

§ 2065. Improving the reliability of domestic medical isotope supply

(a) Medical isotope development projects

(1) In general

The Secretary shall carry out a technology-neutral program—

(A) to evaluate and support projects for the production in the United States, without the use of highly enriched uranium, of significant quantities of molybdenum-99 for medical uses;

(B) to be carried out in cooperation with non-Federal entities; and

(C) the costs of which shall be shared in accordance with section 16352 of this title.

(2) Criteria

Projects shall be evaluated against the following primary criteria:

(A) The length of time necessary for the proposed project to begin production of molybdenum-99 for medical uses within the United States.

(B) The capability of the proposed project to produce a significant percentage of United States demand for molybdenum-99 for medical uses.

(C) The capability of the proposed project to produce molybdenum-99 in a cost-effective manner.

(D) The cost of the proposed project.

(3) Exemption

An existing reactor in the United States fueled with highly enriched uranium shall not be disqualified from the program if the Secretary determines that—

(A) there is no alternative nuclear reactor fuel, enriched in the isotope U-235 to less than 20 percent, that can be used in that reactor;

(B) the reactor operator has provided assurances that, whenever an alternative nuclear reactor fuel, enriched in the isotope U-235 to less than 20 percent, can be used in that reactor, it will use that alternative in lieu of highly enriched uranium; and

(C) the reactor operator has provided a current report on the status of its efforts to convert the reactor to an alternative nuclear reactor fuel enriched in the isotope U-235 to less than 20 percent, and an anticipated schedule for completion of conversion.

(4) Public participation and review

The Secretary shall—

(A) develop a program plan and annually update the program plan through public workshops; and

(B) use the Nuclear Science Advisory Committee to conduct annual reviews of the progress made in achieving the program goals and make recommendations to improve program effectiveness.

(b) Development assistance

The Secretary shall carry out a program to provide assistance for—

(1) the development of fuels, targets, and processes for domestic molybdenum-99 production that do not use highly enriched uranium; and

(2) commercial operations using the fuels, targets, and processes described in paragraph (1).

(c) Uranium lease and take-back

(1) In general

The Secretary shall establish a program to make low enriched uranium available, through lease contracts, for irradiation for the production of molybdenum-99 for medical uses.

(2) Title

The lease contracts shall provide for the producers of the molybdenum-99 to take title to and be responsible for the molybdenum-99 created by the irradiation, processing, or purification of uranium leased under this section.

(3) Duties

(A) Secretary

The lease contracts shall require the Secretary—

(i) to retain responsibility for the final disposition of spent nuclear fuel created by the irradiation, processing, or purification of uranium leased under this section for the production of medical isotopes; and

(ii) to take title to and be responsible for the final disposition of radioactive waste created by the irradiation, processing, or purification of uranium leased under this section for which the Secretary determines the producer does not have access to a disposal path.

(B) Producer

The producer of the spent nuclear fuel and radioactive waste shall accurately characterize, appropriately package, and transport the spent nuclear fuel and radioactive waste prior to acceptance by the Department.

(4) Compensation

(A) In general

Subject to subparagraph (B), the lease contracts shall provide for compensation in cash amounts equivalent to prevailing market rates for the sale of comparable uranium products and for compensation in cash amounts equivalent to the net present value of the cost to the Federal Government for—

(i) the final disposition of spent nuclear fuel and radioactive waste for which the Department is responsible under paragraph (3); and

(ii) other costs associated with carrying out the uranium lease and take-back program authorized by this subsection.

(B) Discount rate

The discount rate used to determine the net present value of costs described in subparagraph (A)(ii) shall be not greater than the average interest rate on marketable Treasury securities.

(5) Authorized use of funds

Subject to the availability of appropriations, the Secretary may obligate and expend funds received under leases entered into under this subsection, which shall remain available until expended, for the purpose of carrying out the

activities authorized by this subtitle, including activities related to the final disposition of spent nuclear fuel and radioactive waste for which the Department is responsible under paragraph (3).

(6) Exchange of uranium for services

The Secretary shall not barter or otherwise sell or transfer uranium in any form in exchange for—

(A) services related to the final disposition of the spent nuclear fuel and radioactive waste for which the Department is responsible under paragraph (3); or

(B) any other services associated with carrying out the uranium lease and take-back program authorized by this subsection.

(d) Coordination of environmental reviews

The Department and the Nuclear Regulatory Commission shall ensure to the maximum extent practicable that environmental reviews for the production of the medical isotopes shall complement and not duplicate each review.

