

**Calendar No. 124**118TH CONGRESS  
1ST SESSION**S. 452****[Report No. 118-52]**

To require the Secretary of Energy to establish a Nuclear Fuel Security Program, expand the American Assured Fuel Supply Program, and submit a report on a civil nuclear credit program, and for other purposes.

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**IN THE SENATE OF THE UNITED STATES**

FEBRUARY 15, 2023

Mr. MANCHIN (for himself, Mr. BARRASSO, Mr. RISCH, Mr. WARNER, Mr. COONS, and Mr. BUDD) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

JULY 11, 2023

Reported by Mr. MANCHIN, with an amendment

[Insert the part printed in italic]

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**A BILL**

To require the Secretary of Energy to establish a Nuclear Fuel Security Program, expand the American Assured Fuel Supply Program, and submit a report on a civil nuclear credit program, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Nuclear Fuel Security  
3 Act of 2023”.

4 **SEC. 2. U.S. NUCLEAR FUEL SECURITY INITIATIVE.**

5 (a) SENSE OF CONGRESS.—It is the sense of Con-  
6 gress that—

7 (1) the Department should—

8 (A) prioritize activities to increase domes-  
9 tic production of low-enriched uranium; and

10 (B) accelerate efforts to establish a domes-  
11 tic high-assay, low-enriched uranium enrich-  
12 ment capability; and

13 (2) if domestic enrichment of high-assay, low-  
14 enriched uranium will not be commercially available  
15 at the scale needed in time to meet the needs of the  
16 advanced nuclear reactor demonstration projects of  
17 the Department, the Secretary shall consider and  
18 implement, as necessary—

19 (A) all viable options to make high-assay,  
20 low-enriched uranium produced from inven-  
21 tories owned by the Department available in a  
22 manner that is sufficient to maximize the po-  
23 tential for the Department to meet the needs  
24 and schedules of advanced nuclear reactor de-  
25 velopers, without impacting existing Depart-  
26 ment missions, until such time that commercial

1 enrichment and deconversion capability for  
2 high-assay, low-enriched uranium exists at a  
3 scale sufficient to meet future needs; and

4 (B) all viable options for partnering with  
5 countries that are allies or partners of the  
6 United States to meet those needs and sched-  
7 ules until that time.

8 (b) OBJECTIVES.—The objectives of this section  
9 are—

10 (1) to expeditiously increase domestic produc-  
11 tion of low-enriched uranium;

12 (2) to expeditiously increase domestic produc-  
13 tion of high-assay, low-enriched uranium by an an-  
14 nual quantity, and in such form, determined by the  
15 Secretary to be sufficient to meet the needs of—

16 (A) advanced nuclear reactor developers;  
17 and

18 (B) the consortium;

19 (3) to ensure the availability of domestically  
20 produced, converted, enriched, deconverted, and re-  
21 duced uranium in a quantity determined by the Sec-  
22 retary, in consultation with U.S. nuclear energy  
23 companies, to be sufficient to address a reasonably  
24 anticipated supply disruption;

1           (4) to address gaps and deficiencies in the do-  
2           mestic production, conversion, enrichment,  
3           deconversion, and reduction of uranium by  
4           partnering with countries that are allies or partners  
5           of the United States if domestic options are not  
6           practicable;

7           (5) to ensure that, in the event of a supply dis-  
8           ruption in the nuclear fuel market, a reserve of nu-  
9           clear fuels is available to serve as a backup supply  
10          to support the nuclear nonproliferation and civil nu-  
11          clear energy objectives of the Department;

12          (6) to support enrichment, deconversion, and  
13          reduction technology deployed in the United States;  
14          and

15          (7) to ensure that, until such time that domes-  
16          tic enrichment and deconversion of high-assay, low-  
17          enriched uranium is commercially available at the  
18          scale needed to meet the needs of advanced nuclear  
19          reactor developers, the Secretary considers and im-  
20          plements, as necessary—

21                 (A) all viable options to make high-assay,  
22                 low-enriched uranium produced from inven-  
23                 tories owned by the Department available in a  
24                 manner that is sufficient to maximize the po-  
25                 tential for the Department to meet the needs

1 and schedules of advanced nuclear reactor de-  
2 velopers; and

3 (B) all viable options for partnering with  
4 countries that are allies or partners of the  
5 United States to meet those needs and sched-  
6 ules.

