niques; and public information with the objective of improving the reliability and efficiency of energy supplies and encourage the conservation of energy resources;

(Q) to improve methods for the prevention and cleanup of marine oil spills;

(R) to implement the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12001 et seq.); and

(S) to implement titles XX through XXIII of the Energy Policy Act of 1992 [42 U.S.C. 13401 et seq., 13451 et seq., 13501 et seq., 13521 et seq.].

(c) Based upon the comprehensive plan developed under subsection (a), the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992 [42 U.S.C. 13522], shall develop and transmit to the Congress, on or before September 1, 1978, a comprehensive environment and safety program to insure the full consideration and evaluation of all environmental, health, and safety impacts of each element, program, or initiative contained in the nuclear and nonnuclear energy research. development, and demonstration plans. Such program shall be updated and transmitted to the Congress annually as part of the report required under section 59141 of this title. (Pub. L. 93-577, §6, Dec. 31, 1974, 88 Stat. 1881; Pub. L. 95–238, title II, §206(a), Feb. 25, 1978, 92 Stat. 61; Pub. L. 102-486, title XXIII, §2303(a),

REFERENCES IN TEXT

X, §1009(b)(4), Aug. 8, 2005, 119 Stat. 935.)

Oct. 24, 1992, 106 Stat. 3092; Pub. L. 109-58, title

The Energy Reorganization Act of 1974, referred to in subsec. (a), is Pub. L. 93-438, Oct. 11, 1974, 88 Stat. 1233, as amended, which is classified principally to chapter 73 (§5801 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 5801 of this title and Tables.

The Department of Energy Organization Act, referred to in subsec. (a), is Pub. L. 95–91, Aug. 4, 1977, 91 Stat. 565, as amended, which is classified principally to chapter 84 (§7101 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 7101 of this title and Tables.

The Energy Policy Act of 1992, referred to in subsecs. (a) and (b)(3)(S), is Pub. L. 102-486, Oct. 24, 1992, 106 Stat. 2776. Titles XX through XXIII of the Act are classified generally to subchapters VIII (§13401 et seq.), IX (§13451 et seq.), X (§13501 et seq.), and XI (§13521 et seq.), respectively, of chapter 134 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 13201 of this title and Tables.

Section 5914 of this title, referred to in subsecs. (a), (b)(1), and (c), was omitted from the Code.

The Geothermal Energy Research, Development, and Demonstration Act of 1974, referred to in subsec. (b)(3)(F), is Pub. L. 93-410, Sept. 3, 1974, 88 Stat. 1079, as amended, which is classified generally to chapter 24 (§1101 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 1101 of Title 30 and Tables.

The Solar Heating and Cooling Demonstration Act of 1974, referred to in subsec. (b)(3)(I), is Pub. L. 93–409, Sept. 3, 1974, 88 Stat. 1069, as amended, which is classified generally to subchapter I (\$5501 et seq.) of chapter 71 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 5501 of this title and Tables.

The Solar Energy Research, Development, and Demonstration Act of 1974, referred to in subsec. (b)(3)(L), is Pub. L. 93-473, Oct. 26, 1974, 88 Stat. 1431, as amended, which is classified generally to subchapter II (§5551 et

seq.) of chapter 71 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 5551 of this title and Tables.

The Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989, referred to in subsec. (b)(3)(R), is Pub. L. 101–218, Dec. 11, 1989, 103 Stat. 1859, which is classified principally to chapter 125 (§12001 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 12001 of this title and Tables.

AMENDMENTS

2005—Subsec. (b)(3). Pub. L. 109–58 substituted "Secretary" for "Administrator" in introductory provisions and subpars. (D) and (E) and inserted "Demonstration" after "Cooling" in subpar. (I) and "Energy" after "Solar" in subpar. (L).

1992—Subsec. (a). Pub. L. 102–486, §2303(a)(1)(A), substituted "the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), and titles XX through XXIII of the Energy Policy Act of 1992, the Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992," for "the Administrator".

