

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-