SUBCHAPTER VI—NUCLEAR MATTERS

PART A—GENERAL NUCLEAR MATTERS

§ 16011. Demonstration hydrogen production at existing nuclear power plants

(a) Demonstration projects

The Secretary shall provide for the establishment of 2 projects in geographic areas that are regionally and climatically diverse to demonstrate the commercial production of hydrogen at existing nuclear power plants.

(b) Economic analysis

Prior to making an award under subsection (a), the Secretary shall determine whether the use of existing nuclear power plants is a cost-effective means of producing hydrogen.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for the purposes of carrying out this section not more than $100,000,000.

(Pub. L. 109–58, title VI, § 634, Aug. 8, 2005, 119 Stat. 790.)

§ 16012. Prohibition on assumption by United States Government of liability for certain foreign incidents

(a) In general

Notwithstanding any other provision of law, no officer of the United States or of any department, agency, or instrumentality of the United States Government may enter into any contract or other arrangement, or into any amendment or modification of a contract or other arrangement, the purpose or effect of which would be to directly or indirectly impose liability on the United States Government, or any department, agency, or instrumentality of the United States Government, or to otherwise directly or indirectly require an indemnity by the United States Government, for nuclear incidents occurring in connection with the design, construction, or operation of a production facility or utilization facility in any country whose government has been identified by the Secretary of State as engaged in state sponsorship of terrorist activities (specifically including any country the government of which, as of September 11, 2001, had been determined by the Secretary of State under section 2371(a) of title 22, section 4605(j)(1)[1] of title 50, or section 2780(d) of title 22 to have repeatedly provided support for acts of international terrorism). This section shall not apply to nuclear incidents occurring as a result of missions, carried out under the direction of the Secretary, the Secretary of Defense, or the Secretary of State, that are necessary to safely secure, store, transport, or remove nuclear materials for nuclear safety or nonproliferation purposes.

(b) Definitions

The terms used in this section shall have the same meaning as those terms have under section 2014 of this title, unless otherwise expressly provided in this section.

[1] See References in Text note below.

(Pub. L. 109–58, title VI, § 635, Aug. 8, 2005, 119 Stat. 790.)

REFERENCES IN TEXT

Section 4605(j)(1) of title 50, referred to in subsec. (a), was repealed by Pub. L. 115–232, div. A, title XVII, § 1766(a), Aug. 13, 2018, 132 Stat. 2232.

§ 16013. Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this subtitle and the amendments made by this subtitle.

(Pub. L. 109–58, title VI, § 636, Aug. 8, 2005, 119 Stat. 791.)

REFERENCES IN TEXT

This subtitle, referred to in text, is subtitle B (§§ 621–639) of title VI of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 782, which enacted this part and sections 2015b, 2210c, and 5853 of this title, amended sections 2133, 2135, 2158, 2160d, 2201, 2210a, 2214, 2297h–8, and 5851 of this title, repealed section 2213 of this title, and enacted provisions set out as notes under sections 2158 and 2214 of this title. For complete classification of this subtitle to the Code, see Tables.

§ 16014. Standby support for certain nuclear plant delays

(a) Definitions

In this section:

(1) Advanced nuclear facility

The term ''advanced nuclear facility'' means any nuclear facility the reactor design for which is approved after December 31, 1993, by the Commission (and such design or a substantially similar design of comparable capacity was not approved on or before that date).

(2) Combined license

The term ''combined license'' means a combined construction and operating license for an advanced nuclear facility issued by the Commission.

(3) Commission

The term ''Commission'' means the Nuclear Regulatory Commission.

(4) Sponsor

The term ''sponsor'' means a person who has applied for or been granted a combined license.

(b) Contract authority

(1) In general

The Secretary may enter into contracts under this section with sponsors of an advanced nuclear facility that cover a total of 6 reactors, with the 6 reactors consisting of not more than 3 different reactor designs, in accordance with paragraph (2).

