

**Calendar No. 118**118TH CONGRESS  
1ST SESSION**S. 1111**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, and for other purposes.

---

**IN THE SENATE OF THE UNITED STATES**

MARCH 30, 2023

Mrs. CAPITO (for herself, Mr. WHITEHOUSE, Mr. BARRASSO, Mr. CARPER, Mr. CRAPO, Mr. BOOKER, Mr. GRAHAM, Mr. KELLY, Mr. RISCH, Mr. HEINRICH, Mr. CARDIN, Ms. SINEMA, Ms. LUMMIS, Mr. RICKETTS, Mr. COONS, Mr. WARNER, Mrs. GILLIBRAND, Mr. MANCHIN, Mr. CRAMER, and Mr. WICKER) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

JULY 10, 2023

Reported by Mr. CARPER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italie*]

---

**A BILL**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, 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,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the  
 5 “Accelerating Deployment of Versatile, Advanced Nuclear  
 6 for Clean Energy Act of 2023” or the “ADVANCE Act  
 7 of 2023”.

8 (b) **TABLE OF CONTENTS.**—The table of contents for  
 9 this Act is as follows:

Sec. 1. Short title; table of contents.  
 Sec. 2. Definitions.

**TITLE I—AMERICAN NUCLEAR LEADERSHIP**

Sec. 101. International nuclear reactor export and innovation activities.  
 Sec. 102. Denial of certain domestic licenses for national security purposes.  
 Sec. 103. Export license requirements.  
 Sec. 104. Coordinated international engagement.

**TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR  
 TECHNOLOGIES**

Sec. 201. Fees for advanced nuclear reactor application review.  
 Sec. 202. Advanced nuclear reactor prizes.  
 Sec. 203. Report on unique licensing considerations relating to the use of nu-  
 clear energy for nonelectric applications.  
 Sec. 204. Enabling preparations for the demonstration of advanced nuclear re-  
 actors on Department of Energy sites.  
 Sec. 205. Clarification on fusion regulation.  
 Sec. 206. Regulatory issues for nuclear facilities at brownfield sites.  
 Sec. 207. Appalachian Regional Commission nuclear energy development.

**TITLE III—PRESERVING EXISTING NUCLEAR ENERGY  
 GENERATION**

Sec. 301. Investment by allies.  
 Sec. 302. Extension of the Price-Anderson Act.

**TITLE IV—NUCLEAR FUEL CYCLE, SUPPLY CHAIN,  
 INFRASTRUCTURE, AND WORKFORCE**

Sec. 401. Report on advanced methods of manufacturing and construction for  
 nuclear energy applications.  
 Sec. 402. Nuclear energy traineeship.

Sec. 403. Report on Commission readiness and capacity to license additional conversion and enrichment capacity to reduce reliance on uranium from Russia.

Sec. 404. Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.

Sec. 405. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.

Sec. 406. Development, qualification, and licensing of advanced nuclear fuel concepts.

#### TITLE V—IMPROVING COMMISSION EFFICIENCY

Sec. 501. Commission workforce.

Sec. 502. Commission corporate support funding.

Sec. 503. Performance and reporting update.

#### TITLE VI—MISCELLANEOUS

Sec. 601. Nuclear closure communities.

Sec. 602. Technical correction.

### 1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **ACCIDENT TOLERANT FUEL.**—The term  
4 “accident tolerant fuel” has the meaning given the  
5 term in section 107(a) of the Nuclear Energy Inno-  
6 vation and Modernization Act (Public Law 115–439;  
7 132 Stat. 5577).

8 (2) **ADMINISTRATOR.**—The term “Adminis-  
9 trator” means the Administrator of the Environ-  
10 mental Protection Agency.

11 (3) **ADVANCED NUCLEAR FUEL.**—The term  
12 “advanced nuclear fuel” means—

13 (A) advanced nuclear reactor fuel; and

14 (B) accident tolerant fuel.

15 (4) **ADVANCED NUCLEAR REACTOR.**—The term  
16 “advanced nuclear reactor” has the meaning given

1 the term in section 3 of the Nuclear Energy Innova-  
2 tion and Modernization Act (42 U.S.C. 2215 note;  
3 Public Law 115-439).

4 (5) **ADVANCED NUCLEAR REACTOR FUEL.**—The  
5 term “advanced nuclear reactor fuel” has the mean-  
6 ing given the term in section 3 of the Nuclear En-  
7 ergy Innovation and Modernization Act (42 U.S.C.  
8 2215 note; Public Law 115-439).

9 (6) **APPROPRIATE COMMITTEES OF**  
10 **CONGRESS.**—The term “appropriate committees of  
11 Congress” means—

12 (A) the Committee on Environment and  
13 Public Works of the Senate; and

14 (B) the Committee on Energy and Com-  
15 merce of the House of Representatives.

16 (7) **COMMISSION.**—The term “Commission”  
17 means the Nuclear Regulatory Commission.

18 (8) **INSTITUTION OF HIGHER EDUCATION.**—The  
19 term “institution of higher education” has the  
20 meaning given the term in section 101(a) of the  
21 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

22 (9) **NATIONAL LABORATORY.**—The term “Na-  
23 tional Laboratory” has the meaning given the term  
24 in section 2 of the Energy Policy Act of 2005 (42  
25 U.S.C. 15801).

1 **TITLE I—AMERICAN NUCLEAR**  
2 **LEADERSHIP**

3 **SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT**  
4 **AND INNOVATION ACTIVITIES.**

5 (a) COORDINATION.—

6 (1) IN GENERAL.—The Commission shall—

7 (A) coordinate all work of the Commission  
8 relating to—

9 (i) nuclear reactor import and export  
10 licensing; and

11 (ii) international regulatory coopera-  
12 tion and assistance relating to nuclear re-  
13 actors, including with countries that are  
14 members of the Organisation for Economic  
15 Co-operation and Development; and

16 (B) support interagency and international  
17 coordination with respect to—

18 (i) the consideration of international  
19 technical standards to establish the licens-  
20 ing and regulatory basis to assist the de-  
21 sign, construction, and operation of nu-  
22 clear systems;

23 (ii) efforts to help build competent nu-  
24 clear regulatory organizations and legal

1 frameworks in countries seeking to develop  
2 nuclear power; and

3 (iii) exchange programs and training  
4 provided to other countries relating to nu-  
5 clear regulation and oversight to improve  
6 nuclear technology licensing; in accordance  
7 with paragraph (2).

8 (2) EXCHANGE PROGRAMS AND TRAINING.—

9 With respect to the exchange programs and training  
10 described in paragraph (1)(B)(iii), the Commission  
11 shall coordinate, as applicable, with—

12 (A) the Secretary of Energy;

13 (B) National Laboratories;

14 (C) the private sector; and

15 (D) institutions of higher education.

16 (b) AUTHORITY TO ESTABLISH BRANCH.—The Com-  
17 mission may establish within the Office of International  
18 Programs a branch, to be known as the “International  
19 Nuclear Reactor Export and Innovation Branch”, to carry  
20 out such international nuclear reactor export and innova-  
21 tion activities as the Commission determines to be appro-  
22 priate and within the mission of the Commission.

23 (c) EXCLUSION OF INTERNATIONAL ACTIVITIES  
24 FROM THE FEE BASE.—

1           (1) ~~IN GENERAL.~~—Section 102 of the Nuclear  
2 Energy Innovation and Modernization Act (42  
3 U.S.C. 2215) is amended—

4           (A) in subsection (a), by adding at the end  
5 the following:

6           “~~(4) INTERNATIONAL NUCLEAR REACTOR EX-~~  
7 ~~PORT AND INNOVATION ACTIVITIES.~~—The Commis-  
8 sion shall identify in the annual budget justification  
9 international nuclear reactor export and innovation  
10 activities described in section 101(a) of the AD-  
11 VANCE Act of 2023.”; and

12           (B) in subsection (b)(1)(B), by adding at  
13 the end the following:

14           “~~(iv) Costs for international nuclear~~  
15 ~~reactor export and innovation activities de-~~  
16 ~~scribed in section 101(a) of the AD-~~  
17 ~~VANCE Act of 2023.”.~~

18           (2) ~~EFFECTIVE DATE.~~—The amendments made  
19 by paragraph (1) shall take effect on October 1,  
20 2024.

21           (d) ~~SAVINGS CLAUSE.~~—Nothing in this section alters  
22 the authority of the Commission to license and regulate  
23 the civilian use of radioactive materials.

1 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**  
 2 **NATIONAL SECURITY PURPOSES.**

3 (a) **DEFINITION OF COVERED FUEL.**—In this sec-  
 4 tion, the term “covered fuel” means enriched uranium  
 5 that is fabricated into fuel assemblies for nuclear reactors  
 6 by an entity that—

7 (1) is owned or controlled by the Government of  
 8 the Russian Federation or the Government of the  
 9 People’s Republic of China; or

10 (2) is organized under the laws of, or otherwise  
 11 subject to the jurisdiction of, the Russian Federation  
 12 or the People’s Republic of China.

13 (b) **PROHIBITION ON UNLICENSED POSSESSION OR**  
 14 **OWNERSHIP OF COVERED FUEL.**—Unless specifically au-  
 15 thorized by the Commission in a license issued under sec-  
 16 tion 53 of the Atomic Energy Act of 1954 (42 U.S.C.  
 17 2073) and part 70 of title 10, Code of Federal Regulations  
 18 (or successor regulations), no person subject to the juris-  
 19 diction of the Commission may possess or own covered  
 20 fuel.

21 (c) **LICENSE TO POSSESS OR OWN COVERED**  
 22 **FUEL.**—

23 (1) **CONSULTATION REQUIRED PRIOR TO**  
 24 **ISSUANCE.**—The Commission shall not issue a li-  
 25 cense to possess or own covered fuel under section  
 26 53 of the Atomic Energy Act of 1954 (42 U.S.C.



1 2073) and part 70 of title 10, Code of Federal Reg-  
 2 ulations (or successor regulations), unless the Com-  
 3 mission has first consulted with the Secretary of En-  
 4 ergy and the Secretary of State before issuing the li-  
 5 cense.

6 ~~(2) PROHIBITION ON ISSUANCE OF LICENSE.—~~

7 ~~(A) IN GENERAL.—~~Subject to subpara-  
 8 graph (C), a license to possess or own covered  
 9 fuel shall not be issued if the Secretary of En-  
 10 ergy and the Secretary of State make the deter-  
 11 mination described in subparagraph (B).

12 ~~(B) DETERMINATION.—~~

13 ~~(i) IN GENERAL.—~~The determination  
 14 referred to in subparagraph (A) is a deter-  
 15 mination that possession or ownership, as  
 16 applicable, of covered fuel poses a threat to  
 17 the national security of the United States  
 18 that adversely impacts the physical and  
 19 economic security of the United States.

20 ~~(ii) JOINT DETERMINATION.—~~A deter-  
 21 mination described in clause (i) shall be  
 22 jointly made by the Secretary of Energy  
 23 and the Secretary of State.

24 ~~(iii) TIMELINE.—~~

1           (I) NOTICE OF APPLICATION.—  
2           Not later than 30 days after the date  
3           on which the Commission receives an  
4           application for a license to possess or  
5           own covered fuel, the Commission  
6           shall notify the Secretary of Energy  
7           and the Secretary of State of the ap-  
8           plication.

9           (II) DETERMINATION.—The Sec-  
10          retary of Energy and the Secretary of  
11          State shall have a period of 180 days,  
12          beginning on the date on which the  
13          Commission notifies the Secretary of  
14          Energy and the Secretary of State  
15          under subclause (I) of an application  
16          for a license to possess or own covered  
17          fuel, in which to make the determina-  
18          tion described in clause (i).

19          (III) COMMISSION NOTIFICA-  
20          TION.—On making the determination  
21          described in clause (i), the Secretary  
22          of Energy and the Secretary of State  
23          shall immediately notify the Commis-  
24          sion.

1                   (IV) CONGRESSIONAL NOTIFICA-  
2                   TION.—Not later than 30 days after  
3                   the date on which the Secretary of  
4                   Energy and the Secretary of State no-  
5                   tify the Commission under subclause  
6                   (III), the Commission shall notify the  
7                   appropriate committees of Congress of  
8                   the determination.

9                   (V) PUBLIC NOTICE.—Not later  
10                  than 15 days after the date on which  
11                  the Commission notifies Congress  
12                  under subclause (IV) of a determina-  
13                  tion made under clause (i), the Com-  
14                  mission shall make that determination  
15                  publicly available.

16                (C) EFFECT OF NO DETERMINATION.—  
17                The prohibition described in subparagraph (A)  
18                shall not apply if the Secretary of Energy and  
19                the Secretary of State do not make the deter-  
20                mination described in subparagraph (B) by the  
21                date described in clause (iii)(II) of that sub-  
22                paragraph.

23                (d) SAVINGS CLAUSE.—Nothing in this section alters  
24                any treaty or international agreement in effect on the date  
25                of enactment of this Act.

1 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

2 (a) ~~DEFINITION OF LOW-ENRICHED URANIUM.~~—In  
3 this section, the term “low-enriched uranium” means ura-  
4 nium enriched to less than 20 percent of the uranium-  
5 ~~235~~ isotope.

6 (b) ~~REQUIREMENT.~~—The Commission shall not issue  
7 an export license for the transfer of any item described  
8 in subsection (d) to a country described in subsection (e)  
9 unless the Commission makes a determination that such  
10 transfer will not be inimical to the common defense and  
11 security of the United States.

12 (c) ~~COUNTRIES DESCRIBED.~~—A country referred to  
13 in subsection (b) is a country that—

14 (1) has not concluded and ratified an Addi-  
15 tional Protocol to its safeguards agreement with the  
16 International Atomic Energy Agency; or

17 (2) has not ratified or acceded to the amend-  
18 ment to the Convention on the Physical Protection  
19 of Nuclear Material, adopted at Vienna October 26,  
20 1979, and opened for signature at New York March  
21 3, 1980 (TIAS 11080), described in the information  
22 circular of the International Atomic Energy Agency  
23 numbered ~~INFCIRC/274/Rev.1/Mod.1~~ and dated  
24 May 9, 2016 (TIAS 16-508).

25 (d) ~~ITEMS DESCRIBED.~~—An item referred to in sub-  
26 section (b) includes—

1           (1) unirradiated nuclear fuel containing special  
2 nuclear material (as defined in section 11 of the  
3 Atomic Energy Act of 1954 (42 U.S.C. 2014)), ex-  
4 cluding low-enriched uranium;

5           (2) a nuclear reactor that uses nuclear fuel de-  
6 scribed in paragraph (1); and

7           (3) any plant or component listed in Appendix  
8 I to part 110 of title 10, Code of Federal Regula-  
9 tions (or successor regulations), that is involved in—

10           (A) the reprocessing of irradiated nuclear  
11 reactor fuel elements;

12           (B) the separation of plutonium; or

13           (C) the separation of the uranium-233 iso-  
14 tope.

15       (e) NOTIFICATION.—If the Commission makes a de-  
16 termination under subsection (b) that the transfer of any  
17 item described in subsection (d) to a country described in  
18 subsection (e) will not be inimical to the common defense  
19 and security of the United States, the Commission shall  
20 notify the appropriate committees of Congress.

21 **SEC. 104. COORDINATED INTERNATIONAL ENGAGEMENT.**

22       (a) DEFINITIONS.—In this section:

23           (1) EMBARKING CIVIL NUCLEAR ENERGY NA-  
24 TION.—

1 (A) IN GENERAL.—The term “embarking  
2 civil nuclear energy nation” means a country  
3 that—

4 (i)(I) does not have a civil nuclear  
5 program;

6 (II) is in the process of developing or  
7 expanding a civil nuclear program, includ-  
8 ing safeguards and a legal and regulatory  
9 framework; or

10 (III) is in the process of selecting, de-  
11 veloping, constructing, or utilizing an ad-  
12 vanced nuclear reactor or advanced civil  
13 nuclear technologies; and

14 (ii) is eligible to receive development  
15 lending from the World Bank.

16 (B) EXCLUSIONS.—The term “embarking  
17 civil nuclear energy nation” does not include—

18 (i) the People’s Republic of China;

19 (ii) the Russian Federation;

20 (iii) the Republic of Belarus;

21 (iv) the Islamic Republic of Iran;

22 (v) the Democratic People’s Republic  
23 of Korea;

24 (vi) the Republic of Cuba;

1 (vii) the Bolivarian Republic of Ven-  
2 ezuela;

3 (viii) the Syrian Arab Republic; or

4 (ix) any other country—

5 (I) the property or interests in  
6 property of the government of which  
7 are blocked pursuant to the Inter-  
8 national Emergency Economic Powers  
9 Act (50 U.S.C. 1701 et seq.); or

10 (II) the government of which the  
11 Secretary of State has determined has  
12 repeatedly provided support for acts  
13 of international terrorism for purposes  
14 of—

15 (aa) section 620A(a) of the  
16 Foreign Assistance Act of 1961  
17 (22 U.S.C. 2371(a));

18 (bb) section 40(d) of the  
19 Arms Export Control Act (22  
20 U.S.C. 2780(d));

21 (cc) section 1754(e)(1)(A)(i)  
22 of the Export Control Reform  
23 Act of 2018 (50 U.S.C.  
24 4813(e)(1)(A)(i)); or

1 (dd) any other relevant pro-  
2 vision of law.

3 (2) SECRETARIES.—The term “Secretaries”  
4 means the Secretary of Commerce and the Secretary  
5 of Energy, acting—

6 (A) in consultation with each other; and

7 (B) in coordination with—

8 (i) the Secretary of State;

9 (ii) the Commission;

10 (iii) the Secretary of the Treasury;

11 (iv) the President of the Export-Im-  
12 port Bank of the United States; and

13 (v) officials of other Federal agencies,  
14 as the Secretary of Commerce determines  
15 to be appropriate.

16 (b) INTERNATIONAL CIVIL NUCLEAR MODERNIZA-  
17 TION INITIATIVE.—

18 (1) IN GENERAL.—The Secretaries shall estab-  
19 lish and carry out, in accordance with applicable nu-  
20 clear technology export laws (including regulations),  
21 an international initiative to modernize civil nuclear  
22 outreach to embarking civil nuclear energy nations.

23 (2) ACTIVITIES.—In carrying out the initiative  
24 described in paragraph (1)—

25 (A) the Secretary of Commerce shall—



1 (i) expand outreach by the executive  
2 branch to the private investment commu-  
3 nity to create public-private financing rela-  
4 tionships to assist in the export of civil nu-  
5 clear technology to embarking civil nuclear  
6 energy nations;

7 (ii) seek to coordinate, to the max-  
8 imum extent practicable, the work carried  
9 out by each of—

10 (I) the Commission;

11 (II) the Department of Energy;

12 (III) the Department of State;

13 (IV) the Nuclear Energy Agency;

14 (V) the International Atomic En-  
15 ergy Agency; and

16 (VI) other agencies, as the Sec-  
17 retary of Commerce determines to be  
18 appropriate; and

19 (iii) improve the regulatory framework  
20 to allow for the efficient and expeditious  
21 exporting and importing of items under the  
22 jurisdiction of the Secretary of Commerce;  
23 and

24 (B) the Secretary of Energy shall—

1           (i) assist nongovernmental organiza-  
2           tions and appropriate offices, administra-  
3           tions, agencies, laboratories, and programs  
4           of the Federal Government in providing  
5           education and training to foreign govern-  
6           ments in nuclear safety, security, and safe-  
7           guards—

8                   (I) through engagement with the  
9                   International Atomic Energy Agency;  
10                  or

11                  (II) independently, if the applica-  
12                  ble nongovernmental organization, of-  
13                  fice, administration, agency, labora-  
14                  tory, or program determines that it  
15                  would be more advantageous under  
16                  the circumstances to provide the ap-  
17                  plicable education and training inde-  
18                  pendently; and

19           (ii) assist the efforts of the Inter-  
20           national Atomic Energy Agency to expand  
21           the support provided by the International  
22           Atomic Energy Agency to embarking civil  
23           nuclear energy nations for nuclear safety,  
24           security, and safeguards.

1       (c) REPORT.—Not later than 2 years after the date  
 2 of enactment of this Act, the Secretary of Commerce, in  
 3 consultation with the Secretary of Energy, shall submit  
 4 to Congress a report describing the activities carried out  
 5 under this section.

6 **TITLE II—DEVELOPING AND DE-**  
 7 **PLOYING NEW NUCLEAR**  
 8 **TECHNOLOGIES**

9 **SEC. 201. FEES FOR ADVANCED NUCLEAR REACTOR APPLI-**  
 10 **CATION REVIEW.**

11       (a) DEFINITIONS.—Section 3 of the Nuclear Energy  
 12 Innovation and Modernization Act (42 U.S.C. 2215 note;  
 13 Public Law 115–439) is amended—

14           (1) by redesignating paragraphs (2) through  
 15           (15) as paragraphs (3), (5), (6), (7), (8), (9), (11),  
 16           (14), (15), (16), (17), (18), (19), and (20), respec-  
 17           tively;

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

20           “(2) ADVANCED NUCLEAR REACTOR APPLI-  
 21           CANT.—The term ‘advanced nuclear reactor appli-  
 22           cant’ means an entity that has submitted to the  
 23           Commission an application to receive a license for an  
 24           advanced nuclear reactor under the Atomic Energy  
 25           Act of 1954 (42 U.S.C. 2011 et seq.).”;

1           (3) by inserting after paragraph (3) (as so re-  
2 designated) the following:

3           “(4) AGENCY SUPPORT.—The term ‘agency  
4 support’ means the resources of the Commission  
5 that are located in executive, administrative, and  
6 other support offices of the Commission, as de-  
7 scribed in the document of the Commission entitled  
8 ‘FY 2022 Final Fee Rule Work Papers’ (or a suc-  
9 cessor document).”;

10          (4) by inserting after paragraph (9) (as so re-  
11 designated) the following:

12          “(10) HOURLY RATE FOR MISSION-DIRECT PRO-  
13 GRAM SALARIES AND BENEFITS FOR THE NUCLEAR  
14 REACTOR SAFETY PROGRAM.—The term ‘hourly rate  
15 for mission-direct program salaries and benefits for  
16 the Nuclear Reactor Safety Program’ means the  
17 quotient obtained by dividing—

18               “(A) the full-time equivalent rate (within  
19 the meaning of the document of the Commis-  
20 sion entitled ‘FY 2022 Final Fee Rule Work  
21 Papers’ (or a successor document)) for mission-  
22 direct program salaries and benefits for the Nu-  
23 clear Reactor Safety Program (as determined  
24 by the Commission) for a fiscal year; by

1           “(B) the productive hours assumption for  
2           that fiscal year, determined in accordance with  
3           the formula established in the document re-  
4           ferred to in subparagraph (A) (or a successor  
5           document).”;

6           (5) by inserting after paragraph (11) (as so re-  
7           designated) the following:

8           “~~(12) MISSION-DIRECT PROGRAM SALARIES~~  
9           ~~AND BENEFITS FOR THE NUCLEAR REACTOR SAFETY~~  
10          ~~PROGRAM.—The term ‘mission-direct program sala-~~  
11          ~~ries and benefits for the Nuclear Reactor Safety~~  
12          ~~Program’ means the resources of the Commission~~  
13          ~~that are allocated to the Nuclear Reactor Safety~~  
14          ~~Program (as determined by the Commission) to per-~~  
15          ~~form core work activities committed to fulfilling the~~  
16          ~~mission of the Commission to protect public health~~  
17          ~~and safety, promote the common defense and secu-~~  
18          ~~arity, and protect the environment, as described in~~  
19          ~~the document of the Commission entitled ‘FY 2022~~  
20          ~~Final Fee Rule Work Papers’ (or a successor docu-~~  
21          ~~ment).~~

22          “~~(13) MISSION-INDIRECT PROGRAM SUPPORT.—~~  
23          ~~The term ‘mission-indirect program support’ means~~  
24          ~~the resources of the Commission that support the~~  
25          ~~core mission-direct activities for the Nuclear Reactor~~

1 Safety Program of the Commission (as determined  
 2 by the Commission), as described in the document of  
 3 the Commission entitled ‘FY 2022 Final Fee Rule  
 4 Work Papers’ (or a successor document).”.