7 (c) DEFINITIONS.—In this section:

8 (1) ADVANCED NUCLEAR REACTOR.—The term  
9 “advanced nuclear reactor” has the meaning given  
10 the term in section 951(b) of the Energy Policy Act  
11 of 2005 (42 U.S.C. 16271(b)).

12 (2) ASSOCIATED ENTITY.—The term “associ-  
13 ated entity” means an entity that—

14 (A) is owned, controlled, or dominated  
15 by—

16 (i) the government of a country that  
17 is an ally or partner of the United States;

18 or

19 (ii) an associated individual; or

20 (B) is organized under the laws of, or oth-  
21 erwise subject to the jurisdiction of, a country  
22 that is an ally or partner of the United States,  
23 including a corporation that is incorporated in  
24 such a country.

1           (3) ASSOCIATED INDIVIDUAL.—The term “asso-  
2           ciated individual” means an alien who is a national  
3           of a country that is an ally or partner of the United  
4           States.

5           (4) CONSORTIUM.—The term “consortium”  
6           means the consortium established under section  
7           2001(a)(2)(F) of the Energy Act of 2020 (42 U.S.C.  
8           16281(a)(2)(F)).

9           (5) DEPARTMENT.—The term “Department”  
10          means the Department of Energy.

11          (6) HIGH-ASSAY, LOW-ENRICHED URANIUM;  
12          HALEU.—The term “high-assay, low-enriched ura-  
13          nium” or “HALEU” means high-assay low-enriched  
14          uranium (as defined in section 2001(d) of the En-  
15          ergy Act of 2020 (42 U.S.C. 16281(d))).

16          (7) LOW-ENRICHED URANIUM; LEU.—The term  
17          “low-enriched uranium” or “LEU” means each of—

18                (A) low-enriched uranium (as defined in  
19                section 3102 of the USEC Privatization Act  
20                (42 U.S.C. 2297h)); and

21                (B) low-enriched uranium (as defined in  
22                section 3112A(a) of that Act (42 U.S.C.  
23                2297h–10a(a))).

24          (8) PROGRAMS.—The term “Programs”  
25          means—

1 (A) the Nuclear Fuel Security Program es-  
2 tablished under subsection (d)(1);

3 (B) the American Assured Fuel Supply  
4 Program of the Department; and

5 (C) the HALEU for Advanced Nuclear Re-  
6 actor Demonstration Projects Program estab-  
7 lished under subsection (d)(3).

8 (9) SECRETARY.—The term “Secretary” means  
9 the Secretary of Energy.

10 (10) U.S. NUCLEAR ENERGY COMPANY.—The  
11 term “U.S. nuclear energy company” means a com-  
12 pany that—

13 (A) is organized under the laws of, or oth-  
14 erwise subject to the jurisdiction of, the United  
15 States; and

16 (B) is involved in the nuclear energy indus-  
17 try.

18 (d) ESTABLISHMENT AND EXPANSION OF PRO-  
19 GRAMS.—The Secretary, consistent with the objectives de-  
20 scribed in subsection (b), shall—

21 (1) establish a program, to be known as the  
22 “Nuclear Fuel Security Program”, to increase the  
23 quantity of LEU and HALEU produced by U.S. nu-  
24 clear energy companies;

1           (2) expand the American Assured Fuel Supply  
2 Program of the Department to ensure the avail-  
3 ability of domestically produced, converted, enriched,  
4 deconverted, and reduced uranium in the event of a  
5 supply disruption; and

6           (3) establish a program, to be known as the  
7 “HALEU for Advanced Nuclear Reactor Dem-  
8 onstration Projects Program”—

9           (A) to maximize the potential for the De-  
10 partment to meet the needs and schedules of  
11 advanced nuclear reactor developers until such  
12 time that commercial enrichment and  
13 deconversion capability for HALEU exists in  
14 the United States at a scale sufficient to meet  
15 future needs; and

16           (B) where practicable, to partner with  
17 countries that are allies or partners of the  
18 United States to meet those needs and sched-  
19 ules until that time.

