

Calendar No. 598

116TH CONGRESS
2D SESSION

S. 4897

To reestablish United States global leadership in nuclear energy, revitalize domestic nuclear energy supply chain infrastructure, support the licensing of advanced nuclear technologies, and improve the regulation of nuclear energy, and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 16, 2020

Mr. BARRASSO (for himself, Mr. WHITEHOUSE, Mr. CRAPO, Mr. BOOKER, and Mrs. CAPITO) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

DECEMBER 2, 2020

Reported by Mr. BARRASSO, with an amendment

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

A BILL

To reestablish United States global leadership in nuclear energy, revitalize domestic nuclear energy supply chain infrastructure, support the licensing of advanced nuclear technologies, 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,*

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

2 (a) **SHORT TITLE.**—This Act may be cited as the
 3 “American Nuclear Infrastructure Act of 2020”.

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

Sec. 1: Short title; table of contents.

Sec. 2: Definitions.

**TITLE I—REESTABLISHING AMERICAN INTERNATIONAL
COMPETITIVENESS AND GLOBAL LEADERSHIP**

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

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

**TITLE II—EXPANDING NUCLEAR ENERGY THROUGH ADVANCED
NUCLEAR TECHNOLOGIES**

Sec. 201: Advanced nuclear reactor project environmental reviews.

Sec. 202: Advanced nuclear reactor prizes.

Sec. 203: New nuclear energy project application reviews.

Sec. 204: Report on unique licensing considerations relating to the use of nu-
clear energy for nonelectric applications.

Sec. 205: Enabling preparations for the demonstration of advanced nuclear re-
actors on Department sites.

Sec. 206: Regulatory requirements for micro-reactors.

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

Sec. 301: Nuclear reactor incentives.

Sec. 302: Report on lessons learned during the COVID-19 public health emer-
gency.

Sec. 303: Investment by allies.

**TITLE IV—REVITALIZING AMERICA’S NUCLEAR SUPPLY CHAIN
INFRASTRUCTURE**

Sec. 401: Advanced nuclear fuel approval.

Sec. 402: National strategic uranium reserve.

Sec. 403: Report on advanced methods of manufacturing and construction for
nuclear energy applications.

TITLE V—MISCELLANEOUS

Sec. 501: Nuclear energy workforce development.

Sec. 502: Annual report on the spent nuclear fuel and high-level radioactive
waste inventory in the United States.

Sec. 503: Authorization of appropriations for superfund actions at abandoned
mining sites on Tribal land.

Sec. 504: 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 (as de-
14 fined in section 3 of the Nuclear Energy Inno-
15 vation and Modernization Act (42 U.S.C. 2215
16 note; Public Law 115–439)); and

17 (B) accident tolerant fuel.

18 (4) **ADVANCED NUCLEAR REACTOR.**—The term
19 “advanced nuclear reactor” has the meaning given
20 the term in section 3 of the Nuclear Energy Inno-
21 vation and Modernization Act (42 U.S.C. 2215 note;
22 Public Law 115–439).

23 (5) **APPROPRIATE COMMITTEES OF CON-**
24 **GRESS.**—The term “appropriate committees of Con-
25 gress” means—

1 (A) the Committee on Environment and
2 Public Works of the Senate; and

3 (B) the Committee on Energy and Com-
4 merce of the House of Representatives.

5 (6) CHAIRMAN.—The term “Chairman” means
6 the Chairman of the Nuclear Regulatory Commis-
7 sion.

8 (7) COMMISSION.—The term “Commission”
9 means the Nuclear Regulatory Commission.

10 (8) DEPARTMENT.—The term “Department”
11 means the Department of Energy.

12 (9) EARLY SITE PERMIT.—The term “early site
13 permit” has the meaning given the term in section
14 52.1 of title 10, Code of Federal Regulations (or a
15 successor regulation).

16 (10) HIGH-ASSAY, LOW-ENRICHED URANIUM.—
17 The term “high-assay, low-enriched uranium” means
18 uranium with an assay greater than 5 weight per-
19 cent, but less than 20 weight percent, of the ura-
20 nium-235 isotope.

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

1 (12) MICRO-REACTOR.—The term “micro-reactor” means an advanced nuclear reactor that has a
 2 power production capacity that is not greater than
 3 20 megawatts.

5 (13) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term
 6 in section 2 of the Energy Policy Act of 2005 (42
 7 U.S.C. 15801).

9 (14) REMOVAL; REMEDIAL ACTION.—The terms
 10 “removal” and “remedial action” have the meanings
 11 given those terms in section 101 of the Comprehensive Environmental Response, Compensation, and
 12 Liability Act of 1980 (42 U.S.C. 9601).

14 (15) SECRETARY.—The term “Secretary”
 15 means the Secretary of Energy.

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

19 **TITLE I—REESTABLISHING**
 20 **AMERICAN INTERNATIONAL**
 21 **COMPETITIVENESS AND**
 22 **GLOBAL LEADERSHIP**

23 **SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT**
 24 **AND INNOVATION ACTIVITIES.**

25 (a) COORDINATION.—

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

2 (A) coordinate all work of the Commission
3 relating to—

4 (i) nuclear reactor import and export
5 licensing; and

6 (ii) international regulatory coopera-
7 tion and assistance relating to nuclear re-
8 actors, including with countries that are
9 members of the Organisation for Economic
10 Co-operation and Development; and

11 (B) support interagency and international
12 coordination with respect to—

13 (i) the consideration of international
14 technical standards to establish the licens-
15 ing and regulatory basis to assist the de-
16 sign, construction, and operation of nu-
17 clear systems;

18 (ii) efforts to help build competent nu-
19 clear regulatory organizations and legal
20 frameworks in countries seeking to develop
21 nuclear power; and

22 (iii) exchange programs and training
23 provided to other countries relating to nu-
24 clear regulation and oversight to improve

1 nuclear technology licensing, in accordance
 2 with paragraph (2).

3 ~~(2) EXCHANGE PROGRAMS AND TRAINING.—~~

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

7 (A) the Secretary;

8 (B) National Laboratories;

9 (C) the private sector; and

10 (D) institutions of higher education.

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

18 ~~(c) EXCLUSION OF INTERNATIONAL ACTIVITIES~~
 19 ~~FROM THE FEE BASE.—~~

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

23 (A) in subsection (a), by adding at the end
 24 the following:

1 “(4) INTERNATIONAL NUCLEAR REACTOR EX-
 2 PORT AND INNOVATION ACTIVITIES.—The Commis-
 3 sion shall identify in the annual budget justification
 4 international nuclear reactor export and innovation
 5 activities described in section 101(a) of the Amer-
 6 ican Nuclear Infrastructure Act of 2020.”; and

7 (B) in subsection (b)(1)(B), by adding at
 8 the end the following:

9 “(iv) Costs for international nuclear
 10 reactor export and innovation activities de-
 11 scribed in section 101(a) of the American
 12 Nuclear Infrastructure Act of 2020.”.

13 (2) EFFECTIVE DATE.—The amendments made
 14 by paragraph (1) shall take effect on October 1,
 15 2021.

16 (d) SAVINGS CLAUSE.—Nothing in this section alters
 17 the authority of the Commission to license and regulate
 18 the civilian use of radioactive materials.

19 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**
 20 **NATIONAL SECURITY PURPOSES.**

21 (a) DEFINITION OF COVERED FUEL.—In this sec-
 22 tion, the term “covered fuel” means enriched uranium
 23 that is fabricated into fuel assemblies for nuclear reactors
 24 by an entity that—

1 (1) is owned or controlled by the Government of
 2 the Russian Federation or the Government of the
 3 People's Republic of China; or

4 (2) is organized under the laws of, or otherwise
 5 subject to the jurisdiction of, the Russian Federation
 6 or the People's Republic of China.

7 (b) PROHIBITION ON UNLICENSED POSSESSION OR
 8 OWNERSHIP OF COVERED FUEL.—Unless specifically au-
 9 thorized by the Commission in a license issued under sec-
 10 tion 53 of the Atomic Energy Act of 1954 (42 U.S.C.
 11 2073) and part 70 of title 10, Code of Federal Regulations
 12 (or successor regulations), no person subject to the juris-
 13 diction of the Commission may possess or own covered
 14 fuel.

15 (c) LICENSE TO POSSESS OR OWN COVERED
 16 FUEL.—

17 (1) CONSULTATION REQUIRED PRIOR TO
 18 ISSUANCE.—The Commission shall not issue a li-
 19 cense to possess or own covered fuel under section
 20 53 of the Atomic Energy Act of 1954 (42 U.S.C.
 21 2073) and part 70 of title 10, Code of Federal Reg-
 22 ulations (or successor regulations), unless the Com-
 23 mission has first consulted with the Secretary and
 24 the Secretary of State before issuing the license.

25 (2) PROHIBITION ON ISSUANCE OF LICENSE.—

1 (A) IN GENERAL.—Subject to subpara-
 2 graph (C), a license to possess or own covered
 3 fuel shall not be issued if the Secretary and the
 4 Secretary of State make the determination de-
 5 scribed in subparagraph (B).

6 (B) DETERMINATION.—

7 (i) IN GENERAL.—The determination
 8 referred to in subparagraph (A) is a deter-
 9 mination that possession or ownership, as
 10 applicable, of covered fuel poses a threat to
 11 the national security of the United States
 12 that adversely impacts the physical and
 13 economic security of the United States.

14 (ii) JOINT DETERMINATION.—A deter-
 15 mination described in clause (i) shall be
 16 jointly made by the Secretary and the Sec-
 17 retary of State.

18 (iii) TIMELINE.—

19 (I) NOTICE OF APPLICATION.—

20 Not later than 30 days after the date
 21 on which the Commission receives an
 22 application for a license to possess or
 23 own covered fuel, the Commission
 24 shall notify the Secretary and the Sec-
 25 retary of State of the application.

1 (II) DETERMINATION.—The Sec-
2 retary and the Secretary of State shall
3 have a period of 120 days, beginning
4 on the date on which the Commission
5 notifies the Secretary and the Sec-
6 retary of State under subclause (I) of
7 an application for a license to possess
8 or own covered fuel, in which to make
9 the determination described in clause
10 (i).

11 (III) COMMISSION NOTIFICA-
12 TION.—On making the determination
13 described in clause (i), the Secretary
14 and the Secretary of State shall im-
15 mediately notify the Commission.

16 (IV) CONGRESSIONAL NOTIFICA-
17 TION.—Not later than 30 days after
18 the date on which the Secretary and
19 the Secretary of State notify the Com-
20 mission under subclause (III), the
21 Commission shall notify the appro-
22 priate committees of Congress of the
23 determination.

24 (V) PUBLIC NOTICE.—Not later
25 than 15 days after the date on which

1 the Commission notifies Congress
 2 under subclause (IV) of a determina-
 3 tion made under clause (i); the Com-
 4 mission shall make that determination
 5 publicly available.

6 ~~(C) EFFECT OF NO DETERMINATION.—~~

7 The prohibition described in subparagraph (A)
 8 shall not apply if the Secretary and the Sec-
 9 retary of State do not make the determination
 10 described in subparagraph (B) by the date de-
 11 scribed in clause (iii)(II) of that subparagraph.

12 ~~(d) SAVINGS CLAUSE.—~~Nothing in this section alters
 13 any treaty or international agreement in effect on the date
 14 of enactment of this Act.

15 **TITLE II—EXPANDING NUCLEAR** 16 **ENERGY THROUGH AD-** 17 **VANCED NUCLEAR TECH-** 18 **NOLOGIES**

19 **SEC. 201. ADVANCED NUCLEAR REACTOR PROJECT ENVI-** 20 **RONMENTAL REVIEWS.**

21 ~~(a) DEFINITION OF ENVIRONMENTAL REVIEW PROC-~~
 22 ~~ESS.—~~In this section, the term “environmental review
 23 process” means the environmental review activities carried
 24 out by the Commission pursuant to part 51 of title 10,
 25 Code of Federal Regulations (or successor regulations).