(2) Requirement for contracts

(A) Definition of loan cost

In this paragraph, the term ''loan cost'' has the meaning given the term ''cost of a loan guarantee'' under section 661a(5)(C) of title 2.

(B) Establishment of accounts

There is established in the Department 2 separate accounts, which shall be known as the—

(i) ''Standby Support Program Account''; and

(ii) ''Standby Support Grant Account''.

(C) Requirement

The Secretary shall not enter into a contract under this section unless the Secretary deposits—

(i) in the Standby Support Program Account established under subparagraph (B), funds appropriated to the Secretary in advance of the contract or a combination of appropriated funds and loan guarantee fees that are in an amount sufficient to cover the loan costs described in subsection (d)(5)(A); and

(ii) in the Standby Support Grant Account established under subparagraph (B), funds appropriated to the Secretary in advance of the contract, paid to the Secretary by the sponsor of the advanced nuclear facility, or a combination of appropriations and payments that are in an amount sufficient[1] cover the costs described in subparagraphs (B), (C), and (D) of subsection (d)(5).

(c) Covered delays

(1) Inclusions

Under each contract authorized by this section, the Secretary shall pay the costs specified in subsection (d), using funds appropriated or collected for the covered costs, if full power operation of the advanced nuclear facility is delayed by—

(A) the failure of the Commission to comply with schedules for review and approval of inspections, tests, analyses, and acceptance criteria established under the combined license or the conduct of preoperational hearings by the Commission for the advanced nuclear facility; or

(B) litigation that delays the commencement of full-power operations of the advanced nuclear facility.

(2) Exclusions

The Secretary may not enter into any contract under this section that would obligate the Secretary to pay any costs resulting from—

(A) the failure of the sponsor to take any action required by law or regulation;

(B) events within the control of the sponsor; or

(C) normal business risks.

(d) Covered costs

(1) In general

Subject to paragraphs (2), (3), and (4), the costs that shall be paid by the Secretary pursuant to a contract entered into under this section are the costs that result from a delay covered by the contract.

(2) Initial 2 reactors

In the case of the first 2 reactors that receive combined licenses and on which construction is commenced, the Secretary shall pay—

(A) 100 percent of the covered costs of delay; but

(B) not more than $500,000,000 per contract.

(3) Subsequent 4 reactors

In the case of the next 4 reactors that receive a combined license and on which construction is commenced, the Secretary shall pay—

(A) 50 percent of the covered costs of delay that occur after the initial 180-day period of covered delay; but

(B) not more than $250,000,000 per contract.

(4) Conditions on payment of certain covered costs

(A) In general

The obligation of the Secretary to pay the covered costs described in subparagraph (B) of paragraph (5) is subject to the Secretary receiving from appropriations or payments from other non-Federal sources amounts sufficient to pay the covered costs.

(B) Non-Federal sources

The Secretary may receive and accept payments from any non-Federal source, which shall be made available without further appropriation for the payment of the covered costs.

(5) Types of covered costs

Subject to paragraphs (2), (3), and (4), the contract entered into under this section for an advanced nuclear facility shall include as covered costs those costs that result from a delay during construction and in gaining approval for fuel loading and full-power operation, including—

(A) principal or interest on any debt obligation of an advanced nuclear facility owned by a non-Federal entity; and

(B) the incremental difference between—

(i) the fair market price of power purchased to meet the contractual supply agreements that would have been met by the advanced nuclear facility but for the delay; and

(ii) the contractual price of power from the advanced nuclear facility subject to the delay.

(e) Requirements

Any contract between a sponsor and the Secretary covering an advanced nuclear facility under this section shall require the sponsor to use due diligence to shorten, and to end, the delay covered by the contract.

(f) Reports

For each advanced nuclear facility that is covered by a contract under this section, the Commission shall submit to Congress and the Secretary quarterly reports summarizing the status of licensing actions associated with the advanced nuclear facility.

(g) Regulations

(1) In general

Subject to paragraphs (2) and (3), the Secretary shall issue such regulations as are necessary to carry out this section.