5 (b) EXCLUDED ACTIVITIES.—Section 102(b)(1)(B)  
 6 of the Nuclear Energy Innovation and Modernization Act  
 7 (42 U.S.C. 2215(b)(1)(B)) (as amended by section  
 8 101(e)(1)(B)) is amended by adding at the end the fol-  
 9 lowing:

10 “(v) The total costs of mission-indi-  
 11 rect program support and agency support  
 12 that, under paragraph (2)(B), may not be  
 13 included in the hourly rate charged for fees  
 14 assessed to advanced nuclear reactor appli-  
 15 cants.”.

16 (c) FEES FOR SERVICE OR THING OF VALUE.—Sec-  
 17 tion 102(b) of the Nuclear Energy Innovation and Mod-  
 18 ernization Act (42 U.S.C. 2215(b)) is amended by striking  
 19 paragraph (2) and inserting the following:

20 “(2) FEES FOR SERVICE OR THING OF  
 21 VALUE.—

22 “(A) IN GENERAL.—In accordance with  
 23 section 9701 of title 31, United States Code,  
 24 the Commission shall assess and collect fees  
 25 from any person who receives a service or thing

1 of value from the Commission to cover the costs  
 2 to the Commission of providing the service or  
 3 thing of value.

4 “(B) ~~ADVANCED NUCLEAR REACTOR AP-~~  
 5 ~~PLICANTS.~~—The hourly rate charged for fees  
 6 assessed to advanced nuclear reactor applicants  
 7 under this paragraph relating to the review of  
 8 a submitted application described in section  
 9 ~~3(1)~~ shall not exceed the hourly rate for mis-  
 10 sion-direct program salaries and benefits for the  
 11 Nuclear Reactor Safety Program.”.

12 (d) ~~EFFECTIVE DATE.~~—The amendments made by  
 13 this section shall take effect on October 1, 2024.

14 **SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.**

15 Section ~~103~~ of the Nuclear Energy Innovation and  
 16 Modernization Act (Public Law ~~115-439~~; ~~132~~ Stat. ~~5571~~)  
 17 is amended by adding at the end the following:

18 “(f) ~~PRIZES FOR ADVANCED NUCLEAR REACTOR LI-~~  
 19 ~~CENSING.~~—

20 “(1) ~~DEFINITION OF ELIGIBLE ENTITY.~~—In  
 21 this subsection, the term ‘eligible entity’ means—

22 “(A) a non-Federal entity; and

23 “(B) the Tennessee Valley Authority.

24 “(2) ~~PRIZE FOR ADVANCED NUCLEAR REACTOR~~  
 25 ~~LICENSING.~~—

1           “(A) IN GENERAL.—Notwithstanding sec-  
2           tion 169 of the Atomic Energy Act of 1954 (42  
3           U.S.C. 2209) and subject to the availability of  
4           appropriations, the Secretary is authorized to  
5           make, with respect to each award category de-  
6           scribed in subparagraph (C), an award in an  
7           amount described in subparagraph (B) to the  
8           first eligible entity—

9                   “(i) to which the Commission issues  
10                  an operating license for an advanced nu-  
11                  clear reactor under part 50 of title 10,  
12                  Code of Federal Regulations (or successor  
13                  regulations), for which an application has  
14                  not been approved by the Commission as  
15                  of the date of enactment of this subsection;  
16                  or

17                  “(ii) for which the Commission makes  
18                  a finding described in section 52.103(g) of  
19                  title 10, Code of Federal Regulations (or  
20                  successor regulations), with respect to a  
21                  combined license for an advanced nuclear  
22                  reactor—

23                   “(I) that is issued under subpart  
24                  C of part 52 of that title (or successor  
25                  regulations); and



1                   “(H) for which an application  
2                   has not been approved by the Com-  
3                   mission as of the date of enactment of  
4                   this subsection.

5                   “(B) AMOUNT OF AWARD.—An award  
6                   under subparagraph (A) shall be in an amount  
7                   equal to the total amount assessed by the Com-  
8                   mission and collected under section 102(b)(2)  
9                   from the eligible entity receiving the award for  
10                  costs relating to the issuance of the license de-  
11                  scribed in that subparagraph, including, as ap-  
12                  plicable, costs relating to the issuance of an as-  
13                  sociated construction permit described in sec-  
14                  tion 50.23 of title 10, Code of Federal Regula-  
15                  tions (or successor regulations); or early site  
16                  permit (as defined in section 52.1 of that title  
17                  (or successor regulations)).

18                  “(C) AWARD CATEGORIES.—An award  
19                  under subparagraph (A) may be made for—

20                         “(i) the first advanced nuclear reactor  
21                         for which the Commission—

22                                 “(I) issues a license in accord-  
23                                 ance with clause (i) of subparagraph  
24                                 (A); or

1                   “(H) makes a finding in accord-  
2                   ance with clause (ii) of that subpara-  
3                   graph;

4                   “(ii) an advanced nuclear reactor  
5                   that—

6                   “(I) uses isotopes derived from  
7                   spent nuclear fuel (as defined in sec-  
8                   tion 2 of the Nuclear Waste Policy  
9                   Act of 1982 (42 U.S.C. 10101)) or  
10                  depleted uranium as fuel for the ad-  
11                  vanced nuclear reactor; and

12                  “(H) is the first advanced nu-  
13                  clear reactor described in subclause  
14                  (I) for which the Commission—

15                         “(aa) issues a license in ac-  
16                         cordance with clause (i) of sub-  
17                         paragraph (A); or

18                         “(bb) makes a finding in ac-  
19                         cordance with clause (ii) of that  
20                         subparagraph;

21                  “(iii) an advanced nuclear reactor  
22                  that—

23                         “(I) is a nuclear integrated en-  
24                         ergy system—

1           “(aa) that is composed of 2  
2           or more co-located or jointly op-  
3           erated subsystems of energy gen-  
4           eration, energy storage, or other  
5           technologies;

6           “(bb) in which not fewer  
7           than 1 subsystem described in  
8           item (aa) is a nuclear energy sys-  
9           tem; and

10           “(cc) the purpose of which  
11           is—

12           “(AA) to reduce green-  
13           house gas emissions in both  
14           the power and nonpower sec-  
15           tors; and

16           “(BB) to maximize en-  
17           ergy production and effi-  
18           ciency; and

19           “(H) is the first advanced nu-  
20           clear reactor described in subelause  
21           (I) for which the Commission—

22           “(aa) issues a license in ac-  
23           cordance with elause (i) of sub-  
24           paragraph (A); or

1                   “(bb) makes a finding in ac-  
2                   cordance with clause (ii) of that  
3                   subparagraph;

4                   “(iv) an advanced reactor that—

5                   “(I) operates flexibly to generate  
6                   electricity or high temperature process  
7                   heat for nonelectric applications; and

8                   “(II) is the first advanced nu-  
9                   clear reactor described in subclause  
10                  (I) for which the Commission—

11                  “(aa) issues a license in ac-  
12                  cordance with clause (i) of sub-  
13                  paragraph (A); or

14                  “(bb) makes a finding in ac-  
15                  cordance with clause (ii) of that  
16                  subparagraph; and

17                  “(v) the first advanced nuclear reactor  
18                  for which the Commission grants approval  
19                  to load nuclear fuel pursuant to the tech-  
20                  nology-inclusive regulatory framework es-  
21                  tablished under subsection (a)(4).

22                  “(3) FEDERAL FUNDING LIMITATION.—An  
23                  award under this subsection shall not exceed the  
24                  total amount expended (excluding any expenditures  
25                  made with Federal funds received for the applicable

1 project and an amount equal to the minimum cost-  
 2 share required under section 988 of the Energy Pol-  
 3 icy Act of 2005 (42 U.S.C. 16352)) by the eligible  
 4 entity receiving the award for licensing costs relating  
 5 to the project for which the award is made.”.

6 **SEC. 203. REPORT ON UNIQUE LICENSING CONSIDER-**  
 7 **ATIONS RELATING TO THE USE OF NUCLEAR**  
 8 **ENERGY FOR NONELECTRIC APPLICATIONS.**

9 (a) **IN GENERAL.**—Not later than 270 days after the  
 10 date of enactment of this Act, the Commission shall sub-  
 11 mit to the appropriate committees of Congress a report  
 12 (referred to in this section as the “report”) addressing any  
 13 unique licensing issues or requirements relating to—

14 (1) the flexible operation of nuclear reactors,  
 15 such as ramping power output and switching be-  
 16 tween electricity generation and nonelectric applica-  
 17 tions;

18 (2) the use of advanced nuclear reactors exclu-  
 19 sively for nonelectric applications; and

20 (3) the colocation of nuclear reactors with in-  
 21 dustrial plants or other facilities.

22 (b) **STAKEHOLDER INPUT.**—In developing the report,  
 23 the Commission shall seek input from—

24 (1) the Secretary of Energy;

25 (2) the nuclear energy industry;

- 1           (3) technology developers;
- 2           (4) the industrial, chemical, and medical sec-
- 3           tors;
- 4           (5) nongovernmental organizations; and
- 5           (6) other public stakeholders.

6           (c) CONTENTS.—

7           (1) IN GENERAL.—The report shall describe—

8                   (A) any unique licensing issues or require-

9                   ments relating to the matters described in para-

10                   graphs (1) through (3) of subsection (a), in-

11                   cluding, with respect to the nonelectric applica-

12                   tions referred to in paragraphs (1) and (2) of

13                   that subsection, any licensing issues or require-

14                   ments relating to the use of nuclear energy in—

15                           (i) hydrogen or other liquid and gas-

16                           eous fuel or chemical production;

17                           (ii) water desalination and wastewater

18                           treatment;

19                           (iii) heat for industrial processes;

20                           (iv) district heating;

21                           (v) energy storage;

22                           (vi) industrial or medical isotope pro-

23                           duction; and

24                           (vii) other applications, as identified

25                           by the Commission;

1           (B) options for addressing those issues or  
2 requirements—

3           (i) within the existing regulatory  
4 framework of the Commission;

5           (ii) as part of the technology-inclusive  
6 regulatory framework required under sub-  
7 section (a)(4) of section 103 of the Nuclear  
8 Energy Innovation and Modernization Act  
9 (42 U.S.C. 2133 note; Public Law 115-  
10 439) or described in the report required  
11 under subsection (e) of that section (Public  
12 Law 115-439; 132 Stat. 5575); or

13           (iii) through a new rulemaking; and

14           (C) the extent to which Commission action  
15 is needed to implement any matter described in  
16 the report.

17           (2) COST ESTIMATES, BUDGETS, AND TIME-  
18 FRAMES.—The report shall include cost estimates,  
19 proposed budgets, and proposed timeframes for im-  
20 plementing risk-informed and performance-based  
21 regulatory guidance in the licensing of nuclear reac-  
22 tors for nonelectric applications.

1 **SEC. 204. ENABLING PREPARATIONS FOR THE DEMONSTRATION OF ADVANCED NUCLEAR REACTORS ON DEPARTMENT OF ENERGY SITES.**

2  
3  
4 (a) **IN GENERAL.**—Section 102(b)(1)(B) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)(1)(B)) (as amended by section 201(b)) is amended by adding at the end the following:

8 “(vi) Costs for—  
9 “(I) activities to review and approve or disapprove an application for an early site permit (as defined in section 52.1 of title 10, Code of Federal Regulations (or a successor regulation)) to demonstrate an advanced nuclear reactor on a Department of Energy site; and  
10  
11  
12  
13  
14  
15  
16  
17 “(II) pre-application activities relating to an early site permit (as so defined) to demonstrate an advanced nuclear reactor on a Department of Energy site.”

18  
19  
20  
21  
22 (b) **EFFECTIVE DATE.**—The amendment made by  
23 subsection (a) shall take effect on October 1, 2024.



1 **SEC. 205. CLARIFICATION ON FUSION REGULATION.**

2 Section 103(a)(4) of the Nuclear Energy Innovation  
3 and Modernization Act (42 U.S.C. 2133 note; Public Law  
4 115-439) is amended—

5 (1) by striking “Not later” and inserting the  
6 following:

7 “(A) IN GENERAL.—Not later”; and

8 (2) by adding at the end the following:

9 “(B) EXCLUSION OF FUSION REACTORS.—

10 For purposes of subparagraph (A), the term  
11 ‘advanced reactor applicant’ does not include an  
12 applicant seeking a license for a fusion reac-  
13 tor.”.

14 **SEC. 206. REGULATORY ISSUES FOR NUCLEAR FACILITIES**  
15 **AT BROWNFIELD SITES.**

16 (a) DEFINITIONS.—

17 (1) BROWNFIELD SITE.—The term “brownfield  
18 site” has the meaning given the term in section 101  
19 of the Comprehensive Environmental Response,  
20 Compensation, and Liability Act of 1980 (42 U.S.C.  
21 9601).

22 (2) PRODUCTION FACILITY.—The term “pro-  
23 duction facility” has the meaning given the term in  
24 section 11 of the Atomic Energy Act of 1954 (42  
25 U.S.C. 2014).

1           (3) RETIRED FOSSIL FUEL SITE.—The term  
2           “retired fossil fuel site” means the site of 1 or more  
3           fossil fuel electric generation facilities that are re-  
4           tired or scheduled to retire, including multi-unit fa-  
5           cilities that are partially shut down.

6           (4) UTILIZATION FACILITY.—The term “utiliza-  
7           tion facility” has the meaning given the term in sec-  
8           tion 11 of the Atomic Energy Act of 1954 (42  
9           U.S.C. 2014).

10          (b) IDENTIFICATION OF REGULATORY ISSUES.—

11           (1) IN GENERAL.—Not later than 1 year after  
12           the date of enactment of this Act, the Commission  
13           shall evaluate the extent to which modification of  
14           regulations, guidance, or policy is needed to enable  
15           timely licensing reviews for, and to support the over-  
16           sight of, production facilities or utilization facilities  
17           at brownfield sites.

18           (2) REQUIREMENT.—In carrying out paragraph  
19           (1), the Commission shall consider how licensing re-  
20           views for production facilities or utilization facilities  
21           at brownfield sites may be expedited by considering  
22           matters relating to siting and operating a production  
23           facility or a utilization facility at or near a retired  
24           fossil fuel site to support the reuse of existing site  
25           infrastructure, including—

- 1           (A) electric switchyard components and  
 2           transmission infrastructure;  
 3           (B) heat-sink components;  
 4           (C) steam cycle components;  
 5           (D) roads;  
 6           (E) railroad access; and  
 7           (F) water availability.

8           (3) REPORT.—Not later than 14 months after  
 9           the date of enactment of this Act, the Commission  
 10          shall submit to the appropriate committees of Con-  
 11          gress a report describing any regulations, guidance,  
 12          and policies identified under paragraph (1).

13          (e) LICENSING.—

14           (1) IN GENERAL.—Not later than 2 years after  
 15          the date of enactment of this Act, the Commission  
 16          shall—

17           (A) develop and implement strategies to  
 18           enable timely licensing reviews for, and to sup-  
 19           port the oversight of, production facilities or  
 20           utilization facilities at brownfield sites, includ-  
 21           ing retired fossil fuel sites; or

22           (B) initiate a rulemaking to enable timely  
 23           licensing reviews for, and to support the over-  
 24           sight of, of production facilities or utilization

1 facilities at brownfield sites, including retired  
2 fossil fuel sites.

3 ~~(2) REQUIREMENTS.—~~In carrying out para-  
4 graph ~~(1)~~, consistent with the role of the Commis-  
5 sion in protecting public health and safety and the  
6 common defense and security, the Commission shall  
7 consider matters relating to—

8 (A) the use of existing site infrastructure;

9 (B) existing emergency preparedness orga-  
10 nizations and planning;

11 (C) the availability of historical site-spe-  
12 cific environmental data;

13 (D) previously approved environmental re-  
14 views required by the National Environmental  
15 Policy Act of 1969 (42 U.S.C. 4321 et seq.);

16 (E) activities associated with the potential  
17 decommissioning of facilities or decontamina-  
18 tion and remediation at brownfield sites; and

19 (F) community engagement and historical  
20 experience with energy production.

21 ~~(d) REPORT.—~~Not later than 3 years after the date  
22 of enactment of this Act, the Commission shall submit to  
23 the appropriate committees of Congress a report describ-  
24 ing the actions taken by the Commission under subsection  
25 ~~(e)~~.

1 **SEC. 207. APPALACHIAN REGIONAL COMMISSION NUCLEAR**  
2 **ENERGY DEVELOPMENT.**

3 (a) IN GENERAL.—Subchapter I of chapter 145 of  
4 subtitle IV of title 40, United States Code, is amended  
5 by adding at the end the following:

6 **“§ 14512. Appalachian Regional Commission nuclear**  
7 **energy development**

8 “(a) DEFINITIONS.—In this section:

9 “(1) BROWNFIELD SITE.—The term ‘brownfield  
10 site’ has the meaning given the term in section 101  
11 of the Comprehensive Environmental Response,  
12 Compensation, and Liability Act of 1980 (42 U.S.C.  
13 9601).

14 “(2) PRODUCTION FACILITY.—The term ‘pro-  
15 duction facility’ has the meaning given the term in  
16 section 11 of the Atomic Energy Act of 1954 (42  
17 U.S.C. 2014).

18 “(3) RETIRED FOSSIL FUEL SITE.—The term  
19 ‘retired fossil fuel site’ means the site of 1 or more  
20 fossil fuel electric generation facilities that are re-  
21 tired or scheduled to retire, including multi-unit fa-  
22 cilities that are partially shut down.

23 “(4) UTILIZATION FACILITY.—The term ‘utili-  
24 zation facility’ has the meaning given the term in  
25 section 11 of the Atomic Energy Act of 1954 (42  
26 U.S.C. 2014).

1       “(b) AUTHORITY.—The Appalachian Regional Com-  
 2 mission may provide technical assistance to, make grants  
 3 to, enter into contracts with, or otherwise provide amounts  
 4 to individuals or entities in the Appalachian region for  
 5 projects and activities—

6           “(1) to conduct research and analysis regarding  
 7 the economic impact of siting, constructing, and op-  
 8 erating a production facility or a utilization facility  
 9 at a brownfield site, including a retired fossil fuel  
 10 site;

11          “(2) to assist with workforce training or re-  
 12 training to perform activities relating to the siting  
 13 and operation of a production facility or a utilization  
 14 facility at a brownfield site, including a retired fossil  
 15 fuel site; and

16          “(3) to engage with the Nuclear Regulatory  
 17 Commission, the Department of Energy, and other  
 18 Federal agencies with expertise in civil nuclear en-  
 19 ergy.

20       “(c) LIMITATION ON AVAILABLE AMOUNTS.—Of the  
 21 cost of any project or activity eligible for a grant under  
 22 this section—

23           “(1) except as provided in paragraphs (2) and  
 24 (3), not more than 50 percent may be provided from  
 25 amounts made available to carry out this section;

1           “(2) in the case of a project or activity to be  
 2 carried out in a county for which a distressed county  
 3 designation is in effect under section 14526, not  
 4 more than 80 percent may be provided from  
 5 amounts made available to carry out this section;  
 6 and

7           “(3) in the case of a project or activity to be  
 8 carried out in a county for which an at-risk county  
 9 designation is in effect under section 14526, not  
 10 more than 70 percent may be provided from  
 11 amounts made available to carry out this section.

12       “(d) SOURCES OF ASSISTANCE.—Subject to sub-  
 13 section (c), a grant provided under this section may be  
 14 provided from amounts made available to carry out this  
 15 section, in combination with amounts made available—

16           “(1) under any other Federal program; or

17           “(2) from any other source.

18       “(e) FEDERAL SHARE.—Notwithstanding any provi-  
 19 sion of law limiting the Federal share under any other  
 20 Federal program, amounts made available to carry out  
 21 this section may be used to increase that Federal share,  
 22 as the Appalachian Regional Commission determines to be  
 23 appropriate.”.

24       (b) AUTHORIZATION OF APPROPRIATIONS.—Section  
 25 14703 of title 40, United States Code, is amended—

1           (1) by redesignating subsections (e) and (f) as  
2           subsections (f) and (g), respectively; and

3           (2) by inserting after subsection (d) the fol-  
4           lowing:

5           “(e) APPALACHIAN REGIONAL COMMISSION NU-  
6           CLEAR ENERGY DEVELOPMENT.—Of the amounts made  
7           available under subsection (a), \$5,000,000 may be used  
8           to carry out section 14512 for each of fiscal years 2023  
9           through 2026.”.

10          (e) CLERICAL AMENDMENT.—The analysis for sub-  
11          chapter I of chapter 145 of subtitle IV of title 40, United  
12          States Code, is amended by striking the item relating to  
13          section 14511 and inserting the following:

“14511: Appalachian regional energy hub initiative.

“14512: Appalachian Regional Commission nuclear energy development.”.

14       **TITLE III—PRESERVING EXIST-**  
15       **ING NUCLEAR ENERGY GEN-**  
16       **ERATION**

17       **SEC. 301. INVESTMENT BY ALLIES.**

18          (a) IN GENERAL.—The prohibitions against issuing  
19          certain licenses for utilization facilities to certain corpora-  
20          tions and other entities described in the second sentence  
21          of section 103 d. of the Atomic Energy Act of 1954 (42  
22          U.S.C. 2133(d)) and the second sentence of section 104  
23          d. of that Act (42 U.S.C. 2134(d)) shall not apply to an  
24          entity described in subsection (b) if the Commission deter-



1 mines that issuance of the applicable license to that entity  
2 is not inimical to—

3           (1) the common defense and security; or

4           (2) the health and safety of the public.

