ganization to support university research and development in areas relevant to their respective organization's mission, and \$5,000,000 shall be used by each organization to support a jointly implemented Nuclear Science and Engineering Grant Program that will support multiyear research projects that do not align with programmatic missions but are critical to maintaining the discipline of nuclear science and engineering.

(Pub. L. 111-8, div. C, title III, §313, Mar. 11, 2009, 123 Stat. 627.)

#### CODIFICATION

Section was enacted as part of the Energy and Water Development and Related Agencies Appropriations Act, 2009, and also as part of the Omnibus Appropriations Act, 2009, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

## § 16275. Department of Energy civilian nuclear infrastructure and facilities

#### (a) In general

The Secretary shall operate and maintain infrastructure and facilities to support the nuclear energy research, development, demonstration, and commercial application programs, including radiological facilities management, isotope production, and facilities management.

#### (b) Duties

In carrying out this section, the Secretary shall—

- (1) develop an inventory of nuclear science and engineering facilities, equipment, expertise, and other assets at all of the National Laboratories:
- (2) develop a prioritized list of nuclear science and engineering plant and equipment improvements needed at each of the National Laboratories;
- (3) consider the available facilities and expertise at all National Laboratories and emphasize investments which complement rather than duplicate capabilities; and
- (4) develop a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment, with the goal of ensuring that Department programs under this part will be generally recognized to be among the best in the world.

## (c) Plan

The Secretary shall develop a comprehensive plan for the facilities at the Idaho National Laboratory, especially taking into account the resources available at other National Laboratories. In developing the plan, the Secretary shall—

- (1) evaluate the facilities planning processes utilized by other physical science and engineering research and development institutions, both in the United States and abroad, that are generally recognized as being among the best in the world, and consider how those processes might be adapted toward developing such facilities plan;
- (2) avoid duplicating, moving, or transferring nuclear science and engineering facilities, equipment, expertise, and other assets that currently exist at other National Laboratories:

- (3) consider the establishment of a national transuranic analytic chemistry laboratory as a user facility at the Idaho National Laboratory:
- (4) include a plan to develop, if feasible, the Advanced Test Reactor and Test Reactor Area into a user facility that is more readily accessible to academic and industrial researchers;
- (5) consider the establishment of a fast neutron source as a user facility;
- (6) consider the establishment of new hot cells and the configuration of hot cells most likely to advance research, development, demonstration, and commercial application in nuclear science and engineering, especially in the context of the condition and availability of these facilities elsewhere in the National Laboratories; and
- (7) include a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment.

#### (d) Transmittal to Congress

Not later than 1 year after August 8, 2005, the Secretary shall transmit the plan under subsection (c) to Congress.

(Pub. L. 109-58, title IX, §955, Aug. 8, 2005, 119 Stat. 887.)

#### § 16276. Security of nuclear facilities

The Secretary, acting through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct a research and development program on cost-effective technologies for increasing—

- (1) the safety of nuclear facilities from natural phenomena; and
- (2) the security of nuclear facilities from deliberate attacks.

(Pub. L. 109-58, title IX, §956, Aug. 8, 2005, 119 Stat. 888.)

## § 16277. Alternatives to industrial radioactive sources

## (a) Survey

## (1) In general

Not later than August 1, 2006, the Secretary shall submit to Congress the results of a survey of industrial applications of large radioactive sources.

## (2) Administration

The survey shall—

- (A) consider well-logging sources as one class of industrial sources;
- (B) include information on current domestic and international Department, Department of Defense, State Department, and commercial programs to manage and dispose of radioactive sources; and
- (C) analyze available disposal options for currently deployed or future sources and, if deficiencies are noted for either deployed or future sources, recommend legislative options that Congress may consider to remedy identified deficiencies.

## (b) Plan

## (1) In general

In conjunction with the survey conducted under subsection (a), the Secretary shall es-

tablish a research and development program to develop alternatives to sources described in subsection (a) that reduce safety, environmental, or proliferation risks to either workers using the sources or the public.