1 (b) REPORT.—Not later than 1 year after the date
2 on which the Commission issues the third operating or
3 combined license for an advanced nuclear reactor, the
4 Commission shall submit to the appropriate committees
5 of Congress a report that—

6 (1) describes—

7 (A) any differences between the environ-
8 mental review process for nuclear reactors li-
9 censed and in operation as of the date of enact-
10 ment of this Act and the environmental review
11 process for advanced nuclear reactors;

12 (B) ways in which the environmental re-
13 view process for advanced nuclear reactors
14 could be improved by reducing or eliminating
15 duplicative requirements or requirements that
16 are not applicable to advanced nuclear reactor
17 designs; and

18 (C) ways in which environmental regula-
19 tions other than those promulgated under the
20 National Environmental Policy Act of 1969 (42
21 U.S.C. 4321 et seq.) could be integrated into
22 the environmental review process for advanced
23 nuclear reactors to reduce the environmental
24 impacts of advanced nuclear reactors; and

(2) includes an assessment by the Commission of whether it would be beneficial—

(A) to revise the applicable environmental review process for advanced nuclear reactors; or

(B) to promulgate new regulations to establish a technology inclusive, risk-informed environmental review process for advanced nuclear reactors.

SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.

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

“(f) PRIZES FOR ADVANCED NUCLEAR REACTOR LICENSING.—

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

“(A) IN GENERAL.—Subject to the availability of appropriations, the Secretary is authorized to make, with respect to each award category described in subparagraph (C), an award in an amount described in subparagraph (B) to the first non-Federal entity to which the Commission issues—

“(i) an operating license for an advanced nuclear reactor under part 50 of

1 title 10, Code of Federal Regulations (or
 2 successor regulations), for which an appli-
 3 cation has not been approved by the Com-
 4 mission as of the date of enactment of this
 5 subsection; or

6 “(ii) a finding required under section
 7 52.103(g) of title 10, Code of Federal Reg-
 8 ulations (or successor regulations), for a
 9 combined license for an advanced nuclear
 10 reactor—

11 “(I) that is issued under subpart
 12 C of part 52 that title (or successor
 13 regulations); and

14 “(II) for which an application
 15 has not been approved by the Com-
 16 mission as of the date of enactment of
 17 this subsection.

18 “(B) AMOUNT OF AWARD.—An award
 19 under subparagraph (A) shall be in an amount
 20 equal to the total amount assessed by the Com-
 21 mission and collected under section 102(b)(2)
 22 from the entity receiving the award for costs re-
 23 lating to the issuance of the license described in
 24 that subparagraph, including, as applicable,
 25 costs relating to the issuance of an associated

1 construction permit described in section 50.23
 2 of title 10, Code of Federal Regulations (or suc-
 3 cessor regulations); or early site permit (as de-
 4 fined in section 52.1 of that title (or successor
 5 regulations)).

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

8 “(i) the first advanced nuclear reactor
 9 for which the Commission issues—

10 “(I) a license in accordance with
 11 clause (i) of subparagraph (A); or

12 “(II) a finding in accordance
 13 with clause (ii) of that subparagraph;

14 “(ii) an advanced nuclear reactor
 15 that—

16 “(I) uses isotopes derived from
 17 spent nuclear fuel (as defined in sec-
 18 tion 2 of the Nuclear Waste Policy
 19 Act of 1982 (42 U.S.C. 10101)) or
 20 depleted uranium as fuel for the ad-
 21 vanced nuclear reactor; and

22 “(II) is the first advanced nu-
 23 clear reactor described in subclause
 24 (I) for which the Commission issues—

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

4 “(bb) a finding in accord-
5 ance with clause (ii) of that sub-
6 paragraph; and

7 “(iii) an advanced nuclear reactor
8 that—

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

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

15 “(aa) a license in accordance
16 with clause (i) of subparagraph
17 (A); or

18 “(bb) a finding in accord-
19 ance with clause (ii) of that sub-
20 paragraph.

21 “(2) FEDERAL FUNDING LIMITATION.—An
22 award under this subsection shall not exceed the
23 total amount expended (excluding any expenditures
24 made with Federal funds received for the applicable
25 project and an amount equal to the minimum cost-

1 share required under section 988 of the Energy Pol-
 2 icy Act of 2005 (42 U.S.C. 16352)) by the entity re-
 3 ceiving the award for licensing costs relating to the
 4 project for which the award is made.”.

5 **SEC. 203. NEW NUCLEAR ENERGY PROJECT APPLICATION**
 6 **REVIEWS.**

7 (a) **PRODUCTION, UTILIZATION, OR FUEL FACILITY**
 8 **LOCATED AT AN EXISTING SITE.**—In reviewing an appli-
 9 cation for an early site permit, construction permit, oper-
 10 ating license, or combined construction permit and oper-
 11 ating license for a production, utilization, or fuel facility
 12 located at the site of a licensed production, utilization, or
 13 fuel facility, the Commission, to the maximum extent prac-
 14 ticable, shall use information that was part of the licensing
 15 basis of the licensed production, utilization, or fuel facility.

16 (b) **RELATIONSHIP TO OTHER LAW.**—Nothing in this
 17 section exempts the Commission from any requirement to
 18 be fully compliant with section 102(2)(C) of the National
 19 Environmental Policy Act of 1969 (42 U.S.C.
 20 4332(2)(C)).

21 (c) **USE OF NEW INFORMATION AND ANALYSES.**—
 22 Nothing in this section precludes the Commission from
 23 using new information or new scientific or technical anal-
 24 yses that are applicable to the review of an application
 25 described in subsection (a).

1 **SEC. 204. 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 1 year after the
 5 date of enactment of this Act, the Commission shall sub-
 6 mit to the appropriate committees of Congress a report
 7 (referred to in this section as the “report”) addressing any
 8 unique licensing issues or requirements relating to—

9 (1) the flexible operation of nuclear reactors;
 10 such as ramping power output and switching be-
 11 tween electricity generation and nonelectric applica-
 12 tions;

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

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

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

19 (1) the Secretary;

20 (2) the nuclear energy industry;

21 (3) technology developers;

22 (4) the industrial, chemical, and medical sec-
 23 tors;

24 (5) nongovernmental organizations; and

25 (6) other public stakeholders.

26 (c) CONTENTS.—

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

(A) any unique licensing issues or requirements relating to the matters described in paragraphs (1) through (3) of subsection (a), including, with respect to the nonelectric applications referred to in paragraphs (1) and (2) of that subsection, any licensing issues or requirements relating to the use of nuclear energy in—

(i) hydrogen or other liquid and gaseous fuel or chemical production;

(ii) water desalination and wastewater treatment;

(iii) heat for industrial processes;

(iv) district heating;

(v) energy storage;

(vi) industrial or medical isotope production; and

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

(B) options for addressing those issues or requirements—

(i) within the existing regulatory framework;

(ii) as part of the technology-inclusive regulatory framework required under sub-

section (a)(4) of section 102 of the Nuclear
 Energy Innovation and Modernization Act
 (42 U.S.C. 2133 note; Public Law 115–
 439) or described in the report required
 under subsection (e) of that section (Public
 Law 115–439; 132 Stat. 5575); or

(iii) through a new rulemaking; and

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

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

SEC. 205. ENABLING PREPARATIONS FOR THE DEMONSTRATION OF ADVANCED NUCLEAR REACTORS ON DEPARTMENT SITES.

(a) IN GENERAL.—Section 102(b)(1)(B) of the Nu-
 clear Energy Innovation and Modernization Act (42
 U.S.C. 2215(b)(1)(B)) (as amended by section 101(c)) is
 amended by adding at the end the following:

“(v) 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; and

9 “(II) pre-application activities re-
 10 lating to an early site permit (as so
 11 defined) to demonstrate an advanced
 12 nuclear reactor on a Department of
 13 Energy site.”.

14 (b) **EFFECTIVE DATE.**—The amendment made by
 15 subsection (a) shall take effect on October 1, 2021.

16 **SEC. 206. REGULATORY REQUIREMENTS FOR MICRO-REAC-**
 17 **TORS.**

18 (a) **IN GENERAL.**—The Commission shall develop
 19 risk-informed and performance-based strategies and guid-
 20 ance to support a timely and efficient licensing and regu-
 21 latory process for micro-reactors that takes into consider-
 22 ation—

23 (1) the unique characteristics of micro-reactors;
 24 and

1 (2) the development timeframes of micro-reactors.

2
3 (b) IMPLEMENTATION.—The Commission shall implement the strategies and guidance developed under subsection (a)—

4
5
6 (1) not later than the date on which the technology-inclusive regulatory framework required under section 103(a)(4) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2133 note; Public Law 115–439) is established; and

7
8
9
10 (2) in a manner that is consistent with that technology-inclusive regulatory framework.

11
12
13 **TITLE III—PRESERVING EXIST-**
14 **ING NUCLEAR ENERGY GEN-**
15 **ERATION**

16 **SEC. 301. NUCLEAR REACTOR INCENTIVES.**

17 (a) FINDINGS.—Congress finds that—

18 (1) as of December 31, 2019, 96 nuclear reactors provided approximately 20 percent of the electricity used in the United States and more than 55 percent of the carbon-free, clean energy used in the United States;

19
20
21
22
23 (2) from 2013 through September 2020, 11 nuclear reactors ceased operation prior to the end of the operating licenses of those reactors;

1 ~~(3) as of September 2020, an additional 8 nu-~~
 2 ~~clear reactors are scheduled to cease operations by~~
 3 ~~2025;~~

4 ~~(4) 25 percent, or more, of the nuclear reactors~~
 5 ~~in the current nuclear fleet, primarily in the com-~~
 6 ~~petitive electricity market, are projected to cease op-~~
 7 ~~erations prior to the end of the operating licenses of~~
 8 ~~those reactors;~~

9 ~~(5) emissions of carbon dioxide, nitrogen oxides,~~
 10 ~~sulfur oxides, particulate matter, and hazardous air~~
 11 ~~pollutants typically increase when a nuclear reactor~~
 12 ~~ceases operations; and~~

13 ~~(6) a program to incentivize nuclear energy~~
 14 ~~generation to avoid emissions of carbon dioxide, ni-~~
 15 ~~trogen oxides, sulfur oxides, particulate matter, and~~
 16 ~~hazardous air pollutants offers substantial environ-~~
 17 ~~mental benefits to the United States.~~

18 ~~(b) DEFINITIONS.—In this section:~~

19 ~~(1) CERTIFIED NUCLEAR REACTOR.—The term~~
 20 ~~“certified nuclear reactor” means a nuclear reactor~~
 21 ~~that—~~

22 ~~(A) operates in a competitive electricity~~
 23 ~~market; and~~

1 (B) is certified under subsection
 2 (d)(2)(A)(i) to submit a sealed bid in accord-
 3 ance with subsection (e).

4 (2) CREDIT.—The term “credit” means a credit
 5 allocated to a certified nuclear reactor under sub-
 6 section (f)(2).

7 (e) ESTABLISHMENT OF PROGRAM.—The Adminis-
 8 trator, in consultation with the Secretary, shall establish
 9 an emissions avoidance program—

10 (1) to evaluate nuclear reactors that are pro-
 11 jected to cease operations due to economic factors;
 12 and

13 (2) to allocate credits to certified nuclear reac-
 14 tors that are selected under paragraph (1)(B) of
 15 subsection (f) to receive credits under paragraph (2)
 16 of that subsection.