5       (b) ENTITIES DESCRIBED.—An entity referred to in  
6 subsection (a) is a corporation or other entity that is  
7 owned, controlled, or dominated by—

8           (1) the government of—

9               (A) a country that is a member of the  
10 Group of Seven as of November 25, 2020,  
11 which includes the United Kingdom, Germany,  
12 Canada, Japan, France, and Italy; or

13               (B) the Republic of Korea;

14           (2) a corporation that is incorporated in a  
15 country described in subparagraph (A) or (B) of  
16 paragraph (1); or

17           (3) an alien who is a national of a country de-  
18 scribed in subparagraph (A) or (B) of paragraph  
19 (1).

20       (c) TECHNICAL AMENDMENT.—Section 103 d. of the  
21 Atomic Energy Act of 1954 (42 U.S.C. 2133(d)) is  
22 amended, in the second sentence, by striking “any any”  
23 and inserting “any”.

1 (d) SAVINGS CLAUSE.—Nothing in this section af-  
 2 fects the requirements of section 721 of the Defense Pro-  
 3 duction Act of 1950 (50 U.S.C. 4565).

4 **SEC. 302. EXTENSION OF THE PRICE-ANDERSON ACT.**

5 (a) EXTENSION.—Section 170 of the Atomic Energy  
 6 Act of 1954 (42 U.S.C. 2210) (commonly known as the  
 7 “Price-Anderson Act”) is amended by striking “December  
 8 31, 2025” each place it appears and inserting “December  
 9 31, 2045”.

10 (b) REPORT.—Section 170 p. of the Atomic Energy  
 11 Act of 1954 (42 U.S.C. 2210(p)) is amended by striking  
 12 “December 31, 2021” and inserting “December 31,  
 13 2041”.

14 **TITLE IV—NUCLEAR FUEL**  
 15 **CYCLE, SUPPLY CHAIN, IN-**  
 16 **FRASTRUCTURE, AND WORK-**  
 17 **FORCE**

18 **SEC. 401. REPORT ON ADVANCED METHODS OF MANUFAC-**  
 19 **TURING AND CONSTRUCTION FOR NUCLEAR**  
 20 **ENERGY APPLICATIONS.**

21 (a) IN GENERAL.—Not later than 180 days after the  
 22 date of enactment of this Act, the Commission shall sub-  
 23 mit to the appropriate committees of Congress a report  
 24 (referred to in this section as the “report”) on manufac-  
 25 turing and construction for nuclear energy applications.

1 (b) STAKEHOLDER INPUT.—In developing the report,  
2 the Commission shall seek input from—

3 (1) the Secretary of Energy;

4 (2) the nuclear energy industry;

5 (3) National Laboratories;

6 (4) institutions of higher education;

7 (5) nuclear and manufacturing technology de-  
8 velopers;

9 (6) the manufacturing and construction indus-  
10 tries, including manufacturing and construction  
11 companies with operating facilities in the United  
12 States;

13 (7) standards development organizations;

14 (8) labor unions;

15 (9) nongovernmental organizations; and

16 (10) other public stakeholders.

17 (c) CONTENTS.—

18 (1) IN GENERAL.—The report shall—

19 (A) examine any unique licensing issues or  
20 requirements relating to the use of innovative—

21 (i) advanced manufacturing processes;

22 (ii) advanced construction techniques;

23 and

24 (iii) rapid improvement or iterative in-  
25 novation processes;

1           (B) examine—

2                 (i) the requirements for nuclear-grade  
3                 components in manufacturing and con-  
4                 struction for nuclear energy applications;

5                 (ii) opportunities to use standard ma-  
6                 terials, parts, or components in manufac-  
7                 turing and construction for nuclear energy  
8                 applications;

9                 (iii) opportunities to use standard ma-  
10                terials that are in compliance with existing  
11                codes to provide acceptable approaches to  
12                support or encapsulate new materials that  
13                do not yet have applicable codes; and

14                (iv) requirements relating to the  
15                transport of a fueled advanced nuclear re-  
16                actor core from a manufacturing licensee  
17                to a licensee that holds a license to con-  
18                struct and operate a facility at a particular  
19                site;

20                (C) identify any safety aspects of innova-  
21                tive advanced manufacturing processes and ad-  
22                vanced construction techniques that are not ad-  
23                dressed by existing codes and standards, so that  
24                generic guidance may be updated or created, as  
25                necessary;

1           (D) identify options for addressing the  
2 issues, requirements, and opportunities exam-  
3 ined under subparagraphs (A) and (B)—

4                   (i) within the existing regulatory  
5 framework; or

6                   (ii) through a new rulemaking;

7           (E) identify how addressing the issues, re-  
8 quirements, and opportunities examined under  
9 subparagraphs (A) and (B) will impact oppor-  
10 tunities for domestic nuclear manufacturing  
11 and construction developers; and

12           (F) describe the extent to which Commis-  
13 sion action is needed to implement any matter  
14 described in the report.

15           (2) ~~COST ESTIMATES, BUDGETS, AND TIME-~~  
16 ~~FRAMES.~~—The report shall include cost estimates,  
17 proposed budgets, and proposed timeframes for im-  
18 plementing risk-informed and performance-based  
19 regulatory guidance for manufacturing and construc-  
20 tion for nuclear energy applications.

21 **SEC. 402. NUCLEAR ENERGY TRAINEESHIP.**

22           Section ~~313~~ of division C of the Omnibus Appropria-  
23 tions Act, 2009 (42 U.S.C. 16274a), is amended—

24                   (1) in subsection (a), by striking “Nuclear Reg-  
25 ulatory”;

1           (2) in subsection (b)(1), in the matter pre-  
2           ceding subparagraph (A), by inserting “and sub-  
3           section (c)” after “paragraph (2)”;

4           (3) in subsection (c)—

5           (A) by redesignating paragraph (2) as  
6           paragraph (5); and

7           (B) by striking paragraph (1) and insert-  
8           ing the following:

9           “(1) ADVANCED NUCLEAR REACTOR.—The  
10          term ‘advanced nuclear reactor’ has the meaning  
11          given the term in section 951(b) of the Energy Pol-  
12          icy Act of 2005 (42 U.S.C. 16271(b)).

13          “(2) COMMISSION.—The term ‘Commission’  
14          means the Nuclear Regulatory Commission.

15          “(3) INSTITUTION OF HIGHER EDUCATION.—  
16          The term ‘institution of higher education’ has the  
17          meaning given the term in section 2 of the Energy  
18          Policy Act of 2005 (42 U.S.C. 15801).

19          “(4) NATIONAL LABORATORY.—The term ‘Na-  
20          tional Laboratory’ has the meaning given the term  
21          in section 951(b) of the Energy Policy Act of 2005  
22          (42 U.S.C. 16271(b)).”;

23          (4) in subsection (d)(2), by striking “Nuclear  
24          Regulatory”;

1           (5) by redesignating subsections (c) and (d) as  
2 subsections (d) and (e), respectively; and

3           (6) by inserting after subsection (b) the fol-  
4 lowing:

5           “(e) NUCLEAR ENERGY TRAINEESHIP SUBPRO-  
6 GRAM.—

7           “(1) IN GENERAL.—The Commission shall es-  
8 tablish, as a subprogram of the Program, a nuclear  
9 energy traineeship subprogram under which the  
10 Commission, in coordination with institutions of  
11 higher education and trade schools, shall competi-  
12 tively award traineeships that provide focused train-  
13 ing to meet critical mission needs of the Commission  
14 and nuclear workforce needs, including needs relat-  
15 ing to—

16                   “(A) nuclear criticality safety; and

17                   “(B) the nuclear tradecraft workforce.

18           “(2) REQUIREMENTS.—In carrying out the nu-  
19 clear energy traineeship subprogram described in  
20 paragraph (1), the Commission shall—

21                   “(A) coordinate with the Secretary of En-  
22 ergy to prioritize the funding of traineeships  
23 that focus on—

24                           “(i) nuclear workforce needs; and

1           “(ii) critical mission needs of the  
2           Commission;

3           “(B) encourage appropriate partnerships  
4           among—

5           “(i) National Laboratories;

6           “(ii) institutions of higher education;

7           “(iii) trade schools;

8           “(iv) the nuclear energy industry; and

9           “(v) other entities, as the Commission  
10          determines to be appropriate; and

11          “(C) on an annual basis, evaluate nuclear  
12          workforce needs for the purpose of imple-  
13          menting traineeships in focused topical areas  
14          that—

15               “(i) address the workforce needs of  
16               the nuclear energy community; and

17               “(ii) support critical mission needs of  
18               the Commission.”.

19 **SEC. 403. REPORT ON COMMISSION READINESS AND CA-**  
20 **PACITY TO LICENSE ADDITIONAL CONVER-**  
21 **SION AND ENRICHMENT CAPACITY TO RE-**  
22 **DUCE RELIANCE ON URANIUM FROM RUSSIA.**

23          Not later than 180 days after the date of enactment  
24 of this Act, the Commission shall submit to the appro-  
25 priate committees of Congress a report on the readiness



1 and capacity of the Commission to license additional con-  
2 version and enrichment capacity at existing and new fuel  
3 cycle facilities to reduce reliance on nuclear fuel that is  
4 recovered, converted, enriched, or fabricated by an entity  
5 that—

6           (1) is owned or controlled by the Government of  
7 the Russian Federation; or

8           (2) is organized under the laws of, or otherwise  
9 subject to the jurisdiction of, the Russian Federa-  
10 tion.

11 **SEC. 404. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**  
12 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**  
13 **VENTORY IN THE UNITED STATES.**

14 (a) DEFINITIONS.—In this section:

15           (1) HIGH-LEVEL RADIOACTIVE WASTE.—The  
16 term “high-level radioactive waste” has the meaning  
17 given the term in section 2 of the Nuclear Waste  
18 Policy Act of 1982 (42 U.S.C. 10101).

19           (2) SPENT NUCLEAR FUEL.—The term “spent  
20 nuclear fuel” has the meaning given the term in sec-  
21 tion 2 of the Nuclear Waste Policy Act of 1982 (42  
22 U.S.C. 10101).

23           (3) STANDARD CONTRACT.—The term “stand-  
24 ard contract” has the meaning given the term “con-

1       tract” in section 961.3 of title 10, Code of Federal  
2       Regulations (or a successor regulation).

3       (b) REPORT.—Not later than January 1, 2025, and  
4       annually thereafter, the Secretary of Energy shall submit  
5       to Congress a report that describes—

6           (1) the annual and cumulative amount of pay-  
7       ments made by the United States to the holder of  
8       a standard contract due to a partial breach of con-  
9       tract under the Nuclear Waste Policy Act of 1982  
10      (42 U.S.C. 10101 et seq.) resulting in financial  
11      damages to the holder;

12          (2) the cumulative amount spent by the Depart-  
13      ment of Energy since fiscal year 2008 to reduce fu-  
14      ture payments projected to be made by the United  
15      States to any holder of a standard contract due to  
16      a partial breach of contract under the Nuclear  
17      Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.);

18          (3) the cumulative amount spent by the Depart-  
19      ment of Energy to store, manage, and dispose of  
20      spent nuclear fuel and high-level radioactive waste in  
21      the United States as of the date of the report;

22          (4) the projected lifecycle costs to store, man-  
23      age, transport, and dispose of the projected inven-  
24      tory of spent nuclear fuel and high-level radioactive  
25      waste in the United States, including spent nuclear

1 fuel and high-level radioactive waste expected to be  
 2 generated from existing reactors through 2050;

3 (5) any mechanisms for better accounting of li-  
 4 abilities for the lifecycle costs of the spent nuclear  
 5 fuel and high-level radioactive waste inventory in the  
 6 United States; and

7 (6) any recommendations for improving the  
 8 methods used by the Department of Energy for the  
 9 accounting of spent nuclear fuel and high-level ra-  
 10 dioactive waste costs and liabilities.

11 **SEC. 405. AUTHORIZATION OF APPROPRIATIONS FOR**  
 12 **SUPERFUND ACTIONS AT ABANDONED MIN-**  
 13 **ING SITES ON TRIBAL LAND.**

14 (a) DEFINITIONS.—In this section:

15 (1) ELIGIBLE NON-NPL SITE.—The term “eligi-  
 16 ble non-NPL site” means a site—

17 (A) that is not on the National Priorities  
 18 List; but

19 (B) with respect to which the Adminis-  
 20 trator determines that—

21 (i) the site would be eligible for listing  
 22 on the National Priorities List based on  
 23 the presence of hazards from contamina-  
 24 tion at the site, applying the hazard rank-  
 25 ing system described in section 105(e) of

1 the Comprehensive Environmental Re-  
2 sponse, Compensation, and Liability Act of  
3 1980 (42 U.S.C. 9605(c)); and

4 (ii) for removal site evaluations; engi-  
5 neering evaluations/cost analyses; remedial  
6 planning activities; remedial investigations  
7 and feasibility studies; and other actions  
8 taken pursuant to section 104(b) of that  
9 Act (42 U.S.C. 9604), the site—

10 (I) has undergone a pre-  
11 CERCLA screening; and

12 (II) is included in the Superfund  
13 Enterprise Management System.

14 (2) INDIAN TRIBE.—The term “Indian Tribe”  
15 has the meaning given the term “Indian tribe” in  
16 section 101 of the Comprehensive Environmental  
17 Response, Compensation, and Liability Act of 1980  
18 (42 U.S.C. 9601).

19 (3) NATIONAL PRIORITIES LIST.—The term  
20 “National Priorities List” means the National Prior-  
21 ities List developed by the President in accordance  
22 with section 105(a)(8)(B) of the Comprehensive En-  
23 vironmental Response, Compensation, and Liability  
24 Act of 1980 (42 U.S.C. 9605(a)(8)(B)).

1           (4) REMEDIAL ACTION; REMOVAL; RESPONSE.—  
 2           The terms “remedial action”, “removal”, and “re-  
 3           sponse” have the meanings given those terms in sec-  
 4           tion 101 of the Comprehensive Environmental Re-  
 5           sponse, Compensation, and Liability Act of 1980 (42  
 6           U.S.C. 9601).

7           (5) TRIBAL LAND.—The term “Tribal land”  
 8           has the meaning given the term “Indian country” in  
 9           section 1151 of title 18, United States Code.

10          (b) AUTHORIZATION OF APPROPRIATIONS.—There  
 11          are authorized to be appropriated for each of fiscal years  
 12          2023 through 2032, to remain available until expended—

13               (1) \$97,000,000 to the Administrator to carry  
 14               out this section (except for subsection (d)); and

15               (2) \$3,000,000 to the Administrator of the  
 16               Agency for Toxic Substances and Disease Registry  
 17               to carry out subsection (d).

18          (c) USES OF AMOUNTS.—Amounts appropriated  
 19          under subsection (b)(1) shall be used by the Adminis-  
 20          trator—

21               (1) to carry out removal actions on abandoned  
 22               mine land located on Tribal land;

23               (2) to carry out response actions, including re-  
 24               moval and remedial planning activities, removal and  
 25               remedial studies, remedial actions, and other actions

1 taken pursuant to section 104(b) of the Comprehen-  
 2 sive Environmental Response, Compensation, and  
 3 Liability Act of 1980 (42 U.S.C. 9604(b)) on aban-  
 4 doned mine land located on Tribal land at—

5 (A) eligible non-NPL sites; and

6 (B) sites listed on the National Priorities  
 7 List; and

8 (3) to make grants under subsection (c).

9 (d) HEALTH ASSESSMENTS.—Subject to the avail-  
 10 ability of appropriations, the Agency for Toxic Substances  
 11 and Disease Registry, in coordination with Tribal health  
 12 authorities, shall perform 1 or more health assessments  
 13 at each eligible non-NPL site that is located on Tribal  
 14 land, in accordance with section 104(i)(6) of the Com-  
 15 prehensive Environmental Response, Compensation, and  
 16 Liability Act of 1980 (42 U.S.C. 9604(i)(6)).

17 (e) TRIBAL GRANTS.—

18 (1) IN GENERAL.—The Administrator may use  
 19 amounts appropriated under subsection (b)(1) to  
 20 make grants to eligible entities described in para-  
 21 graph (2) for the purposes described in paragraph  
 22 (3).

23 (2) ELIGIBLE ENTITIES DESCRIBED.—An eligi-  
 24 ble entity referred to in paragraph (1) is—

1           (A) the governing body of an Indian Tribe;

2           or

3           (B) a legally established organization of

4           Indians that—

5                 (i) is controlled, sanctioned, or char-

6                 tered by the governing bodies of 2 or more

7                 Indian Tribes to be served, or that is

8                 democratically elected by the adult mem-

9                 bers of the Indian community to be served,

10                by that organization; and

11               (ii) includes the maximum participa-

12               tion of Indians in all phases of the activi-

13               ties of that organization.

14           (3) USE OF GRANT FUNDS.—A grant under this

15           subsection shall be used—

16                 (A) in accordance with the second sentence

17                 of section 117(e)(1) of the Comprehensive Envi-

18                 ronmental Response, Compensation, and Liabil-

19                 ity Act of 1980 (42 U.S.C. 9617(e)(1));

20                 (B) for obtaining technical assistance in

21                 carrying out response actions under subpara-

22                 graph (C); or

23                 (C) for carrying out response actions, if

24                 the Administrator determines that the Indian

25                 Tribe has the capability to carry out any or all

1 of those response actions in accordance with the  
2 criteria and priorities established pursuant to  
3 section 105(a)(8) of the Comprehensive Envi-  
4 ronmental Response, Compensation, and Liabil-  
5 ity Act of 1980 (42 U.S.C. 9605(a)(8)).

6 (4) APPLICATIONS.—An eligible entity desiring  
7 a grant under this subsection shall submit to the  
8 Administrator an application at such time, in such  
9 manner, and containing such information as the Ad-  
10 ministrator may require.

11 (5) LIMITATIONS.—A grant under this sub-  
12 section shall be governed by the rules, procedures,  
13 and limitations described in section 117(e)(2) of the  
14 Comprehensive Environmental Response, Compensa-  
15 tion, and Liability Act of 1980 (42 U.S.C.  
16 9617(e)(2)), except that—

17 (A) “Administrator of the Environmental  
18 Protection Agency” shall be substituted for  
19 “President” each place it appears in that sec-  
20 tion; and

21 (B) in the first sentence of that section,  
22 “under section 405 of the ADVANCE Act of  
23 2023” shall be substituted for “under this sub-  
24 section”.



1           (f) ~~STATUTE OF LIMITATIONS.~~—If a remedial action  
 2 described in subsection (e)(2) is scheduled at an eligible  
 3 non-NPL site, no action may be commenced for damages  
 4 (as defined in section 101 of the Comprehensive Environ-  
 5 mental Response, Compensation, and Liability Act of  
 6 1980 (42 U.S.C. 9601)) with respect to that eligible non-  
 7 NPL site unless the action is commenced within the time-  
 8 frame provided for such actions with respect to facilities  
 9 on the National Priorities List in the first sentence of the  
 10 matter following subparagraph (B) of section 113(g)(1)  
 11 of that Act (42 U.S.C. 9613(g)(1)).

12           (g) ~~COORDINATION.~~—The Administrator shall coordi-  
 13 nate with the Indian Tribe on whose land the applicable  
 14 site is located in—

15                   (1) selecting and prioritizing sites for response  
 16 actions under paragraphs (1) and (2) of subsection  
 17 (e); and

18                   (2) carrying out those response actions.

19 **SEC. 406. DEVELOPMENT, QUALIFICATION, AND LICENSING**  
 20 **OF ADVANCED NUCLEAR FUEL CONCEPTS.**

21           (a) ~~IN GENERAL.~~—The Commission shall establish  
 22 an initiative to enhance preparedness and coordination  
 23 with respect to the qualification and licensing of advanced  
 24 nuclear fuel.

1           (b) AGENCY COORDINATION.—Not later than 180  
2 days after the date of enactment of this Act, the Commis-  
3 sion and the Secretary of Energy shall enter into a memo-  
4 randum of understanding—

5           (1) to share technical expertise and knowledge  
6 through—

7           (A) enabling the testing and demonstration  
8 of accident tolerant fuels for existing commer-  
9 cial nuclear reactors and advanced nuclear reac-  
10 tor fuel concepts to be proposed and funded, in  
11 whole or in part, by the private sector;

12           (B) operating a database to store and  
13 share data and knowledge relevant to nuclear  
14 science and engineering between Federal agen-  
15 cies and the private sector;

16           (C) leveraging expertise with respect to  
17 safety analysis and research relating to ad-  
18 vanced nuclear fuel; and

19           (D) enabling technical staff to actively ob-  
20 serve and learn about technologies, with an em-  
21 phasis on identification of additional informa-  
22 tion needed with respect to advanced nuclear  
23 fuel; and

24           (2) to ensure that—

1           (A) the Department of Energy has suffi-  
2           cient technical expertise to support the timely  
3           research, development, demonstration, and com-  
4           mercial application of advanced nuclear fuel;

5           (B) the Commission has sufficient tech-  
6           nical expertise to support the evaluation of ap-  
7           plications for licenses, permits, and design cer-  
8           tifications and other requests for regulatory ap-  
9           proval for advanced nuclear fuel;

10          (C)(i) the Department of Energy main-  
11          tains and develops the facilities necessary to en-  
12          able the timely research, development, dem-  
13          onstration, and commercial application by the  
14          civilian nuclear industry of advanced nuclear  
15          fuel; and

16          (ii) the Commission has access to the fa-  
17          cilities described in clause (i), as needed; and

18          (D) the Commission consults, as appro-  
19          priate, with the modeling and simulation ex-  
20          perts at the Office of Nuclear Energy of the  
21          Department of Energy, at the National Labora-  
22          tories, and within industry fuel vendor teams in  
23          cooperative agreements with the Department of  
24          Energy to leverage physics-based computer  
25          modeling and simulation capabilities.

1       ~~(c) REPORT.—~~

2             ~~(1) IN GENERAL.—~~Not later than 1 year after  
3 the date of enactment of this Act, the Commission  
4 shall submit to the appropriate committees of Con-  
5 gress a report describing the efforts of the Commis-  
6 sion under subsection (a), including—

7             ~~(A) an assessment of the preparedness of~~  
8             ~~the Commission to review and qualify for use—~~

9                     ~~(i) accident tolerant fuel;~~

10                    ~~(ii) ceramic cladding materials;~~

11                    ~~(iii) fuels containing silicon carbide;~~

12                    ~~(iv) high-assay, low-enriched uranium~~  
13                    ~~fuels;~~

14                    ~~(v) molten-salt based liquid fuels;~~

15                    ~~(vi) fuels derived from spent nuclear~~  
16                    ~~fuel or depleted uranium; and~~

17                    ~~(vii) other related fuel concepts; as de-~~  
18                    ~~termined by the Commission;~~

19             ~~(B) activities planned or undertaken under~~  
20             ~~the memorandum of understanding described in~~  
21             ~~subsection (b);~~

22             ~~(C) an accounting of the areas of research~~  
23             ~~needed with respect to advanced nuclear fuel;~~  
24             ~~and~~

1           (D) any other challenges or considerations  
2 identified by the Commission.