(2) Interim final rulemaking

Not later than 270 days after August 8, 2005, the Secretary shall issue for public comment

[1] So in original. Probably should be followed by ''to''.

an interim final rule regulating contracts authorized by this section.

(3) Notice of final rulemaking

Not later than 1 year after August 8, 2005, the Secretary shall issue a notice of final rulemaking regulating the contracts.

(h) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 109–58, title VI, § 638, Aug. 8, 2005, 119 Stat. 791.)

PART B—NEXT GENERATION NUCLEAR PLANT PROJECT

§ 16021. Project establishment

(a) Establishment

The Secretary shall establish a project to be known as the ''Next Generation Nuclear Plant Project'' (referred to in this part as the ''Project'').

(b) Content

The Project shall consist of the research, development, design, construction, and operation of a prototype plant, including a nuclear reactor that—

(1) is based on research and development activities supported by the Generation IV Nuclear Energy Systems Initiative under section 16272(c) of this title; and

(2) shall be used—

(A) to generate electricity;

(B) to produce hydrogen; or

(C) both to generate electricity and to produce hydrogen.

(Pub. L. 109–58, title VI, § 641, Aug. 8, 2005, 119 Stat. 794; Pub. L. 115–248, § 2(b)(2), Sept. 28, 2018, 132 Stat. 3155.)

AMENDMENTS

2018—Pub. L. 115–248 substituted ''section 16272(c)'' for ''section 16272(d)'', which had been an editorial translation of a reference in original text to section 942(d) of Pub. L. 109–58.

§ 16022. Project management

(a) Departmental management

(1) In general

The Project shall be managed in the Department by the Office of Nuclear Energy, Science, and Technology.

(2) Generation IV Nuclear Energy Systems program

The Secretary may combine the Project with the Generation IV Nuclear Energy Systems Initiative.

(3) Existing DOE project management expertise

The Secretary may utilize capabilities for review of construction projects for advanced scientific facilities within the Office of Science to track the progress of the Project.

(b) Laboratory management

(1) Lead Laboratory

The Idaho National Laboratory shall be the lead National Laboratory for the Project and shall collaborate with other National Laboratories, institutions of higher education, other research institutes, industrial researchers, and international researchers to carry out the Project.

(2) Industrial partnerships

(A) In general

The Idaho National Laboratory shall organize a consortium of appropriate industrial partners that will carry out cost-shared research, development, design, and construction activities, and operate research facilities, on behalf of the Project.

(B) Cost-sharing

Activities of industrial partners funded by the Project shall be cost-shared in accordance with section 16352 of this title.

(C) Preference

Preference in determining the final structure of the consortium or any partnerships under this part shall be given to a structure (including designating as a lead industrial partner an entity incorporated in the United States) that retains United States technological leadership in the Project while maximizing cost sharing opportunities and minimizing Federal funding responsibilities.

(3) Prototype plant siting

The prototype nuclear reactor and associated plant shall be sited at the Idaho National Laboratory in Idaho.

(4) Reactor test capabilities

The Project shall use, if appropriate, reactor test capabilities at the Idaho National Laboratory.

(5) Other Laboratory capabilities

The Project may use, if appropriate, facilities at other National Laboratories.

(Pub. L. 109–58, title VI, § 642, Aug. 8, 2005, 119 Stat. 795.)

§ 16023. Project organization

(a) Major project elements

The Project shall consist of the following major program elements:

(1) High-temperature hydrogen production technology development and validation.

(2) Energy conversion technology development and validation.

(3) Nuclear fuel development, characterization, and qualification.

(4) Materials selection, development, testing, and qualification.

(5) Reactor and balance-of-plant design, engineering, safety analysis, and qualification.

(b) Project phases

The Project shall be conducted in the following phases:

(1) First project phase

A first project phase shall be conducted to—

(A) select and validate the appropriate technology under subsection (a)(1);

(B) carry out enabling research, development, and demonstration activities on tech-