17 (d) CERTIFICATION.—

18 (1) APPLICATION.—

19 (A) IN GENERAL.—In order to be certified
 20 under paragraph (2)(A)(i), the owner or oper-
 21 ator of a nuclear reactor that is projected to
 22 cease operations due to economic factors shall
 23 submit to the Administrator an application at
 24 such time, in such manner, and containing such

1 information as the Administrator determines to
2 be appropriate, including—

3 (i) information on the operating costs
4 necessary to make the examination de-
5 scribed in paragraph (2)(A)(ii)(II), includ-
6 ing—

7 (I) the average annual operating
8 loss per megawatt-hour expected to be
9 incurred by the nuclear reactor over
10 the 2-year period for which credits
11 would be allocated;

12 (II) any private or publicly avail-
13 able data with respect to current or
14 projected bulk power market prices;

15 (III) out-of-market revenue
16 streams;

17 (IV) operations and maintenance
18 costs;

19 (V) capital costs, including fuel;
20 and

21 (VI) operational and market
22 risks;

23 (ii) an estimate of the potential incre-
24 mental emissions of carbon dioxide, nitro-
25 gen oxides, sulfur oxides, particulate mat-

1 ter, and hazardous air pollutants that
 2 would result if the nuclear reactor were to
 3 cease operations;

4 (iii) information on the source of re-
 5 covered uranium and the location where
 6 the uranium is converted, enriched, and
 7 fabricated into fuel assemblies for the nu-
 8 clear reactor for the 2-year period for
 9 which credits would be allocated; and

10 (iv) a detailed plan to sustain oper-
 11 ations at the conclusion of the applicable
 12 2-year period for which credits would be
 13 allocated—

14 (I) without receiving additional
 15 credits; or

16 (II) with the receipt of additional
 17 credits of a lower amount than the
 18 credits allocated during that 2-year
 19 credit period.

20 (B) **TIMELINE.**—The Administrator shall
 21 accept applications described in subparagraph
 22 (A)—

23 (i) until the date that is 120 days
 24 after the date of enactment of this Act;
 25 and

1 (ii) not less frequently than every 2
2 years thereafter.

3 ~~(2) DETERMINATION TO CERTIFY.—~~

4 ~~(A) DETERMINATION.—~~

5 (i) IN GENERAL.—Not later than 60
6 days after the applicable date under sub-
7 paragraph (B) of paragraph (1), the Ad-
8 ministrators, in consultation with the Sec-
9 retary, shall determine whether to certify,
10 in accordance with clauses (ii) and (iii),
11 each nuclear reactor for which an applica-
12 tion is submitted under subparagraph (A)
13 of that paragraph.

14 (ii) MINIMUM REQUIREMENTS.—To
15 the maximum extent practicable, the Ad-
16 ministrators, in consultation with the Sec-
17 retary, shall only certify a nuclear reactor
18 under clause (i) if—

19 (I) the nuclear reactor has a
20 good safety record, as determined by
21 the Action Matrix of the Commission
22 or the Performance Indicators of the
23 Reactor Oversight Process, such that
24 the nuclear reactor falls under the “li-

1 "cessor response" column indicating no
2 current significant safety issues;

3 (II) after considering the infor-
4 mation submitted under paragraph
5 (1)(A)(i), the Administrator deter-
6 mines that the nuclear reactor is pro-
7 jected to cease operations due to eco-
8 nomic factors; and

9 (III) after considering the esti-
10 mate submitted under paragraph
11 (1)(A)(ii), the Administrator deter-
12 mines that emissions of carbon diox-
13 ide, nitrogen oxides, sulfur oxides,
14 particulate matter, and hazardous air
15 pollutants would increase if the nu-
16 clear reactor were to cease operations
17 and be replaced with other types of
18 power generation.

19 (iii) **PRIORITY.**—In determining
20 whether to certify a nuclear reactor under
21 clause (i), the Administrator, in consulta-
22 tion with the Secretary, shall give priority
23 to a nuclear reactor that uses uranium
24 that is recovered, converted, enriched, and

1 fabricated into fuel assemblies in the
2 United States.

3 (B) NOTICE.—For each application re-
4 ceived under paragraph (1)(A), the Adminis-
5 trator, in consultation with the Secretary, shall
6 provide to the applicable owner or operator, as
7 applicable—

8 (i) a notice of the certification of the
9 applicable nuclear reactor; or

10 (ii) a notice that describes the reasons
11 why the certification of the applicable nu-
12 clear reactor was denied.

13 (e) BIDDING PROCESS.—

14 (1) IN GENERAL.—Subject to paragraph (2),
15 the Administrator shall establish a deadline by which
16 each certified nuclear reactor shall submit to the Ad-
17 ministrator a sealed bid that—

18 (A) describes the price per megawatt-hour
19 required to maintain operations of the certified
20 nuclear reactor during the 2-year period for
21 which the certified nuclear reactor would receive
22 credits; and

23 (B) includes a commitment, subject to the
24 receipt of credits, to provide a specific number

1 of megawatt-hours of generation during the 2-
 2 year period for which credits would be allocated.

3 ~~(2) REQUIREMENT.—~~The deadline established
 4 under paragraph (1) shall be not later than 30 days
 5 after the first date on which the Administrator has
 6 made the determination described in paragraph
 7 ~~(2)(A)(i)~~ of subsection (d) with respect to each ap-
 8 plication submitted under paragraph (1)(A) of that
 9 subsection.

10 ~~(f) ALLOCATION.—~~

11 ~~(1) AUCTION.—~~The Administrator, in consulta-
 12 tion with the Secretary, shall—

13 ~~(A)~~ in consultation with the heads of appli-
 14 cable Federal agencies, establish a process for
 15 evaluating bids submitted under subsection
 16 ~~(c)(1)~~ through an auction process; and

17 ~~(B)~~ select certified nuclear reactors to be
 18 allocated credits.

19 ~~(2) CREDITS.—~~Subject to subsection ~~(g)(2)~~, on
 20 selection under paragraph (1), a certified nuclear re-
 21 actor shall be allocated credits for a 2-year period
 22 beginning on the date of the selection.

23 ~~(3) REQUIREMENT.—~~To the maximum extent
 24 practicable, the Administrator shall use the amounts
 25 made available for credits under this section to allo-

1 eate credits to as many certified nuclear reactors as
 2 possible.

3 ~~(g) RENEWAL.~~—

4 (1) ~~IN GENERAL.~~—The owner or operator of a
 5 certified nuclear reactor may seek to recertify the
 6 nuclear reactor in accordance with this section.

7 (2) ~~LIMITATION.~~—Notwithstanding any other
 8 provision of this section, the Administrator may not
 9 allocate any credits after September 30, 2030.

10 ~~(h) ADDITIONAL REQUIREMENTS.~~—

11 (1) ~~AUDIT.~~—During the 2-year period begin-
 12 ning on the date on which a certified nuclear reactor
 13 first receives a credit, the Administrator, in con-
 14 sultation with the Secretary, shall periodically audit
 15 the certified nuclear reactor.

16 (2) ~~RECAPTURE.~~—The Administrator shall, by
 17 regulation, provide for the recapture of the alloca-
 18 tion of any credit to a certified nuclear reactor that,
 19 during the period described in paragraph (1)—

20 (A) terminates operations; or

21 (B) does not operate at an annual loss in
 22 the absence of an allocation of credits to the
 23 certified nuclear reactor.

24 (3) ~~CONFIDENTIALITY.~~—The Administrator, in
 25 consultation with the Secretary, shall establish pro-

1 cedures to ensure that any confidential, private, pro-
 2 prietary, or privileged information that is included in
 3 a sealed bid submitted under this section is not pub-
 4 licly disclosed or otherwise improperly used.

5 (i) **REPORT.**—Not later than January 1, 2024, the
 6 Comptroller General of the United States shall submit to
 7 Congress a report with respect to the credits allocated to
 8 certified nuclear reactors, which shall include—

9 (1) an evaluation of the effectiveness of the
 10 credits in avoiding emissions of carbon dioxide, ni-
 11 trogen oxides, sulfur oxides, particulate matter, and
 12 hazardous air pollutants while ensuring grid reli-
 13 ability;

14 (2) a quantification of the ratepayer savings
 15 achieved under this section; and

16 (3) any recommendations to renew or expand
 17 the credits.

18 (j) **AUTHORIZATION OF APPROPRIATIONS.**—There
 19 are authorized to be appropriated such sums as are nec-
 20 essary to carry out this section for each of fiscal years
 21 2021 through 2030.

22 **SEC. 302. REPORT ON LESSONS LEARNED DURING THE**
 23 **COVID-19 PUBLIC HEALTH EMERGENCY.**

24 (a) **IN GENERAL.**—Not later than 180 days after the
 25 date of enactment of this Act, the Commission shall sub-

1 mit to the appropriate committees of Congress and make
2 publicly available a report on actions taken by the Com-
3 mission during the public health emergency declared by
4 the Secretary of Health and Human Services under sec-
5 tion 319 of the Public Health Service Act (42 U.S.C.
6 247d) on January 31, 2020, with respect to COVID-19.

7 (b) CONTENTS.—The report under subsection (a)
8 shall include—

9 (1) an identification of the processes, proce-
10 dures, and other regulatory policies that were re-
11 vised or temporarily suspended during the public
12 health emergency described in subsection (a);

13 (2) a review of actions, if any, taken by the
14 Commission that examines how any revision or tem-
15 porary suspension of a process, procedure, or other
16 regulatory policy identified under paragraph (1) may
17 or may not have compromised the ability of the
18 Commission to license and regulate the civilian use
19 of radioactive materials in the United States to pro-
20 tect public health and safety, promote the common
21 defense and security, and protect the environment;

22 (3) a description of any process efficiencies or
23 challenges that resulted from the matters identified
24 under paragraph (1);

1 (4) a discussion of lessons learned from the
2 matters described in paragraphs (1), (2), and (3);

3 (5) a list of actions that the Commission may
4 take to incorporate into the licensing activities and
5 regulations of the Commission—

6 (A) the lessons described in paragraph (4);
7 and

8 (B) the information provided under para-
9 graphs (2) and (3); and

10 (6) a description of when the actions described
11 in paragraph (5) may be implemented.

12 **SEC. 303. INVESTMENT BY ALLIES.**

13 (a) **IN GENERAL.**—The prohibitions against issuing
14 certain licenses for utilization facilities to certain corpora-
15 tions and other entities described in the second sentence
16 of section 103 d. of the Atomic Energy Act of 1954 (42
17 U.S.C. 2133(d)) and the second sentence of section 104
18 d. of that Act (42 U.S.C. 2134(d)) shall not apply to an
19 entity described in subsection (b) if the Commission deter-
20 mines that issuance of the applicable license to that entity
21 is not inimical to—

22 (1) the common defense and security; or

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

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

4 (1) the government of—

5 (A) a country that is a member of the
 6 North Atlantic Treaty Organization;

7 (B) Japan; or

8 (C) the Republic of Korea;

9 (2) a corporation that is incorporated in a
 10 country described in any of subparagraphs (A)
 11 through (C) of paragraph (1); or

12 (3) an alien who is a national of a country de-
 13 scribed in any of subparagraphs (A) through (C) of
 14 paragraph (1).

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

19 **TITLE IV—REVITALIZING AMER-**
 20 **ICA’S NUCLEAR SUPPLY**
 21 **CHAIN INFRASTRUCTURE**

22 **SEC. 401. ADVANCED NUCLEAR FUEL APPROVAL.**

23 (a) AGENCY COORDINATION.—

24 (1) IN GENERAL.—Not later than 1 year after
 25 the date of enactment of this Act, the Chairman and

the Secretary shall enter into a memorandum of understanding relating to advanced nuclear fuels.

