out a program, as provided in this section, for the development and demonstration of solar heating systems (including

collectors, controls, and thermal storage) for use in residential dwellings.

Performance criteria, publication.

(b)(1) Within 120 days after the date of the enactment of this Act, the Secretary, utilizing the services of the Director of the National Bureau of Standards and in consultation with the Administrator and the Director, shall determine, prescribe, and publish—

(A) interim performance criteria for solar heating components and systems to be used in residential dwellings, and

(B) interim performance criteria (relating to suitability for solar heating) for such dwellings themselves,

taking into account in each instance climatic variations existing between different geographic areas.

Design selection.

(2) As soon as possible after the publication of the performance criteria prescribed under paragraph (1), the Secretary, in consultation with the Director of the National Bureau of Standards and the Administrator, will select on the basis of open competition a number of designs for various types of residential dwellings suitable for and adapted to the installation of solar heating systems meeting the performance criteria prescribed under paragraph (1)(A).

Contracts and grants.
42 USC 2471 et seq.

(c) The Administrator, in accordance with the applicable provisions of title II of the National Aeronautics and Space Act of 1958 and under program guidelines established jointly by the Administrator and the Secretary, shall, after consultation with the Secretary—

(1) enter into such contracts and grants as may be necessary or appropriate for the development (for commercial production and residential use) of solar heating systems meeting the performance criteria prescribed under subsection (b)(1)(A) (including any further planning and design which may be required to conform with the specifications set forth in such criteria); and

(2) enter into contracts with a number of persons or firms for the procurement of solar heating components and systems meeting such performance criteria (including adequate numbers of spare and replacement parts for such systems).

Installation and monitoring.

(d) The Secretary shall (1) arrange for the installation of solar heating systems procured by the Administrator under subsection (c)(2) in a substantial number of residential dwellings and (2) provide for the satisfactory operation of such installations during the demonstration period. Title to and ownership of any dwellings constructed hereunder and of solar heating systems installed hereunder may be conveyed to purchasers or owners of such dwellings under terms and conditions prescribed by the Secretary, including an express agreement that any such purchaser or owner shall, in such manner and form and on such terms and conditions as the Secretary may prescribe, observe and monitor (or permit the Secretary to observe and monitor) the performance and operation of such system for a period of five years, and that such purchaser or owner (including any subsequent owner and occupant of the property who also makes such an agreement) shall regularly furnish the Secretary with such reports thereon as the agreement may require.

Federal property installations.

(e) The Secretary of Defense shall arrange for the installation of solar heating systems procured by the Administrator under subsection (c)(2) in a substantial number of residential dwellings which are located on Federal or federally administered property where the performance and operation of such systems can be regularly and effectively observed and monitored by designated Federal personnel.

(f) The Secretary and the Secretary of Defense, and officials responsible for administering Federal or federally administered property, shall coordinate their activities under this section to assure that solar heating systems are installed in a substantial number of resi-

dential dwellings and in a sufficient number of different geographic areas under varying climatic conditions to constitute a realistic and effective demonstration in support of the objectives of this Act.

DEVELOPMENT AND DEMONSTRATION OF COMBINED SOLAR HEATING AND COOLING SYSTEMS TO BE USED IN RESIDENTIAL DWELLINGS

42 USC 5504.

SEC. 6. (a) The Administrator and the Secretary shall promptly initiate and carry out a program, as provided in this section, for the development and demonstration of combined solar heating and cooling systems (including collectors, controls, and thermal storage) for use in residential dwellings.

Performance criteria, publication.

(b)(1) As soon as possible after the date of the enactment of this Act, the Secretary, utilizing the services of the Director of the National Bureau of Standards and in consultation with the Administrator and the Director, shall determine, prescribe, and publish—

(A) interim performance criteria for combined solar heating and cooling components and systems to be used in residential dwellings, and

(B) interim performance criteria (relating to suitability for solar heating and cooling) for such dwellings themselves,

taking into account in each instance climatic variations existing between different geographic areas.

Design selection.

(2) As soon as possible after the publication of the performance criteria prescribed under paragraph (1) (and if possible before the completion of the research and development provided for in subsection (c)), the Secretary, in consultation with the Director of the National Bureau of Standards and the Administrator, will select on the basis of open competition a number of designs for various types of residential dwellings suitable for and adapted to the installation of combined solar heating and cooling systems meeting the performance criteria prescribed under paragraph (1)(A).

Technological research and development.