Subsec. (a)(1). Pub. L. 102-486, §2303(a)(1)(B), substituted "(the period up to 5 years after submission of the plan or its annual revision)" for "(to the early 1980's)".

Subsec. (a)(2). Pub. L. 102–486, §2303(a)(1)(C), substituted "(the period from 5 years to 10 years after submission of the plan or its annual revision)" for "(the early 1980's to 2000)".

Subsec. (a)(3). Pub. L. 102-486, §2303(a)(1)(D), substituted "(the period beyond 10 years after submission of the plan or its annual revision)" for "(beyond 2000)".

Subsec. (b)(1). Pub. L. 102-486, §2303(a)(2)(B), inserted at end "Such program shall be updated and transmitted to the Congress annually as part of the report required under section 5914 of this title."

Pub. L. 102-486, §2303(a)(2)(A), substituted "Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992," for "Administrator".

Subsec. (b)(2). Pub. L. 102–486, §2303(a)(2)(C), substituted ", middle-term, and long-term time intervals described in subsection (a)(1) through (3)" for "(to the early 1980's), middle-term (the early 1980's to 2000), and long-term (beyond 2000) time intervals".

Pub. L. 102-486, §2303(a)(2)(A), substituted "Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992," for "Administrator".

Subsec. (b)(3). Pub. L. 102–486, $\S2303(a)(2)(D)$ –(F), added subpars. (R) and (S).

Subsec. (c). Pub. L. 102–486, \$2303(a)(3)(B), inserted at end "Such program shall be updated and transmitted to the Congress annually as part of the report required under section 5914 of this title."

Pub. L. 102-486, §2303(a)(3)(A), substituted "Secretary, in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992," for "Administrator".

1978—Subsec. (c). Pub. L. 95-238 added subsec. (c).

Nonapplicability of Title II of Pub. L. 95-238 to Any Authorization or Appropriation for Military Application of Nuclear Energy, Etc.; Definitions

Nonapplicability of provisions of title II of Pub. L. 95–238 with respect to any authorization or appropriation for any military application of nuclear energy, etc., see section 209 of Pub. L. 95–238, set out as a note under section 5821 of this title.

§ 5906. Federal assistance and participation in programs

(a) Forms of activities authorized

In carrying out the objectives of this chapter, the Secretary may utilize various forms of Federal assistance and participation which may include but are not limited to— $\,$

- (1) joint Federal-industry experimental, demonstration, or commercial corporations consistent with the provisions of subsection (b) of this section:
- (2) contractual arrangements with non-Federal participants including corporations, consortia, universities, governmental entities and nonprofit institutions;
- (3) contracts for the construction and operation of federally owned facilities;
- (4) Federal purchases or guaranteed price of the products of demonstration plants or activities consistent with the provisions of subsection (c) of this section;
- (5) Federal loans to non-Federal entities conducting demonstrations of new technologies:
- (6) incentives, including financial awards, to individual inventors, such incentives to be designed to encourage the participation of a large number of such inventors; and
- (7) Federal loan guarantees and commitments thereof as provided in section 5919 of this title.

(b) Proposed joint Federal-industry corporations; operational guidelines; powers, duties, and functions; composition; scope of Federal assistance and participation; specific authorization

Joint Federal-industry corporations proposed for congressional authorization pursuant to this chapter shall be subject to the provisions of section 5908 of this title and shall conform to the following guidelines except as otherwise authorized by Congress:

(1) Each such corporation may design, construct, operate, and maintain one or more experimental, demonstration, or commercial-size facilities, or other operations which will ascertain the technical, environmental, and economic feasibility of a particular energy technology. In carrying out this function, the corporation shall be empowered, either directly or by contract, to utilize commercially available technologies, perform tests, or design, construct, and operate pilot plants, as may be necessary for the design of the full-scale facility.