(2) MEMORANDUM OF UNDERSTANDING CONTENTS.—The memorandum of understanding entered into under paragraph (1) shall require the Department and the Commission to coordinate, as appropriate—

(A) to ensure that the Department has sufficient technical expertise to support the timely research, development, demonstration, and commercial application by the civilian nuclear industry of innovative advanced nuclear fuels, including by facilitating the development and sharing of criticality benchmark data to support—

(i) the licensing of fuel enrichment, deconversion, and fabrication facilities for—

(I) advanced nuclear fuels containing high-assay, low-enriched uranium with an assay greater than 5 weight percent, but less than 10 weight percent, of the uranium-235 isotope; and

1 (H) advanced nuclear fuels con-
2 taining high-assay, low-enriched ura-
3 nium with an assay greater than or
4 equal to 10 weight percent, but less
5 than 20 weight percent, of the ura-
6 nium-235 isotope; and

7 (ii) the certification of transportation
8 packages for—

9 (I) advanced nuclear fuels con-
10 taining high-assay, low-enriched ura-
11 nium with an assay greater than 5
12 weight percent, but less than 10
13 weight percent, of the uranium-235
14 isotope; and

15 (H) advanced nuclear fuels con-
16 taining high-assay, low-enriched ura-
17 nium with an assay greater than or
18 equal to 10 weight percent, but less
19 than 20 weight percent, of the ura-
20 nium-235 isotope;

21 (B) to ensure that the Commission has
22 sufficient technical expertise to support the
23 evaluation of advanced nuclear fuels;

24 (C) to identify methods to improve the use
25 of computers and software codes to calculate

the behavior and performance of advanced nuclear fuels based on mathematical models of the physical behavior of advanced nuclear fuels;

(D) to ensure that the Department maintains and develops the facilities necessary to enable the timely research, development, demonstration, and commercial application by the civilian nuclear industry of innovative advanced nuclear fuels; and

(E) to ensure that the Commission has access to the facilities described in subparagraph (D), as needed.

(b) REPORTING REQUIREMENTS.—Not later than 180 days after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress a report that—

(1) identifies criticality benchmark data to assist—

(A) the licensing of fuel enrichment, deconversion, and fabrication facilities for—

(i) advanced nuclear fuels containing high-assay, low-enriched uranium with an assay greater than 5 weight percent, but less than 10 weight percent, of the uranium-235 isotope; and

1 (ii) advanced nuclear fuels containing
2 high-assay, low-enriched uranium with an
3 assay greater than or equal to 10 weight
4 percent, but less than 20 weight percent,
5 of the uranium-235 isotope; and

6 (B) the certification of transportation
7 packages for—

8 (i) advanced nuclear fuels containing
9 high-assay, low-enriched uranium with an
10 assay greater than 5 weight percent, but
11 less than 10 weight percent, of the ura-
12 nium-235 isotope; and

13 (ii) advanced nuclear fuels containing
14 high-assay, low-enriched uranium with an
15 assay greater than or equal to 10 weight
16 percent, but less than 20 weight percent,
17 of the uranium-235 isotope;

18 (2) identifies and describes any updates to reg-
19 ulations, certifications, and other regulatory policies
20 that the Commission determines are necessary for li-
21 censing and oversight relating to high-assay, low-en-
22 riched uranium, including—

23 (A) certifications relating to transportation
24 packages for—

1 (i) high-assay, low-enriched uranium
 2 with an assay greater than 5 weight per-
 3 cent, but less than 10 weight percent, of
 4 the uranium-235 isotope; and

5 (ii) high-assay, low-enriched uranium
 6 with an assay greater than or equal to 10
 7 weight percent, but less than 20 weight
 8 percent, of the uranium-235 isotope; and

9 (B) licensing of fuel enrichment,
 10 deconversion, and fabrication facilities for high-
 11 assay, low-enriched uranium, and associated
 12 physical security plans for those facilities;

13 (3) identifies and describes any updates to reg-
 14 ulations, certifications, and other regulatory policies
 15 that the Commission determines are necessary to ad-
 16 dress nuclear nonproliferation considerations that—

17 (A) are within the mission of the Commis-
 18 sion; and

19 (B) are associated with—

20 (i) high-assay, low-enriched uranium
 21 with an assay greater than 5 weight per-
 22 cent, but less than 10 weight percent, of
 23 the uranium-235 isotope; or

24 (ii) high-assay, low-enriched uranium
 25 with an assay greater than or equal to 10

1 weight percent, but less than 20 weight
 2 percent, of the uranium-235 isotope;

3 (4) identifies and describes—

4 (A) any data needs, regulatory require-
 5 ments, or policies identified under paragraph
 6 (1), (2), or (3) that—

7 (i) differ based on whether they are
 8 related to—

9 (I) high-assay, low-enriched ura-
 10 nium with an assay greater than 5
 11 weight percent, but less than 10
 12 weight percent, of the uranium-235
 13 isotope; or

14 (II) high-assay, low-enriched ura-
 15 nium with an assay greater than or
 16 equal to 10 weight percent, but less
 17 than 20 weight percent, of the ura-
 18 nium-235 isotope; or

19 (ii) are unique to—

20 (I) high-assay, low-enriched ura-
 21 nium with an assay greater than 5
 22 weight percent, but less than 10
 23 weight percent, of the uranium-235
 24 isotope; or

1 (H) high-assay, low-enriched ura-
2 nium with an assay greater than or
3 equal to 10 weight percent, but less
4 than 20 weight percent, of the ura-
5 nium-235 isotope;

6 (B) the manner in which the data needs,
7 regulatory requirements, or policies identified
8 under subparagraph (A)(i) differ as described
9 in that subparagraph; and

10 (C) the extent to which the data needs,
11 regulatory requirements, or policies identified
12 under subparagraph (A)(ii) are unique to ei-
13 ther—

14 (i) high-assay, low-enriched uranium
15 with an assay greater than 5 weight per-
16 cent, but less than 10 weight percent, of
17 the uranium-235 isotope; or

18 (ii) high-assay, low-enriched uranium
19 with an assay greater than or equal to 10
20 weight percent, but less than 20 weight
21 percent, of the uranium-235 isotope; and

22 (5) includes a timeline for completing the up-
23 dates described in paragraphs (2) and (3) within the
24 existing regulatory framework.

1 **SEC. 402. NATIONAL STRATEGIC URANIUM RESERVE.**

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

3 (1) **PROGRAM.**—The term “program” means
4 the program established under subsection (b)(1).

5 (2) **URANIUM RESERVE.**—The term “Uranium
6 Reserve” means the uranium reserve operated pur-
7 suant to the program.

8 (b) **ESTABLISHMENT.**—

9 (1) **IN GENERAL.**—Not later than 60 days after
10 the date of enactment of this Act, the Secretary,
11 subject to the availability of appropriations, shall es-
12 tablish a program to operate a uranium reserve in
13 accordance with this section.

14 (2) **AUTHORITY.**—In establishing the program
15 and operating the Uranium Reserve, the Secretary
16 shall use the authority granted to the Secretary by
17 sections 53, 63, and 161 g. of the Atomic Energy
18 Act of 1954 (42 U.S.C. 2073, 2093, 2201(g)).

19 (c) **PURPOSES.**—The purposes of the Uranium Re-
20 serve are—

21 (1) to provide assurance of the availability of
22 uranium recovered in the United States in the event
23 of a market disruption; and

24 (2) to support strategic fuel cycle capabilities in
25 the United States.

1 (d) ~~EXCLUSION.~~—The Secretary shall exclude from
 2 the Uranium Reserve uranium that is recovered in the
 3 United States by an entity that—

4 (1) is owned or controlled by the Government of
 5 the Russian Federation or the Government of the
 6 People’s Republic of China; or

7 (2) is organized under the laws of, or otherwise
 8 subject to the jurisdiction of, the Russian Federation
 9 or the People’s Republic of China.

10 (e) ~~ACQUISITION.~~—

11 (1) ~~IN GENERAL.~~—The Secretary may acquire
 12 for the Uranium Reserve only uranium recovered
 13 from a facility described in paragraph (2), including,
 14 subject to paragraph (3), uranium ore that has been
 15 mined.

16 (2) ~~FACILITIES DESCRIBED.~~—A facility referred
 17 to in paragraph (1) is a facility that—

18 (A)(i) is licensed by the Commission as of
 19 the date of enactment of this Act;

20 (ii) is not located on Tribal land; and

21 (iii) is not the subject of an enforcement
 22 action that—

23 (I) was taken—

24 (aa) in response to a violation of
 25 a regulation in part 40 of title 10;

1 Code of Federal Regulations (or suc-
 2 cessor regulations); and

3 (bb) during the 1-year period
 4 ending on the date on which the ura-
 5 nium is acquired for the Uranium Re-
 6 serve; and

7 (H) was characterized as “escalated
 8 enforcement”; or

9 (B)(i) as of the date of enactment of this
 10 Act, is licensed by a State that has entered into
 11 an agreement with the Commission under sec-
 12 tion 274 b. of the Atomic Energy Act of 1954
 13 (42 U.S.C. 2021(b));

14 (ii) is not located on Tribal land; and

15 (iii) is not the subject of an enforcement
 16 action that—

17 (I) was taken—

18 (aa) in response to a violation of
 19 an applicable State requirement that
 20 is compatible with the regulations of
 21 the Commission in part 40 of title 10,
 22 Code of Federal Regulations (or suc-
 23 cessor regulations); and

24 (bb) during the 1-year period
 25 ending on the date on which the ura-

1 nium is acquired for the Uranium Re-
2 serve; and

3 (H) was subject to further administra-
4 tive actions, further orders, or the equiva-
5 lent of further administrative actions or or-
6 ders.

7 (3) REQUIREMENT.—

8 (A) IN GENERAL.—Except as provided in
9 subparagraph (B), with respect to any uranium
10 ore acquired by a facility described in para-
11 graph (2) that has been mined, the Secretary
12 may acquire for the Uranium Reserve only ura-
13 nium extracted from a conventional mine that
14 is not located on—

15 (i) Tribal land;

16 (ii) Federal land temporarily with-
17 drawn from location and entry pursuant to
18 the record of decision described in the no-
19 tice of availability entitled “Notice of
20 Availability of Record of Decision for the
21 Northern Arizona Proposed Withdrawal”
22 (77 Fed. Reg. 2317 (January 17, 2012));
23 or

24 (iii) Federal land that, as of October
25 1, 2020, is permanently withdrawn from

1 location and entry under sections 2319
 2 through 2344 of the Revised Statutes
 3 (commonly known as the “Mining Law of
 4 1872”) (30 U.S.C. 22 et seq.).

5 (B) REMOVAL AND REMEDIAL ACTIONS.—

6 The Secretary may acquire for the Uranium
 7 Reserve uranium recovered from material ob-
 8 tained as a result of removal or remedial ac-
 9 tions carried out on abandoned mine land lo-
 10 cated on Tribal land.

11 (f) REQUEST FOR INFORMATION.—Not later than 90
 12 days after the date of enactment of this Act, the Secretary
 13 shall publish a request for information to help the Sec-
 14 retary evaluate—

15 (1) options for the operation and management
 16 of the Uranium Reserve;

17 (2) contractual mechanisms pursuant to which
 18 the Secretary could acquire uranium; and

19 (3) the quantities, form, transportation, and
 20 storage of uranium in the Uranium Reserve.

21 (g) BUDGET REQUEST.—For each fiscal year begin-
 22 ning after the date of enactment of this Act, the Secretary
 23 shall include in the budget justification submitted to Con-
 24 gress pursuant to section 1105 of title 31, United States
 25 Code—

1 (1) a request for amounts for the acquisition;
 2 transportation, and storage of uranium in the Ura-
 3 nium Reserve; or

4 (2) an explanation of why amounts are not re-
 5 quested for the acquisition, transportation, or stor-
 6 age of uranium in the Uranium Reserve.