3           (2) CONSULTATION.—In developing the report  
4 under paragraph (1), the Commission shall seek  
5 input from—

6           (A) the Secretary of Energy;

7           (B) National Laboratories;

8           (C) the nuclear energy industry;

9           (D) technology developers;

10          (E) nongovernmental organizations; and

11          (F) other public stakeholders.

12                           **TITLE V—IMPROVING**  
13                           **COMMISSION EFFICIENCY**

14   **SEC. 501. COMMISSION WORKFORCE.**

15          (a) DEFINITION OF CHAIRMAN.—In this section, the  
16 term “Chairman” means the Chairman of the Commis-  
17 sion.

18          (b) APPOINTMENT AUTHORITY.—

19           (1) IN GENERAL.—Notwithstanding section 161  
20 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
21 2201(d)), any provision of Reorganization Plan No.  
22 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.) governing  
23 appointments, and any provision of title 5, United  
24 States Code, governing appointments and General  
25 Schedule classification and pay rates, the Chairman

1 may appoint persons to the positions described in  
2 paragraph (2), subject to the limitation described in  
3 paragraph (3), without regard to the civil service  
4 laws.

5 (2) POSITIONS DESCRIBED.—The positions re-  
6 ferred to in paragraph (1) are—

7 (A) positions with highly specialized sci-  
8 entific, engineering, and technical competencies  
9 to address a critical need for the Commission,  
10 including—

11 (i) health physicist;

12 (ii) reactor operations engineer;

13 (iii) human factors analyst or engi-  
14 neer;

15 (iv) risk and reliability analyst or en-  
16 gineer;

17 (v) licensing project manager;

18 (vi) reactor engineer for severe acci-  
19 dents;

20 (vii) geotechnical engineer;

21 (viii) structural engineer;

22 (ix) reactor systems engineer;

23 (x) reactor engineer;

24 (xi) radiation scientist; and

25 (xii) electronics engineer; or

1           (B) positions to be filled by exceptionally  
2 well-qualified individuals that the Commission  
3 determines are necessary to fulfill the mission  
4 of the Commission.

5           (3) LIMITATION.—The Chairman may appoint  
6 persons to not more than—

7           (A) 90 positions described in paragraph  
8 (2)(A); and

9           (B) 90 positions described in paragraph  
10 (2)(B).

11           (4) HIRING BONUS.—The Commission may pay  
12 any employee appointed under paragraph (1) a 1-  
13 time hiring bonus in an amount not to exceed the  
14 least of—

15           (A) \$25,000;

16           (B) the amount equal to 15 percent of the  
17 annual rate of basic pay of the employee; and

18           (C) the amount of the limitation that is  
19 applicable for a calendar year under section  
20 5307(a)(1) of title 5, United States Code.

21           (5) APPLICATION OF MERIT SYSTEM PRIN-  
22 CIPLES.—To the maximum extent practicable, the  
23 Chairman shall appoint persons under paragraph (1)  
24 to the positions described in paragraph (2) in ac-

1 eordance with the merit system principles set forth  
 2 in section 2301 of title 5, United States Code.

3 (c) COMPENSATION AUTHORITY.—

4 (1) IN GENERAL.—Notwithstanding section 161  
 5 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
 6 2201(d)) and chapter 51, and subchapter III of  
 7 chapter 53, of title 5, United States Code, the  
 8 Chairman may fix the rate of basic pay for the posi-  
 9 tions of individuals described in paragraph (2), sub-  
 10 ject to the limitation described in paragraph (3), in  
 11 accordance with this subsection.

12 (2) INDIVIDUALS DESCRIBED.—The individuals  
 13 referred to in paragraph (1) are—

14 (A) individuals with highly specialized sci-  
 15 entific, engineering, and technical competencies  
 16 to address a critical need for the Commission,  
 17 including individuals with expertise in—

18 (i) health physics;

19 (ii) reactor operations engineering;

20 (iii) human factors analysis or engi-  
 21 neering;

22 (iv) risk and reliability analysis or en-  
 23 gineering;

24 (v) licensing project management;



1                   (vi) reactor engineering for severe ac-  
2                   cidents;

3                   (vii) geotechnical engineering;

4                   (viii) structural engineering;

5                   (ix) reactor systems engineering;

6                   (x) reactor engineering;

7                   (xi) radiation science; and

8                   (xii) electronics engineering; or

9                   (B) exceptionally well-qualified individuals  
10                  that the Commission determines are necessary  
11                  to fulfill the mission of the Commission.

12                 (3) LIMITATION.—

13                 (A) IN GENERAL.—Except as provided in  
14                 subparagraph (B), the annual rate of basic pay  
15                 for an individual described in paragraph (2)  
16                 may not exceed the per annum rate of salary  
17                 payable for level III of the Executive Schedule  
18                 under section 5314 of title 5, United States  
19                 Code, without regard to the civil service laws.

20                 (B) CERTAIN POSITIONS.—The Chairman  
21                 may set the annual rate of basic pay for an in-  
22                 dividual described in paragraph (2) for not  
23                 more than—

24                         (i) 90 persons appointed to positions  
25                         described in paragraph (2)(A); and

1                   (ii) 90 persons appointed to positions  
2                   described in paragraph (2)(B).

3           (d) NO DELEGATION.—The Chairman may not dele-  
4 gate the authority provided by subsection (b) or (c).

5           (e) ANNUAL SOLICITATION FOR NUCLEAR REGU-  
6 LATOR APPRENTICESHIP NETWORK APPLICATIONS.—The  
7 Chairman, on an annual basis, shall solicit applications for  
8 the Nuclear Regulator Apprenticeship Network.

9           (f) REPORT.—The Chairman shall include in the an-  
10 nual budget justification of the Commission information  
11 that describes—

12                   (1) the total number of and the positions of the  
13 persons appointed under the authority provided by  
14 subsection (b);

15                   (2) the total number of and the positions of the  
16 persons paid at the rate determined under the au-  
17 thority provided by subsection (c);

18                   (3) how the authority provided by subsections  
19 (b) and (c) is being used, and has been used during  
20 the previous fiscal year, to address the hiring and  
21 retention needs of the Commission with respect to  
22 the positions described in those subsections to which  
23 that authority is applicable; and

24                   (4) if the authority provided by subsections (b)  
25 and (c) is not being used, or has not been used, the

1 reasons, including a justification, for not using that  
2 authority.

3 **SEC. 502. COMMISSION CORPORATE SUPPORT FUNDING.**

4 (a) REPORT.—Not later than 180 days after the date  
5 of enactment of this Act, the Commission shall submit to  
6 the appropriate committees of Congress and make publicly  
7 available a report that describes—

8 (1) the progress on the implementation of sec-  
9 tion 102(a)(3) of the Nuclear Energy Innovation  
10 and Modernization Act (42 U.S.C. 2215(a)(3)); and

11 (2) whether the Commission is meeting and is  
12 expected to meet the total budget authority caps re-  
13 quired for corporate support under that section.

14 (b) LIMITATION ON CORPORATE SUPPORT COSTS.—  
15 Section 102(a)(3) of the Nuclear Energy Innovation and  
16 Modernization Act (42 U.S.C. 2215(a)(3)) is amended by  
17 striking subparagraphs (B) and (C) and inserting the fol-  
18 lowing:

19 “(B) 30 percent for fiscal year 2024 and  
20 each fiscal year thereafter.”.

21 (c) CORPORATE SUPPORT COSTS CLARIFICATION.—  
22 Paragraph (9) of section 3 of the Nuclear Energy Innova-  
23 tion and Modernization Act (42 U.S.C. 2215 note; Public  
24 Law 115–439) (as redesignated by section 201(a)(1)) is  
25 amended—

1           (1) by striking “The term” and inserting the  
2 following:

3                   “(A) IN GENERAL.—The term”; and

4           (2) by adding at the end the following:

5                   “(B) EXCLUSIONS.—The term ‘corporate  
6 support costs’ does not include—

7                           “(i) costs for rent and utilities relat-  
8 ing to any and all space in the Three  
9 White Flint North building that is not oc-  
10 cupied by the Commission; or

11                           “(ii) costs for salaries, travel, and  
12 other support for the Office of the Com-  
13 mission.”.

14 **SEC. 503. PERFORMANCE AND REPORTING UPDATE.**

15           Section 102(e) of the Nuclear Energy Innovation and  
16 Modernization Act (42 U.S.C. 2215(e)) is amended—

17           (1) in paragraph (3)—

18                   (A) in the paragraph heading, by striking  
19 “180” and inserting “90”; and

20                   (B) by striking “180” and inserting “90”;

21 and

22           (2) by adding at the end the following:

23                   “(4) PERIODIC UPDATES TO METRICS AND  
24 SCHEDULES.—

1           “(A) REVIEW AND ASSESSMENT.—Not less  
2 frequently than once every 3 years, the Com-  
3 mission shall review and assess, based on the li-  
4 censing and regulatory activities of the Com-  
5 mission, the performance metrics and milestone  
6 schedules established under paragraph (1).

7           “(B) REVISIONS.—After each review and  
8 assessment under subparagraph (A), the Com-  
9 mission shall revise and improve, as appro-  
10 priate, the performance metrics and milestone  
11 schedules described in that subparagraph to  
12 provide the most efficient metrics and schedules  
13 reasonably achievable.”.

## 14           **TITLE VI—MISCELLANEOUS**

### 15           **SEC. 601. NUCLEAR CLOSURE COMMUNITIES.**

16           (a) DEFINITIONS.—In this section:

17           (1) COMMUNITY ADVISORY BOARD.—The term  
18 “community advisory board” means a community  
19 committee or other advisory organization that aims  
20 to foster communication and information exchange  
21 between a licensee planning for and involved in de-  
22 commissioning activities and members of the com-  
23 munity that decommissioning activities may affect.

24           (2) DECOMMISSION.—The term “decommis-  
25 sion” has the meaning given the term in section

1 50.2 of title 10, Code of Federal Regulations (or  
2 successor regulations).

3 (3) ELIGIBLE RECIPIENT.—The term “eligible  
4 recipient” has the meaning given the term in section  
5 3 of the Public Works and Economic Development  
6 Act of 1965 (42 U.S.C. 3122).

7 (4) LICENSEE.—The term “licensee” has the  
8 meaning given the term in section 50.2 of title 10,  
9 Code of Federal Regulations (or successor regula-  
10 tions).

11 (5) NUCLEAR CLOSURE COMMUNITY.—The  
12 term “nuclear closure community” means a unit of  
13 local government, including a county, city, town, vil-  
14 lage, school district, or special district, that has been  
15 impacted, or reasonably demonstrates to the satis-  
16 faction of the Secretary that it will be impacted, by  
17 a nuclear power plant licensed by the Commission  
18 that—

19 (A) is not co-located with an operating nu-  
20 clear power plant;

21 (B) is at a site with spent nuclear fuel;  
22 and

23 (C) as of the date of enactment of this  
24 Act—

25 (i) has ceased operations; or

1                   (ii) has provided a written notification  
2                   to the Commission that it will cease oper-  
3                   ations.

4                   (6) SECRETARY.—The term “Secretary” means  
5                   the Secretary of Commerce, acting through the As-  
6                   sistant Secretary of Commerce for Economic Devel-  
7                   opment.

8                   (b) ESTABLISHMENT.—Not later than 180 days after  
9                   the date of enactment of this Act, the Secretary shall es-  
10                  tablish a grant program to provide grants to eligible re-  
11                  ipients—

12                  (1) to assist with economic development in nu-  
13                  clear closure communities; and

14                  (2) to fund community advisory boards in nu-  
15                  clear closure communities.

16                  (c) REQUIREMENT.—In carrying out this section, to  
17                  the maximum extent practicable, the Secretary shall im-  
18                  plement the recommendations described in the report sub-  
19                  mitted to Congress under section 108 of the Nuclear En-  
20                  ergy Innovation and Modernization Act (Public Law 115–  
21                  439; 132 Stat. 5577) entitled “Best Practices for Estab-  
22                  lishment and Operation of Local Community Advisory  
23                  Boards Associated with Decommissioning Activities at  
24                  Nuclear Power Plants”.

1 (d) DISTRIBUTION OF FUNDS.—The Secretary shall  
2 establish a formula to ensure, to the maximum extent  
3 practicable, geographic diversity among grant recipients  
4 under this section.

5 (e) AUTHORIZATION OF APPROPRIATIONS.—

6 (1) IN GENERAL.—There are authorized to be  
7 appropriated to the Secretary—

8 (A) to carry out subsection (b)(1),  
9 \$35,000,000 for each of fiscal years 2023  
10 through 2028; and

11 (B) to carry out subsection (b)(2),  
12 \$5,000,000 for each of fiscal years 2023  
13 through 2025.

14 (2) AVAILABILITY.—Amounts made available  
15 under this section shall remain available for a period  
16 of 5 years beginning on the date on which the  
17 amounts are made available.

18 (3) NO OFFSET.—None of the funds made  
19 available under this section may be used to offset  
20 the funding for any other Federal program.

21 **SEC. 602. TECHNICAL CORRECTION.**

22 Section 104 e. of the Atomic Energy Act of 1954 (42  
23 U.S.C. 2134(e)) is amended—

24 (1) by striking the third sentence and inserting  
25 the following:



1           “(3) LIMITATION ON UTILIZATION FACILI-  
 2           TIES.—The Commission may issue a license under  
 3           this section for a utilization facility useful in the  
 4           conduct of research and development activities of the  
 5           types specified in section 31 if—

6                   “(A) not more than 75 percent of the an-  
 7                   nual costs to the licensee of owning and oper-  
 8                   ating the facility are devoted to the sale, other  
 9                   than for research and development or education  
 10                  and training, of—

11                           “(i) nonenergy services;

12                           “(ii) energy; or

13                           “(iii) a combination of nonenergy  
 14                           services and energy; and

15                   “(B) not more than 50 percent of the an-  
 16                   nual costs to the licensee of owning and oper-  
 17                   ating the facility are devoted to the sale of en-  
 18                   ergy.”;

19           (2) in the second sentence, by striking “The  
 20           Commission” and inserting the following:

21                   “(2) REGULATION.—The Commission”; and

22           (3) by striking “c. The Commission” and in-  
 23           serting the following:

24           “c. RESEARCH AND DEVELOPMENT ACTIVITIES.—

1           “~~(1) IN GENERAL.—~~Subject to paragraphs ~~(2)~~  
2           and ~~(3)~~, the Commission”.

3   **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4           (a) *SHORT TITLE.*—*This Act may be cited as the “Ac-*  
5           *celerating Deployment of Versatile, Advanced Nuclear for*  
6           *Clean Energy Act of 2023” or the “ADVANCE Act of*  
7           *2023”.*

8           (b) *TABLE OF CONTENTS.*—*The table of contents for*  
9           *this Act is as follows:*

*Sec. 1. Short title; table of contents.*

*Sec. 2. Definitions.*

*TITLE I—AMERICAN NUCLEAR LEADERSHIP*

*Sec. 101. International nuclear reactor export and innovation activities.*

*Sec. 102. Denial of certain domestic licenses for national security purposes.*

*Sec. 103. Export license requirements.*

*Sec. 104. Coordinated international engagement.*

*TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR  
TECHNOLOGIES*

*Sec. 201. Fees for advanced nuclear reactor application review.*

*Sec. 202. Advanced nuclear reactor prizes.*

*Sec. 203. Report on unique licensing considerations relating to the use of nuclear  
energy for nonelectric applications.*

*Sec. 204. Enabling preparations for the demonstration of advanced nuclear reac-  
tors on Department of Energy sites or critical national security  
infrastructure sites.*

*Sec. 205. Clarification on fusion regulation.*

*Sec. 206. Regulatory issues for nuclear facilities at brownfield sites.*

*Sec. 207. Appalachian Regional Commission nuclear energy development.*

*TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION*

*Sec. 301. Investment by allies.*

*Sec. 302. Extension of the Price-Anderson Act.*

*TITLE IV—NUCLEAR FUEL CYCLE, SUPPLY CHAIN,  
INFRASTRUCTURE, AND WORKFORCE*

*Sec. 401. Report on advanced methods of manufacturing and construction for nu-  
clear energy applications.*

*Sec. 402. Nuclear energy traineeship.*

Sec. 403. *Report on Commission readiness and capacity to license additional conversion and enrichment capacity to reduce reliance on uranium from Russia.*

Sec. 404. *Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.*

Sec. 405. *Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.*

Sec. 406. *Development, qualification, and licensing of advanced nuclear fuel concepts.*

**TITLE V—IMPROVING COMMISSION EFFICIENCY**

Sec. 501. *Commission workforce.*

Sec. 502. *Commission corporate support funding.*

Sec. 503. *Performance and reporting update.*

**TITLE VI—MISCELLANEOUS**

Sec. 601. *Nuclear closure communities.*

Sec. 602. *Technical correction.*

Sec. 603. *Report on engagement with the Government of Canada with respect to nuclear waste issues in the Great Lakes Basin.*

**1 SEC. 2. DEFINITIONS.**

2 *In this Act:*

3 (1) *ACCIDENT TOLERANT FUEL.*—*The term “ac-*  
 4 *cident tolerant fuel” has the meaning given the term*  
 5 *in section 107(a) of the Nuclear Energy Innovation*  
 6 *and Modernization Act (Public Law 115–439; 132*  
 7 *Stat. 5577).*

8 (2) *ADMINISTRATOR.*—*The term “Adminis-*  
 9 *trator” means the Administrator of the Environ-*  
 10 *mental Protection Agency.*

11 (3) *ADVANCED NUCLEAR FUEL.*—*The term “ad-*  
 12 *vanced nuclear fuel” means—*

13 (A) *advanced nuclear reactor fuel; and*

14 (B) *accident tolerant fuel.*

1           (4) *ADVANCED NUCLEAR REACTOR.*—*The term*  
2           *“advanced nuclear reactor” has the meaning given the*  
3           *term in section 3 of the Nuclear Energy Innovation*  
4           *and Modernization Act (42 U.S.C. 2215 note; Public*  
5           *Law 115–439).*

6           (5) *ADVANCED NUCLEAR REACTOR FUEL.*—*The*  
7           *term “advanced nuclear reactor fuel” has the meaning*  
8           *given the term in section 3 of the Nuclear Energy In-*  
9           *novation and Modernization Act (42 U.S.C. 2215*  
10           *note; Public Law 115–439).*

11           (6) *APPROPRIATE COMMITTEES OF CONGRESS.*—  
12           *The term “appropriate committees of Congress”*  
13           *means—*

14                   (A) *the Committee on Environment and*  
15                   *Public Works of the Senate; and*

16                   (B) *the Committee on Energy and Com-*  
17                   *merce of the House of Representatives.*

18           (7) *COMMISSION.*—*The term “Commission”*  
19           *means the Nuclear Regulatory Commission.*

20           (8) *INSTITUTION OF HIGHER EDUCATION.*—*The*  
21           *term “institution of higher education” has the mean-*  
22           *ing given the term in section 101(a) of the Higher*  
23           *Education Act of 1965 (20 U.S.C. 1001(a)).*

24           (9) *NATIONAL LABORATORY.*—*The term “Na-*  
25           *tional Laboratory” has the meaning given the term in*

1        *section 2 of the Energy Policy Act of 2005 (42 U.S.C.*  
2        *15801).*

3        ***TITLE I—AMERICAN NUCLEAR***  
4        ***LEADERSHIP***

5        ***SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT***  
6        ***AND INNOVATION ACTIVITIES.***

7        *(a) COORDINATION.—*

8            *(1) IN GENERAL.—The Commission shall—*

9                    *(A) coordinate all work of the Commission*  
10                   *relating to—*

11                            *(i) nuclear reactor import and export*  
12                            *licensing; and*

13                            *(ii) international regulatory coopera-*  
14                            *tion and assistance relating to nuclear reac-*  
15                            *tors, including with countries that are*  
16                            *members of—*

17                                    *(I) the Organisation for Economic*  
18                                    *Co-operation and Development; or*

19                                    *(II) the Nuclear Energy Agency;*  
20                                    *and*

21                            *(B) support interagency and international*  
22                            *coordination with respect to—*

23                                    *(i) the consideration of international*  
24                                    *technical standards to establish the licensing*  
25                                    *and regulatory basis to assist the design,*

1                    *construction, and operation of nuclear sys-*  
2                    *tems;*

3                    *(ii) efforts to help build competent nu-*  
4                    *clear regulatory organizations and legal*  
5                    *frameworks in countries seeking to develop*  
6                    *nuclear power; and*

7                    *(iii) exchange programs and training*  
8                    *provided to other countries relating to nu-*  
9                    *clear regulation and oversight to improve*  
10                   *nuclear technology licensing, in accordance*  
11                   *with paragraph (2).*

12                   *(2) EXCHANGE PROGRAMS AND TRAINING.—With*  
13                   *respect to the exchange programs and training de-*  
14                   *scribed in paragraph (1)(B)(iii), the Commission*  
15                   *shall coordinate, as applicable, with—*

16                   *(A) the Secretary of Energy;*

17                   *(B) National Laboratories;*

18                   *(C) the private sector; and*

19                   *(D) institutions of higher education.*

20                   *(b) AUTHORITY TO ESTABLISH BRANCH.—The Com-*  
21                   *mission may establish within the Office of International*  
22                   *Programs a branch, to be known as the “International Nu-*  
23                   *clear Reactor Export and Innovation Branch”, to carry out*  
24                   *such international nuclear reactor export and innovation*

1 *activities as the Commission determines to be appropriate*  
2 *and within the mission of the Commission.*

3 (c) *EXCLUSION OF INTERNATIONAL ACTIVITIES FROM*  
4 *THE FEE BASE.—*

5 (1) *IN GENERAL.—Section 102 of the Nuclear*  
6 *Energy Innovation and Modernization Act (42 U.S.C.*  
7 *2215) is amended—*

8 (A) *in subsection (a), by adding at the end*  
9 *the following:*

10 “(4) *INTERNATIONAL NUCLEAR REACTOR EXPORT*  
11 *AND INNOVATION ACTIVITIES.—The Commission shall*  
12 *identify in the annual budget justification inter-*  
13 *national nuclear reactor export and innovation ac-*  
14 *tivities described in section 101(a) of the ADVANCE*  
15 *Act of 2023.”; and*