(2) Each corporation shall have—

(A) a Board of nine directors consisting of individuals who are citizens of the United States, of whom one shall be elected annually by the Board to serve as Chairman. The Board shall be empowered to adopt and amend bylaws. Five members of the Board shall be appointed by the President of the United States, by and with the advice and consent of the Senate, and four members of the Board shall be appointed by the President on the basis of recommendations received by him from any non-Federal entity or entities entering into contractual arrangements to participate in the corporation:

(B) a President and such other officers and employees as may be named and appointed

- by the Board (with the rates of compensation of all officers and employees being fixed by the Board); and
- (C) the usual powers conferred upon corporations by the laws of the District of Columbia
- (3) An appropriate time interval, not to exceed 12 years, shall be established for the term of Federal participation in the corporation, at the expiration of which the Board of Directors shall take such action as may be necessary to dissolve the corporation or otherwise terminate Federal participation and financial interests. In carrying out such dissolution, the Board of Directors shall dispose of all physical facilities of the corporation in such manner and subject to such terms and conditions as the Board determines are in the public interest and consistent with existing law; and a share of the appraised value of the corporate assets proportional to the Federal participation in the corporation, including the proceeds from the disposition of such facilities, on the date of its dissolution, after satisfaction of all its legal obligations, shall be made available to the United States and deposited in the Treasury of the United States as miscellaneous receipts. All patent rights of the corporation shall, on such date of dissolution, be vested in the Secretary: Provided, That Federal participation may be terminated prior to the time established in the authorizing Act upon recommendation of the Board of Directors.
- (4) Any commercially valuable product produced by demonstration facilities shall be disposed of in such manner and under such terms and conditions as the corporation shall prescribe. All revenues received by the corporation from the sale of such products shall be available to the corporation for use by it in defraying expenses incurred in connection with carrying out its functions to which this chapter applies.

(5) The estimated Federal share of the construction, operation, and maintenance cost over the life of each corporation shall be determined in order to facilitate a single congressional authorization of the full amount at the time of establishment of the corporation.

- (6) The Federal share of the cost of each such corporation shall reflect (A) the technical and economic risk of the venture, (B) the probability of any financial return to the non-Federal participants arising from the venture, (C) the financial capability of the potential non-Federal participants, and (D) such other factors as the Secretary may set forth in proposing the corporation: *Provided*, That in no instance shall the Federal share exceed 90 per centum of the cost.
- (7) No such corporation shall be established unless previously authorized by specific legislation enacted by the Congress.

(c) Proposed competitive systems of price supports for demonstration facilities; guidelines

Competitive systems of price supports proposed for congressional authorization pursuant to this chapter shall conform to the following guidelines:

(1) The Secretary shall determine the types and capacities of the desired full-scale, com-

¹ See Codification note below.

mercial-size facility or other operation which would demonstrate the technical, environmental, and economic feasibility of a particular nonnuclear energy technology.

(2) The Secretary may award planning grants for the purpose of financing a study of the full cycle economic and environmental costs associated with the demonstration facility selected pursuant to paragraph (1) of this subsection. Such planning grants may be awarded to Federal and non-Federal entities including, but not limited to, industrial entities, universities, and nonprofit organizations. Such planning grants may also be used by the grantee to prepare a detailed and comprehensive bid to construct the demonstration facility.

(3) Following the completion of the studies pursuant to the planning grants awarded under paragraph (2) of this subsection regarding each such potential price supported demonstration facility for which the Secretary intends to request congressional authorization, he shall invite bids from all interested parties to determine the minimum amount of Federal price support needed to construct the demonstration facility. The Secretary may designate one or more competing entities, each to construct one commercial demonstration facility. Such designation shall be made on the basis of those entities, (A) commitment to construct the demonstration facility at the minimum level of Federal price supports, (B) detailed plan of environmental protection, and (C) proposed design and operation of the demonstration facility.

(4) The construction plans and actual construction of the demonstration facility, together with all related facilities, shall be monitored by the Environmental Protection Agency. If additional environmental requirements are imposed by the Secretary after the designation of the successful bidders and if such additional environmental requirements result in additional costs, the Secretary is authorized to renegotiate the support price to cover such additional costs.

(5) The estimated amount of the Federal price support for a demonstration facility's product over the life of such facility shall be determined by the Secretary to facilitate a single congressional authorization of the full amount of such support at the time of the designation of the successful bidders.