20 (e) NUCLEAR FUEL SECURITY PROGRAM.—

21           (1) IN GENERAL.—In carrying out the Nuclear  
22 Fuel Security Program, the Secretary—

23           (A) shall—

24           (i) not later than 180 days after the  
25 date of enactment of this Act, enter into 2

1 or more contracts to begin acquiring not  
2 less than 100 metric tons per year of LEU  
3 by December 31, 2026 (or the earliest  
4 operationally feasible date thereafter), to  
5 ensure diversity of supply in domestic ura-  
6 nium mining, conversion, enrichment, and  
7 deconversion capacity and technologies, in-  
8 cluding new capacity, among U.S. nuclear  
9 energy companies;

10 (ii) not later than 180 days after the  
11 date of enactment of this Act, enter into 2  
12 or more contracts with members of the  
13 consortium to begin acquiring not less than  
14 20 metric tons per year of HALEU by De-  
15 cember 31, 2027 (or the earliest operation-  
16 ally feasible date thereafter), from U.S.  
17 nuclear energy companies;

18 (iii) utilize only uranium produced,  
19 converted, enriched, deconverted, and re-  
20 duced in—

21 (I) the United States; or

22 (II) if domestic options are not  
23 practicable, a country that is an ally  
24 or partner of the United States; and

1 (iv) to the maximum extent prac-  
2 ticable, ensure that the use of domestic  
3 uranium utilized as a result of that pro-  
4 gram does not negatively affect the eco-  
5 nomic operation of nuclear reactors in the  
6 United States; and

7 (B)(i) may not make commitments under  
8 this subsection (including cooperative agree-  
9 ments (used in accordance with section 6305 of  
10 title 31, United States Code), purchase agree-  
11 ments, guarantees, leases, service contracts, or  
12 any other type of commitment) for the purchase  
13 or other acquisition of HALEU or LEU un-  
14 less—

15 (I) funds are specifically provided for  
16 those purposes in advance in appropria-  
17 tions Acts enacted after the date of enact-  
18 ment of this Act; or

19 (II) the commitment is funded en-  
20 tirely by funds made available to the Sec-  
21 retary from the account described in sub-  
22 section (i)(2)(B); and

23 (ii) may make a commitment described in  
24 clause (i) only—

1 (I) if the full extent of the anticipated  
2 costs stemming from the commitment is  
3 recorded as an obligation at the time that  
4 the commitment is made; and

5 (II) to the extent of that up-front ob-  
6 ligation recorded in full at that time.

7 (2) CONSIDERATIONS.—In carrying out para-  
8 graph (1)(A)(ii), the Secretary shall consider and, if  
9 appropriate, implement—

10 (A) options to ensure the quickest avail-  
11 ability of commercially enriched HALEU, in-  
12 cluding—

13 (i) partnerships between 2 or more  
14 commercial enrichers; and

15 (ii) utilization of up to 10-percent en-  
16 riched uranium as feedstock in demonstra-  
17 tion-scale or commercial HALEU enrich-  
18 ment facilities;

19 (B) options to partner with countries that  
20 are allies or partners of the United States to  
21 provide LEU and HALEU for commercial pur-  
22 poses;

23 (C) options that provide for an array of  
24 HALEU—

25 (i) enrichment levels;

1 (ii) output levels to meet demand; and

2 (iii) fuel forms, including uranium

3 metal and oxide; and

4 (D) options—

5 (i) to replenish, as necessary, Depart-

6 ment stockpiles of uranium that were in-

7 tended to be downblended for other pur-

8 poses, but were instead used in carrying

9 out activities under the HALEU for Ad-

10 vanced Nuclear Reactor Demonstration

11 Projects Program;

12 (ii) to continue supplying HALEU to

13 meet the needs of the recipients of an

14 award made pursuant to the funding op-

15 portunity announcement of the Depart-

16 ment numbered DE-FOA-0002271 for

17 Pathway 1, Advanced Reactor Demonstra-

18 tions; and

19 (iii) to make HALEU available to

20 other advanced nuclear reactor developers

21 and other end-users.