(c) During the period immediately following the publication of performance criteria under subsection (b)(1), the Administrator, in coordination with the Director, shall undertake and conduct with respect to solar heating and cooling a program of research, development, and testing designed to provide the additional technological resources necessary for the development and commercial application of combined solar heating and cooling systems as contemplated by the program under this section.

Contracts and grants.
42 USC 2471 *et seq.*

(d) The Administrator, in accordance with the applicable provisions of title II of the National Aeronautics and Space Act of 1958 and under program guidelines established jointly by the Administrator and the Secretary, and at the earliest possible time during or immediately after the period specified in subsection (c), shall, after consultation with the Secretary—

(1) enter into such contracts and grants as may be necessary or appropriate for the development (for commercial production and residential use) of combined solar heating and cooling systems meeting the performance criteria prescribed under subsection (b)(1)(A) (including any further planning and design which may be required to conform with the specifications set forth in such criteria or to reflect the results of the activities conducted under subsection (c)); and

(2) enter into contracts with a number of persons or firms for the procurement of combined solar heating and cooling systems meeting such performance criteria (including adequate numbers of spare and replacement parts for such systems).

Installation and monitoring.

(e) The Secretary shall (1) arrange for the installation of combined solar heating and cooling systems procured by the Administrator

under subsection (d)(2) in a substantial number of residential dwellings and (2) provide for the satisfactory operation of such installations during the demonstration period. Title to and ownership of any dwellings constructed hereunder and of combined solar heating and cooling systems installed hereunder may be conveyed to purchasers or owners of such dwellings under terms and conditions prescribed by the Secretary, including an express agreement that any such purchaser or owner shall, in such manner and form and on such terms and conditions as the Secretary may prescribe, observe and monitor (or permit the Secretary to observe and monitor) the performance and operation of such system for a period of five years, and that such purchaser or owner (including any subsequent owner and occupant of the property who also makes such an agreement) shall regularly furnish the Secretary with such reports thereon as the agreement may require.

Federal property installations.

(f) The Secretary of Defense shall arrange for the installation of combined solar heating and cooling systems procured by the Administrator under subsection (d)(2) in a substantial number of residential dwellings which are located on Federal or federally administered property where the performance and operation of such systems can be regularly and effectively observed and monitored by designated Federal personnel.

(g) The Secretary and the Secretary of Defense, and officials responsible for administering Federal or federally administered property, shall coordinate their activities under this section to assure that combined solar heating and cooling systems are installed in a substantial number of residential dwellings and in a sufficient number of geographic areas under varying climatic conditions to constitute a realistic and effective demonstration in support of the objectives of this Act.

COMPREHENSIVE PROGRAM DEFINITION

42 USC 5505.

SEC. 7. (a) The Administrator and the Secretary are authorized and directed to prepare a comprehensive plan for the conduct of the development and demonstration activities under sections 5 and 6. In the preparation of such plan, the Administrator and Secretary shall consult with the Director of the National Bureau of Standards, the Director, the Secretary of Defense, and other Federal agencies and private organizations as appropriate.

Report to President and Congress.

(b) The Administrator and the Secretary shall transmit such comprehensive program plan to the President and to each House of the Congress. The plan shall be transmitted within 120 days after the date of the enactment of this Act.

TEST PROCEDURES AND DEFINITIVE PERFORMANCE CRITERIA

42 USC 5506.

SEC. 8. As soon as feasible, and utilizing data available from the demonstration programs under sections 5 and 6, the Secretary, utilizing the services of the Director of the National Bureau of Standards and in consultation with the Administrator and the Director shall determine, prescribe, and publish in the Federal Register in accordance with the applicable provisions regarding rulemaking prescribed by section 553 of title 5, United States Code—

Publication in Federal Register.

(1) definitive performance criteria for solar heating and combined solar heating and cooling components and systems to be used in residential dwellings, taking into account climatic variations existing between different geographic areas;

(2) definitive performance criteria (relating to suitability for solar heating and for combined solar heating and cooling) for

such dwellings, taking into account climatic variations existing between different geographic areas; and

(3) procedures whereby manufacturers of solar heating and combined solar heating and cooling components and systems shall have their products tested in order to provide certification that such products conform to the performance criteria established under paragraph (1).