(e) Operational date

The Secretary shall establish a program as described in subsection (c)(3) not later than 3 years after January 2, 2013.

(f) Radioactive waste

Notwithstanding section 10101 of this title, radioactive material resulting from the production of medical isotopes that has been permanently removed from a reactor or subcritical assembly and for which there is no further use shall be considered low-level radioactive waste if the material is acceptable under Federal requirements for disposal as low-level radioactive waste.

(Pub. L. 112–239, div. C, title XXXI, §3173, Jan. 2, 2013, 126 Stat. 2211.)

REFERENCES IN TEXT

This subtitle, referred to in subsec. (c)(5), is subtitle F (§§3171–3178) of title XXXI of div. C of Pub. L. 112–239. For complete classification of this subtitle to the Code, see Short Title of 2013 Amendment note set out under section 2011 of this title and Tables.

CODIFICATION

Section was enacted as part of the American Medical Isotopes Production Act of 2012 and also as part of the National Defense Authorization Act for Fiscal Year 2013, and not as part of the Atomic Energy Act of 1954 which comprises this chapter.

DEFINITIONS

Pub. L. 112–239, div. C, title XXXI, §3172, Jan. 2, 2013, 126 Stat. 2211, provided that: “In this subtitle [subtitle F (§§3171–3178), see Short Title of 2013 Amendment note set out under section 2011 of this title and Tables]:

“(1) DEPARTMENT.—The term ‘Department’ means the Department of Energy.

“(2) HIGHLY ENRICHED URANIUM.—The term ‘highly enriched uranium’ means uranium enriched to 20 percent or greater in the isotope U–235.

“(3) LOW ENRICHED URANIUM.—The term ‘low enriched uranium’ means uranium enriched to less than 20 percent in the isotope U–235.

“(4) SECRETARY.—The term ‘Secretary’ means the Secretary of Energy.”

SUBCHAPTER V—SPECIAL NUCLEAR MATERIAL

§ 2071. Determination of other material as special nuclear material; Presidential assent; effective date

The Commission may determine from time to time that other material is special nuclear material in addition to that specified in the definition as special nuclear material. Before making any such determination, the Commission must find that such material is capable of releasing substantial quantities of atomic energy and must find that the determination that such material is special nuclear material is in the interest of the common defense and security, and the President must have expressly assented in writing to the determination. The Commission’s determination, together with the assent of the President, shall be submitted to the Energy Committees and a period of thirty days shall elapse while Congress is in session (in computing such thirty days, there shall be excluded the days on which either House is not in session because of an adjournment for more than three days) before the determination of the Commission may become effective: *Provided, however*, That the Energy Committees, after having received such determination, may by resolution in writing, waive the conditions of or all or any portion of such thirty-day period.

(Aug. 1, 1946, ch. 724, title I, §51, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 929; renumbered title I, Pub. L. 102–486, title IX, §902(a)(8), Oct. 24, 1992, 106 Stat. 2944; amended Pub. L. 103–437, §15(f)(2), Nov. 2, 1994, 108 Stat. 4592.)

PRIOR PROVISIONS

Provisions similar to this section were contained in section 1805(a)(1) of this title, prior to the general amendment and renumbering of act Aug. 1, 1946, by act Aug. 30, 1954.

AMENDMENTS

1994—Pub. L. 103–437 substituted “Energy Committees” for “Joint Committee” in two places.

§ 2072. Repealed. Pub. L. 88–489, § 4, Aug. 26, 1964, 78 Stat. 603

Section, act Aug. 1, 1946, ch. 724, §52, as added Aug. 30, 1954, ch. 1073, §1, 68 Stat. 929, related to Government ownership of all special nuclear material and provided for compensation of private owners of such material.

EXTINGUISHMENT OF RIGHTS, TITLE AND INTEREST IN SPECIAL NUCLEAR MATERIAL

Pub. L. 88–489, §4, Aug. 26, 1964, 78 Stat. 603, provided in part that: “All rights, title, and interest in and to any special nuclear material vested in the United States solely by virtue of the provisions of the first sentence of such section 52 [this section], and not by any other transaction authorized by the Atomic Energy Act of 1954, as amended [this chapter], or other applicable law, are hereby extinguished.”

§ 2073. Domestic distribution of special nuclear material

(a) Licenses

The Commission is authorized (i) to issue licenses to transfer or receive in interstate commerce, transfer, deliver, acquire, possess, own,