7 **SEC. 403. REPORT ON ADVANCED METHODS OF MANUFAC-**
 8 **TURING AND CONSTRUCTION FOR NUCLEAR**
 9 **ENERGY APPLICATIONS.**

10 (a) IN GENERAL.—Not later than 180 days after the
 11 date of enactment of this Act, the Commission shall sub-
 12 mit to the appropriate committees of Congress a report
 13 (referred to in this subsection as the “report”) on manu-
 14 facturing and construction for nuclear energy applications.

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

- 17 (1) the Secretary;
- 18 (2) the nuclear energy industry;
- 19 (3) National Laboratories;
- 20 (4) institutions of higher education;
- 21 (5) nuclear and manufacturing technology de-
 22 velopers;
- 23 (6) the manufacturing and construction indus-
 24 tries;
- 25 (7) standards development organizations;

- 1 ~~(8) labor unions;~~
- 2 ~~(9) nongovernmental organizations; and~~
- 3 ~~(10) other public stakeholders.~~

4 ~~(c) CONTENTS.—~~

5 ~~(1) IN GENERAL.—The report shall—~~

6 ~~(A) examine any unique licensing issues or~~
 7 ~~requirements relating to the use of innovative—~~

8 ~~(i) advanced manufacturing processes;~~
 9 ~~and~~

10 ~~(ii) advanced construction techniques;~~

11 ~~(B) examine—~~

12 ~~(i) the requirements for nuclear-grade~~
 13 ~~components in manufacturing and con-~~
 14 ~~struction for nuclear energy applications;~~

15 ~~(ii) opportunities to use standard ma-~~
 16 ~~terials, parts, or components in manufac-~~
 17 ~~turing and construction for nuclear energy~~
 18 ~~applications; and~~

19 ~~(iii) opportunities to use standard ma-~~
 20 ~~terials that are in compliance with existing~~
 21 ~~codes to provide acceptable approaches to~~
 22 ~~support or encapsulate new materials that~~
 23 ~~do not yet have applicable codes;~~

24 ~~(C) identify any safety aspects of innova-~~
 25 ~~tive advanced manufacturing processes and ad-~~

vanced construction techniques that are not addressed by existing codes and standards, so that generic guidance may be updated or created, as necessary;

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

(i) within the existing regulatory framework; or

(ii) through a new rulemaking; and

(E) describe the extent to which Commission action is needed to implement any matter described in the report.

(2) COST ESTIMATES, BUDGETS, AND TIMEFRAMES.—The report shall include cost estimates, proposed budgets, and proposed timeframes for implementing risk-informed and performance-based regulatory guidance for manufacturing and construction for nuclear energy applications.

TITLE V—MISCELLANEOUS

SEC. 501. NUCLEAR ENERGY WORKFORCE DEVELOPMENT.

Section 313 of division C of the Omnibus Appropriations Act, 2009 (42 U.S.C. 16274a) is amended—

(1) in subsection (b), in the matter preceding paragraph (1), by striking “in each of fiscal years

1 2009 to 2019” and inserting “for each of fiscal
2 years 2021 through 2030,”; and

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

4 “(d) NUCLEAR ENERGY TRAINEESHIP SUBPRO-
5 GRAM.—

6 “(1) DEFINITIONS.—In this subsection:

7 “(A) COMMISSION.—The term ‘Commis-
8 sion’ means the Nuclear Regulatory Commis-
9 sion.

10 “(B) INSTITUTION OF HIGHER EDU-
11 CATION.—The term ‘institution of higher edu-
12 cation’ has the meaning given the term in sec-
13 tion 101(a) of the Higher Education Act of
14 1965 (20 U.S.C. 1001(a)).

15 “(C) NATIONAL LABORATORY.—The term
16 ‘National Laboratory’ has the meaning given
17 the term in section 2 of the Energy Policy Act
18 of 2005 (42 U.S.C. 15801).

19 “(2) ESTABLISHMENT.—The Commission shall
20 establish, as a subprogram of the Integrated Univer-
21 sity Program established under this section, a work-
22 force development subprogram under which the
23 Commission, in coordination with institutions of
24 higher education and trade schools, shall competi-
25 tively award traineeships that provide focused train-

ing to meet critical mission needs of the Commission
and nuclear workforce needs, including needs relating to—

“(A) nuclear criticality safety; and

“(B) the nuclear tradecraft workforce.

“(3) REQUIREMENTS.—In carrying out the
workforce development program described in paragraph (2), the Commission shall—

“(A) coordinate with the Secretary to
prioritize the funding of traineeships that focus
on—

“(i) nuclear workforce needs; and

“(ii) critical mission needs of the
Commission;

“(B) encourage appropriate partnerships
among—

“(i) National Laboratories;

“(ii) institutions of higher education;

“(iii) trade schools; and

“(iv) the nuclear energy industry; and

“(C) on an annual basis, evaluate nuclear
workforce needs for the purpose of implementing
traineeships in focused topical areas
that—

1 “(i) address the workforce needs of
 2 that community; and
 3 “(ii) support critical mission needs of
 4 the Commission.”.

5 **SEC. 502. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**
 6 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**
 7 **VENTORY IN THE UNITED STATES.**

8 (a) DEFINITIONS.—In this section:

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

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

17 (3) STANDARD CONTRACT.—The term “stand-
 18 ard contract” has the meaning given the term “con-
 19 tract” in section 961.3 of title 10, Code of Federal
 20 Regulations (or a successor regulation).

21 (b) REPORT.—Not later than January 1, 2022, and
 22 annually thereafter, the Secretary shall submit to Con-
 23 gress a report that describes—

24 (1) the annual and cumulative amount of pay-
 25 ments made by the United States to the holder of

1 a standard contract due to a partial breach of con-
2 tract under the Nuclear Waste Policy Act of 1982
3 (42 U.S.C. 10101 et seq.) resulting in financial
4 damages to the holder;

5 (2) the amount spent by the Department to re-
6 duce future payments projected to be made by the
7 United States to any holder of a standard contract
8 due to a partial breach of contract under the Nu-
9 clear Waste Policy Act of 1982 (42 U.S.C. 10101 et
10 seq.);

11 (3) the cumulative amount spent by the Depart-
12 ment to store, manage, and dispose of spent nuclear
13 fuel and high-level radioactive waste in the United
14 States as of the date of the report;

15 (4) the projected lifecycle costs to store, man-
16 age, transport, and dispose of the projected inven-
17 tory of spent nuclear fuel and high-level radioactive
18 waste in the United States, including spent nuclear
19 fuel and high-level radioactive waste expected to be
20 generated from existing reactors through 2050;

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

(6) any recommendations for improving the methods used by the Department for the accounting of spent nuclear fuel and high-level radioactive waste costs and liabilities.

**SEC. 503. AUTHORIZATION OF APPROPRIATIONS FOR
SUPERFUND ACTIONS AT ABANDONED MIN-
ING SITES ON TRIBAL LAND.**

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE NON-NPL SITE.—The term “eligible non-NPL site” means a site that—

(A) is not on the National Priorities List;

but

(B) the Administrator determines would be eligible for listing on the National Priorities List based on the presence of hazards from contamination at the site, applying the hazard ranking system described in section 105(e) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9605(e)).

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

1 ~~(3)~~ NATIONAL PRIORITIES LIST.—The term
 2 “National Priorities List” means the National Prior-
 3 ities List developed by the President in accordance
 4 with section 105(a)(8)(B) of the Comprehensive En-
 5 vironmental Response, Compensation, and Liability
 6 Act of 1980 (42 U.S.C. 9605(a)(8)(B)).

7 ~~(b)~~ AUTHORIZATION OF APPROPRIATIONS.—There is
 8 authorized to be appropriated to the Administrator to
 9 carry out this section \$100,000,000 for each of fiscal
 10 years 2021 through 2030, to remain available until ex-
 11 pended.

12 ~~(c)~~ USES OF AMOUNTS.—Amounts appropriated
 13 under subsection (b) shall be used by the Administrator—

14 ~~(1)~~ to carry out removal actions on abandoned
 15 mine land located on Tribal land;

16 ~~(2)~~ to carry out remedial actions on abandoned
 17 mine land located on Tribal land at—

18 ~~(A)~~ eligible non-NPL sites; and

19 ~~(B)~~ sites listed on the National Priorities
 20 List; and

21 ~~(3)~~ to make grants under subsection (c).

22 ~~(d)~~ HEALTH ASSESSMENTS.—Subject to the avail-
 23 ability of appropriations, the Agency for Toxic Substances
 24 and Disease Registry, in coordination with Tribal health
 25 authorities, shall perform 1 or more health assessments

1 at each eligible non-NPL site that is located on Tribal
2 land.

3 ~~(c) GRANTS FOR TECHNICAL ASSISTANCE.—~~

4 ~~(1) IN GENERAL.—~~The Administrator may use
5 amounts appropriated under subsection (b) to make
6 grants to Indian Tribes on whose land is located an
7 eligible non-NPL site.

8 ~~(2) USE OF GRANT FUNDS.—~~A grant under
9 paragraph (1) shall be used in accordance with the
10 second sentence of section 117(e)(1) of the Com-
11 prehensive Environmental Response, Compensation,
12 and Liability Act of 1980 (42 U.S.C. 9617(e)(1)).

13 ~~(3) LIMITATIONS.—~~A grant under paragraph
14 (1) shall be governed by the rules, procedures, and
15 limitations described in section 117(e)(2) of the
16 Comprehensive Environmental Response, Compensa-
17 tion, and Liability Act of 1980 (42 U.S.C.
18 9617(e)(2)), except that—

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

23 ~~(B) in the first sentence of that section,~~
24 ~~“under section 503 of the American Nuclear In-~~

1 frastructure Act of 2020” shall be substituted
2 for “under this subsection”.

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

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

17 (1) selecting and prioritizing sites for removal
18 actions and remedial actions under paragraphs (1)
19 and (2) of subsection (c); and
20 (2) carrying out those removal actions and re-
21 medial actions.

22 **SEC. 504. TECHNICAL CORRECTION.**

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

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

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

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

13 ~~“(i) nonenergy services;~~

14 ~~“(ii) energy; or~~

15 ~~“(iii) a combination of nonenergy~~
16 ~~services and energy; and~~

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

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

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

24 (3) by striking “e. The Commission” and in-
25 serting the following:

- 1 ~~“c. RESEARCH AND DEVELOPMENT ACTIVITIES.—~~
 2 ~~“(1) IN GENERAL.—Subject to paragraphs (2)~~
 3 ~~and (3), the Commission”.~~
 4 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**
 5 (a) *SHORT TITLE.—This Act may be cited as the*
 6 *“American Nuclear Infrastructure Act of 2020”.*
 7 (b) *TABLE OF CONTENTS.—The table of contents for*
 8 *this Act is as follows:*

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

**TITLE I—REESTABLISHING AMERICAN INTERNATIONAL
COMPETITIVENESS AND GLOBAL 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.

**TITLE II—EXPANDING NUCLEAR ENERGY THROUGH ADVANCED
NUCLEAR TECHNOLOGIES**

Sec. 201. Advanced nuclear reactor prizes.

*Sec. 202. Report on unique licensing considerations relating to the use of nuclear
energy for nonelectric applications.*

*Sec. 203. Enabling preparations for the demonstration of advanced nuclear reac-
tors on Department sites.*

TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION

Sec. 301. Nuclear reactor incentives.

*Sec. 302. Report on lessons learned during the COVID–19 public health emer-
gency.*

Sec. 303. Investment by allies.

**TITLE IV—REVITALIZING AMERICA’S NUCLEAR SUPPLY CHAIN
INFRASTRUCTURE**

Sec. 401. Advanced nuclear fuel approval.

Sec. 402. National strategic uranium reserve.