22 (3) AVOIDANCE OF MARKET DISRUPTIONS.—In

23 carrying out the Nuclear Fuel Security Program, the

24 Secretary, to the extent practicable and consistent

25 with the purposes of that program, shall not disrupt

1 or replace market mechanisms by competing with  
2 U.S. nuclear energy companies.

3 (f) EXPANSION OF THE AMERICAN ASSURED FUEL  
4 SUPPLY PROGRAM.—The Secretary, in consultation with  
5 U.S. nuclear energy companies, shall—

6 (1) expand the American Assured Fuel Supply  
7 Program of the Department by merging the oper-  
8 ations of the Uranium Reserve Program of the De-  
9 partment with the American Assured Fuel Supply  
10 Program; and

11 (2) in carrying out the American Assured Fuel  
12 Supply Program of the Department, as expanded  
13 under paragraph (1)—

14 (A) maintain, replenish, diversify, or in-  
15 crease the quantity of uranium made available  
16 by that program in a manner determined by the  
17 Secretary to be consistent with the purposes of  
18 that program and the objectives described in  
19 subsection (b);

20 (B) utilize only uranium produced, con-  
21 verted, enriched, deconverted, and reduced in—

22 (i) the United States; or

23 (ii) if domestic options are not prac-  
24 ticable, a country that is an ally or partner  
25 of the United States;

1 (C) make uranium available from the  
2 American Assured Fuel Supply, subject to  
3 terms and conditions determined by the Sec-  
4 retary to be reasonable and appropriate;

5 (D) refill and expand the supply of ura-  
6 nium in the American Assured Fuel Supply, in-  
7 cluding by maintaining a limited reserve of ura-  
8 nium to address a potential event in which a  
9 domestic or foreign recipient of uranium experi-  
10 ences a supply disruption for which uranium  
11 cannot be obtained through normal market  
12 mechanisms or under normal market conditions;  
13 and

14 (E) take other actions that the Secretary  
15 determines to be necessary or appropriate to  
16 address the purposes of that program and the  
17 objectives described in subsection (b).

18 (g) HALEU FOR ADVANCED NUCLEAR REACTOR  
19 DEMONSTRATION PROJECTS PROGRAM.—

20 (1) ACTIVITIES.—On enactment of this Act, the  
21 Secretary shall immediately accelerate and, as nec-  
22 essary, initiate activities to make available from in-  
23 ventories or stockpiles owned by the Department and  
24 made available to the consortium, HALEU for use  
25 in advanced nuclear reactors that cannot operate on

1 uranium with lower enrichment levels or on alternate  
2 fuels, with priority given to the awards made pursu-  
3 ant to the funding opportunity announcement of the  
4 Department numbered DE-FOA-0002271 for Path-  
5 way 1, Advanced Reactor Demonstrations, with ad-  
6 ditional HALEU to be made available to other ad-  
7 vanced nuclear reactor developers, as the Secretary  
8 determines to be appropriate.

9 (2) QUANTITY.—In carrying out activities  
10 under this subsection, the Secretary shall consider  
11 and implement, as necessary, all viable options to  
12 make HALEU available in quantities and forms suf-  
13 ficient to maximize the potential for the Department  
14 to meet the needs and schedules of advanced nuclear  
15 reactor developers, including by seeking to make  
16 available—

17 (A) by September 30, 2024, not less than  
18 3 metric tons of HALEU;

19 (B) by December 31, 2025, not less than  
20 an additional 8 metric tons of HALEU; and

21 (C) by June 30, 2026, not less than an ad-  
22 ditional 10 metric tons of HALEU.

23 (3) FACTORS FOR CONSIDERATION.—In car-  
24 rying out activities under this subsection, the Sec-  
25 retary shall take into consideration—

1 (A) options for providing HALEU from a  
2 stockpile of uranium owned by the Department,  
3 including—

4 (i) uranium that has been declared ex-  
5 cess to national security needs during or  
6 prior to fiscal year 2023;

7 (ii) uranium that—

8 (I) directly meets the needs of  
9 advanced nuclear reactor developers;  
10 but

11 (II) has been previously used or  
12 fabricated for another purpose;