DEVELOPMENT AND DEMONSTRATION OF SOLAR HEATING AND COMBINED SOLAR HEATING AND COOLING SYSTEMS FOR COMMERCIAL BUILDINGS

42 USC 5507.

SEC. 9. The Administrator, in consultation with the Secretary, the Director, the Administrator of General Services, and the Director of the National Bureau of Standards and concurrently with the conduct of the programs under sections 5 and 6, shall enter into arrangements with appropriate Federal agencies to carry out such projects and activities (including demonstration projects) with respect to apartment buildings, office buildings, factories, crop-drying facilities and other agricultural structures, public buildings (including schools and colleges), and other non-residential, commercial, or industrial buildings, taking into account the special needs of and individual differences in such buildings based upon size, function, and other relevant factors, as may be appropriate for the early development and demonstration of solar heating and combined solar heating and cooling systems suitable and effective for use in such buildings.

SOLAR HEATING AND COOLING RESEARCH BY NATIONAL SCIENCE FOUNDATION

42 USC 5508.

SEC. 10. (a) The Director shall conduct a program of applied research relevant to (1) the improvement of solar heating components and systems and (2) the development and commercial application of combined solar heating and cooling components and systems as contemplated by the programs under this Act.

(b) The Director shall apprise the Secretary and the Administrator on a continuing basis of the results of the programs being conducted in accordance with subsection (a), and the Secretary and the Administrator shall insure that such results, where appropriate, are incorporated into the development and demonstration programs established by this Act.

COORDINATION, MONITORING, AND LIAISON

42 USC 5509.

SEC. 11. (a) The Secretary, utilizing the services of the Director of the National Bureau of Standards and in coordination with such other Government agencies as may be appropriate, shall—

(1) monitor the performance and operation of solar heating and combined solar heating and cooling systems installed in residential dwellings under this Act;

(2) collect and evaluate data and information on the performance and operation of solar heating and combined solar heating and cooling systems installed in residential dwellings under this Act; and

Reports to Congress.

(3) from time to time, carrying out such studies and investigations and take such other actions, including the submission of special reports to the Congress when appropriate, as may be necessary to assure that the programs for which the Secretary is responsible under this Act effectively carry out the policy of this Act.

(b) In the development of the performance criteria and test procedures required under sections 5, 6, and 8, the Secretary shall work

closely with the appropriate scientific, technical, and professional societies and industry representatives to insure the best possible use of available expertise in this area.

(c) The Secretary shall also maintain continuing liaison with the building industry and related industries and interests, and with the scientific and technical community during and after the period of the programs carried out under this Act, in order to assure that the projected benefits of such programs are and will continue to be realized.

DISSEMINATION OF INFORMATION AND OTHER ACTIONS TO PROMOTE PRACTICAL USE OF SOLAR HEATING AND COOLING TECHNOLOGIES

42 USC 5510.

SEC. 12. (a) The Secretary shall take all possible steps to assure that full and complete information with respect to the demonstrations and other activities conducted under this Act is made available to Federal, State, and local authorities, the building industry and related segments of the economy, the scientific and technical community, and the public at large, both during and after the close of the programs under this Act, with the objective of promoting and facilitating to the maximum extent feasible the early and widespread practical use of solar energy for the heating and cooling of buildings throughout the United States. In accordance with regulations prescribed under section 16 such information shall be disseminated on a coordinated basis by the Secretary, the Administrator, the Director of the National Bureau of Standards, the Director, the Commissioner of the Patent Office, and other appropriate Federal offices and agencies.

(b) In addition, the Secretary shall—

(1) study and investigate the effect of building codes, zoning ordinances, tax regulations, and other laws, codes, ordinances, and practices upon the practical use of solar energy for the heating and cooling of buildings;

(2) determine the extent to which such laws, codes, ordinances, and practices should be changed to permit or facilitate such use, and the methods by which any such changes may best be brought about; and

(3) study the necessity of a program of incentives to accelerate the commercial application of solar heating and cooling technology.

Solar Heating and Cooling Information Data Bank.
Establishment.

(c)(1) In carrying out his functions under subsections (a) and (b) the Secretary, utilizing the capabilities of the National Aeronautics and Space Administration, the Department of Commerce, and the National Science Foundation to the maximum extent possible, shall establish and operate a Solar Heating and Cooling Information Data Bank (hereinafter in this subsection referred to as the "bank") for the purpose of collecting, reviewing, processing, and disseminating solar heating and cooling information and data in a timely and accurate manner in support of the objectives of this Act.

(2) Information and data compiled in the bank shall include—

(A) technical information (including reports, journal articles, dissertions, monographs, and project descriptions) on solar energy research, development, and applications;

(B) technical information on the design, construction, and maintenance of buildings compatible with solar heating and cooling concepts;

(C) physical and chemical properties of the materials required for solar heating and cooling;

(D) climatic conditions in appropriate areas of the United States, including those areas where the demonstrations are to be located; and

(E) engineering performance of devices utilized in solar heating and cooling or to be employed in the demonstrations.

