

§ 5556. Solar energy demonstration facilities program

(a) Authorization for design and construction of facilities; objectives

The Chairman is authorized to initiate a program to design and construct, in specific solar energy technologies (including, but not limited to, those listed in section 5555(c) of this title,¹ facilities or powerplants of sufficient size to demonstrate the technical and economic feasibility of utilizing the various forms of solar energy. The specific goals of such programs shall include—

- (1) production of electricity from a number of powerplants, on the order of one to ten megawatts each;
- (2) production of synthetic fuels in commercial quantities;
- (3) large-scale utilization of solar energy in the form of direct heat;
- (4) utilization of thermal and all other by-products of the solar facilities;
- (5) design and development of hybrid systems involving the concomitant utilization of solar and other energy sources; and
- (6) the continuous operation of such plants and facilities for a period of time.

(b) Criteria for determination to proceed from development program to demonstration

For each of the technologies for which a successful and appropriate development program is completed, the Chairman shall make a determination to proceed to demonstration based on criteria including, but not necessarily limited to, the following:

- (1) the technological feasibility of the project;
- (2) the costs and benefits of the project, as determined by an economic assessment;
- (3) the immediate and the potential uses of the solar energy utilized in the project;
- (4) long-term national need for the technology;
- (5) environmental impact;
- (6) potential for technology transfer to other applications; and
- (7) the nature and extent of Federal participation, if any, in the project.

(c) Establishment of one or more projects utilizing each form of solar energy

In carrying out his responsibilities under this section, the Chairman, acting through the appropriate Federal agencies, may provide for the establishment of one or more demonstration projects utilizing each form of solar energy, which shall include, as appropriate, the specific research, development, pilot plant construction and operation, demonstration plant construction and operation, and other facilities and activities which may be necessary to show commercial viability of the specific solar technology.

(d) Investigation and agreements for cooperative development of demonstration facilities

The Chairman, acting through the appropriate Federal agencies, is authorized to investigate

and enter into agreements for the cooperative development of facilities to demonstrate solar technologies. The responsible Federal agency may consider—

- (1) cooperative agreements with non-Federal entities for construction of facilities and equipment to demonstrate solar energy technologies; and
- (2) cooperative agreements with other Federal agencies for the construction of facilities and equipment and operation of facilities to produce energy for direct Federal utilization.

(e) Construction and operation of demonstration projects without cooperative agreements

The Chairman, acting through appropriate Federal agencies is authorized to construct and operate demonstration projects without entering into cooperative agreements with respect to such projects, if the Chairman finds that—

- (1) the nature of the resource, the geographical location, the scale and engineering design of the facilities, the techniques of production, or any other significant factor of the specific demonstration project offers opportunities to make important contributions to the general knowledge of solar resources, the techniques of its development, or public confidence in the technology; and
- (2) there is no opportunity for cooperative agreements with any non-Federal entity willing and able to cooperate in the demonstration project under subsection (d)(1) of this section, and there is no opportunity for cooperative agreements with other Federal agencies under subsection (d)(2) of this section.

(f) Additional appropriations for projects exceeding maximum amount

If the estimate of the Federal investment with respect to construction and operation costs of any demonstration project proposed to be established under this section exceeds \$20,000,000, no amount may be appropriated for such project except as specifically authorized by legislation hereafter enacted by the Congress.

(g) Disposition of Federal property interests, electricity, synthetic fuels, and other byproducts upon completion of project

(1) At the conclusion of any demonstration project established under this section, or as soon thereafter as may be practicable, the responsible Federal agencies shall, by sale, lease, or otherwise, dispose of all Federal property interests which they have acquired pursuant to this section in accordance with existing law and the terms of the cooperative agreements involved.

(2) The agency involved shall, under appropriate agreements or other arrangements, provide for the disposition of electricity, synthetic fuels, and other byproducts of the project administered by such agency.

(Pub. L. 93-473, §7, Oct. 26, 1974, 88 Stat. 1434.)

§ 5556a. Solar photovoltaic energy systems studies and acquisitions by Secretary of Energy; scope, contents, and submission dates for reports; acquisition authority and requirements; authorization of appropriations

(a) The Secretary of Energy shall—

¹So in original. Probably should be preceded by a closing parenthesis.