*Sec. 403. Report on advanced methods of manufacturing and construction for nu-
clear energy applications.*

TITLE V—MISCELLANEOUS

Sec. 501. Nuclear energy workforce development.

*Sec. 502. Annual report on the spent nuclear fuel and high-level radioactive waste
inventory in the United States.*

Sec. 503. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.

Sec. 504. Nuclear closure communities.

Sec. 505. Report on corporate support.

Sec. 506. Technical correction.

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 (as de-*
 14 *finied in section 3 of the Nuclear Energy Innova-*
 15 *tion and Modernization Act (42 U.S.C. 2215*
 16 *note; Public Law 115–439)); and*

17 (B) *accident tolerant fuel.*

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

1 (5) *APPROPRIATE COMMITTEES OF CONGRESS.*—

2 *The term “appropriate committees of Congress”*
 3 *means—*

4 (A) *the Committee on Environment and*
 5 *Public Works of the Senate; and*

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

8 (6) *CHAIRMAN.*—*The term “Chairman” means*
 9 *the Chairman of the Nuclear Regulatory Commission.*

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

12 (8) *DEPARTMENT.*—*The term “Department”*
 13 *means the Department of Energy.*

14 (9) *EARLY SITE PERMIT.*—*The term “early site*
 15 *permit” has the meaning given the term in section*
 16 *52.1 of title 10, Code of Federal Regulations (or a*
 17 *successor regulation).*

18 (10) *HIGH-ASSAY, LOW-ENRICHED URANIUM.*—
 19 *The term “high-assay, low-enriched uranium” means*
 20 *uranium with an assay greater than 5 weight per-*
 21 *cent, but less than 20 weight percent, of the uranium-*
 22 *235 isotope.*

23 (11) *INSTITUTION OF HIGHER EDUCATION.*—*The*
 24 *term “institution of higher education” has the mean-*

ing given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(12) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(13) REMOVAL; REMEDIAL ACTION.—The terms “removal” and “remedial action” have the meanings given those terms in section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601).

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

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

TITLE I—REESTABLISHING AMERICAN INTERNATIONAL COMPETITIVENESS AND GLOBAL LEADERSHIP

SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT AND INNOVATION ACTIVITIES.

(a) COORDINATION.—

(1) IN GENERAL.—The Commission shall—

1 (A) coordinate all work of the Commission
2 relating to—

3 (i) nuclear reactor import and export
4 licensing; and

5 (ii) international regulatory coopera-
6 tion and assistance relating to nuclear reac-
7 tors, including with countries that are
8 members of the Organisation for Economic
9 Co-operation and Development; and

10 (B) support interagency and international
11 coordination with respect to—

12 (i) the consideration of international
13 technical standards to establish the licensing
14 and regulatory basis to assist the design,
15 construction, and operation of nuclear sys-
16 tems;

17 (ii) efforts to help build competent nu-
18 clear regulatory organizations and legal
19 frameworks in countries seeking to develop
20 nuclear power; and

21 (iii) exchange programs and training
22 provided to other countries relating to nu-
23 clear regulation and oversight to improve
24 nuclear technology licensing, in accordance
25 with paragraph (2).

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

5 *(A) the Secretary;*

6 *(B) National Laboratories;*

7 *(C) the private sector; and*

8 *(D) institutions of higher education.*

9 (b) *AUTHORITY TO ESTABLISH BRANCH.*—The Com-
 10 *mission may establish within the Office of International*
 11 *Programs a branch, to be known as the “International Nu-*
 12 *clear Reactor Export and Innovation Branch”, to carry out*
 13 *such international nuclear reactor export and innovation*
 14 *activities as the Commission determines to be appropriate*
 15 *and within the mission of the Commission.*

16 (c) *EXCLUSION OF INTERNATIONAL ACTIVITIES FROM*
 17 *THE FEE BASE.*—

18 (1) *IN GENERAL.*—Section 102 of the Nuclear
 19 *Energy Innovation and Modernization Act (42 U.S.C.*
 20 *2215) is amended—*

21 *(A) in subsection (a), by adding at the end*
 22 *the following:*

23 “(4) *INTERNATIONAL NUCLEAR REACTOR EXPORT*
 24 *AND INNOVATION ACTIVITIES.*—The Commission shall
 25 *identify in the annual budget justification inter-*

1 *national nuclear reactor export and innovation ac-*
 2 *tivities described in section 101(a) of the American*
 3 *Nuclear Infrastructure Act of 2020.”; and*

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

6 *“(iv) Costs for international nuclear*
 7 *reactor export and innovation activities de-*
 8 *scribed in section 101(a) of the American*
 9 *Nuclear Infrastructure Act of 2020.”.*

10 *(2) EFFECTIVE DATE.—The amendments made*
 11 *by paragraph (1) shall take effect on October 1, 2021.*

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

15 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**
 16 **NATIONAL SECURITY PURPOSES.**

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

21 *(1) is owned or controlled by the Government of*
 22 *the Russian Federation or the Government of the Peo-*
 23 *ple’s Republic of China; or*

1 (2) *is organized under the laws of, or otherwise*
 2 *subject to the jurisdiction of, the Russian Federation*
 3 *or the People's Republic of China.*

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

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

12 (1) *CONSULTATION REQUIRED PRIOR TO*
 13 *ISSUANCE.—The Commission shall not issue a license*
 14 *to possess or own covered fuel under section 53 of the*
 15 *Atomic Energy Act of 1954 (42 U.S.C. 2073) and*
 16 *part 70 of title 10, Code of Federal Regulations (or*
 17 *successor regulations), unless the Commission has first*
 18 *consulted with the Secretary and the Secretary of*
 19 *State before issuing the license.*

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

21 (A) *IN GENERAL.—Subject to subparagraph*
 22 *(C), a license to possess or own covered fuel shall*
 23 *not be issued if the Secretary and the Secretary*
 24 *of State make the determination described in*
 25 *subparagraph (B).*

1 (B) *DETERMINATION.*—

2 (i) *IN GENERAL.*—*The determination*
3 *referred to in subparagraph (A) is a deter-*
4 *mination that possession or ownership, as*
5 *applicable, of covered fuel poses a threat to*
6 *the national security of the United States*
7 *that adversely impacts the physical and eco-*
8 *nomie security of the United States.*

9 (ii) *JOINT DETERMINATION.*—*A deter-*
10 *mination described in clause (i) shall be*
11 *jointly made by the Secretary and the Sec-*
12 *retary of State.*

13 (iii) *TIMELINE.*—

14 (I) *NOTICE OF APPLICATION.*—*Not*
15 *later than 30 days after the date on*
16 *which the Commission receives an ap-*
17 *plication for a license to possess or*
18 *own covered fuel, the Commission shall*
19 *notify the Secretary and the Secretary*
20 *of State of the application.*

21 (II) *DETERMINATION.*—*The Sec-*
22 *retary and the Secretary of State shall*
23 *have a period of 180 days, beginning*
24 *on the date on which the Commission*
25 *notifies the Secretary and the Sec-*

1 *retary of State under subclause (I) of*
2 *an application for a license to possess*
3 *or own covered fuel, in which to make*
4 *the determination described in clause*
5 *(i).*

6 (III) COMMISSION NOTIFICA-
7 TION.—*On making the determination*
8 *described in clause (i), the Secretary*
9 *and the Secretary of State shall imme-*
10 *diately notify the Commission.*

11 (IV) CONGRESSIONAL NOTIFICA-
12 TION.—*Not later than 30 days after*
13 *the date on which the Secretary and*
14 *the Secretary of State notify the Com-*
15 *mission under subclause (III), the*
16 *Commission shall notify the appro-*
17 *priate committees of Congress of the*
18 *determination.*

19 (V) PUBLIC NOTICE.—*Not later*
20 *than 15 days after the date on which*
21 *the Commission notifies Congress*
22 *under subclause (IV) of a determina-*
23 *tion made under clause (i), the Com-*
24 *mission shall make that determination*
25 *publicly available.*

1 (C) *EFFECT OF NO DETERMINATION.*—The
2 prohibition described in subparagraph (A) shall
3 not apply if the Secretary and the Secretary of
4 State do not make the determination described in
5 subparagraph (B) by the date described in clause
6 (iii)(II) of that subparagraph.

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

10 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

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

15 (b) *REQUIREMENT.*—The Commission shall not issue
16 an export license for the transfer of any item described in
17 subsection (d) to a country described in subsection (c) unless
18 the Commission makes a determination that such transfer
19 will not be inimical to the interests of the United States.

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

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

1 (2) *has not ratified or acceded to the amendment*
 2 *to the Convention on the Physical Protection of Nu-*
 3 *clear Material, signed at Vienna and New York*
 4 *March 3, 1980, described in the information circular*
 5 *of the International Atomic Energy Agency numbered*
 6 *INFCIRC/274/Rev.1/Mod.1 and dated May 9, 2016.*

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

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

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

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

18 (A) *the reprocessing of irradiated nuclear*
 19 *reactor fuel elements;*

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

21 (C) *the separation of the uranium-233 iso-*
 22 *tope.*

23 (e) *NOTIFICATION.—If the Commission makes a deter-*
 24 *mination under subsection (b) that the transfer of any item*
 25 *described in subsection (d) to a country described in sub-*

1 *section (c) will not be inimical to the interests of the United*
 2 *States, the Commission shall notify the appropriate com-*
 3 *mittees of Congress.*

4 ***TITLE II—EXPANDING NUCLEAR***
 5 ***ENERGY THROUGH AD-***
 6 ***VANCED NUCLEAR TECH-***
 7 ***NOLOGIES***

8 ***SEC. 201. ADVANCED NUCLEAR REACTOR PRIZES.***

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

12 *“(f) PRIZES FOR ADVANCED NUCLEAR REACTOR LI-*
 13 *CENSING.—*

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

16 *“(A) IN GENERAL.—Subject to the avail-*
 17 *ability of appropriations, the Secretary is au-*
 18 *thorized to make, with respect to each award cat-*
 19 *egory described in subparagraph (C), an award*
 20 *in an amount described in subparagraph (B) to*
 21 *the first non-Federal entity to which the Com-*
 22 *mission issues—*

23 *“(i) an operating license for an ad-*
 24 *vanced nuclear reactor under part 50 of*
 25 *title 10, Code of Federal Regulations (or*

1 *successor regulations), for which an appli-*
 2 *cation has not been approved by the Com-*
 3 *mission as of the date of enactment of this*
 4 *subsection; or*

5 *“(ii) a finding required under section*
 6 *52.103(g) of title 10, Code of Federal Regu-*
 7 *lations (or successor regulations), for a com-*
 8 *bined license for an advanced nuclear reac-*
 9 *tor—*

10 *“(I) that is issued under subpart*
 11 *C of part 52 that title (or successor*
 12 *regulations); and*

13 *“(II) for which an application*
 14 *has not been approved by the Commis-*
 15 *sion as of the date of enactment of this*
 16 *subsection.*

17 *“(B) AMOUNT OF AWARD.—An award under*
 18 *subparagraph (A) shall be in an amount equal*
 19 *to the total amount assessed by the Commission*
 20 *and collected under section 102(b)(2) from the*
 21 *entity receiving the award for costs relating to*
 22 *the issuance of the license described in that sub-*
 23 *paragraph, including, as applicable, costs relat-*
 24 *ing to the issuance of an associated construction*
 25 *permit described in section 50.23 of title 10,*

1 *Code of Federal Regulations (or successor regula-*
2 *tions), or early site permit (as defined in section*
3 *52.1 of that title (or successor regulations)).*

4 “(C) *AWARD CATEGORIES.*—An award
5 *under subparagraph (A) may be made for—*

6 “(i) *the first advanced nuclear reactor*
7 *for which the Commission issues—*

8 “(I) *a license in accordance with*
9 *clause (i) of subparagraph (A); or*

10 “(II) *a finding in accordance*
11 *with clause (ii) of that subparagraph;*

12 “(ii) *an advanced nuclear reactor*
13 *that—*

14 “(I) *uses isotopes derived from*
15 *spent nuclear fuel (as defined in sec-*
16 *tion 2 of the Nuclear Waste Policy Act*
17 *of 1982 (42 U.S.C. 10101)) or depleted*
18 *uranium as fuel for the advanced nu-*
19 *clear reactor; and*

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

23 “(aa) *a license in accordance*
24 *with clause (i) of subparagraph*
25 *(A); or*

1 “(bb) a finding in accord-
 2 ance with clause (ii) of that sub-
 3 paragraph; and

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

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

9 “(II) is the first advanced nuclear
 10 reactor described in subclause (I) for
 11 which the Commission issues—

12 “(aa) a license in accordance
 13 with clause (i) of subparagraph
 14 (A); or

15 “(bb) a finding in accord-
 16 ance with clause (ii) of that sub-
 17 paragraph.