16 (B) *in subsection (b)(1)(B), by adding at*  
17 *the end the following:*

18 “(iv) *Costs for international nuclear*  
19 *reactor export and innovation activities de-*  
20 *scribed in section 101(a) of the ADVANCE*  
21 *Act of 2023.”.*

22 (2) *EFFECTIVE DATE.—The amendments made*  
23 *by paragraph (1) shall take effect on October 1, 2024.*

1       (d) *SAVINGS CLAUSE.*—*Nothing in this section alters*  
2 *the authority of the Commission to license and regulate the*  
3 *civilian use of radioactive materials.*

4 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**  
5 **NATIONAL SECURITY PURPOSES.**

6       (a) *DEFINITION OF COVERED FUEL.*—*In this section,*  
7 *the term “covered fuel” means enriched uranium that is*  
8 *fabricated into fuel assemblies for nuclear reactors by an*  
9 *entity that—*

10           (1) *is owned or controlled by the Government of*  
11 *the Russian Federation or the Government of the Peo-*  
12 *ple’s Republic of China; or*

13           (2) *is organized under the laws of, or otherwise*  
14 *subject to the jurisdiction of, the Russian Federation*  
15 *or the People’s Republic of China.*

16       (b) *PROHIBITION ON UNLICENSED POSSESSION OR*  
17 *OWNERSHIP OF COVERED FUEL.*—*Unless specifically au-*  
18 *thorized by the Commission in a license issued under sec-*  
19 *tion 53 of the Atomic Energy Act of 1954 (42 U.S.C. 2073)*  
20 *and part 70 of title 10, Code of Federal Regulations (or*  
21 *successor regulations), no person subject to the jurisdiction*  
22 *of the Commission may possess or own covered fuel.*

23       (c) *LICENSE TO POSSESS OR OWN COVERED FUEL.*—

24           (1) *CONSULTATION REQUIRED PRIOR TO*  
25 *ISSUANCE.*—*The Commission shall not issue a license*



1        *to possess or own covered fuel under section 53 of the*  
2        *Atomic Energy Act of 1954 (42 U.S.C. 2073) and*  
3        *part 70 of title 10, Code of Federal Regulations (or*  
4        *successor regulations), unless the Commission has first*  
5        *consulted with the Secretary of Energy and the Sec-*  
6        *retary of State before issuing the license.*

7            (2) *PROHIBITION ON ISSUANCE OF LICENSE.—*

8            (A) *IN GENERAL.—Subject to subparagraph*  
9            *(C), a license to possess or own covered fuel shall*  
10           *not be issued if the Secretary of Energy and the*  
11           *Secretary of State make the determination de-*  
12           *scribed in subparagraph (B).*

13           (B) *DETERMINATION.—*

14           (i) *IN GENERAL.—The determination*  
15           *referred to in subparagraph (A) is a deter-*  
16           *mination that possession or ownership, as*  
17           *applicable, of covered fuel poses a threat to*  
18           *the national security of the United States*  
19           *that adversely impacts the physical and eco-*  
20           *nomics security of the United States.*

21           (ii) *JOINT DETERMINATION.—A deter-*  
22           *mination described in clause (i) shall be*  
23           *jointly made by the Secretary of Energy*  
24           *and the Secretary of State.*

25           (iii) *TIMELINE.—*

1                   (I) *NOTICE OF APPLICATION.*—Not  
2                   later than 30 days after the date on  
3                   which the Commission receives an ap-  
4                   plication for a license to possess or  
5                   own covered fuel, the Commission shall  
6                   notify the Secretary of Energy and the  
7                   Secretary of State of the application.

8                   (II) *DETERMINATION.*—The Sec-  
9                   retary of Energy and the Secretary of  
10                  State shall have a period of 180 days,  
11                  beginning on the date on which the  
12                  Commission notifies the Secretary of  
13                  Energy and the Secretary of State  
14                  under subclause (I) of an application  
15                  for a license to possess or own covered  
16                  fuel, in which to make the determina-  
17                  tion described in clause (i).

18                  (III) *COMMISSION NOTIFICA-*  
19                  *TION.*—On making the determination  
20                  described in clause (i), the Secretary of  
21                  Energy and the Secretary of State  
22                  shall immediately notify the Commis-  
23                  sion.

24                  (IV) *CONGRESSIONAL NOTIFICA-*  
25                  *TION.*—Not later than 30 days after

1           *the date on which the Secretary of En-*  
2           *ergy and the Secretary of State notify*  
3           *the Commission under subclause (III),*  
4           *the Commission shall notify the appro-*  
5           *priate committees of Congress of the*  
6           *determination.*

7                   (V) *PUBLIC NOTICE.*—*Not later*  
8           *than 15 days after the date on which*  
9           *the Commission notifies Congress*  
10          *under subclause (IV) of a determina-*  
11          *tion made under clause (i), the Com-*  
12          *mission shall make that determination*  
13          *publicly available.*

14                   (C) *EFFECT OF NO DETERMINATION.*—*The*  
15          *prohibition described in subparagraph (A) shall*  
16          *not apply if the Secretary of Energy and the*  
17          *Secretary of State do not make the determina-*  
18          *tion described in subparagraph (B) by the date*  
19          *described in clause (iii)(II) of that subpara-*  
20          *graph.*

21           (d) *SAVINGS CLAUSE.*—*Nothing in this section alters*  
22          *any treaty or international agreement in effect on the date*  
23          *of enactment of this Act.*

1 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

2 (a) *DEFINITION OF LOW-ENRICHED URANIUM.*—In  
3 this section, the term “low-enriched uranium” means ura-  
4 nium enriched to less than 20 percent of the uranium-235  
5 isotope.

6 (b) *REQUIREMENT.*—The Commission shall not issue  
7 an export license for the transfer of any item described in  
8 subsection (d) to a country described in subsection (c) unless  
9 the Commission makes a determination that such transfer  
10 will not be inimical to the common defense and security  
11 of the United States.

12 (c) *COUNTRIES DESCRIBED.*—A country referred to in  
13 subsection (b) is a country that—

14 (1) has not concluded and ratified an Additional  
15 Protocol to its safeguards agreement with the Inter-  
16 national Atomic Energy Agency; or

17 (2) has not ratified or acceded to the amendment  
18 to the Convention on the Physical Protection of Nu-  
19 clear Material, adopted at Vienna October 26, 1979,  
20 and opened for signature at New York March 3, 1980  
21 (TIAS 11080), described in the information circular  
22 of the International Atomic Energy Agency numbered  
23 INFCIRC/274/Rev.1/Mod.1 and dated May 9, 2016  
24 (TIAS 16–508).

25 (d) *ITEMS DESCRIBED.*—An item referred to in sub-  
26 section (b) includes—

1           (1) *unirradiated nuclear fuel containing special*  
 2           *nuclear material (as defined in section 11 of the*  
 3           *Atomic Energy Act of 1954 (42 U.S.C. 2014)), exclud-*  
 4           *ing low-enriched uranium;*

5           (2) *a nuclear reactor that uses nuclear fuel de-*  
 6           *scribed in paragraph (1); and*

7           (3) *any plant or component listed in Appendix*  
 8           *I to part 110 of title 10, Code of Federal Regulations*  
 9           *(or successor regulations), that is involved in—*

10                   (A) *the reprocessing of irradiated nuclear*  
 11                   *reactor fuel elements;*

12                   (B) *the separation of plutonium; or*

13                   (C) *the separation of the uranium-233 iso-*  
 14                   *tope.*

15           (e) *NOTIFICATION.—If the Commission makes a deter-*  
 16           *mination under subsection (b) that the transfer of any item*  
 17           *described in subsection (d) to a country described in sub-*  
 18           *section (c) will not be inimical to the common defense and*  
 19           *security of the United States, the Commission shall notify*  
 20           *the appropriate committees of Congress.*

21   **SEC. 104. COORDINATED INTERNATIONAL ENGAGEMENT.**

22           (a) *DEFINITIONS.—In this section:*

23                   (1) *EMBARKING CIVIL NUCLEAR NATION.—*

24                           (A) *IN GENERAL.—The term “embarking*  
 25                           *civil nuclear nation” means a country that—*

1                   (i) does not have a civil nuclear pro-  
2                   gram;

3                   (ii) is in the process of developing or  
4                   expanding a civil nuclear program, includ-  
5                   ing safeguards and a legal and regulatory  
6                   framework; or

7                   (iii) is in the process of selecting, de-  
8                   veloping, constructing, or utilizing an ad-  
9                   vanced nuclear reactor or advanced civil  
10                  nuclear technologies.

11                  (B) *EXCLUSIONS.*—The term “embarking  
12                  civil nuclear nation” does not include—

13                   (i) the People’s Republic of China;

14                   (ii) the Russian Federation;

15                   (iii) the Republic of Belarus;

16                   (iv) the Islamic Republic of Iran;

17                   (v) the Democratic People’s Republic of  
18                  Korea;

19                   (vi) the Republic of Cuba;

20                   (vii) the Bolivarian Republic of Ven-  
21                  ezuela;

22                   (viii) the Syrian Arab Republic;

23                   (ix) Burma; or

24                   (x) any other country—

1           (I) *the property or interests in*  
2           *property of the government of which*  
3           *are blocked pursuant to the Inter-*  
4           *national Emergency Economic Powers*  
5           *Act (50 U.S.C. 1701 et seq.); or*

6           (II) *the government of which the*  
7           *Secretary of State has determined has*  
8           *repeatedly provided support for acts of*  
9           *international terrorism for purposes*  
10          *of—*

11                   (aa) *section 620A(a) of the*  
12                   *Foreign Assistance Act of 1961*  
13                   *(22 U.S.C. 2371(a));*

14                   (bb) *section 40(d) of the*  
15                   *Arms Export Control Act (22*  
16                   *U.S.C. 2780(d));*

17                   (cc) *section 1754(c)(1)(A)(i)*  
18                   *of the Export Control Reform Act*  
19                   *of 2018 (50 U.S.C.*  
20                   *4813(c)(1)(A)(i)); or*

21                   (dd) *any other relevant pro-*  
22                   *vision of law.*

23           (2) *SECRETARIES.—The term “Secretaries”*  
24           *means the Secretary of Commerce and the Secretary*  
25           *of Energy, acting—*

- 1                   (A) *in consultation with each other; and*  
2                   (B) *in coordination with—*  
3                         (i) *the Secretary of State;*  
4                         (ii) *the Commission;*  
5                         (iii) *the Secretary of the Treasury;*  
6                         (iv) *the President of the Export-Import*  
7                   *Bank of the United States; and*  
8                         (v) *officials of other Federal agencies,*  
9                   *as the Secretary of Commerce determines to*  
10                   *be appropriate.*

11                   (3) *U.S. NUCLEAR ENERGY COMPANY.—The term*  
12                   *“U.S. nuclear energy company” means a company*  
13                   *that—*

14                         (A) *is organized under the laws of, or other-*  
15                         *wise subject to the jurisdiction of, the United*  
16                         *States; and*

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

19                   (b) *INTERNATIONAL CIVIL NUCLEAR MODERNIZATION*  
20                   *INITIATIVE.—*

21                         (1) *IN GENERAL.—The Secretaries shall establish*  
22                         *and carry out, in accordance with applicable nuclear*  
23                         *technology export laws (including regulations), an*  
24                         *international initiative to modernize civil nuclear*  
25                         *outreach to embarking civil nuclear nations.*



1           (2) *ACTIVITIES.*—*In carrying out the initiative*  
2 *described in paragraph (1)—*

3           (A) *the Secretary of Commerce shall—*

4               (i) *expand outreach by the Executive*  
5 *Branch to the private investment commu-*  
6 *nity to create public-private financing rela-*  
7 *tionships to assist in the export of civil nu-*  
8 *clear technology to embarking civil nuclear*  
9 *nations;*

10              (ii) *seek to coordinate, to the max-*  
11 *imum extent practicable, the work carried*  
12 *out by each of—*

13                   (I) *the Commission;*

14                   (II) *the Department of Energy;*

15                   (III) *the Department of State;*

16                   (IV) *the Nuclear Energy Agency;*

17                   (V) *the International Atomic En-*  
18 *ergy Agency; and*

19                   (VI) *other agencies, as the Sec-*  
20 *retary of Commerce determines to be*  
21 *appropriate; and*

22              (iii) *improve the regulatory framework*  
23 *to allow for the efficient and expeditious ex-*  
24 *porting and importing of items under the*

1 *jurisdiction of the Secretary of Commerce;*

2 *and*

3 *(B) the Secretary of Energy shall—*

4 *(i) assist nongovernmental organiza-*  
5 *tions and appropriate offices, administra-*  
6 *tions, agencies, laboratories, and programs*  
7 *of the Federal Government in providing*  
8 *education and training to foreign govern-*  
9 *ments in nuclear safety, security, and safe-*  
10 *guards—*

11 *(I) through engagement with the*  
12 *International Atomic Energy Agency;*  
13 *or*

14 *(II) independently, if the applica-*  
15 *ble nongovernmental organization, of-*  
16 *fice, administration, agency, labora-*  
17 *tory, or program determines that it*  
18 *would be more advantageous under the*  
19 *circumstances to provide the applicable*  
20 *education and training independently;*

21 *(ii) assist the efforts of the Inter-*  
22 *national Atomic Energy Agency to expand*  
23 *the support provided by the International*  
24 *Atomic Energy Agency to embarking civil*

1                    *nuclear nations for nuclear safety, security,*  
 2                    *and safeguards; and*

3                    *(iii) assist U.S. nuclear energy compa-*  
 4                    *nies to integrate security and safeguards by*  
 5                    *design in international outreach carried out*  
 6                    *by those U.S. nuclear energy companies.*

7            *(c) REPORT.—Not later than 2 years after the date of*  
 8            *enactment of this Act, the Secretary of Commerce, in con-*  
 9            *sultation with the Secretary of Energy, shall submit to Con-*  
 10           *gress a report describing the activities carried out under*  
 11           *this section.*

12            **TITLE II—DEVELOPING AND DE-**  
 13            **PLOYING NEW NUCLEAR**  
 14            **TECHNOLOGIES**

15            **SEC. 201. FEES FOR ADVANCED NUCLEAR REACTOR APPLI-**  
 16            **CATION REVIEW.**

17            *(a) DEFINITIONS.—Section 3 of the Nuclear Energy*  
 18            *Innovation and Modernization Act (42 U.S.C. 2215 note;*  
 19            *Public Law 115–439) is amended—*

20                    *(1) by redesignating paragraphs (2) through (15)*  
 21                    *as paragraphs (3), (6), (7), (8), (9), (10), (12), (15),*  
 22                    *(16), (17), (18), (19), (20), and (21), respectively;*

23                    *(2) by inserting after paragraph (1) the fol-*  
 24                    *lowing:*

1           “(2) *ADVANCED NUCLEAR REACTOR APPLI-*  
2           *CANT.—The term ‘advanced nuclear reactor appli-*  
3           *cant’ means an entity that has submitted to the Com-*  
4           *mission an application to receive a license for an ad-*  
5           *vanced nuclear reactor under the Atomic Energy Act*  
6           *of 1954 (42 U.S.C. 2011 et seq.).”;*

7           (3) *by inserting after paragraph (3) (as so red-*  
8           *esignated) the following:*

9           “(4) *ADVANCED NUCLEAR REACTOR PRE-APPLI-*  
10           *CANT.—The term ‘advanced nuclear reactor pre-appli-*  
11           *cant’ means an entity that has submitted to the Com-*  
12           *mission a licensing project plan for the purposes of*  
13           *submitting a future application to receive a license*  
14           *for an advanced nuclear reactor under the Atomic*  
15           *Energy Act of 1954 (42 U.S.C. 2011 et seq.).*

16           “(5) *AGENCY SUPPORT.—The term ‘agency sup-*  
17           *port’ means the resources of the Commission that are*  
18           *located in executive, administrative, and other sup-*  
19           *port offices of the Commission, as described in the*  
20           *document of the Commission entitled ‘FY 2022 Final*  
21           *Fee Rule Work Papers’ (or a successor document).”;*

22           (4) *by inserting after paragraph (10) (as so re-*  
23           *designated) the following:*

24           “(11) *HOURLY RATE FOR MISSION-DIRECT PRO-*  
25           *GRAM SALARIES AND BENEFITS FOR THE NUCLEAR*

1        *REACTOR SAFETY PROGRAM.—The term ‘hourly rate*  
 2        *for mission-direct program salaries and benefits for*  
 3        *the Nuclear Reactor Safety Program’ means the*  
 4        *quotient obtained by dividing—*

5                *“(A) the full-time equivalent rate (within*  
 6                *the meaning of the document of the Commission*  
 7                *entitled ‘FY 2022 Final Fee Rule Work Papers’*  
 8                *(or a successor document)) for mission-direct*  
 9                *program salaries and benefits for the Nuclear*  
 10                *Reactor Safety Program (as determined by the*  
 11                *Commission) for a fiscal year; by*

12                *“(B) the productive hours assumption for*  
 13                *that fiscal year, determined in accordance with*  
 14                *the formula established in the document referred*  
 15                *to in subparagraph (A) (or a successor docu-*  
 16                *ment).”;* and

17                *(5) by inserting after paragraph (12) (as so re-*  
 18                *designated) the following:*

19                *“(13) MISSION-DIRECT PROGRAM SALARIES AND*  
 20                *BENEFITS FOR THE NUCLEAR REACTOR SAFETY PRO-*  
 21                *GRAM.—The term ‘mission-direct program salaries*  
 22                *and benefits for the Nuclear Reactor Safety Program’*  
 23                *means the resources of the Commission that are allo-*  
 24                *cated to the Nuclear Reactor Safety Program (as de-*  
 25                *termined by the Commission) to perform core work*

1        *activities committed to fulfilling the mission of the*  
2        *Commission, as described in the document of the*  
3        *Commission entitled ‘FY 2022 Final Fee Rule Work*  
4        *Papers’ (or a successor document).*

5                *“(14) MISSION-INDIRECT PROGRAM SUPPORT.—*  
6        *The term ‘mission-indirect program support’ means*  
7        *the resources of the Commission that support the core*  
8        *mission-direct activities for the Nuclear Reactor Safe-*  
9        *ty Program of the Commission (as determined by the*  
10        *Commission), as described in the document of the*  
11        *Commission entitled ‘FY 2022 Final Fee Rule Work*  
12        *Papers’ (or a successor document).”.*

13        *(b) EXCLUDED ACTIVITIES.—Section 102(b)(1)(B) of*  
14        *the Nuclear Energy Innovation and Modernization Act (42*  
15        *U.S.C. 2215(b)(1)(B)) (as amended by section 101(c)(1)(B))*  
16        *is amended by adding at the end the following:*

17                *“(v) The total costs of mission-indirect*  
18                *program support and agency support that,*  
19                *under paragraph (2)(B), may not be in-*  
20                *cluded in the hourly rate charged for fees*  
21                *assessed to advanced nuclear reactor appli-*  
22                *cants.*

23                *“(vi) The total costs of mission-indirect*  
24                *program support and agency support that,*  
25                *under paragraph (2)(C), may not be in-*

1                   cluded in the hourly rate charged for fees  
2                   assessed to advanced nuclear reactor pre-ap-  
3                   plicants.”.

4           (c) *FEES FOR SERVICE OR THING OF VALUE.*—Section  
5 102(b) of the Nuclear Energy Innovation and Moderniza-  
6 tion Act (42 U.S.C. 2215(b)) is amended by striking para-  
7 graph (2) and inserting the following:

8                   “(2) *FEES FOR SERVICE OR THING OF VALUE.*—

9                   “(A) *IN GENERAL.*—In accordance with sec-  
10 tion 9701 of title 31, United States Code, the  
11 Commission shall assess and collect fees from  
12 any person who receives a service or thing of  
13 value from the Commission to cover the costs to  
14 the Commission of providing the service or thing  
15 of value.

16                   “(B) *ADVANCED NUCLEAR REACTOR APPLI-*  
17 *CANTS.*—The hourly rate charged for fees assessed  
18 to advanced nuclear reactor applicants under  
19 this paragraph relating to the review of a sub-  
20 mitted application described in section 3(1) shall  
21 not exceed the hourly rate for mission-direct pro-  
22 gram salaries and benefits for the Nuclear Reac-  
23 tor Safety Program.

24                   “(C) *ADVANCED NUCLEAR REACTOR PRE-AP-*  
25 *PLICANTS.*—The hourly rate charged for fees as-

1           *essed to advanced nuclear reactor pre-applicants*  
 2           *under this paragraph relating to the review of*  
 3           *submitted materials as described in the licensing*  
 4           *project plan of an advanced nuclear reactor pre-*  
 5           *applicant shall not exceed the hourly rate for*  
 6           *mission-direct program salaries and benefits for*  
 7           *the Nuclear Reactor Safety Program.”.*

8           *(d) SUNSET.—Section 102 of the Nuclear Energy In-*  
 9           *novation and Modernization Act (42 U.S.C. 2215) is*  
 10          *amended by adding at the end the following:*

11           *“(g) CESSATION OF EFFECTIVENESS.—Paragraphs*  
 12          *(1)(B)(vi) and (2)(C) of subsection (b) shall cease to be effec-*  
 13          *tive on September 30, 2029.”.*

14           *(e) EFFECTIVE DATE.—The amendments made by this*  
 15          *section shall take effect on October 1, 2024.*

16          **SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.**

17           *Section 103 of the Nuclear Energy Innovation and*  
 18          *Modernization Act (Public Law 115–439; 132 Stat. 5571)*  
 19          *is amended by adding at the end the following:*

20           *“(f) PRIZES FOR ADVANCED NUCLEAR REACTOR LI-*  
 21          *CENSING.—*

22           *“(1) DEFINITION OF ELIGIBLE ENTITY.—In this*  
 23          *subsection, the term ‘eligible entity’ means—*

24                           *“(A) a non-Federal entity; and*

25                           *“(B) the Tennessee Valley Authority.*



1           “(2) *PRIZE FOR ADVANCED NUCLEAR REACTOR*  
2           *LICENSING.—*

3                   “(A) *IN GENERAL.—Notwithstanding sec-*  
4                   *tion 169 of the Atomic Energy Act of 1954 (42*  
5                   *U.S.C. 2209) and subject to the availability of*  
6                   *appropriations, the Secretary is authorized to*  
7                   *make, with respect to each award category de-*  
8                   *scribed in subparagraph (C), an award in an*  
9                   *amount described in subparagraph (B) to the*  
10                   *first eligible entity—*

11                           “(i) *to which the Commission issues an*  
12                           *operating license for an advanced nuclear*  
13                           *reactor under part 50 of title 10, Code of*  
14                           *Federal Regulations (or successor regula-*  
15                           *tions), for which an application has not*  
16                           *been approved by the Commission as of the*  
17                           *date of enactment of this subsection; or*

18                           “(ii) *for which the Commission makes*  
19                           *a finding described in section 52.103(g) of*  
20                           *title 10, Code of Federal Regulations (or*  
21                           *successor regulations), with respect to a*  
22                           *combined license for an advanced nuclear*  
23                           *reactor—*

1                   “(I) that is issued under subpart  
2                   C of part 52 of that title (or successor  
3                   regulations); and

4                   “(II) for which an application  
5                   has not been approved by the Commis-  
6                   sion as of the date of enactment of this  
7                   subsection.

