

**§ 16274a. Integrated University Program**

(a) The Secretary of Energy, along with the Administrator of the National Nuclear Security Administration and the Chairman of the Nuclear Regulatory Commission, shall establish an Integrated University Program.

(b) For the purposes of carrying out this section, \$45,000,000 is authorized to be appropriated in each of fiscal years 2009 to 2019 as follows:

- (1) \$15,000,000 for the Department of Energy;
- (2) \$15,000,000 for the Nuclear Regulatory Commission; and
- (3) \$15,000,000 for the National Nuclear Security Administration.

(c) Of the amounts authorized to carry out this section, \$10,000,000 shall be used by each organization 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) Versatile neutron source****(1) Mission need****(A) In general**

Not later than December 31, 2017, the Secretary shall determine the mission need for a versatile reactor-based fast neutron source, which shall operate as a national user facility.

**(B) Consultations required**

In carrying out subparagraph (A), the Secretary shall consult with the private sector, institutions of higher education, the National Laboratories, and relevant Federal agencies to ensure that the user facility described in subparagraph (A) will meet the research needs of the largest practicable majority of prospective users.

**(2) Establishment**

As soon as practicable after determining the mission need under paragraph (1)(A), the Secretary shall submit to the appropriate committees of Congress a detailed plan for the establishment of the user facility.

**(3) Facility requirements****(A) Capabilities**

The Secretary shall ensure that the user facility will provide, at a minimum, the following capabilities:

- (i) Fast neutron spectrum irradiation capability.
- (ii) Capacity for upgrades to accommodate new or expanded research needs.

**(B) Considerations**

In carrying out the plan submitted under paragraph (2), the Secretary shall consider the following:

- (i) Capabilities that support experimental high-temperature testing.
- (ii) Providing a source of fast neutrons at a neutron flux, higher than that at which current research facilities operate, sufficient to enable research for an optimal base of prospective users.
- (iii) Maximizing irradiation flexibility and irradiation volume to accommodate as many concurrent users as possible.
- (iv) Capabilities for irradiation with neutrons of a lower energy spectrum.
- (v) Multiple loops for fuels and materials testing in different coolants.
- (vi) Additional pre-irradiation and post-irradiation examination capabilities.
- (vii) Lifetime operating costs and lifecycle costs.

**(4) Deadline for establishment**

The Secretary shall, to the maximum extent practicable, complete construction of, and approve the start of operations for, the user facility by not later than December 31, 2025.

**(5) Reporting**

The Secretary shall include in the annual budget request of the Department an explanation for any delay in the progress of the Department in completing the user facility by the deadline described in paragraph (4).

**(6) Coordination**

The Secretary shall leverage the best practices for management, construction, and oper-