18 “(2) *FEDERAL FUNDING LIMITATION.*—An award
 19 under this subsection shall not exceed the total
 20 amount expended (excluding any expenditures made
 21 with Federal funds received for the applicable project
 22 and an amount equal to the minimum cost-share re-
 23 quired under section 988 of the Energy Policy Act of
 24 2005 (42 U.S.C. 16352)) by the entity receiving the

1 *award for licensing costs relating to the project for*
2 *which the award is made.”.*

3 **SEC. 202. REPORT ON UNIQUE LICENSING CONSIDER-**
4 **ATIONS RELATING TO THE USE OF NUCLEAR**
5 **ENERGY FOR NONELECTRIC APPLICATIONS.**

6 *(a) IN GENERAL.—Not later than 1 year after the date*
7 *of enactment of this Act, the Commission shall submit to*
8 *the appropriate committees of Congress a report (referred*
9 *to in this section as the “report”) addressing any unique*
10 *licensing issues or requirements relating to—*

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

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

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

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

20 *(1) the Secretary;*

21 *(2) the nuclear energy industry;*

22 *(3) technology developers;*

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

24 *(5) nongovernmental organizations; and*

25 *(6) other public stakeholders.*

1 (c) *CONTENTS.*—

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

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

10 (i) *hydrogen or other liquid and gas-*
 11 *eous fuel or chemical production;*

12 (ii) *water desalination and wastewater*
 13 *treatment;*

14 (iii) *heat for industrial processes;*

15 (iv) *district heating;*

16 (v) *energy storage;*

17 (vi) *industrial or medical isotope pro-*
 18 *duction; and*

19 (vii) *other applications, as identified*
 20 *by the Commission;*

21 (B) *options for addressing those issues or*
 22 *requirements—*

23 (i) *within the existing regulatory*
 24 *framework;*

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

(iii) through a new rulemaking; and

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

(2) *COST ESTIMATES, BUDGETS, AND TIME-FRAMES.*—The report shall include cost estimates, proposed budgets, and proposed timeframes for implementing risk-informed and performance-based regulatory guidance in the licensing of nuclear reactors for nonelectric applications.

SEC. 203. ENABLING PREPARATIONS FOR THE DEMONSTRATION OF ADVANCED NUCLEAR REACTORS ON DEPARTMENT SITES.

(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 101(c)) is amended by adding at the end the following:

1 “(v) *Costs for—*

2 “(I) *activities to review and ap-*
 3 *prove or disapprove an application for*
 4 *an early site permit (as defined in sec-*
 5 *tion 52.1 of title 10, Code of Federal*
 6 *Regulations (or a successor regula-*
 7 *tion)) to demonstrate an advanced nu-*
 8 *clear reactor on a Department of En-*
 9 *ergy site; and*

10 “(II) *pre-application activities re-*
 11 *lating to an early site permit (as so*
 12 *defined) to demonstrate an advanced*
 13 *nuclear reactor on a Department of*
 14 *Energy site.”.*

15 (b) *EFFECTIVE DATE.—The amendment made by sub-*
 16 *section (a) shall take effect on October 1, 2021.*

17 ***TITLE III—PRESERVING EXIST-***
 18 ***ING NUCLEAR ENERGY GEN-***
 19 ***ERATION***

20 ***SEC. 301. NUCLEAR REACTOR INCENTIVES.***

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

22 (1) *CERTIFIED NUCLEAR REACTOR.—The term*
 23 *“certified nuclear reactor” means a nuclear reactor*
 24 *that—*

1 (A) operates in a competitive electricity
2 market; and

3 (B) is certified under subsection (c)(2)(A)(i)
4 to submit a sealed bid in accordance with sub-
5 section (d).

6 (2) CREDIT.—The term “credit” means a credit
7 allocated to a certified nuclear reactor under sub-
8 section (e)(2).

9 (b) ESTABLISHMENT OF PROGRAM.—Subject to the
10 availability of appropriations, the Administrator, in con-
11 sultation with the Secretary, shall establish an emissions
12 avoidance program—

13 (1) to evaluate nuclear reactors that are pro-
14 jected to cease operations due to economic factors; and

15 (2) to allocate credits to certified nuclear reactors
16 that are selected under paragraph (1)(B) of subsection
17 (e) to receive credits under paragraph (2) of that sub-
18 section.

19 (c) CERTIFICATION.—

20 (1) APPLICATION.—

21 (A) IN GENERAL.—In order to be certified
22 under paragraph (2)(A)(i), the owner or oper-
23 ator of a nuclear reactor that is projected to
24 cease operations due to economic factors shall
25 submit to the Administrator an application at

1 *such time, in such manner, and containing such*
 2 *information as the Administrator determines to*
 3 *be appropriate, including—*

4 *(i) information on the operating costs*
 5 *necessary to make the examination de-*
 6 *scribed in paragraph (2)(A)(ii)(II), includ-*
 7 *ing—*

8 *(I) the average annual operating*
 9 *loss per megawatt-hour expected to be*
 10 *incurred by the nuclear reactor over*
 11 *the 4-year period for which credits*
 12 *would be allocated;*

13 *(II) any private or publicly avail-*
 14 *able data with respect to current or*
 15 *projected bulk power market prices;*

16 *(III) out-of-market revenue*
 17 *streams;*

18 *(IV) operations and maintenance*
 19 *costs;*

20 *(V) capital costs, including fuel;*
 21 *and*

22 *(VI) operational and market risks;*

23 *(ii) an estimate of the potential incre-*
 24 *mental emissions of carbon dioxide, nitro-*
 25 *gen oxides, sulfur oxides, particulate matter,*

1 *and hazardous air pollutants that would re-*
2 *sult if the nuclear reactor were to cease op-*
3 *erations;*

4 *(iii) information on the source of re-*
5 *covered uranium and the location where the*
6 *uranium is converted, enriched, and fab-*
7 *ricated into fuel assemblies for the nuclear*
8 *reactor for the 4-year period for which cred-*
9 *its would be allocated; and*

10 *(iv) a detailed plan to sustain oper-*
11 *ations at the conclusion of the applicable 4-*
12 *year period for which credits would be allo-*
13 *cated—*

14 *(I) without receiving additional*
15 *credits; or*

16 *(II) with the receipt of additional*
17 *credits of a lower amount than the*
18 *credits allocated during that 4-year*
19 *credit period.*

20 *(B) TIMELINE.—The Administrator shall*
21 *accept applications described in subparagraph*
22 *(A)—*

23 *(i) until the date that is 120 days after*
24 *the date of enactment of this Act; and*

1 (ii) not less frequently than every year
2 thereafter.

3 (2) *DETERMINATION TO CERTIFY.*—

4 (A) *DETERMINATION.*—

5 (i) *IN GENERAL.*—Not later than 60
6 days after the applicable date under sub-
7 paragraph (B) of paragraph (1), the Ad-
8 ministrators, in consultation with the Sec-
9 retary, shall determine whether to certify, in
10 accordance with clauses (ii) and (iii), each
11 nuclear reactor for which an application is
12 submitted under subparagraph (A) of that
13 paragraph.

14 (ii) *MINIMUM REQUIREMENTS.*—To the
15 maximum extent practicable, the Adminis-
16 trator, in consultation with the Secretary,
17 shall only certify a nuclear reactor under
18 clause (i) if—

19 (I) the nuclear reactor has a good
20 safety record, as determined by the Ac-
21 tion Matrix of the Commission or the
22 Performance Indicators of the Reactor
23 Oversight Process, such that the nu-
24 clear reactor falls under the “licensee

1 *response” column indicating no cur-*
2 *rent significant safety issues;*

3 *(II) after considering the informa-*
4 *tion submitted under paragraph*
5 *(1)(A)(i), the Administrator determines*
6 *that the nuclear reactor is projected to*
7 *cease operations due to economic fac-*
8 *tors; and*

9 *(III) after considering the esti-*
10 *mate submitted under paragraph*
11 *(1)(A)(ii), the Administrator deter-*
12 *mines that emissions of carbon dioxide,*
13 *nitrogen oxides, sulfur oxides, particu-*
14 *late matter, and hazardous air pollut-*
15 *ants would increase if the nuclear reac-*
16 *tor were to cease operations and be re-*
17 *placed with other types of power gen-*
18 *eration.*

19 *(iii) PRIORITY.—In determining*
20 *whether to certify a nuclear reactor under*
21 *clause (i), the Administrator, in consulta-*
22 *tion with the Secretary, shall give priority*
23 *to a nuclear reactor that uses uranium that*
24 *is recovered, converted, enriched, and fab-*

1 ricated into fuel assemblies in the United
2 States.

3 (B) NOTICE.—For each application received
4 under paragraph (1)(A), the Administrator, in
5 consultation with the Secretary, shall provide to
6 the applicable owner or operator, as applicable—

7 (i) a notice of the certification of the
8 applicable nuclear reactor; or

9 (ii) a notice that describes the reasons
10 why the certification of the applicable nu-
11 clear reactor was denied.

12 (d) BIDDING PROCESS.—

13 (1) IN GENERAL.—Subject to paragraph (2), the
14 Administrator shall establish a deadline by which
15 each certified nuclear reactor shall submit to the Ad-
16 ministrator a sealed bid that—

17 (A) describes the price per megawatt-hour
18 required to maintain operations of the certified
19 nuclear reactor during the 4-year period for
20 which the certified nuclear reactor would receive
21 credits; and

22 (B) includes a commitment, subject to the
23 receipt of credits, to provide a specific number of
24 megawatt-hours of generation during the 4-year
25 period for which credits would be allocated.