8                   “(B) AMOUNT OF AWARD.—An award under  
9                   subparagraph (A) shall be in an amount equal  
10                  to the total amount assessed by the Commission  
11                  and collected under section 102(b)(2) from the el-  
12                  igible entity receiving the award for costs relat-  
13                  ing to the issuance of the license described in  
14                  that subparagraph, including, as applicable,  
15                  costs relating to the issuance of an associated  
16                  construction permit described in section 50.23 of  
17                  title 10, Code of Federal Regulations (or suc-  
18                  cessor regulations), or early site permit (as de-  
19                  fined in section 52.1 of that title (or successor  
20                  regulations)).

21                  “(C) AWARD CATEGORIES.—An award  
22                  under subparagraph (A) may be made for—

23                         “(i) the first advanced nuclear reactor  
24                         for which the Commission—

1                   “(I) issues a license in accordance  
2                   with clause (i) of subparagraph (A); or

3                   “(II) makes a finding in accord-  
4                   ance with clause (ii) of that subpara-  
5                   graph;

6                   “(ii) an advanced nuclear reactor  
7                   that—

8                   “(I) uses isotopes derived from  
9                   spent nuclear fuel (as defined in sec-  
10                  tion 2 of the Nuclear Waste Policy Act  
11                  of 1982 (42 U.S.C. 10101)) or depleted  
12                  uranium as fuel for the advanced nu-  
13                  clear reactor; and

14                  “(II) is the first advanced nuclear  
15                  reactor described in subclause (I) for  
16                  which the Commission—

17                   “(aa) issues a license in ac-  
18                   cordance with clause (i) of sub-  
19                   paragraph (A); or

20                   “(bb) makes a finding in ac-  
21                   cordance with clause (ii) of that  
22                   subparagraph;

23                   “(iii) an advanced nuclear reactor  
24                   that—

1           “(I) is a nuclear integrated en-  
2           ergy system—

3                   “(aa) that is composed of 2  
4                   or more co-located or jointly oper-  
5                   ated subsystems of energy genera-  
6                   tion, energy storage, or other tech-  
7                   nologies;

8                   “(bb) in which not fewer  
9                   than 1 subsystem described in  
10                  item (aa) is a nuclear energy sys-  
11                  tem; and

12                  “(cc) the purpose of which  
13                  is—

14                           “(AA) to reduce green-  
15                           house gas emissions in both  
16                           the power and nonpower sec-  
17                           tors; and

18                           “(BB) to maximize en-  
19                           ergy production and effi-  
20                           ciency; and

21           “(II) is the first advanced nuclear  
22           reactor described in subclause (I) for  
23           which the Commission—

1                   “(aa) issues a license in ac-  
2 cordance with clause (i) of sub-  
3 paragraph (A); or

4                   “(bb) makes a finding in ac-  
5 cordance with clause (ii) of that  
6 subparagraph;

7                   “(iv) an advanced reactor that—

8                   “(I) operates flexibly to generate  
9 electricity or high temperature process  
10 heat for nonelectric applications; and

11                   “(II) is the first advanced nuclear  
12 reactor described in subclause (I) for  
13 which the Commission—

14                   “(aa) issues a license in ac-  
15 cordance with clause (i) of sub-  
16 paragraph (A); or

17                   “(bb) makes a finding in ac-  
18 cordance with clause (ii) of that  
19 subparagraph; and

20                   “(v) the first advanced nuclear reactor  
21 for which the Commission grants approval  
22 to load nuclear fuel pursuant to the tech-  
23 nology-inclusive regulatory framework es-  
24 tablished under subsection (a)(4).

25                   “(3) FEDERAL FUNDING LIMITATIONS.—

1           “(A) *EXCLUSION OF TVA FUNDS.*—*In this*  
2 *paragraph, the term ‘Federal funds’ does not in-*  
3 *clude funds received under the power program of*  
4 *the Tennessee Valley Authority.*

5           “(B) *LIMITATION ON AMOUNTS EX-*  
6 *PENDED.*—*An award under this subsection shall*  
7 *not exceed the total amount expended (excluding*  
8 *any expenditures made with Federal funds re-*  
9 *ceived for the applicable project and an amount*  
10 *equal to the minimum cost-share required under*  
11 *section 988 of the Energy Policy Act of 2005 (42*  
12 *U.S.C. 16352)) by the eligible entity receiving*  
13 *the award for licensing costs relating to the*  
14 *project for which the award is made.*

15           “(C) *REPAYMENT AND DIVIDENDS NOT RE-*  
16 *QUIRED.*—*Notwithstanding section 9104(a)(4) of*  
17 *title 31, United States Code, or any other provi-*  
18 *sion of law, an eligible entity that receives an*  
19 *award under this subsection shall not be re-*  
20 *quired—*

21                   “(i) *to repay that award or any part*  
22 *of that award; or*

23                   “(ii) *to pay a dividend, interest, or*  
24 *other similar payment based on the sum of*  
25 *that award.”.*

1 **SEC. 203. REPORT ON UNIQUE LICENSING CONSIDER-**  
2 **ATIONS RELATING TO THE USE OF NUCLEAR**  
3 **ENERGY FOR NONELECTRIC APPLICATIONS.**

4 (a) *IN GENERAL.*—Not later than 270 days after the  
5 date of enactment of this Act, the Commission shall submit  
6 to the appropriate committees of Congress a report (referred  
7 to in this section as the “report”) addressing any unique  
8 licensing issues or requirements relating to—

9 (1) *the flexible operation of nuclear reactors,*  
10 *such as ramping power output and switching between*  
11 *electricity generation and nonelectric applications;*

12 (2) *the use of advanced nuclear reactors exclu-*  
13 *sively for nonelectric applications; and*

14 (3) *the colocation of nuclear reactors with indus-*  
15 *trial plants or other facilities.*

16 (b) *STAKEHOLDER INPUT.*—In developing the report,  
17 the Commission shall seek input from—

18 (1) *the Secretary of Energy;*

19 (2) *the nuclear energy industry;*

20 (3) *technology developers;*

21 (4) *the industrial, chemical, and medical sectors;*

22 (5) *nongovernmental organizations; and*

23 (6) *other public stakeholders.*

24 (c) *CONTENTS.*—

25 (1) *IN GENERAL.*—The report shall describe—

1           (A) any unique licensing issues or require-  
2           ments relating to the matters described in para-  
3           graphs (1) through (3) of subsection (a), includ-  
4           ing, with respect to the nonelectric applications  
5           referred to in paragraphs (1) and (2) of that  
6           subsection, any licensing issues or requirements  
7           relating to the use of nuclear energy in—

8                   (i) hydrogen or other liquid and gas-  
9                   eous fuel or chemical production;

10                   (ii) water desalination and wastewater  
11                   treatment;

12                   (iii) heat for industrial processes;

13                   (iv) district heating;

14                   (v) energy storage;

15                   (vi) industrial or medical isotope pro-  
16                   duction; and

17                   (vii) other applications, as identified  
18                   by the Commission;

19           (B) options for addressing those issues or  
20           requirements—

21                   (i) within the existing regulatory  
22                   framework of the Commission;

23                   (ii) as part of the technology-inclusive  
24                   regulatory framework required under sub-  
25                   section (a)(4) of section 103 of the Nuclear



1           *Energy Innovation and Modernization Act*  
 2           *(42 U.S.C. 2133 note; Public Law 115–439)*  
 3           *or described in the report required under*  
 4           *subsection (e) of that section (Public Law*  
 5           *115–439; 132 Stat. 5575); or*

6                     *(iii) through a new rulemaking; and*  
 7                     *(C) the extent to which Commission action*  
 8           *is needed to implement any matter described in*  
 9           *the report.*

10           (2) *COST ESTIMATES, BUDGETS, AND TIME-*  
 11           *FRAMES.—The report shall include cost estimates,*  
 12           *proposed budgets, and proposed timeframes for imple-*  
 13           *menting risk-informed and performance-based regu-*  
 14           *latory guidance in the licensing of nuclear reactors*  
 15           *for nonelectric applications.*

16 **SEC. 204. ENABLING PREPARATIONS FOR THE DEMONSTRA-**  
 17                     **TION OF ADVANCED NUCLEAR REACTORS ON**  
 18                     **DEPARTMENT OF ENERGY SITES OR CRITICAL**  
 19                     **NATIONAL SECURITY INFRASTRUCTURE**  
 20                     **SITES.**

21           (a) *IN GENERAL.—Section 102(b)(1)(B) of the Nuclear*  
 22           *Energy Innovation and Modernization Act (42 U.S.C.*  
 23           *2215(b)(1)(B)) (as amended by section 201(b)) is amended*  
 24           *by adding at the end the following:*

25                             “*(vi) Costs for—*

1           “(I) activities to review and ap-  
2           prove or disapprove an application for  
3           an early site permit (as defined in sec-  
4           tion 52.1 of title 10, Code of Federal  
5           Regulations (or a successor regula-  
6           tion)) to demonstrate an advanced nu-  
7           clear reactor on a Department of En-  
8           ergy site or critical national security  
9           infrastructure (as defined in section  
10          327(d) of the John S. McCain National  
11          Defense Authorization Act for Fiscal  
12          Year 2019 (Public Law 115–232; 132  
13          Stat. 1722)) site; and

14          “(II) pre-application activities re-  
15          lating to an early site permit (as de-  
16          fined in section 52.1 of title 10, Code  
17          of Federal Regulations (or a successor  
18          regulation)) to demonstrate an ad-  
19          vanced nuclear reactor on a Depart-  
20          ment of Energy site or critical na-  
21          tional security infrastructure (as de-  
22          fined in section 327(d) of the John S.  
23          McCain National Defense Authoriza-  
24          tion Act for Fiscal Year 2019 (Public  
25          Law 115–232; 132 Stat. 1722)) site.”.

1           (b) *EFFECTIVE DATE.*—*The amendment made by sub-*  
2 *section (a) shall take effect on October 1, 2024.*

3 **SEC. 205. CLARIFICATION ON FUSION REGULATION.**

4           *Section 103(a)(4) of the Nuclear Energy Innovation*  
5 *and Modernization Act (42 U.S.C. 2133 note; Public Law*  
6 *115–439) is amended—*

7           (1) *by striking “Not later” and inserting the fol-*  
8 *lowing:*

9                     *“(A) IN GENERAL.—Not later”;* and

10           (2) *by adding at the end the following:*

11                     *“(B) EXCLUSION OF FUSION REACTORS.—*  
12 *For purposes of subparagraph (A), the term ‘ad-*  
13 *vanced reactor applicant’ does not include an*  
14 *applicant seeking a license for a fusion reactor.”.*

15 **SEC. 206. REGULATORY ISSUES FOR NUCLEAR FACILITIES**  
16 **AT BROWNFIELD SITES.**

17           (a) *DEFINITIONS.*—

18           (1) *BROWNFIELD SITE.*—*The term “brownfield*  
19 *site” has the meaning given the term in section 101*  
20 *of the Comprehensive Environmental Response, Com-*  
21 *ensation, and Liability Act of 1980 (42 U.S.C.*  
22 *9601).*

23           (2) *PRODUCTION FACILITY.*—*The term “produc-*  
24 *tion facility” has the meaning given the term in sec-*

1        *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
2        *2014).*

3            (3) *RETIRED FOSSIL FUEL SITE.*—*The term “re-*  
4        *tired fossil fuel site” means the site of 1 or more fossil*  
5        *fuel electric generation facilities that are retired or*  
6        *scheduled to retire, including multi-unit facilities that*  
7        *are partially shut down.*

8            (4) *UTILIZATION FACILITY.*—*The term “utiliza-*  
9        *tion facility” has the meaning given the term in sec-*  
10       *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
11       *2014).*

12        (b) *IDENTIFICATION OF REGULATORY ISSUES.*—

13            (1) *IN GENERAL.*—*Not later than 1 year after*  
14        *the date of enactment of this Act, the Commission*  
15        *shall evaluate the extent to which modification of reg-*  
16        *ulations, guidance, or policy is needed to enable time-*  
17        *ly licensing reviews for, and to support the oversight*  
18        *of, production facilities or utilization facilities at*  
19        *brownfield sites.*

20            (2) *REQUIREMENT.*—*In carrying out paragraph*  
21        *(1), the Commission shall consider how licensing re-*  
22        *views for production facilities or utilization facilities*  
23        *at brownfield sites may be expedited by considering*  
24        *matters relating to siting and operating a production*

1       *facility or a utilization facility at or near a retired*  
2       *fossil fuel site to support—*

3               *(A) the reuse of existing site infrastructure,*

4               *including—*

5                       *(i) electric switchyard components and*

6                       *transmission infrastructure;*

7                       *(ii) heat-sink components;*

8                       *(iii) steam cycle components;*

9                       *(iv) roads;*

10                      *(v) railroad access; and*

11                      *(vi) water availability;*

12               *(B) the use of early site permits;*

13               *(C) the utilization of plant parameter enve-*

14               *lopes or similar standardized site parameters on*

15               *a portion of a larger site; and*

16               *(D) the use of a standardized application*  
17               *for similar sites.*

18               *(3) REPORT.—Not later than 14 months after the*  
19               *date of enactment of this Act, the Commission shall*  
20               *submit to the appropriate committees of Congress a*  
21               *report describing any regulations, guidance, and poli-*  
22               *cies identified under paragraph (1).*

23               *(c) LICENSING.—*

1           (1) *IN GENERAL.*—Not later than 2 years after  
2           the date of enactment of this Act, the Commission  
3           shall—

4                   (A) *develop and implement strategies to en-*  
5                   *able timely licensing reviews for, and to support*  
6                   *the oversight of, production facilities or utiliza-*  
7                   *tion facilities at brownfield sites, including re-*  
8                   *tired fossil fuel sites; or*

9                   (B) *initiate a rulemaking to enable timely*  
10                  *licensing reviews for, and to support the over-*  
11                  *sight of, of production facilities or utilization fa-*  
12                  *cilities at brownfield sites, including retired fos-*  
13                  *sil fuel sites.*

14           (2) *REQUIREMENTS.*—In carrying out para-  
15           graph (1), consistent with the mission of the Commis-  
16           sion, the Commission shall consider matters relating  
17           to—

18                   (A) *the use of existing site infrastructure;*

19                   (B) *existing emergency preparedness orga-*  
20                   *nizations and planning;*

21                   (C) *the availability of historical site-specific*  
22                   *environmental data;*

23                   (D) *previously approved environmental re-*  
24                   *views required by the National Environmental*  
25                   *Policy Act of 1969 (42 U.S.C. 4321 et seq.);*

1           (E) activities associated with the potential  
2           decommissioning of facilities or decontamination  
3           and remediation at brownfield sites; and

4           (F) community engagement and historical  
5           experience with energy production.

6           (d) *REPORT*.—Not later than 3 years after the date  
7           of enactment of this Act, the Commission shall submit to  
8           the appropriate committees of Congress a report describing  
9           the actions taken by the Commission under subsection (c).

10   **SEC. 207. APPALACHIAN REGIONAL COMMISSION NUCLEAR**  
11                                   **ENERGY DEVELOPMENT.**

12           (a) *IN GENERAL*.—Subchapter I of chapter 145 of sub-  
13           title IV of title 40, United States Code, is amended by add-  
14           ing at the end the following:

15   **“§ 14512. Appalachian Regional Commission nuclear**  
16                                   **energy development**

17           “(a) *DEFINITIONS*.—In this section:

18                   “(1) *BROWNFIELD SITE*.—The term ‘brownfield  
19                   site’ has the meaning given the term in section 101  
20                   of the Comprehensive Environmental Response, Com-  
21                   pensation, and Liability Act of 1980 (42 U.S.C.  
22                   9601).

23                   “(2) *PRODUCTION FACILITY*.—The term ‘produc-  
24                   tion facility’ has the meaning given the term in sec-

1        *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
2        *2014).*

3            “(3) *RETIRED FOSSIL FUEL SITE.*—*The term ‘re-*  
4        *tired fossil fuel site’ means the site of 1 or more fossil*  
5        *fuel electric generation facilities that are retired or*  
6        *scheduled to retire, including multi-unit facilities that*  
7        *are partially shut down.*

8            “(4) *UTILIZATION FACILITY.*—*The term ‘utiliza-*  
9        *tion facility’ has the meaning given the term in sec-*  
10       *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
11       *2014).*

12          “(b) *AUTHORITY.*—*The Appalachian Regional Com-*  
13       *mission may provide technical assistance to, make grants*  
14       *to, enter into contracts with, or otherwise provide amounts*  
15       *to individuals or entities in the Appalachian region for*  
16       *projects and activities—*

17            “(1) *to conduct research and analysis regarding*  
18       *the economic impact of siting, constructing, and oper-*  
19       *ating a production facility or a utilization facility at*  
20       *a brownfield site, including a retired fossil fuel site;*

21            “(2) *to assist with workforce training or retrain-*  
22       *ing to perform activities relating to the siting and op-*  
23       *eration of a production facility or a utilization facil-*  
24       *ity at a brownfield site, including a retired fossil fuel*  
25       *site; and*



1           “(3) to engage with the Nuclear Regulatory Com-  
2           mission, the Department of Energy, and other Federal  
3           agencies with expertise in civil nuclear energy.

4           “(c) *LIMITATION ON AVAILABLE AMOUNTS.*—Of the  
5           cost of any project or activity eligible for a grant under  
6           this section—

7           “(1) except as provided in paragraphs (2) and  
8           (3), not more than 50 percent may be provided from  
9           amounts made available to carry out this section;

10           “(2) in the case of a project or activity to be car-  
11           ried out in a county for which a distressed county  
12           designation is in effect under section 14526, not more  
13           than 80 percent may be provided from amounts made  
14           available to carry out this section; and

15           “(3) in the case of a project or activity to be car-  
16           ried out in a county for which an at-risk county des-  
17           ignation is in effect under section 14526, not more  
18           than 70 percent may be provided from amounts made  
19           available to carry out this section.

20           “(d) *SOURCES OF ASSISTANCE.*—Subject to subsection  
21           (c), a grant provided under this section may be provided  
22           from amounts made available to carry out this section, in  
23           combination with amounts made available—

24           “(1) under any other Federal program; or

25           “(2) from any other source.

1       “(e) *FEDERAL SHARE*.—Notwithstanding any provi-  
2       sion of law limiting the Federal share under any other Fed-  
3       eral program, amounts made available to carry out this sec-  
4       tion may be used to increase that Federal share, as the Ap-  
5       palachian Regional Commission determines to be appro-  
6       priate.”.

7       (b) *AUTHORIZATION OF APPROPRIATIONS*.—Section  
8       14703 of title 40, United States Code, is amended—

9               (1) by redesignating subsections (e) and (f) as  
10       subsections (f) and (g), respectively; and

11              (2) by inserting after subsection (d) the fol-  
12       lowing:

13       “(e) *APPALACHIAN REGIONAL COMMISSION NUCLEAR*  
14       *ENERGY DEVELOPMENT*.—Of the amounts made available  
15       under subsection (a), \$5,000,000 may be used to carry out  
16       section 14512 for each of fiscal years 2023 through 2026.”.

17       (c) *CLERICAL AMENDMENT*.—The analysis for sub-  
18       chapter I of chapter 145 of subtitle IV of title 40, United  
19       States Code, is amended by striking the item relating to  
20       section 14511 and inserting the following:

“14511. *Appalachian regional energy hub initiative.*

“14512. *Appalachian Regional Commission nuclear energy development.*”.

1 **TITLE III—PRESERVING EXIST-**  
 2 **ING NUCLEAR ENERGY GEN-**  
 3 **ERATION**

4 **SEC. 301. INVESTMENT BY ALLIES.**

5 (a) *IN GENERAL.*—*The prohibitions against issuing*  
 6 *certain licenses for utilization facilities to certain corpora-*  
 7 *tions and other entities described in the second sentence of*  
 8 *section 103 d. of the Atomic Energy Act of 1954 (42 U.S.C.*  
 9 *2133(d)) and the second sentence of section 104 d. of that*  
 10 *Act (42 U.S.C. 2134(d)) shall not apply to an entity de-*  
 11 *scribed in subsection (b) if the Commission determines that*  
 12 *issuance of the applicable license to that entity is not inim-*  
 13 *ical to—*

- 14 (1) *the common defense and security; or*  
 15 (2) *the health and safety of the public.*

16 (b) *ENTITIES DESCRIBED.*—

17 (1) *IN GENERAL.*—*An entity referred to in sub-*  
 18 *section (a) is a corporation or other entity that is*  
 19 *owned, controlled, or dominated by—*

20 (A) *the government of—*

21 (i) *a country that is a member of the*  
 22 *Organisation for Economic Co-operation*  
 23 *and Development on the date of enactment*  
 24 *of this Act, subject to paragraph (2); or*

25 (ii) *the Republic of India;*

1           (B) a corporation that is incorporated in a  
2           country described in clause (i) or (ii) of sub-  
3           paragraph (A); or

4           (C) an alien who is a national of a country  
5           described in clause (i) or (ii) of subparagraph  
6           (A).

7           (2) *EXCLUSION.*—An entity described in para-  
8           graph (1)(A)(i) is not an entity referred to in sub-  
9           section (a), and subsection (a) shall not apply to that  
10          entity, if, on the date of enactment of this Act—

11           (A) the entity (or any department, agency,  
12           or instrumentality of the entity) is a person sub-  
13           ject to sanctions under section 231 of the Coun-  
14           tering America’s Adversaries Through Sanctions  
15           Act (22 U.S.C. 9525); or

16           (B) any citizen of the entity, or any entity  
17           organized under the laws of, or otherwise subject  
18           to the jurisdiction of, the entity, is a person sub-  
19           ject to sanctions under that section.

20          (c) *TECHNICAL AMENDMENT.*—Section 103 d. of the  
21          Atomic Energy Act of 1954 (42 U.S.C. 2133(d)) is amend-  
22          ed, in the second sentence, by striking “any any” and in-  
23          serting “any”.

1       (d) *SAVINGS CLAUSE.*—Nothing in this section affects  
 2 the requirements of section 721 of the Defense Production  
 3 Act of 1950 (50 U.S.C. 4565).