13 (iii) uranium that can meet the needs  
14 of advanced nuclear reactor developers  
15 after removing radioactive or other con-  
16 taminants that resulted from previous use  
17 or fabrication of the fuel for research, de-  
18 velopment, demonstration, or deployment  
19 activities of the Department, including ac-  
20 tivities that reduce the environmental li-  
21 ability of the Department by accelerating  
22 the processing of uranium from stockpiles  
23 designated as waste;

24 (iv) uranium from a high-enriched  
25 uranium stockpile, which can be blended

1 with lower assay uranium to become  
2 HALEU to meet the needs of advanced  
3 nuclear reactor developers; and

4 (v) uranium from stockpiles intended  
5 for other purposes (excluding stockpiles in-  
6 tended for national security needs), but for  
7 which uranium could be swapped or re-  
8 placed in time in such a manner that  
9 would not negatively impact the missions  
10 of the Department;

11 (B) options for expanding, or establishing  
12 new, capabilities or infrastructure to support  
13 the processing of uranium from Department in-  
14 ventories;

15 (C) options for accelerating the availability  
16 of HALEU from HALEU enrichment dem-  
17 onstration projects of the Department;

18 (D) options for providing HALEU from  
19 domestically enriched HALEU procured by the  
20 Department through a competitive process pur-  
21 suant to the Nuclear Fuel Security Program es-  
22 tablished under subsection (d)(1);

23 (E) options to replenish, as needed, De-  
24 partment stockpiles of uranium made available  
25 pursuant to subparagraph (A) with domestically

1 enriched HALEU procured by the Department  
2 through a competitive process pursuant to the  
3 Nuclear Fuel Security Program established  
4 under subsection (d)(1); and

5 (F) options that combine 1 or more of the  
6 approaches described in subparagraphs (A)  
7 through (E) to meet the deadlines described in  
8 paragraph (2).

9 (4) LIMITATIONS.—

10 (A) CERTAIN SERVICES.—The Secretary  
11 shall not barter or otherwise sell or transfer  
12 uranium in any form in exchange for services  
13 relating to—

14 (i) the final disposition of radioactive  
15 waste from uranium that is the subject of  
16 a contract for sale, resale, transfer, or  
17 lease under this subsection; or

18 (ii) environmental cleanup activities.

19 (B) CERTAIN COMMITMENTS.—In carrying  
20 out activities under this subsection, the Sec-  
21 retary—

22 (i) may not make commitments under  
23 this subsection (including cooperative  
24 agreements (used in accordance with sec-  
25 tion 6305 of title 31, United States Code),

1 purchase agreements, guarantees, leases,  
2 service contracts, or any other type of com-  
3 mitment) for the purchase or other acquisi-  
4 tion of HALEU or LEU unless—

5 (I) funds are specifically provided  
6 for those purposes in advance in ap-  
7 propriations Acts enacted after the  
8 date of enactment of this Act; or

9 (II) the commitment is funded  
10 entirely by funds made available to  
11 the Secretary from the account de-  
12 scribed in subsection (i)(2)(B); and

13 (ii) may make a commitment de-  
14 scribed in clause (i) only—

15 (I) if the full extent of the antici-  
16 pated costs stemming from the com-  
17 mitment is recorded as an obligation  
18 at the time that the commitment is  
19 made; and

20 (II) to the extent of that up-front  
21 obligation recorded in full at that  
22 time.

23 (5) SUNSET.—The authority of the Secretary to  
24 carry out activities under this subsection shall termi-  
25 nate on the date on which the Secretary notifies

1 Congress that the HALEU needs of advanced nu-  
2 clear reactor developers can be fully met by commer-  
3 cial HALEU suppliers in the United States, as de-  
4 termined by the Secretary, in consultation with U.S.  
5 nuclear energy companies.

6 (h) DOMESTIC SOURCING CONSIDERATIONS.—

7 (1) IN GENERAL.—Except as provided in para-  
8 graph (2), the Secretary may only carry out an ac-  
9 tivity in connection with 1 or more of the Programs  
10 if—

11 (A) the activity promotes manufacturing in  
12 the United States associated with uranium sup-  
13 ply chains; or

14 (B) the activity relies on resources, mate-  
15 rials, or equipment developed or produced—

16 (i) in the United States; or

17 (ii) in a country that is an ally or  
18 partner of the United States by—

19 (I) the government of that coun-  
20 try;

21 (II) an associated entity; or

22 (III) a U.S. nuclear energy com-  
23 pany.