#### (2) Accelerators

Miniaturized particle accelerators for welllogging or other industrial applications and portable accelerators for production of shortlived radioactive materials at an industrial site shall be considered as part of the research and development efforts.

#### (3) Report

Not later than August 1, 2006, the Secretary shall submit to Congress a report describing the details of the program plan.

(Pub. L. 109–58, title IX, §957, Aug. 8, 2005, 119 Stat. 888.)

PART F—FOSSIL ENERGY

## § 16291. Fossil energy

## (a) In general

The Secretary shall carry out research, development, demonstration, and commercial application programs in fossil energy, including activities under this part, with the goal of improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption. Such programs take into consideration the following objectives:

- (1) Increasing the energy conversion efficiency of all forms of fossil energy through improved technologies.
- (2) Decreasing the cost of all fossil energy production, generation, and delivery.
- (3) Promoting diversity of energy supply.
- (4) Decreasing the dependence of the United States on foreign energy supplies.
- (5) Improving United States energy security.(6) Decreasing the environmental impact of
- (6) Decreasing the environmental impact of energy-related activities.
- (7) Increasing the export of fossil energy-related equipment, technology, and services from the United States.

## (b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this part—

- (1) \$611,000,000 for fiscal year 2007;
- (2) \$626,000,000 for fiscal year 2008; and
- (3) \$641,000,000 for fiscal year 2009.

## (c) Allocations

From amounts authorized under subsection (a), the following sums are authorized:

- (1) For activities under section 16292 of this title—
  - (A) \$367,000,000 for fiscal year 2007;
  - (B) \$376,000,000 for fiscal year 2008; and
  - (C) \$394,000,000 for fiscal year 2009.
- (2) For activities under section 16294 of this title—
  - (A) \$20,000,000 for fiscal year 2007;
  - (B) \$25,000,000 for fiscal year 2008; and

- (C) \$30,000,000 for fiscal year 2009.
- (3) For activities under section 16296 of this title—
  - (A) \$1,500,000 for fiscal year 2007; and
  - (B) \$450,000 for each of fiscal years 2008 and 2009.
- (4) For the Office of Arctic Energy under section 7144d of this title \$25,000,000 for each of fiscal years 2007 through 2009.

#### (d) Extended authorization

There are authorized to be appropriated to the Secretary for the Office of Arctic Energy established under section 7144d of this title \$25,000,000 for each of fiscal years 2010 through 2012.

## (e) Limitations

#### (1) Uses

None of the funds authorized under this section may be used for Fossil Energy Environmental Restoration or Import/Export Authorization.

## (2) Institutions of higher education

Of the funds authorized under subsection (c)(2), not less than 20 percent of the funds appropriated for each fiscal year shall be dedicated to research and development carried out at institutions of higher education.

(Pub. L. 109–58, title IX, §961, Aug. 8, 2005, 119 Stat. 889.)

#### REFERENCES IN TEXT

This part, referred to in subsecs. (a) and (b), was in the original "this subtitle", meaning subtitle F (§§961-968) of title IX of Pub. L. 109-58, Aug. 8, 2005, 119 Stat. 889, which enacted this part and provisions set out as notes under section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as a note under section 1902 of Title 30. For complete classification of subtitle F to the Code, see Tables.

## § 16291a. Property interests

That for all programs funded under Fossil Energy appropriations in this and subsequent Acts, the Secretary may vest fee title or other property interests acquired under projects in any entity, including the United States.

(Pub. L. 113-76, div. D, title III, Jan. 17, 2014, 128 Stat. 165.)

## CODIFICATION

Section was enacted as part of the Energy and Water Development and Related Agencies Appropriations Act, 2014, and also as part of the Consolidated Appropriations Act, 2014, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

## DEFINITIONS

For definition of "this [Act]", referred to in text, see section 3 of Pub. L. 113-76, set out as a note under section 1 of Title 1, General Provisions.

# § 16292. Coal and related technologies program (a) In general

In addition to the programs authorized under subchapter IV, the Secretary shall conduct a program of technology research, development, demonstration, and commercial application for coal and power systems, including programs to facilitate production and generation of coalbased power through—