(6) No price support program shall be implemented unless previously authorized by specific legislation enacted by the Congress.

(d) Support for joint university-industry research efforts

Nothing in this section shall preclude Federal participation in, and support for, joint university-industry nonnuclear energy research efforts.

(Pub. L. 93-577, §7, Dec. 31, 1974, 88 Stat. 1883; Pub. L. 95-238, title II, §207(a), Feb. 25, 1978, 92 Stat. 61; Pub. L. 99-386, title I, §104(a), Aug. 22, 1986, 100 Stat. 821; Pub. L. 109-58, title X, §1009(b)(5), Aug. 8, 2005, 119 Stat. 935.)

CODIFICATION

Section 5919 of this title, referred to in subsec. (a)(7), was in the original "section 19" and has been edi-

torially translated as section 5919 of this title which related to loan guarantees prior to repeal by Pub. L. 109–58, title X, \$1009(b)(12), Aug. 8, 2005, 119 Stat. 936, to reflect the probable intent of Congress, notwithstanding enactment of another section 19 which was classified to section 5918 of this title and related to organizational conflicts prior to repeal by Pub. L. 104–106, div. D, title XLIII, \$4304(b)(5), Feb. 10, 1996, 110 Stat. 664.

AMENDMENTS

2005—Subsec. (a). Pub. L. 109–58, §1009(b)(5)(A), substituted "Secretary" for "Administrator" in introductory provisions.

Subsec. (a)(4). Pub. L. 109-58, §1009(b)(5)(B), substituted "of this section" for "of the section".

Subsecs. (b), (c). Pub. L. 109-58, \$1009(b)(5)(A), substituted "Secretary" for "Administrator" wherever appearing.

1986—Subsec. (b)(7). Pub. L. 99–386 struck out subpar. (A) which related to submission of a report by Secretary to House and Senate, prior to establishment of any joint Federal-industry corporation pursuant to this chapter, setting forth in detail consistency of establishment of corporation with this section and section 5904 of this title, and proposed purpose and activities of corporation, and struck out subpar. (B) designation.

1978—Subsec. (a)(7). Pub. L. 95-238 added par. (7).

NONAPPLICABILITY OF TITLE II OF PUB. L. 95–238 TO ANY AUTHORIZATION OR APPROPRIATION FOR MILITARY APPLICATION OF NUCLEAR ENERGY, ETC.; DEFINITIONS

Nonapplicability of provisions of title II of Pub. L. 95–238 with respect to any authorization or appropriation for any military application of nuclear energy, etc., see section 209 of Pub. L. 95–238, set out as a note under section 5821 of this title.

PRICE-SUPPORT PROGRAM TO DEMONSTRATE MUNICIPAL SOLID WASTE REPROCESSING FOR PRODUCTION OF FUELS AND ENERGY INTENSIVE PRODUCTS

Pub. L. 95-39, title I, §107, June 3, 1977, 91 Stat. 185, authorized Administrator, subject to the appropriation of funds pursuant to section 101(7)(I) of Pub. L. 95-39, to establish and implement, under subsection (a)(4) of this section and in accordance with subsection (c) of this section, a price-support program to demonstrate municipal solid waste reprocessing for production of fuels and energy intensive products, with Administrator, prior to entering into any contract for such demonstration, to submit to Congress a full and complete report on the proposed commercial demonstration facility and the necessary project demonstration guarantees, and provided that such contract could not be finalized prior to the expiration of ninety calendar days (not including any day on which either House of Congress was not in session because of an adjournment of more than three calendar days to a day certain) from the date on which such report was received.

§ 5907. Demonstration projects

(a) Scope of authority of Secretary

The Secretary is authorized to-

- (1) identify opportunities to accelerate the commercial applications of new energy technologies, and provide Federal assistance for or participation in demonstration projects (including pilot plants demonstrating technological advances and field demonstrations of new methods and procedures, and demonstrations of prototype commercial applications for the exploration, development, production, transportation, conversion, and utilization of energy resources): and
- (2) enter into cooperative agreements with non-Federal entities to demonstrate the tech-