24 (2) WAIVER.—The Secretary may waive the re-  
25 quirements of paragraph (1) with respect to an ac-

1 tivity if the Secretary determines a waiver to be nec-  
2 essary to achieve 1 or more of the objectives de-  
3 scribed in subsection (b).

4 (i) REASONABLE COMPENSATION.—

5 (1) IN GENERAL.—In carrying out activities  
6 under this section, the Secretary shall ensure that  
7 any LEU and HALEU made available by the Sec-  
8 retary under 1 or more of the Programs is subject  
9 to reasonable compensation, taking into account the  
10 fair market value of the LEU or HALEU and the  
11 purposes of this section.

12 (2) AVAILABILITY OF CERTAIN FUNDS.—

13 (A) IN GENERAL.—Notwithstanding sec-  
14 tion 3302(b) of title 31, United States Code,  
15 revenues received by the Secretary from the  
16 sale or transfer of fuel feed material acquired  
17 by the Secretary pursuant to a contract entered  
18 into under clause (i) or (ii) of subsection  
19 (e)(1)(A) shall—

20 (i) be deposited in the account de-  
21 scribed in subparagraph (B);

22 (ii) be available to the Secretary for  
23 carrying out the purposes of this section,  
24 to reduce the need for further appropria-  
25 tions for those purposes; and

1 (iii) remain available until expended.

2 (B) REVOLVING FUND.—There is estab-  
3 lished in the Treasury an account into which  
4 the revenues described in subparagraph (A)  
5 shall be—

6 (i) deposited in accordance with clause  
7 (i) of that subparagraph; and

8 (ii) made available in accordance with  
9 clauses (ii) and (iii) of that subparagraph.

10 (j) NUCLEAR REGULATORY COMMISSION.—The Nu-  
11 clear Regulatory Commission shall prioritize and expedite  
12 consideration of any action related to the Programs to the  
13 extent permitted under the Atomic Energy Act of 1954  
14 (42 U.S.C. 2011 et seq.) and related statutes.

15 (k) USEC PRIVATIZATION ACT.—The requirements  
16 of section 3112(d)(2) of the USEC Privatization Act (42  
17 U.S.C. 2297h–10(d)(2)) shall not apply to activities re-  
18 lated to the Programs.

19 (l) NATIONAL SECURITY NEEDS.—The Secretary  
20 shall only make available to a member of the consortium  
21 under this section for commercial use or use in a dem-  
22 onstration project material that the President has deter-  
23 mined is not necessary for national security needs, subject  
24 to the condition that the material made available shall not  
25 include any material that the Secretary determines to be

1 necessary for the National Nuclear Security Administra-  
2 tion or any critical mission of the Department.

3 (m) INTERNATIONAL AGREEMENTS.—This section  
4 shall be applied in a manner consistent with the obliga-  
5 tions of the United States under international agreements.

6 (n) AUTHORIZATION OF APPROPRIATIONS.—In addi-  
7 tion to amounts otherwise available, there are authorized  
8 to be appropriated to the Secretary to carry out activities  
9 under this section \$3,500,000,000 for fiscal year 2023,  
10 to remain available until September 30, 2032, of which  
11 the Secretary may use up to \$1,000,000,000 by Sep-  
12 tember 30, 2028, to carry out the HALEU for Advanced  
13 Nuclear Reactor Demonstration Projects Program.

14 **SEC. 3. REPORT ON CIVIL NUCLEAR CREDIT PROGRAM.**

15 Not later than 180 days after the date of enactment  
16 of this Act, the Secretary of Energy shall submit to the  
17 appropriate committees of Congress a report that identi-  
18 fies the anticipated funding requirements for the civil nu-  
19 clear credit program described in section 40323 of the In-  
20 frastructure Investment and Jobs Act (42 U.S.C. 18753),  
21 taking into account—

22 (1) the zero-emission nuclear power production  
23 credit authorized by section 45U of the Internal  
24 Revenue Code of 1986; and

1           (2) any increased fuel costs associated with the  
2           use of domestic fuel that may arise from the imple-  
3           mentation of that program.