(3) In accordance with regulations prescribed under section 16, the Secretary shall provide retrieval and dissemination services to cover the solar heating and cooling information described under paragraph (2) for—

(A) Federal, State, and local government organizations that are active in the area of energy resources (and their contractors);

(B) universities, colleges, and other nonprofit organizations; and

(C) private persons, upon request, in appropriate cases.

(4) In carrying out his functions under this subsection, the Secretary shall utilize, when feasible, the existing data base of scientific and technical information in Federal agencies, adding to such data base any information described in paragraph (2) which does not already reside in such base.

Reports to President and Congress.

(d) Each Federal officer and agency having functions under this Act shall include in his or its annual report to the President and the Congress a full and complete description of his or its activities (current and projected) under this Act, along with his or its recommendations for legislative, administrative, or other action to improve the programs under this Act or to achieve the objectives of this Act more promptly and effectively. In addition, the Secretary shall submit annually to the President and the Congress a special report summarizing in appropriate detail all of the activities (current and projected) of the various Federal officers and agencies having functions under this Act, with the objective of presenting a comprehensive overall view of such programs.

LIMITATIONS ON FEDERALLY ASSISTED OR FEDERALLY CONSTRUCTED HOUSING

42 USC 5511.

SEC. 13. (a)(1) In determining the maximum dollar amount of any federally assisted mortgage loan (as defined in subsection (b)) or the maximum per unit or other cost or floor area limitation of any federally constructed housing (as defined in subsection (c)), where the law establishing the program under which the loan is made or the housing is constructed specifies such maximum per unit or other cost on floor area limitation and the structure involved is furnished with solar heating or combined solar heating and cooling equipment under the demonstration program established by section 5, 6, or 9, the maximum amount or cost or floor area limitation so specified which is applicable to such structure shall be deemed to be increased by the amount by which (as determined by the Secretary or the Secretary of Defense, as appropriate) the price or cost or floor area limitation of the structure including such solar heating or combined solar heating and cooling equipment exceeds the price or cost or floor area limitation of the structure with such equipment replaced by conventional heating equipment or conventional heating and cooling equipment (as the case may be).

(2) In addition, in the case of a federally assisted mortgage loan, the cost excess specified in subsection (a) shall be fully taken into account in determining the value or cost of the structure involved for purposes of applying any statutory provision specifying the maximum loan-to-value or -cost ratio; except that, if the law specifies different rates of downpayment for successive increments of such value or cost, the lowest such rate shall apply to the additional cost attributable to the solar heating or combined solar heating and cooling equipment, and such equipment shall otherwise be excluded in determining the total value or cost of the structure.

(b) As used in subsection (a), the term "mortgage loan" means a loan which is made to finance the purchase or construction of a residence or any other building or structure; and the term "federally assisted mortgage loan" means a mortgage loan which— "Mortgage loan" and "federally assisted mortgage loan."

(1) is made in whole or in part by any lender the deposits or accounts of which are insured by any agency of the Federal Government, or is made in whole or in part by any lender which is itself regulated by any agency of the Federal Government; or

(2) is made in whole or in part, or insured, guaranteed, supplemented, or assisted in any way, by the Secretary or any other officer or agency of the Federal Government or under or in connection with a housing, urban development, or related program administered by the Secretary or a housing or related program administered by any other such officer or agency; or

(3) is eligible for purchase by the Federal National Mortgage Association, the Government National Mortgage Association, or the Federal Home Loan Mortgage Corporation, or from any financial institution from which it could be purchased by the Federal Home Loan Mortgage Corporation; or

(4) is made in whole or in part by any "creditor," as defined in section 103(f) of the Consumer Credit Protection Act of 1968 (15 U.S.C. 1602(f)), who makes or invests in residential real estate loans aggregating more than $1,000,000 per year.

(c) As used in subsection (a), the term "federally constructed housing" means (1) residential or multifamily housing which is constructed by agencies of the Federal Government to provide dwelling accommodations for particular types or classes of persons under programs administered by such Federal agencies (including all housing constructed by the Department of Defense to provide dwelling accommodations for personnel of the armed services or for such personnel and their families), and (2) residential or multifamily housing which is constructed by agencies of State or local government, with financial assistance in any form from the Federal Government, to provide dwelling accommodations for particular types or classes of persons under programs administered by such State or local agencies. "Federally constructed housing."

