(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 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(d)[1] 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.)

REFERENCES IN TEXT

Section 16272(d) of this title, referred to in subsec. (b)(1), was in the original a reference to section 942(d)

[1] See References in Text note below.

of Pub. L. 109–58, which is classified to section 16251(d) of this title but was translated as meaning section 952(d) of Pub. L. 109–58 to reflect the probable intent of Congress, because section 952(d) relates to Generation IV Nuclear Energy Systems Initiative and section 942(d) relates to limitations on production incentives for cellulosic biofuels.

§ 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 technologies and components under paragraphs (2) through (4) of subsection (a);

(C) determine whether it is appropriate to combine electricity generation and hydrogen production in a single prototype nuclear reactor and plant; and

(D) carry out initial design activities for a prototype nuclear reactor and plant, including development of design methods and safety analytical methods and studies under subsection (a)(5).

(2) Second project phase

A second project phase shall be conducted to—

(A) continue appropriate activities under paragraphs (1) through (5) of subsection (a);

(B) develop, through a competitive process, a final design for the prototype nuclear reactor and plant;

(C) apply for licenses to construct and operate the prototype nuclear reactor from the Nuclear Regulatory Commission; and

(D) construct and start up operations of the prototype nuclear reactor and its associated hydrogen or electricity production facilities.

(c) Project requirements

(1) In general

The Secretary shall ensure that the Project is structured so as to maximize the technical interchange and transfer of technologies and ideas into the Project from other sources of relevant expertise, including—

(A) the nuclear power industry, including nuclear powerplant construction firms, particularly with respect to issues associated with plant design, construction, and operational and safety issues;

(B) the chemical processing industry, particularly with respect to issues relating to—

(i) the use of process energy for production of hydrogen; and