4 **SEC. 4. AMENDMENTS TO THE USEC PRIVATIZATION ACT.**

5           (a) *PROHIBITION ON IMPORTS.*—Section 3112A of the  
6 *USEC Privatization Act (42 U.S.C. 2297h–10a)* is amend-  
7 *ed by adding at the end the following:*

8           “(d) *PROHIBITION ON IMPORTS OF LOW-ENRICHED*  
9 *URANIUM.*—

10           “(1) *PROHIBITION.*—Beginning on the date that  
11 *is 90 days after the date of the enactment of this sub-*  
12 *section, and subject to paragraphs (2) and (3), the fol-*  
13 *lowing may not be imported into the United States:*

14           “(A) *Unirradiated low-enriched uranium*  
15 *that is produced in the Russian Federation or by*  
16 *a Russian entity.*

17           “(B) *Unirradiated low-enriched uranium*  
18 *that is determined to have been exchanged with,*  
19 *swapped for, or otherwise obtained in lieu of*  
20 *unirradiated low-enriched uranium described in*  
21 *subparagraph (A) in a manner designed to cir-*  
22 *cumvent the restrictions under this section.*

23           “(2) *WAIVER.*—

24           “(A) *IN GENERAL.*—Subject to subpara-  
25 *graphs (B) and (C), the Secretary of Energy, in*

1           *consultation with the Secretary of State and the*  
2           *Secretary of Commerce, may waive the applica-*  
3           *tion of paragraph (1) to authorize the importa-*  
4           *tion of low-enriched uranium described in that*  
5           *paragraph if the Secretary of Energy determines*  
6           *that—*

7                   “(i) *no alternative viable source of low-*  
8                   *enriched uranium is available to sustain the*  
9                   *continued operation of a nuclear reactor or*  
10                  *a United States nuclear energy company; or*

11                   “(ii) *importation of low-enriched ura-*  
12                   *nium described in paragraph (1) is in the*  
13                   *national interest.*

14                   “(B) *LIMITATION ON AMOUNTS OF IMPORTS*  
15                   *OF LOW-ENRICHED URANIUM.—*

16                   “(i) *IN GENERAL.—The importation*  
17                   *into the United States of low-enriched ura-*  
18                   *nium described in paragraph (1), including*  
19                   *low-enriched uranium obtained under con-*  
20                   *tracts for separative work units, whether or*  
21                   *not such low-enriched uranium is derived*  
22                   *from highly enriched uranium of weapons*  
23                   *origin, may not exceed—*

24                                   “(I) *in calendar year 2023,*  
25                                   *578,877 kilograms;*

1                   “(II) in calendar year 2024,  
2                   476,536 kilograms;

3                   “(III) in calendar year 2025,  
4                   470,376 kilograms;

5                   “(IV) in calendar year 2026,  
6                   464,183 kilograms; and

7                   “(V) in calendar year 2027,  
8                   459,083 kilograms.

9                   “(i) ADMINISTRATION.—The Secretary  
10                  of Commerce shall—

11                   “(I) administer the import limi-  
12                   tations described in clause (i) in ac-  
13                   cordance with the provisions of the  
14                   Suspension Agreement, including the  
15                   provisions described in subsection  
16                   (c)(2)(B)(i);

17                   “(II) be responsible for enforcing  
18                   the import limitations described in  
19                   clause (i); and

20                   “(III) enforce the import limita-  
21                   tions described in clause (i) in a man-  
22                   ner that imposes a minimal burden on  
23                   the commercial nuclear industry.