ENCOURAGEMENT AND PROTECTION OF SMALL BUSINESS

SEC. 14. In carrying out their functions under this Act, all Federal officers and agencies shall take steps to assure that small business concerns will have realistic and adequate opportunities to participate in the programs under this Act to the maximum extent possible. 42 USC 5512.

PRIORITIES

SEC. 15. The Secretary shall set priorities as far as possible consistent with the intent and operation of this Act in accordance with the following criteria: 42 USC 5513.

(a) The residential dwellings and other buildings which will be part of the demonstration programs referred to in sections 5, 6, and 9 shall be located in a sufficient number of different geographic areas in the United States to assure a realistic and effective demonstration of the solar heating systems and combined solar heating and cooling systems involved, and of the dwellings and other buildings themselves, in both rural and urban locations and under climatic conditions which vary as much as possible.

(b) Consideration shall be given to projected costs of commercial production and maintenance of the solar heating systems and combined solar heating and cooling systems utilized in the demonstration programs.

Cost sharing.

(c) Encouragement should be given in the conduct of programs under this Act to those projects in which funds, appropriated by any State or political subdivision thereof for the purpose of sharing costs with the Federal Government for the purchase and installation of solar heating or combined solar heating and cooling components and systems, are committed before or after the date of the enactment of this Act.

REGULATIONS

42 USC 5514.

SEC. 16. The Administrator and the Secretary in consultation with the Director of the National Bureau of Standards, the Director, the Administrator of the General Services Administration, the Secretary of Defense, and other appropriate officers and agencies, shall prescribe such regulations as may be necessary or appropriate to carry out this Act promptly and efficiently. Each such officer or agency, in consultation with the Administrator and the Secretary, may prescribe such regulations as may be necessary or appropriate to carry out his or its particular functions under this Act promptly and efficiently.

USE OF PUBLICLY ASSISTED HOUSING

42 USC 5515.

42 USC 1430.

SEC. 17. The Secretary shall make appropriate use of publicly assisted housing and particularly low-rent housing assisted under the United States Housing Act of 1937 in demonstrating solar heating systems and combined solar heating and cooling systems under this Act.

TRANSFER OF FUNCTIONS

42 USC 5516.

SEC. 18. Within sixty days after the effective date of the law creating the Energy Research and Development Administration or any other law creating a permanent Federal organization or agency having jurisdiction over the energy research and development functions of the United States (or within sixty days after the enactment of this Act if the effective date of such law occurs prior to the enactment of this Act), the energy research and development functions vested in the National Aeronautics and Space Administration and the National Science Foundation under this Act and any funds which may have been appropriated pursuant to section 19 of this Act, to the extent necessary or appropriate, may, in accordance with regulations prescribed by the Office of Management and Budget, be transferred to and vested in the Energy Research and Development Administration or such other organization or agency.

AUTHORIZATION OF APPROPRIATIONS

42 USC 5517.

SEC. 19. (a) There is hereby authorized to be appropriated to the National Aeronautics and Space Administration for the fiscal year ending June 30, 1975, $5,000,000, to remain available until expended, to carry out the functions vested in the Administrator by this Act.

(b) There is hereby authorized to be appropriated to the Department of Housing and Urban Development for the fiscal year ending June 30, 1975, $5,000,000, to remain available until expended. Any

sums so appropriated shall be available (1) to carry out the functions vested in the Secretary of Housing and Urban Development by this Act, and (2) for transfer to the Department of Defense, the National Bureau of Standards, and the General Services Administration to enable them to carry out their respective functions under this Act.

(c) There is hereby authorized to be appropriated for the fiscal years ending June 30, 1976, 1977, 1978, and 1979, $50,000,000 in the aggregate to carry out the programs established by this Act.

Approved September 3, 1974.

Public Law 93-410

AN ACT

September 3, 1974
[H.R. 14920]

To further the conduct of research, development, and demonstrations in geothermal energy technologies, to establish a Geothermal Energy Coordination and Management Project, to provide for the carrying out of research and development in geothermal energy technology, to carry out a program of demonstrations in technologies for the utilization of geothermal resources, to establish a loan guaranty program for the financing of geothermal energy development, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

Geothermal Energy Research, Development, and Demonstration Act of 1974.

SHORT TITLE

30 USC 1101 note.

SECTION 1. This Act may be cited as the "Geothermal Energy Research, Development, and Demonstration Act of 1974".

FINDINGS

30 USC 1101.

SEC. 2. 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;