

opers, 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 subchapter 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.

(Pub. L. 93-409, §2, Sept. 3, 1974, 88 Stat. 1069.)

SHORT TITLE OF 1978 AMENDMENT

Pub. L. 95-590, §1, Nov. 4, 1978, 92 Stat. 2513, provided: "That this Act [enacting subchapter III of this chapter] may be cited as the 'Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978'."

SHORT TITLE

Pub. L. 93-409, §1, Sept. 3, 1974, 88 Stat. 1069, provided: "That this Act [enacting this subchapter and amending section 2473 of this title] may be cited as the 'Solar Heating and Cooling Demonstration Act of 1974'."

Pub. L. 93-473, §1, Oct. 26, 1974, 88 Stat. 1431, provided: "That this Act [enacting subchapter II of this chapter] may be cited as the 'Solar Energy Research, Development, and Demonstration Act of 1974'."

§ 5502. Definitions

For purposes of this subchapter—

(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 Institute of Standards and Technology, and in consultation with the Secretary of Energy, 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 Institute of Standards and Technology, and in consultation with the Secretary of Energy, and the Administrator of the National Aeronautics and Space Administra-

tion, 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 5515 of this title;

(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) Omitted.

(Pub. L. 93-409, §3, Sept. 3, 1974, 88 Stat. 1070; Pub. L. 93-438, title I, §104(f), title III, §301(h), Oct. 11, 1974, 88 Stat. 1238, 1250; Pub. L. 95-91, title III, §301(a), title VII, §§703, 707, Aug. 4, 1977, 91 Stat. 577, 606, 607; Pub. L. 100-418, title V, §5115(c), Aug. 23, 1988, 102 Stat. 1433.)

CODIFICATION

Par. (6) of this section, which defined the term "Director" as meaning the Director of the National Science Foundation, was omitted because of the transfer of functions from the National Science Foundation to the Secretary of Energy and the substitution of "Secretary of Energy" for "Director" wherever appearing in this subchapter. See Transfer of Functions note set out below.

AMENDMENTS

1988—Pars. (1), (2). Pub. L. 100-418 substituted "National Institute of Standards and Technology" for "National Bureau of Standards".

TRANSFER OF FUNCTIONS

"Secretary of Energy" substituted for "Director of the National Science Foundation" in pars. (1) and (2) pursuant to sections 104(f) and 301(h) of Pub. L. 93-438, which are classified to sections 5814(f) and 5871(h) of this title and which transferred functions of National Science Foundation relating to or utilized in connection with solar heating and cooling development to Administrator of Energy Research and Development Administration, and pursuant to sections 301(a), 703, and 707 of Pub. L. 95-91, which are classified to sections 7151(a), 7293, and 7297 of this title and which terminated Energy Research and Development Administration and transferred its functions and functions of Administrator thereof (with certain exceptions) to Secretary of Energy.

§ 5503. Development and demonstration of solar heating systems for use in residential dwellings

(a) Functions of Administrator and Secretary

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.

(b) Time for determination, prescription and publishing of interim performance criteria; selection of designs for suitable dwellings

(1) Within 120 days after September 3, 1974, the Secretary, utilizing the services of the Director of the National Institute of Standards and Tech-

nology and in consultation with the Administrator and the Secretary of Energy, 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.

(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 Institute of Standards and Technology 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).

(c) Contracts and grants for development of heating systems for commercial production and residential use; contracts for procurement of heating systems and components

The Administrator, in accordance with the applicable provisions of subchapter II of chapter 201 of title 51 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).

(d) Installation of heating systems; operation during demonstration period; title and ownership of dwellings and systems; agreement of owner to observe and monitor system for five years; reports by owner

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.

(e) Installation of heating systems by Secretary of Defense in dwellings located on Federal or federally administered property

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) Coordination of activities to assure a realistic and effective demonstration

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 residential 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 subchapter.

(Pub. L. 93-409, §5, Sept. 3, 1974, 88 Stat. 1070; Pub. L. 93-438, title I, §104(f), title III, §301(h), Oct. 11, 1974, 88 Stat. 1238, 1250; Pub. L. 95-91, title III, §301(a), title VII, §§703, 707, Aug. 4, 1977, 91 Stat. 577, 606, 607; Pub. L. 100-418, title V, §5115(c), Aug. 23, 1988, 102 Stat. 1433.)

CODIFICATION

In subsec. (c), “subchapter II of chapter 201 of title 51” substituted for “title II of the National Aeronautics and Space Act of 1958” on authority of Pub. L. 111-314, §5(e), Dec. 18, 2010, 124 Stat. 3443, which Act enacted Title 51, National and Commercial Space Programs.

AMENDMENTS

1988—Subsec. (b)(1), (2). Pub. L. 100-418 substituted “National Institute of Standards and Technology” for “National Bureau of Standards”.

TRANSFER OF FUNCTIONS

“Secretary of Energy” substituted for “Director”, meaning Director of National Science Foundation, in subsec. (b)(1) pursuant to sections 104(f) and 301(h) of Pub. L. 93-438, which are classified to sections 5814(f) and 5871(h) of this title and which transferred functions of National Science Foundation relating to or utilized in connection with solar heating and cooling development to Administrator of Energy Research and Development Administration, and pursuant to sections 301(a), 703, and 707 of Pub. L. 95-91, which are classified to sections 7151(a), 7293, and 7297 of this title and which terminated Energy Research and Development Administration and transferred its functions and functions of Administrator thereof (with certain exceptions) to Secretary of Energy.

§ 5504. Development and demonstration of combined solar heating and cooling systems for use in residential dwellings

(a) Functions of Administrator and Secretary

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.

(b) Time for determination, prescription and publishing of interim performance criteria; selection of designs for suitable dwellings

(1) As soon as possible after September 3, 1974, the Secretary, utilizing the services of the Director of the National Institute of Standards and Technology and in consultation with the Administrator and the Secretary of Energy, 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.

(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 Institute of Standards and Technology 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).

(c) Program of research, development and testing to provide additional technological resources for development and commercial application of combined systems

During the period immediately following the publication of performance criteria under subsection (b)(1), the Administrator, in coordination with the Secretary of Energy, 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.

(d) Contracts and grants for development of combined systems for commercial production and residential use; contracts for procurement of combined systems

The Administrator, in accordance with the applicable provisions of subchapter II of chapter 201 of title 51 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).

(e) Installation of combined systems; operation during demonstration period; title and ownership of dwellings and systems; agreement of owner to observe and monitor system; reports by owner

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.

(f) Installation of combined systems by Secretary of Defense in dwellings located on Federal or federally administered property

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) Coordination of activities to assure a realistic and effective demonstration

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