4 **SEC. 302. EXTENSION OF THE PRICE-ANDERSON ACT.**

5       (a) *EXTENSION.*—Section 170 of the Atomic Energy  
 6 Act of 1954 (42 U.S.C. 2210) (commonly known as the  
 7 “Price-Anderson Act”) is amended by striking “December  
 8 31, 2025” each place it appears and inserting “December  
 9 31, 2045”.

10       (b) *REPORT.*—Section 170 p. of the Atomic Energy Act  
 11 of 1954 (42 U.S.C. 2210(p)) (commonly known as the  
 12 “Price-Anderson Act”) is amended by striking “December  
 13 31, 2021” and inserting “December 31, 2041”.

14 **TITLE IV—NUCLEAR FUEL**  
 15 **CYCLE, SUPPLY CHAIN, IN-**  
 16 **FRASTRUCTURE, AND WORK-**  
 17 **FORCE**

18 **SEC. 401. REPORT ON ADVANCED METHODS OF MANUFAC-**  
 19 **TURING AND CONSTRUCTION FOR NUCLEAR**  
 20 **ENERGY APPLICATIONS.**

21       (a) *IN GENERAL.*—Not later than 180 days after the  
 22 date of enactment of this Act, the Commission shall submit  
 23 to the appropriate committees of Congress a report (referred  
 24 to in this section as the “report”) on manufacturing and  
 25 construction for nuclear energy applications.

1           **(b) STAKEHOLDER INPUT.**—*In developing the report,*  
2 *the Commission shall seek input from—*

3                   (1) *the Secretary of Energy;*

4                   (2) *the nuclear energy industry;*

5                   (3) *National Laboratories;*

6                   (4) *institutions of higher education;*

7                   (5) *nuclear and manufacturing technology devel-*  
8 *opers;*

9                   (6) *the manufacturing and construction indus-*  
10 *tries, including manufacturing and construction com-*  
11 *panies with operating facilities in the United States;*

12                   (7) *standards development organizations;*

13                   (8) *labor unions;*

14                   (9) *nongovernmental organizations; and*

15                   (10) *other public stakeholders.*

16           **(c) CONTENTS.**—

17                   (1) **IN GENERAL.**—*The report shall—*

18                           (A) *examine any unique licensing issues or*  
19 *requirements relating to the use of innovative—*

20                                   (i) *advanced manufacturing processes;*

21                                   (ii) *advanced construction techniques;*

22                                   *and*

23                                   (iii) *rapid improvement or iterative*  
24 *innovation processes;*

25                           (B) *examine—*

- 1           (i) *the requirements for nuclear-grade*  
2           *components in manufacturing and construc-*  
3           *tion for nuclear energy applications;*
- 4           (ii) *opportunities to use standard ma-*  
5           *terials, parts, or components in manufac-*  
6           *turing and construction for nuclear energy*  
7           *applications;*
- 8           (iii) *opportunities to use standard ma-*  
9           *terials that are in compliance with existing*  
10           *codes to provide acceptable approaches to*  
11           *support or encapsulate new materials that*  
12           *do not yet have applicable codes; and*
- 13           (iv) *requirements relating to the trans-*  
14           *port of a fueled advanced nuclear reactor*  
15           *core from a manufacturing licensee to a li-*  
16           *censee that holds a license to construct and*  
17           *operate a facility at a particular site;*
- 18           (C) *identify any safety aspects of innovative*  
19           *advanced manufacturing processes and advanced*  
20           *construction techniques that are not addressed by*  
21           *existing codes and standards, so that generic*  
22           *guidance may be updated or created, as nec-*  
23           *essary;*

1           (D) identify options for addressing the  
2 issues, requirements, and opportunities examined  
3 under subparagraphs (A) and (B)—

4           (i) within the existing regulatory  
5 framework; or

6           (ii) through a new rulemaking;

7           (E) identify how addressing the issues, re-  
8 quirements, and opportunities examined under  
9 subparagraphs (A) and (B) will impact opportu-  
10 nities for domestic nuclear manufacturing and  
11 construction developers; and

12           (F) describe the extent to which Commission  
13 action is needed to implement any matter de-  
14 scribed in the report.

15           (2) *COST ESTIMATES, BUDGETS, AND TIME-*  
16 *FRAMES.*—The report shall include cost estimates,  
17 proposed budgets, and proposed timeframes for imple-  
18 menting risk-informed and performance-based regu-  
19 latory guidance for manufacturing and construction  
20 for nuclear energy applications.

21 **SEC. 402. NUCLEAR ENERGY TRAINEESHIP.**

22           Section 313 of division C of the Omnibus Appropria-  
23 tions Act, 2009 (42 U.S.C. 16274a), is amended—

24           (1) in subsection (a), by striking “Nuclear Regu-  
25 latory”;



1           (2) *in subsection (b)(1), in the matter preceding*  
2 *subparagraph (A), by inserting “and subsection (c)”*  
3 *after “paragraph (2)”;*

4           (3) *in subsection (c)—*

5                 (A) *by redesignating paragraph (2) as*  
6 *paragraph (5); and*

7                 (B) *by striking paragraph (1) and inserting*  
8 *the following:*

9           “(1) *ADVANCED NUCLEAR REACTOR.—The term*  
10 *‘advanced nuclear reactor’ has the meaning given the*  
11 *term in section 951(b) of the Energy Policy Act of*  
12 *2005 (42 U.S.C. 16271(b)).*

13           “(2) *COMMISSION.—The term ‘Commission’*  
14 *means the Nuclear Regulatory Commission.*

15           “(3) *INSTITUTION OF HIGHER EDUCATION.—The*  
16 *term ‘institution of higher education’ has the meaning*  
17 *given the term in section 2 of the Energy Policy Act*  
18 *of 2005 (42 U.S.C. 15801).*

19           “(4) *NATIONAL LABORATORY.—The term ‘Na-*  
20 *tional Laboratory’ has the meaning given the term in*  
21 *section 951(b) of the Energy Policy Act of 2005 (42*  
22 *U.S.C. 16271(b)).”;*

23           (4) *in subsection (d)(2), by striking “Nuclear*  
24 *Regulatory”;*

1           (5) *by redesignating subsections (c) and (d) as*  
2           *subsections (d) and (e), respectively; and*

3           (6) *by inserting after subsection (b) the fol-*  
4           *lowing:*

5           “(c) *NUCLEAR ENERGY TRAINEESHIP SUBPRO-*  
6           *GRAM.—*

7           “(1) *IN GENERAL.—The Commission shall estab-*  
8           *lish, as a subprogram of the Program, a nuclear en-*  
9           *ergy traineeship subprogram under which the Com-*  
10           *mission, in coordination with institutions of higher*  
11           *education and trade schools, shall competitively*  
12           *award traineeships that provide focused training to*  
13           *meet critical mission needs of the Commission and*  
14           *nuclear workforce needs, including needs relating to*  
15           *the nuclear tradecraft workforce.*

16           “(2) *REQUIREMENTS.—In carrying out the nu-*  
17           *clear energy traineeship subprogram described in*  
18           *paragraph (1), the Commission shall—*

19           “(A) *coordinate with the Secretary of En-*  
20           *ergy to prioritize the funding of traineeships that*  
21           *focus on—*

22                           “(i) *nuclear workforce needs; and*

23                           “(ii) *critical mission needs of the Com-*  
24                           *mission;*

1           “(B) encourage appropriate partnerships  
2           among—

3                   “(i) National Laboratories;

4                   “(ii) institutions of higher education;

5                   “(iii) trade schools;

6                   “(iv) the nuclear energy industry; and

7                   “(v) other entities, as the Commission  
8                   determines to be appropriate; and

9           “(C) on an annual basis, evaluate nuclear  
10           workforce needs for the purpose of implementing  
11           traineeships in focused topical areas that—

12                   “(i) address the workforce needs of the  
13                   nuclear energy community; and

14                   “(ii) support critical mission needs of  
15                   the Commission.”.

16 **SEC. 403. REPORT ON COMMISSION READINESS AND CAPAC-**  
17 **ITY TO LICENSE ADDITIONAL CONVERSION**  
18 **AND ENRICHMENT CAPACITY TO REDUCE RE-**  
19 **LIANCE ON URANIUM FROM RUSSIA.**

20           (a) *IN GENERAL.*—Not later than 180 days after the  
21 date of enactment of this Act, the Commission shall submit  
22 to the appropriate committees of Congress a report on the  
23 readiness and capacity of the Commission to license addi-  
24 tional conversion and enrichment capacity at existing and  
25 new fuel cycle facilities to reduce reliance on nuclear fuel

1 *that is recovered, converted, enriched, or fabricated by an*  
2 *entity that—*

3 *(1) is owned or controlled by the Government of*  
4 *the Russian Federation; or*

5 *(2) is organized under the laws of, or otherwise*  
6 *subject to the jurisdiction of, the Russian Federation.*

7 *(b) CONTENTS.—The report required under subsection*  
8 *(a) shall analyze how the capacity of the Commission to*  
9 *license additional conversion and enrichment capacity at*  
10 *existing and new fuel cycle facilities may conflict with or*  
11 *restrict the readiness of the Commission to review advanced*  
12 *nuclear reactor applications.*

13 **SEC. 404. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**  
14 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**  
15 **VENTORY IN THE UNITED STATES.**

16 *(a) DEFINITIONS.—In this section:*

17 *(1) HIGH-LEVEL RADIOACTIVE WASTE.—The*  
18 *term “high-level radioactive waste” has the meaning*  
19 *given the term in section 2 of the Nuclear Waste Pol-*  
20 *icy Act of 1982 (42 U.S.C. 10101).*

21 *(2) SPENT NUCLEAR FUEL.—The term “spent*  
22 *nuclear fuel” has the meaning given the term in sec-*  
23 *tion 2 of the Nuclear Waste Policy Act of 1982 (42*  
24 *U.S.C. 10101).*

1           (3) *STANDARD CONTRACT.*—*The term “standard*  
2 *contract” has the meaning given the term “contract”*  
3 *in section 961.3 of title 10, Code of Federal Regula-*  
4 *tions (or a successor regulation).*

5           (b) *REPORT.*—*Not later than January 1, 2025, and*  
6 *annually thereafter, the Secretary of Energy shall submit*  
7 *to Congress a report that describes—*

8           (1) *the annual and cumulative amount of pay-*  
9 *ments made by the United States to the holder of a*  
10 *standard contract due to a partial breach of contract*  
11 *under the Nuclear Waste Policy Act of 1982 (42*  
12 *U.S.C. 10101 et seq.) resulting in financial damages*  
13 *to the holder;*

14           (2) *the cumulative amount spent by the Depart-*  
15 *ment of Energy since fiscal year 2008 to reduce fu-*  
16 *ture payments projected to be made by the United*  
17 *States to any holder of a standard contract due to a*  
18 *partial breach of contract under the Nuclear Waste*  
19 *Policy Act of 1982 (42 U.S.C. 10101 et seq.);*

20           (3) *the cumulative amount spent by the Depart-*  
21 *ment of Energy to store, manage, and dispose of spent*  
22 *nuclear fuel and high-level radioactive waste in the*  
23 *United States as of the date of the report;*

24           (4) *the projected lifecycle costs to store, manage,*  
25 *transport, and dispose of the projected inventory of*

1 *spent nuclear fuel and high-level radioactive waste in*  
2 *the United States, including spent nuclear fuel and*  
3 *high-level radioactive waste expected to be generated*  
4 *from existing reactors through 2050;*

5 *(5) any mechanisms for better accounting of li-*  
6 *abilities for the lifecycle costs of the spent nuclear fuel*  
7 *and high-level radioactive waste inventory in the*  
8 *United States;*

9 *(6) any recommendations for improving the*  
10 *methods used by the Department of Energy for the ac-*  
11 *counting of spent nuclear fuel and high-level radio-*  
12 *active waste costs and liabilities;*

13 *(7) any actions taken in the previous fiscal year*  
14 *by the Department of Energy with respect to interim*  
15 *storage; and*

16 *(8) any activities taken in the previous fiscal*  
17 *year by the Department of Energy to develop and de-*  
18 *ploy nuclear technologies and fuels that enhance the*  
19 *safe transportation or storage of spent nuclear fuel or*  
20 *high-level radioactive waste, including technologies to*  
21 *protect against seismic, flooding, and other extreme*  
22 *weather events.*

1 **SEC. 405. AUTHORIZATION OF APPROPRIATIONS FOR**  
2 **SUPERFUND ACTIONS AT ABANDONED MIN-**  
3 **ING SITES ON TRIBAL LAND.**

4 (a) *DEFINITIONS.—In this section:*

5 (1) *ELIGIBLE NON-NPL SITE.—The term “eligi-*  
6 *ble non-NPL site” means a site—*

7 (A) *that is not on the National Priorities*  
8 *List; but*

9 (B) *with respect to which the Administrator*  
10 *determines that—*

11 (i) *the site would be eligible for listing*  
12 *on the National Priorities List based on the*  
13 *presence of hazards from contamination at*  
14 *the site, applying the hazard ranking sys-*  
15 *tem described in section 105(c) of the Com-*  
16 *prehensive Environmental Response, Com-*  
17 *ensation, and Liability Act of 1980 (42*  
18 *U.S.C. 9605(c)); and*

19 (ii) *for removal site evaluations, engi-*  
20 *neering evaluations/cost analyses, remedial*  
21 *planning activities, remedial investigations*  
22 *and feasibility studies, and other actions*  
23 *taken pursuant to section 104(b) of that Act*  
24 *(42 U.S.C. 9604), the site—*

25 (I) *has undergone a pre-CERCLA*  
26 *screening; and*

1 (II) is included in the Superfund  
2 Enterprise Management System.

3 (2) INDIAN TRIBE.—The term “Indian Tribe”  
4 has the meaning given the term in section 4 of the In-  
5 dian Self-Determination and Education Assistance  
6 Act (25 U.S.C. 5304).

7 (3) NATIONAL PRIORITIES LIST.—The term “Na-  
8 tional Priorities List” means the National Priorities  
9 List developed by the President in accordance with  
10 section 105(a)(8)(B) of the Comprehensive Environ-  
11 mental Response, Compensation, and Liability Act of  
12 1980 (42 U.S.C. 9605(a)(8)(B)).

13 (4) REMEDIAL ACTION; REMOVAL; RESPONSE.—  
14 The terms “remedial action”, “removal”, and “re-  
15 sponse” have the meanings given those terms in sec-  
16 tion 101 of the Comprehensive Environmental Re-  
17 sponse, Compensation, and Liability Act of 1980 (42  
18 U.S.C. 9601).

19 (5) TRIBAL LAND.—The term “Tribal land” has  
20 the meaning given the term “Indian country” in sec-  
21 tion 1151 of title 18, United States Code.

22 (b) AUTHORIZATION OF APPROPRIATIONS.—There are  
23 authorized to be appropriated for each of fiscal years 2023  
24 through 2032, to remain available until expended—



1           (1) \$97,000,000 to the Administrator to carry  
2 out this section (except for subsection (d)); and

3           (2) \$3,000,000 to the Administrator of the Agen-  
4 cy for Toxic Substances and Disease Registry to carry  
5 out subsection (d).

6           (c) *USES OF AMOUNTS.*—Amounts appropriated under  
7 subsection (b)(1) shall be used by the Administrator—

8           (1) to carry out removal actions on abandoned  
9 mine land located on Tribal land;

10           (2) to carry out response actions, including re-  
11 moval and remedial planning activities, removal and  
12 remedial studies, remedial actions, and other actions  
13 taken pursuant to section 104(b) of the Comprehensive  
14 Environmental Response, Compensation, and Liabil-  
15 ity Act of 1980 (42 U.S.C. 9604(b)) on abandoned  
16 mine land located on Tribal land at—

17           (A) eligible non-NPL sites; and

18           (B) sites listed on the National Priorities  
19 List; and

20           (3) to make grants under subsection (e).

21           (d) *HEALTH ASSESSMENTS.*—Subject to the avail-  
22 ability of appropriations, the Agency for Toxic Substances  
23 and Disease Registry, in coordination with Tribal health  
24 authorities, shall perform 1 or more health assessments at  
25 each eligible non-NPL site that is located on Tribal land,

1 *in accordance with section 104(i)(6) of the Comprehensive*  
2 *Environmental Response, Compensation, and Liability Act*  
3 *of 1980 (42 U.S.C. 9604(i)(6)).*

4 *(e) TRIBAL GRANTS.—*

5 *(1) IN GENERAL.—The Administrator may use*  
6 *amounts appropriated under subsection (b)(1) to*  
7 *make grants to eligible entities described in para-*  
8 *graph (2) for the purposes described in paragraph*  
9 *(3).*

10 *(2) ELIGIBLE ENTITIES DESCRIBED.—An eligible*  
11 *entity referred to in paragraph (1) is—*

12 *(A) the governing body of an Indian Tribe;*

13 *or*

14 *(B) a legally established organization of In-*  
15 *dians that—*

16 *(i) is controlled, sanctioned, or char-*  
17 *tered by the governing bodies of 2 or more*  
18 *Indian Tribes to be served, or that is demo-*  
19 *cratically elected by the adult members of*  
20 *the Indian community to be served, by that*  
21 *organization; and*

22 *(ii) includes the maximum participa-*  
23 *tion of Indians in all phases of the activi-*  
24 *ties of that organization.*

1           (3) *USE OF GRANT FUNDS.*—A grant under this  
2 subsection shall be used—

3           (A) in accordance with the second sentence  
4 of section 117(e)(1) of the Comprehensive Envi-  
5 ronmental Response, Compensation, and Liabil-  
6 ity Act of 1980 (42 U.S.C. 9617(e)(1));

7           (B) for obtaining technical assistance in  
8 carrying out response actions under subpara-  
9 graph (C); or

10           (C) for carrying out response actions, if the  
11 Administrator determines that the Indian Tribe  
12 has the capability to carry out any or all of  
13 those response actions in accordance with the cri-  
14 teria and priorities established pursuant to sec-  
15 tion 105(a)(8) of the Comprehensive Environ-  
16 mental Response, Compensation, and Liability  
17 Act of 1980 (42 U.S.C. 9605(a)(8)).

18           (4) *APPLICATIONS.*—An eligible entity desiring a  
19 grant under this subsection shall submit to the Ad-  
20 ministrator an application at such time, in such  
21 manner, and containing such information as the Ad-  
22 ministrator may require.

23           (5) *LIMITATIONS.*—A grant under this subsection  
24 shall be governed by the rules, procedures, and limita-  
25 tions described in section 117(e)(2) of the Comprehen-

1        *sive Environmental Response, Compensation, and Li-*  
2        *ability Act of 1980 (42 U.S.C. 9617(e)(2)), except*  
3        *that—*

4                (A) *“Administrator of the Environmental*  
5                *Protection Agency” shall be substituted for*  
6                *“President” each place it appears in that sec-*  
7                *tion; and*

8                (B) *in the first sentence of that section,*  
9                *“under section 405 of the ADVANCE Act of*  
10               *2023” shall be substituted for “under this sub-*  
11               *section”.*

12        (f) *STATUTE OF LIMITATIONS.—If a remedial action*  
13        *described in subsection (c)(2) is scheduled at an eligible*  
14        *non-NPL site, no action may be commenced for damages*  
15        *(as defined in section 101 of the Comprehensive Environ-*  
16        *mental Response, Compensation, and Liability Act of 1980*  
17        *(42 U.S.C. 9601)) with respect to that eligible non-NPL site*  
18        *unless the action is commenced within the timeframe pro-*  
19        *vided for such actions with respect to facilities on the Na-*  
20        *tional Priorities List in the first sentence of the matter fol-*  
21        *lowing subparagraph (B) of section 113(g)(1) of that Act*  
22        *(42 U.S.C. 9613(g)(1)).*

23        (g) *COORDINATION.—The Administrator shall coordi-*  
24        *nate with the Indian Tribe on whose land the applicable*  
25        *site is located in—*

1           (1) *selecting and prioritizing sites for response*  
2           *actions under paragraphs (1) and (2) of subsection*  
3           *(c); and*

4           (2) *carrying out those response actions.*

5   **SEC. 406. DEVELOPMENT, QUALIFICATION, AND LICENSING**  
6                           **OF ADVANCED NUCLEAR FUEL CONCEPTS.**

7           (a) *IN GENERAL.*—*The Commission shall establish an*  
8           *initiative to enhance preparedness and coordination with*  
9           *respect to the qualification and licensing of advanced nu-*  
10          *clear fuel.*

11          (b) *AGENCY COORDINATION.*—*Not later than 180 days*  
12          *after the date of enactment of this Act, the Commission and*  
13          *the Secretary of Energy shall enter into a memorandum*  
14          *of understanding—*

15                 (1) *to share technical expertise and knowledge*  
16                 *through—*

17                         (A) *enabling the testing and demonstration*  
18                         *of accident tolerant fuels for existing commercial*  
19                         *nuclear reactors and advanced nuclear reactor*  
20                         *fuel concepts to be proposed and funded, in whole*  
21                         *or in part, by the private sector;*

22                         (B) *operating a database to store and share*  
23                         *data and knowledge relevant to nuclear science*  
24                         *and engineering between Federal agencies and*  
25                         *the private sector;*

1           (C) leveraging expertise with respect to safe-  
2           ty analysis and research relating to advanced  
3           nuclear fuel; and

4           (D) enabling technical staff to actively ob-  
5           serve and learn about technologies, with an em-  
6           phasis on identification of additional informa-  
7           tion needed with respect to advanced nuclear  
8           fuel; and

9           (2) to ensure that—

10           (A) the Department of Energy has sufficient  
11           technical expertise to support the timely re-  
12           search, development, demonstration, and com-  
13           mercial application of advanced nuclear fuel;

14           (B) the Commission has sufficient technical  
15           expertise to support the evaluation of applica-  
16           tions for licenses, permits, and design certifi-  
17           cations and other requests for regulatory ap-  
18           proval for advanced nuclear fuel;

19           (C)(i) the Department of Energy maintains  
20           and develops the facilities necessary to enable the  
21           timely research, development, demonstration,  
22           and commercial application by the civilian nu-  
23           clear industry of advanced nuclear fuel; and

24           (ii) the Commission has access to the facili-  
25           ties described in clause (i), as needed; and

1           (D) the Commission consults, as appro-  
2           priate, with the modeling and simulation experts  
3           at the Office of Nuclear Energy of the Depart-  
4           ment of Energy, at the National Laboratories,  
5           and within industry fuel vendor teams in coop-  
6           erative agreements with the Department of En-  
7           ergy to leverage physics-based computer modeling  
8           and simulation capabilities.

