

(2) to reduce the average cost of installed solar photovoltaic energy systems to \$1 per peak watt by fiscal year 1988; and

(3) to stimulate the purchase by private buyers of at least 90 per centum of all solar photovoltaic energy systems produced in the United States during fiscal year 1988.

(Pub. L. 95-590, § 2, Nov. 4, 1978, 92 Stat. 2513.)

#### SHORT TITLE

For short title of this subchapter as the "Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978", see section 1 of Pub. L. 95-590, set out as a note under section 5501 of this title.

#### § 5582. Definitions

For purposes of this subchapter—

(1) a "solar photovoltaic energy system" is a system of components which generates electricity from incident sunlight by means of the photovoltaic effect, and which shall include all components, including energy storage devices where appropriate, necessary to provide electricity for individual, industrial, agricultural, or governmental use;

(2) the term "solar photovoltaic energy system" may be used interchangeably with the term "photovoltaic system";

(3) a "hybrid solar photovoltaic energy system" is a system of components that generates electricity from incident sunlight by means of the photovoltaic effect and, in conjunction with electronic and, if appropriate, optical, thermal and storage devices, provides electricity, as well as heat and/or light for individual, commercial, industrial, agricultural, or governmental use;

(4) "photovoltaic effect" refers to the physical phenomenon exhibited under certain circumstances by some materials in which a portion of the light energy striking the material is directly converted to electrical energy;

(5) "facility" means any building, agricultural, commercial or industrial complex or other device constructively employing photovoltaic systems; and

(6) "Secretary" means the Secretary of Energy.

(Pub. L. 95-590, § 3, Nov. 4, 1978, 92 Stat. 2515.)

#### § 5583. Establishment and promotion of research, development, and demonstration programs

The Secretary is directed to establish immediately and carry forth such research, development, and demonstration programs as may be necessary to meet the objectives of this subchapter as set forth in section 5581(b) of this title, and as a part of any such program shall—

(a) conduct, and promote the coordination and acceleration of, research, development, and demonstrations relating to solar photovoltaic energy systems and components thereof, and

(b) conduct, and promote the coordination and acceleration of, research, development, and demonstrations for systems and components to be used in applications that are dependent for their energy on solar photovoltaic energy systems.

(Pub. L. 95-590, § 4, Nov. 4, 1978, 92 Stat. 2515.)

#### § 5584. Federal assistance application procedures; selection of applicants; agreements; financial assistance; observation and monitoring of photovoltaic systems; reports; projects and activities

(a) In carrying out the provisions of section 5583 of this title, the Secretary is authorized—

(1) to establish procedures whereby any public or private entity wishing to install solar photovoltaic components and systems in any new or existing facility may apply for Federal assistance in purchasing and installing, in such facility, photovoltaic components or systems;

(2) to select, as soon as he deems it feasible, a number of the applicants under paragraph (1) and enter into agreements with them for the design, purchase, fabrication, testing, installation, and demonstration of photovoltaic components and systems. Such selection shall be based on the need to obtain scientific, technological, and economic information from a variety of such systems under a variety of circumstances and conditions; and

(3) to arrange, as part of any agreement entered into under paragraph (2), to provide up to 75 per centum of the purchase and installation costs of photovoltaic components or systems, taking into account relevant considerations involving the relative stage of consumer and industry interest and development at the time of the financial assistance action. Such arrangements shall be contingent upon terms and conditions prescribed by the Secretary, including an express agreement that the entity with whom the agreement is entered into shall, in such manner and form and on such terms and conditions as the Secretary may prescribe, observe and monitor (or permit the Secretary or his agents to observe and monitor) the performance and operation of such system for a period of five years, and that such entity (including any subsequent owner of the property) shall regularly furnish the Secretary with such reports thereon as the agreement may require.

(b) The Secretary shall, as he deems appropriate, undertake any projects or activities (including demonstration projects) to further the attainment of the objectives of this section.

(Pub. L. 95-590, § 5, Nov. 4, 1978, 92 Stat. 2516.)

#### CODIFICATION

Section 5583 of this title, referred to in subsec. (a), was in the original "section (4)" and was translated section 5583 of this title as the probable intent of Congress.

#### § 5585. Contracts, grants and arrangements

##### (a) Selection of photovoltaic components and systems, design concepts, and designs

The Secretary is authorized to select on the basis of open competitions—

(1) a number of readily available photovoltaic components and systems;

(2) a number of design concepts for various types of applications which demonstrate adaptability to the utilization of photovoltaic components and systems; and