1           “(C) *TERMINATION.*—*Any waiver issued*  
2           *under subparagraph (A) shall terminate not*  
3           *later than January 1, 2028.*

4           “(D) *NOTIFICATION TO CONGRESS.*—

5           “(i) *IN GENERAL.*—*Upon issuing a*  
6           *waiver under subparagraph (A), the Sec-*  
7           *retary of Energy shall submit to the com-*  
8           *mittees specified in clause (ii) a notification*  
9           *that a waiver has been issued, which shall*  
10           *include identification of the recipient of the*  
11           *waiver.*

12           “(ii) *COMMITTEES SPECIFIED.*—*The*  
13           *committees specified in this clause are—*

14           “(I) *the Committee on Energy*  
15           *and Natural Resources and the Com-*  
16           *mittee on Finance of the Senate; and*

17           “(II) *the Committee on Energy*  
18           *and Commerce and the Committee on*  
19           *Ways and Means of the House of Rep-*  
20           *resentatives.*

21           “(3) *APPLICABILITY.*—*This subsection does not*  
22           *apply to imports—*

23           “(A) *by or under contract to the Depart-*  
24           *ment of Energy for national security or non-*  
25           *proliferation purposes; or*

1                   “(B) of non-uranium isotopes.

2                   “(4) *TERMINATION.*—*The provisions of this sub-*  
3 *section shall terminate on December 31, 2040.*

4                   “(5) *RUSSIAN ENTITY DEFINED.*—*In this sub-*  
5 *section, the term ‘Russian entity’ means an entity or-*  
6 *ganized under the laws of or otherwise subject to the*  
7 *jurisdiction of the Government of the Russian Federa-*  
8 *tion.’.*”.

9                   (b) *CONFORMING AMENDMENTS.*—

10                   (1) *IN GENERAL.*—*Section 3112A(c) of the*  
11 *USEC Privatization Act (42 U.S.C. 2297h–10a(c)) is*  
12 *amended—*

13                   (A) *in paragraph (2)—*

14                   (i) *in subparagraph (A)—*

15                   (I) *in clause (viii), by inserting*  
16 *“and” after the semicolon at the end;*

17                   (II) *in clause (ix), by striking the*  
18 *semicolon and inserting a period; and*

19                   (III) *by striking clauses (x)*  
20 *through (xxvii); and*

21                   (ii) *in subparagraph (C)(i), by strik-*  
22 *ing “paragraph (10)” and inserting “para-*  
23 *graph (9)”;*

24                   (B) *in paragraph (3), by striking “United*  
25 *States” and all that follows through “for proc-*

1            *essing*” and inserting “United States for proc-  
2            *essing*”;

3            (C) by striking paragraph (5);

4            (D) by redesignating paragraphs (6)  
5            through (12) as paragraphs (5) through (11), re-  
6            spectively;

7            (E) in paragraph (5), as redesignated by  
8            subparagraph (D), by striking “In addition to  
9            the adjustment under paragraph (5)(A), the”  
10           and inserting “The”;

11           (F) in subparagraph (A) of paragraph (7),  
12           as so redesignated, by striking “paragraph (10)”  
13           and inserting “paragraph (9)”;

14           (G) in paragraph (8), as so redesignated, by  
15           striking “December 31, 2040” and inserting “the  
16           date described in subsection (d)(1)”;

17           (H) in subparagraph (A) of paragraph (9),  
18           as so redesignated, by striking “paragraphs  
19           (2)(C) and (8)” and inserting “paragraphs  
20           (2)(C) and (7)”.

21           (2) *EFFECTIVE DATE.*—The amendment to sec-  
22           tion 3112A(c)(2)(A)(x) of the USEC Privatization  
23           Act (42 U.S.C. 2297h–10a(c)(2)(A)(x)) made by para-  
24           graph (1)(A) of this subsection shall take effect on the



1           (6) by inserting after paragraph (2) the fol-  
2           lowing:

3           “(3) *FOCUS AREAS.*—In carrying out the subpro-  
4           gram under this subsection, the Secretary may imple-  
5           ment traineeships in focus areas that, in the deter-  
6           mination of the Secretary, are necessary to support  
7           the nuclear energy sector in the United States, includ-  
8           ing—

9                     “(A) research and development;

10                    “(B) construction and operation;

11                    “(C) associated supply chains; and

12                    “(D) workforce training and retraining to  
13           support transitioning workforces.”.

**Calendar No. 124**

118<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

**S. 452**

[Report No. 118-52]

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**A BILL**

To require the Secretary of Energy to establish a Nuclear Fuel Security Program, expand the American Assured Fuel Supply Program, and submit a report on a civil nuclear credit program, and for other purposes.

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JULY 11, 2023

Reported with an amendment