9           (c) *REPORT.*—

10           (1) *IN GENERAL.*—Not later than 1 year after  
11           the date of enactment of this Act, the Commission  
12           shall submit to the appropriate committees of Con-  
13           gress a report describing the efforts of the Commission  
14           under subsection (a), including—

15           (A) an assessment of the preparedness of the  
16           Commission to review and qualify for use—

17                   (i) accident tolerant fuel;

18                   (ii) ceramic cladding materials;

19                   (iii) fuels containing silicon carbide;

20                   (iv) high-assay, low-enriched uranium  
21                   fuels;

22                   (v) molten-salt based liquid fuels;

23                   (vi) fuels derived from spent nuclear  
24                   fuel or depleted uranium; and

1                   (vii) other related fuel concepts, as de-  
2                   termined by the Commission;

3                   (B) activities planned or undertaken under  
4                   the memorandum of understanding described in  
5                   subsection (b);

6                   (C) an accounting of the areas of research  
7                   needed with respect to advanced nuclear fuel;  
8                   and

9                   (D) any other challenges or considerations  
10                  identified by the Commission.

11               (2) CONSULTATION.—In developing the report  
12               under paragraph (1), the Commission shall seek input  
13               from—

14                   (A) the Secretary of Energy;

15                   (B) National Laboratories;

16                   (C) the nuclear energy industry;

17                   (D) technology developers;

18                   (E) nongovernmental organizations; and

19                   (F) other public stakeholders.

20                   **TITLE V—IMPROVING**  
21                   **COMMISSION EFFICIENCY**

22               **SEC. 501. COMMISSION WORKFORCE.**

23               (a) DEFINITION OF CHAIRMAN.—In this section, the  
24               term “Chairman” means the Chairman of the Commission.

25               (b) HIRING BONUS AND APPOINTMENT AUTHORITY.—



1           (1) *IN GENERAL.*—Notwithstanding section 161  
2 *d. of the Atomic Energy Act of 1954 (42 U.S.C.*  
3 *2201(d)), any provision of Reorganization Plan No.*  
4 *1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and any*  
5 *provision of title 5, United States Code, governing ap-*  
6 *pointments and General Schedule classification and*  
7 *pay rates, the Chairman may, subject to the limita-*  
8 *tions described in paragraph (3), and without regard*  
9 *to the civil service laws—*

10                   (A) *establish the positions described in*  
11 *paragraph (2); and*

12                   (B) *appoint persons to the positions estab-*  
13 *lished under subparagraph (A).*

14           (2) *POSITIONS DESCRIBED.*—*The positions re-*  
15 *ferred to in paragraph (1)(A) are—*

16                   (A) *permanent or term-limited positions*  
17 *with highly specialized scientific, engineering,*  
18 *and technical competencies to address a critical*  
19 *licensing or regulatory oversight need for the*  
20 *Commission, including—*

21                           (i) *health physicist;*

22                           (ii) *reactor operations engineer;*

23                           (iii) *human factors analyst or engi-*  
24 *neer;*

- 1                   (iv) *risk and reliability analyst or en-*  
2                   *gineer;*  
3                   (v) *licensing project manager;*  
4                   (vi) *reactor engineer for severe acci-*  
5                   *dents;*  
6                   (vii) *geotechnical engineer;*  
7                   (viii) *structural engineer;*  
8                   (ix) *reactor systems engineer;*  
9                   (x) *reactor engineer;*  
10                  (xi) *radiation scientist;*  
11                  (xii) *seismic engineer; and*  
12                  (xiii) *electronics engineer; or*

13                   (B) *permanent or term-limited positions to*  
14                   *be filled by exceptionally well-qualified individ-*  
15                   *uals that the Chairman, subject to subsection (e),*  
16                   *determines are necessary to fulfill the mission of*  
17                   *the Commission.*

18                   (3) *LIMITATIONS.—*

19                   (A) *IN GENERAL.—Appointments under*  
20                   *paragraph (1)(B) may be made to not more*  
21                   *than—*

22                   (i) *(I) 15 permanent positions described*  
23                   *in paragraph (2)(A) during fiscal year*  
24                   *2024; and*

1                   (ii) 10 permanent positions described  
2                   in paragraph (2)(A) during each fiscal year  
3                   thereafter;

4                   (i)(I) 15 term-limited positions de-  
5                   scribed in paragraph (2)(A) during fiscal  
6                   year 2024; and

7                   (ii) 10 term-limited positions described  
8                   in paragraph (2)(A) during each fiscal year  
9                   thereafter;

10                  (iii)(I) 15 permanent positions de-  
11                  scribed in paragraph (2)(B) during fiscal  
12                  year 2024; and

13                  (ii) 10 permanent positions described  
14                  in paragraph (2)(B) during each fiscal year  
15                  thereafter; and

16                  (iv)(I) 15 term-limited positions de-  
17                  scribed in paragraph (2)(B) during fiscal  
18                  year 2024; and

19                  (ii) 10 term-limited positions described  
20                  in paragraph (2)(B) during each fiscal year  
21                  thereafter.

22                  (B) TERM OF TERM-LIMITED APPOINT-  
23                  MENT.—If a person is appointed to a term-lim-  
24                  ited position described in subparagraph (A) or

1           (B) of paragraph (2), the term of that appoint-  
2           ment shall not exceed 4 years.

3           (C) *STAFF POSITIONS.*—Subject to sub-  
4           section (e), appointments made to positions es-  
5           tablished under this subsection shall be to a  
6           range of staff positions that are of entry, mid,  
7           and senior levels, to the extent practicable.

8           (4) *HIRING BONUS.*—The Commission may pay  
9           a person appointed under paragraph (1) a 1-time  
10          hiring bonus in an amount not to exceed the least  
11          of—

12                 (A) \$25,000;

13                 (B) the amount equal to 15 percent of the  
14                 annual rate of basic pay of the employee; and

15                 (C) the amount of the limitation that is ap-  
16                 plicable for a calendar year under section  
17                 5307(a)(1) of title 5, United States Code.

18          (c) *COMPENSATION AND APPOINTMENT AUTHORITY.*—

19                 (1) *IN GENERAL.*—Notwithstanding section 161  
20                 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
21                 2201(d)), any provision of Reorganization Plan No.  
22                 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and chapter  
23                 51, and subchapter III of chapter 53, of title 5,  
24                 United States Code, the Chairman, subject to the lim-

1        *itations described in paragraph (3) and without re-*  
2        *gard to the civil service laws, may—*

3                *(A) establish and fix the rates of basic pay*  
4                *for the positions described in paragraph (2); and*

5                *(B) appoint persons to the positions estab-*  
6                *lished under subparagraph (A).*

7        *(2) POSITIONS DESCRIBED.—The positions re-*  
8        *ferred to in paragraph (1)(A) are—*

9                *(A) positions with highly specialized sci-*  
10                *entific, engineering, and technical competencies*  
11                *to address a critical need for the Commission,*  
12                *including—*

13                    *(i) health physicist;*

14                    *(ii) reactor operations engineer;*

15                    *(iii) human factors analyst or engi-*  
16                    *neer;*

17                    *(iv) risk and reliability analyst or en-*  
18                    *gineer;*

19                    *(v) licensing project manager;*

20                    *(vi) reactor engineer for severe acci-*  
21                    *dents;*

22                    *(vii) geotechnical engineer;*

23                    *(viii) structural engineer;*

24                    *(ix) reactor systems engineer;*

25                    *(x) reactor engineer;*

1                   *(xi) radiation scientist;*

2                   *(xii) seismic engineer; and*

3                   *(xiii) electronics engineer; or*

4                   *(B) positions to be filled by exceptionally*  
 5 *well-qualified persons that the Chairman, subject*  
 6 *to subsection (e), determines are necessary to ful-*  
 7 *fill the mission of the Commission.*

8                   (3) *LIMITATIONS.—*

9                   (A) *IN GENERAL.—The annual rate of basic*  
 10 *pay for a position described in paragraph (2)*  
 11 *may not exceed the per annum rate of salary*  
 12 *payable for level III of the Executive Schedule*  
 13 *under section 5314 of title 5, United States Code.*

14                   (B) *NUMBER OF POSITIONS.—Appointments*  
 15 *under paragraph (1)(B) may be made to not*  
 16 *more than—*

17                   (i) *10 positions described in paragraph*  
 18 *(2)(A) per fiscal year, not to exceed a total*  
 19 *of 50 positions; and*

20                   (ii) *10 positions described in para-*  
 21 *graph (2)(B) per fiscal year, not to exceed*  
 22 *a total of 50 positions.*

23                   (4) *PERFORMANCE BONUS.—*

24                   (A) *IN GENERAL.—Subject to subpara-*  
 25 *graphs (B) and (C), an employee may be paid*

1           a 1-time performance bonus in an amount not to  
2           exceed the least of—

3                   (i) \$25,000;

4                   (ii) the amount equal to 15 percent of  
5           the annual rate of basic pay of the person;  
6           and

7                   (iii) the amount of the limitation that  
8           is applicable for a calendar year under sec-  
9           tion 5307(a)(1) of title 5, United States  
10          Code.

11          (B) *PERFORMANCE*.—Any 1-time perform-  
12          ance bonus under subparagraph (A) shall be  
13          made to a person who demonstrated exceptional  
14          performance in the applicable fiscal year, includ-  
15          ing—

16                   (i) leading a project team in a timely,  
17           efficient, and predictable licensing review to  
18           enable the safe use of nuclear technology;

19                   (ii) making significant contributions  
20           to a timely, efficient, and predictable licens-  
21           ing review to enable the safe use of nuclear  
22           technology;

23                   (iii) the resolution of novel or first-of-  
24           a-kind regulatory issues;

1                   (iv) developing or implementing licens-  
2                   ing or regulatory oversight processes to im-  
3                   prove the effectiveness of the Commission;  
4                   and

5                   (v) other performance, as determined  
6                   by the Chairman, subject to subsection (e).

7                   (C) *LIMITATIONS.*—The Commission may  
8                   pay a 1-time performance bonus under subpara-  
9                   graph (A) for not more than 15 persons per fis-  
10                  cal year, and a person who receives a 1-time per-  
11                  formance bonus under that subparagraph may  
12                  not receive another 1-time performance bonus  
13                  under that subparagraph for a period of 5 years  
14                  thereafter.

15                  (d) *ANNUAL SOLICITATION FOR NUCLEAR REGULATOR*  
16                  *APPRENTICESHIP NETWORK APPLICATIONS.*—The Chair-  
17                  man, on an annual basis, shall solicit applications for the  
18                  Nuclear Regulator Apprenticeship Network.

19                  (e) *APPLICATION OF MERIT SYSTEM PRINCIPLES.*—To  
20                  the maximum extent practicable, appointments under sub-  
21                  sections (b)(1) and (c)(1) and any 1-time performance  
22                  bonus under subsection (c)(4) shall be made in accordance  
23                  with the merit system principles set forth in section 2301  
24                  of title 5, United States Code.



1           (f) *DELEGATION.*—Pursuant to Reorganization Plan  
2 No. 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), the Chairman  
3 shall delegate, subject to the direction and supervision of  
4 the Chairman, the authority provided by subsections (b),  
5 (c), and (d) to the Executive Director for Operations of the  
6 Commission.

7           (g) *ANNUAL REPORT.*—The Commission shall include  
8 in the annual budget justification of the Commission—

9                   (1) information that describes—

10                           (A) the total number of and the positions of  
11 the persons appointed under the authority pro-  
12 vided by subsection (b);

13                           (B) the total number of and the positions of  
14 the persons paid at the rate determined under  
15 the authority provided by subsection (c)(1);

16                           (C) the total number of and the positions of  
17 the persons paid a 1-time performance bonus  
18 under the authority provided by subsection  
19 (c)(4);

20                           (D) how the authority provided by sub-  
21 sections (b) and (c) is being used, and has been  
22 used during the previous fiscal year, to address  
23 the hiring and retention needs of the Commission  
24 with respect to the positions described in those  
25 subsections to which that authority is applicable;

1           (E) if the authority provided by subsections  
2           (b) and (c) is not being used, or has not been  
3           used, the reasons, including a justification, for  
4           not using that authority; and

5           (F) the attrition levels with respect to the  
6           term-limited appointments made under sub-  
7           section (b), including, with respect to persons  
8           leaving a position before completion of the appli-  
9           cable term of service, the average length of service  
10          as a percentage of the term of service;

11          (2) an assessment of—

12           (A) the current critical workforce needs of  
13           the Commission, including any critical workforce  
14           needs that the Commission anticipates in the  
15           subsequent 5 fiscal years; and

16           (B) further skillsets that are or will be need-  
17           ed for the Commission to fulfill the licensing and  
18           oversight responsibilities of the Commission; and

19          (3) the plans of the Commission to assess, de-  
20          velop, and implement updated staff performance  
21          standards, training procedures, and schedules.

22          (h) *REPORT ON ATTRITION AND EFFECTIVENESS.*—

23          Not later than September 30, 2032, the Commission shall  
24          submit to the Committees on Appropriations and Environ-  
25          ment and Public Works of the Senate and the Committees

1 *on Appropriations and Energy and Commerce of the House*  
2 *of Representatives a report that—*

3           (1) *describes the attrition levels with respect to*  
4 *the term-limited appointments made under subsection*  
5 *(b), including, with respect to persons leaving a posi-*  
6 *tion before completion of the applicable term of serv-*  
7 *ice, the average length of service as a percentage of the*  
8 *term of service;*

9           (2) *provides the views of the Commission on the*  
10 *effectiveness of the authorities provided by subsections*  
11 *(b) and (c) in helping the Commission fulfill the mis-*  
12 *sion of the Commission; and*

13           (3) *makes recommendations with respect to*  
14 *whether the authorities provided by subsections (b)*  
15 *and (c) should be continued, modified, or discon-*  
16 *tinued.*

17 **SEC. 502. COMMISSION CORPORATE SUPPORT FUNDING.**

18           (a) *REPORT.—Not later than 3 years after the date*  
19 *of enactment of this Act, the Commission shall submit to*  
20 *the appropriate committees of Congress and make publicly*  
21 *available a report that describes—*

22           (1) *the progress on the implementation of section*  
23 *102(a)(3) of the Nuclear Energy Innovation and Mod-*  
24 *ernization Act (42 U.S.C. 2215(a)(3)); and*

1           (2) *whether the Commission is meeting and is*  
2           *expected to meet the total budget authority caps re-*  
3           *quired for corporate support under that section.*

4           (b) *LIMITATION ON CORPORATE SUPPORT COSTS.—*  
5           *Section 102(a)(3) of the Nuclear Energy Innovation and*  
6           *Modernization Act (42 U.S.C. 2215(a)(3)) is amended by*  
7           *striking subparagraphs (B) and (C) and inserting the fol-*  
8           *lowing:*

9                     *“(B) 30 percent for fiscal year 2024 and*  
10                    *each fiscal year thereafter.”.*

11           (c) *CORPORATE SUPPORT COSTS CLARIFICATION.—*  
12           *Paragraph (9) of section 3 of the Nuclear Energy Innova-*  
13           *tion and Modernization Act (42 U.S.C. 2215 note; Public*  
14           *Law 115–439) (as redesignated by section 201(a)(1)) is*  
15           *amended—*

16                    (1) *by striking “The term” and inserting the fol-*  
17            *lowing:*

18                             *“(A) IN GENERAL.—The term”; and*

19                    (2) *by adding at the end the following:*

20                             *“(B) EXCLUSIONS.—The term ‘corporate*  
21                    *support costs’ does not include—*

22                                     *“(i) costs for rent and utilities relating*  
23                             *to any and all space in the Three White*  
24                             *Flint North building that is not occupied by*  
25                             *the Commission; or*

1                   “(i) costs for salaries, travel, and  
2                   other support for the Office of the Commis-  
3                   sion.”.

4 **SEC. 503. PERFORMANCE AND REPORTING UPDATE.**

5       Section 102(c) of the Nuclear Energy Innovation and  
6 Modernization Act (42 U.S.C. 2215(c)) is amended—

7                   (1) in paragraph (3)—

8                   (A) in the paragraph heading, by striking  
9                   “180” and inserting “90”; and

10                  (B) by striking “180” and inserting “90”;

11                  and

12                  (2) by adding at the end the following:

13                  “(4) *PERIODIC UPDATES TO METRICS AND*  
14                  *SCHEDULES.*—

15                  “(A) *REVIEW AND ASSESSMENT.*—Not less  
16                  frequently than once every 3 years, the Commis-  
17                  sion shall review and assess, based on the licens-  
18                  ing and regulatory activities of the Commission,  
19                  the performance metrics and milestone schedules  
20                  established under paragraph (1).

21                  “(B) *REVISIONS.*—After each review and  
22                  assessment under subparagraph (A), the Com-  
23                  mission shall revise and improve, as appro-  
24                  priate, the performance metrics and milestone  
25                  schedules described in that subparagraph to pro-

1           *vide the most efficient metrics and schedules rea-*  
2           *sonably achievable.”.*

3           ***TITLE VI—MISCELLANEOUS***

4           ***SEC. 601. NUCLEAR CLOSURE COMMUNITIES.***

5           *(a) DEFINITIONS.—In this section:*

6                   *(1) COMMUNITY ADVISORY BOARD.—The term*  
7                   *“community advisory board” means a community*  
8                   *committee or other advisory organization that aims to*  
9                   *foster communication and information exchange be-*  
10                   *tween a licensee planning for and involved in decom-*  
11                   *missioning activities and members of the community*  
12                   *that decommissioning activities may affect.*

13                   *(2) DECOMMISSION.—The term “decommission”*  
14                   *has the meaning given the term in section 50.2 of title*  
15                   *10, Code of Federal Regulations (or successor regula-*  
16                   *tions).*

17                   *(3) ELIGIBLE RECIPIENT.—The term “eligible re-*  
18                   *ipient” has the meaning given the term in section 3*  
19                   *of the Public Works and Economic Development Act*  
20                   *of 1965 (42 U.S.C. 3122).*

21                   *(4) LICENSEE.—The term “licensee” has the*  
22                   *meaning given the term in section 50.2 of title 10,*  
23                   *Code of Federal Regulations (or successor regula-*  
24                   *tions).*

1           (5) *NUCLEAR CLOSURE COMMUNITY*.—*The term*  
2           *“nuclear closure community” means a unit of local*  
3           *government, including a county, city, town, village,*  
4           *school district, or special district, that has been im-*  
5           *acted, or reasonably demonstrates to the satisfaction*  
6           *of the Secretary that it will be impacted, by a nuclear*  
7           *power plant licensed by the Commission that—*

8                   (A) *is not co-located with an operating nu-*  
9                   *clear power plant;*

10                   (B) *is at a site with spent nuclear fuel; and*

11                   (C) *as of the date of enactment of this Act—*

12                           (i) *has ceased operations; or*

13                           (ii) *has provided a written notification*  
14                   *to the Commission that it will cease oper-*  
15                   *ations.*

16           (6) *SECRETARY*.—*The term “Secretary” means*  
17           *the Secretary of Commerce, acting through the Assist-*  
18           *ant Secretary of Commerce for Economic Develop-*  
19           *ment.*

20           (b) *ESTABLISHMENT*.—*Not later than 180 days after*  
21           *the date of enactment of this Act, the Secretary shall estab-*  
22           *lish a grant program to provide grants to eligible recipi-*  
23           *ents—*

24                   (1) *to assist with economic development in nu-*  
25                   *clear closure communities; and*

1           (2) *to fund community advisory boards in nu-*  
2           *clear closure communities.*

3           (c) *REQUIREMENT.*—*In carrying out this section, to*  
4           *the maximum extent practicable, the Secretary shall imple-*  
5           *ment the recommendations described in the report sub-*  
6           *mitted to Congress under section 108 of the Nuclear Energy*  
7           *Innovation and Modernization Act (Public Law 115–439;*  
8           *132 Stat. 5577) entitled “Best Practices for Establishment*  
9           *and Operation of Local Community Advisory Boards Asso-*  
10          *ciated with Decommissioning Activities at Nuclear Power*  
11          *Plants”.*

12          (d) *DISTRIBUTION OF FUNDS.*—*The Secretary shall es-*  
13          *tablish a formula to ensure, to the maximum extent prac-*  
14          *ticable, geographic diversity among grant recipients under*  
15          *this section.*

16          (e) *AUTHORIZATION OF APPROPRIATIONS.*—

17               (1) *IN GENERAL.*—*There are authorized to be ap-*  
18               *propriated to the Secretary—*

19                       (A) *to carry out subsection (b)(1),*  
20                       *\$35,000,000 for each of fiscal years 2023 through*  
21                       *2028; and*

22                       (B) *to carry out subsection (b)(2),*  
23                       *\$5,000,000 for each of fiscal years 2023 through*  
24                       *2025.*



1           (2) *AVAILABILITY.*—Amounts made available  
2 under this section shall remain available for a period  
3 of 5 years beginning on the date on which the  
4 amounts are made available.

5           (3) *NO OFFSET.*—None of the funds made avail-  
6 able under this section may be used to offset the fund-  
7 ing for any other Federal program.

8 **SEC. 602. TECHNICAL CORRECTION.**

9           Section 104 c. of the Atomic Energy Act of 1954 (42  
10 U.S.C. 2134(c)) is amended—

11           (1) by striking the third sentence and inserting  
12 the following:

13           “(3) *LIMITATION ON UTILIZATION FACILITIES.*—  
14 The Commission may issue a license under this sec-  
15 tion for a utilization facility useful in the conduct of  
16 research and development activities of the types speci-  
17 fied in section 31 if—

18           “(A) not more than 75 percent of the an-  
19 nual costs to the licensee of owning and oper-  
20 ating the facility are devoted to the sale, other  
21 than for research and development or education  
22 and training, of—

23           “(i) nonenergy services;

24           “(ii) energy; or

1                   “(iii) a combination of nonenergy serv-  
2                   ices and energy; and

3                   “(B) not more than 50 percent of the an-  
4                   nual costs to the licensee of owning and oper-  
5                   ating the facility are devoted to the sale of en-  
6                   ergy.”;

7                   (2) in the second sentence, by striking “The  
8                   Commission” and inserting the following:

9                   “(2) *REGULATION.—The Commission*”; and

10                  (3) by striking “c. The Commission” and insert-  
11                  ing the following:

12                  “c. *RESEARCH AND DEVELOPMENT ACTIVITIES.—*

13                  “(1) *IN GENERAL.—Subject to paragraphs (2)*  
14                  *and (3), the Commission*”.

15 **SEC. 603. REPORT ON ENGAGEMENT WITH THE GOVERN-**  
16 **MENT OF CANADA WITH RESPECT TO NU-**  
17 **CLEAR WASTE ISSUES IN THE GREAT LAKES**  
18 **BASIN.**

19                  *Not later than 1 year after the date of enactment of*  
20 *this Act, the Commission shall submit to Congress a report*  
21 *describing any engagement between the Commission and the*  
22 *Government of Canada with respect to nuclear waste issues*  
23 *in the Great Lakes Basin.*



**Calendar No. 118**

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

**S. 1111**

---

---

**A BILL**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, and for other purposes.

---

---

JULY 10, 2023

Reported with an amendment