1 (2) *REQUIREMENT.*—*The deadline established*
 2 *under paragraph (1) shall be not later than 30 days*
 3 *after the first date on which the Administrator has*
 4 *made the determination described in paragraph*
 5 *(2)(A)(i) of subsection (c) with respect to each appli-*
 6 *cation submitted under paragraph (1)(A) of that sub-*
 7 *section.*

8 (e) *ALLOCATION.*—

9 (1) *AUCTION.*—*The Administrator, in consulta-*
 10 *tion with the Secretary, shall—*

11 (A) *in consultation with the heads of appli-*
 12 *cable Federal agencies, establish a process for*
 13 *evaluating bids submitted under subsection*
 14 *(d)(1) through an auction process; and*

15 (B) *select certified nuclear reactors to be al-*
 16 *located credits.*

17 (2) *CREDITS.*—*Subject to subsection (f)(2), on se-*
 18 *lection under paragraph (1), a certified nuclear reac-*
 19 *tor shall be allocated credits for a 4-year period be-*
 20 *ginning on the date of the selection.*

21 (3) *REQUIREMENT.*—*To the maximum extent*
 22 *practicable, the Administrator shall use the amounts*
 23 *made available for credits under this section to allo-*
 24 *cate credits to as many certified nuclear reactors as*
 25 *possible.*

1 (f) *RENEWAL.*—

2 (1) *IN GENERAL.*—*The owner or operator of a*
 3 *certified nuclear reactor may seek to recertify the nu-*
 4 *clear reactor in accordance with this section.*

5 (2) *LIMITATION.*—*Notwithstanding any other*
 6 *provision of this section, the Administrator may not*
 7 *allocate any credits after September 30, 2026.*

8 (g) *ADDITIONAL REQUIREMENTS.*—

9 (1) *AUDIT.*—*During the 4-year period beginning*
 10 *on the date on which a certified nuclear reactor first*
 11 *receives a credit, the Administrator, in consultation*
 12 *with the Secretary, shall periodically audit the cer-*
 13 *tified nuclear reactor.*

14 (2) *RECAPTURE.*—*The Administrator shall, by*
 15 *regulation, provide for the recapture of the allocation*
 16 *of any credit to a certified nuclear reactor that, dur-*
 17 *ing the period described in paragraph (1)—*

18 (A) *terminates operations; or*

19 (B) *does not operate at an annual loss in*
 20 *the absence of an allocation of credits to the cer-*
 21 *tified nuclear reactor.*

22 (3) *CONFIDENTIALITY.*—*The Administrator, in*
 23 *consultation with the Secretary, shall establish proce-*
 24 *dures to ensure that any confidential, private, propri-*
 25 *etary, or privileged information that is included in a*

1 *sealed bid submitted under this section is not publicly*
 2 *disclosed or otherwise improperly used.*

3 *(h) REPORT.—Not later than January 1, 2024, the*
 4 *Comptroller General of the United States shall submit to*
 5 *Congress a report with respect to the credits allocated to*
 6 *certified nuclear reactors, which shall include—*

7 *(1) an evaluation of the effectiveness of the cred-*
 8 *its in avoiding emissions of carbon dioxide, nitrogen*
 9 *oxides, sulfur oxides, particulate matter, and haz-*
 10 *ardous air pollutants while ensuring grid reliability;*

11 *(2) a quantification of the ratepayer savings*
 12 *achieved under this section; and*

13 *(3) any recommendations to renew or expand the*
 14 *credits.*

15 *(i) AUTHORIZATION OF APPROPRIATIONS.—There are*
 16 *authorized to be appropriated such sums as are necessary*
 17 *to carry out this section for each of fiscal years 2021*
 18 *through 2026.*

19 **SEC. 302. REPORT ON LESSONS LEARNED DURING THE**
 20 **COVID-19 PUBLIC HEALTH EMERGENCY.**

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 and make pub-*
 24 *licly available a report on actions taken by the Commission*
 25 *during the public health emergency declared by the Sec-*

1 *retary of Health and Human Services under section 319*
2 *of the Public Health Service Act (42 U.S.C. 247d) on Janu-*
3 *ary 31, 2020, with respect to COVID–19.*

4 (b) *CONTENTS.—The report under subsection (a) shall*
5 *include—*

6 (1) *an identification of the processes, procedures,*
7 *and other regulatory policies that were revised or*
8 *temporarily suspended during the public health emer-*
9 *gency described in subsection (a);*

10 (2) *a review of actions, if any, taken by the*
11 *Commission that examines how any revision or tem-*
12 *porary suspension of a process, procedure, or other*
13 *regulatory policy identified under paragraph (1) may*
14 *or may not have compromised the ability of the Com-*
15 *mission to license and regulate the civilian use of ra-*
16 *dioactive materials in the United States to protect*
17 *public health and safety, promote the common defense*
18 *and security, and protect the environment;*

19 (3) *a description of any process efficiencies or*
20 *challenges that resulted from the matters identified*
21 *under paragraph (1);*

22 (4) *a discussion of lessons learned from the mat-*
23 *ters described in paragraphs (1), (2), and (3);*

24 (5) *a list of actions that the Commission may*
25 *take to incorporate into the licensing activities and*

1 *regulations of the Commission, without compromising*
 2 *the mission of the Commission—*

3 *(A) the lessons described in paragraph (4);*

4 *and*

5 *(B) the information provided under para-*
 6 *graphs (2) and (3); and*

7 *(6) a description of when the actions described in*
 8 *paragraph (5) may be implemented.*

9 **SEC. 303. INVESTMENT BY ALLIES.**

10 *(a) IN GENERAL.—The prohibitions against issuing*
 11 *certain licenses for utilization facilities to certain corpora-*
 12 *tions and other entities described in the second sentence of*
 13 *section 103 d. of the Atomic Energy Act of 1954 (42 U.S.C.*
 14 *2133(d)) and the second sentence of section 104 d. of that*
 15 *Act (42 U.S.C. 2134(d)) shall not apply to an entity de-*
 16 *scribed in subsection (b) if the Commission determines that*
 17 *issuance of the applicable license to that entity is not inim-*
 18 *ical to—*

19 *(1) the common defense and security; or*

20 *(2) the health and safety of the public.*

21 *(b) ENTITIES DESCRIBED.—An entity referred to in*
 22 *subsection (a) is a corporation or other entity that is owned,*
 23 *controlled, or dominated by—*

24 *(1) the government of—*

1 (A) a country that is a member of the
 2 Group of Seven as of November 25, 2020, which
 3 includes the United Kingdom, Germany, Can-
 4 ada, Japan, France, and Italy; or

5 (B) the Republic of Korea;

6 (2) a corporation that is incorporated in a coun-
 7 try described in subparagraph (A) or (B) of para-
 8 graph (1); or

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

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

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

18 **TITLE IV—REVITALIZING AMER-**
 19 **ICA’S NUCLEAR SUPPLY**
 20 **CHAIN INFRASTRUCTURE**

21 **SEC. 401. ADVANCED NUCLEAR FUEL APPROVAL.**

22 (a) *AGENCY COORDINATION.*—

23 (1) *IN GENERAL.*—Not later than 1 year after
 24 the date of enactment of this Act, the Chairman and

1 *the Secretary shall enter into a memorandum of un-*
2 *derstanding relating to advanced nuclear fuels.*

3 (2) *MEMORANDUM OF UNDERSTANDING CON-*
4 *TENTS.—The memorandum of understanding entered*
5 *into under paragraph (1) shall require the Depart-*
6 *ment and the Commission to coordinate, as appro-*
7 *priate—*

8 (A) *to ensure that the Department has suffi-*
9 *cient technical expertise to support the timely re-*
10 *search, development, demonstration, and com-*
11 *mercial application by the civilian nuclear in-*
12 *dustry of innovative advanced nuclear fuels, in-*
13 *cluding by facilitating the development and*
14 *sharing of criticality benchmark data to sup-*
15 *port—*

16 (i) *the licensing of fuel enrichment,*
17 *deconversion, and fabrication facilities*
18 *for—*

19 (I) *advanced nuclear fuels con-*
20 *taining high-assay, low-enriched ura-*
21 *nium with an assay greater than 5*
22 *weight percent, but less than 10 weight*
23 *percent, of the uranium-235 isotope;*
24 *and*

1 (ii) advanced nuclear fuels con-
 2 taining high-assay, low-enriched ura-
 3 nium with an assay greater than or
 4 equal to 10 weight percent, but less
 5 than 20 weight percent, of the ura-
 6 nium-235 isotope; and

7 (ii) the certification of transportation
 8 packages for—

9 (I) advanced nuclear fuels con-
 10 taining high-assay, low-enriched ura-
 11 nium with an assay greater than 5
 12 weight percent, but less than 10 weight
 13 percent, of the uranium-235 isotope;
 14 and

15 (II) advanced nuclear fuels con-
 16 taining high-assay, low-enriched ura-
 17 nium with an assay greater than or
 18 equal to 10 weight percent, but less
 19 than 20 weight percent, of the ura-
 20 nium-235 isotope;

21 (B) to ensure that the Commission has suf-
 22 ficient technical expertise to support the evalua-
 23 tion of advanced nuclear fuels;

24 (C) to identify methods to improve the use
 25 of computers and software codes to calculate the

1 *behavior and performance of advanced nuclear*
 2 *fuels based on mathematical models of the phys-*
 3 *ical behavior of advanced nuclear fuels;*

4 *(D) to ensure that the Department main-*
 5 *tains and develops the facilities necessary to en-*
 6 *able the timely research, development, dem-*
 7 *onstration, and commercial application by the*
 8 *civilian nuclear industry of innovative advanced*
 9 *nuclear fuels; and*

10 *(E) to ensure that the Commission has ac-*
 11 *cess to the facilities described in subparagraph*
 12 *(D), as needed.*

13 *(b) REPORTING REQUIREMENTS.—Not later than 180*
 14 *days after the date of enactment of this Act, the Commission*
 15 *shall submit to the appropriate committees of Congress a*
 16 *report that—*

17 *(1) identifies criticality benchmark data to as-*
 18 *sist—*

19 *(A) the licensing of fuel enrichment,*
 20 *deconversion, and fabrication facilities for—*

21 *(i) advanced nuclear fuels containing*
 22 *high-assay, low-enriched uranium with an*
 23 *assay greater than 5 weight percent, but less*
 24 *than 10 weight percent, of the uranium-235*
 25 *isotope; and*

1 (ii) advanced nuclear fuels containing
2 high-assay, low-enriched uranium with an
3 assay greater than or equal to 10 weight
4 percent, but less than 20 weight percent, of
5 the uranium-235 isotope; and

6 (B) the certification of transportation pack-
7 ages for—

8 (i) advanced nuclear fuels containing
9 high-assay, low-enriched uranium with an
10 assay greater than 5 weight percent, but less
11 than 10 weight percent, of the uranium-235
12 isotope; and

13 (ii) advanced nuclear fuels containing
14 high-assay, low-enriched uranium with an
15 assay greater than or equal to 10 weight
16 percent, but less than 20 weight percent, of
17 the uranium-235 isotope;

18 (2) identifies and describes any updates to regu-
19 lations, certifications, and other regulatory policies
20 that the Commission determines are necessary for li-
21 censing and oversight relating to high-assay, low-en-
22 riched uranium, including—

23 (A) certifications relating to transportation
24 packages for—

1 (i) *high-assay, low-enriched uranium*
 2 *with an assay greater than 5 weight per-*
 3 *cent, but less than 10 weight percent, of the*
 4 *uranium-235 isotope; and*

5 (ii) *high-assay, low-enriched uranium*
 6 *with an assay greater than or equal to 10*
 7 *weight percent, but less than 20 weight per-*
 8 *cent, of the uranium-235 isotope; and*

9 (B) *licensing of fuel enrichment,*
 10 *deconversion, and fabrication facilities for high-*
 11 *assay, low-enriched uranium, and associated*
 12 *physical security plans for those facilities;*

13 (3) *identifies and describes any updates to regu-*
 14 *lations, certifications, and other regulatory policies*
 15 *that the Commission determines are necessary to ad-*
 16 *dress nuclear nonproliferation considerations that—*

17 (A) *are within the mission of the Commis-*
 18 *sion; and*

19 (B) *are associated with—*

20 (i) *high-assay, low-enriched uranium*
 21 *with an assay greater than 5 weight per-*
 22 *cent, but less than 10 weight percent, of the*
 23 *uranium-235 isotope; or*

24 (ii) *high-assay, low-enriched uranium*
 25 *with an assay greater than or equal to 10*

1 *weight percent, but less than 20 weight per-*
 2 *cent, of the uranium-235 isotope;*

3 *(4) identifies and describes—*

4 *(A) any data needs, regulatory require-*
 5 *ments, or policies identified under paragraph*
 6 *(1), (2), or (3) that—*

7 *(i) differ based on whether they are re-*
 8 *lated to—*

9 *(I) high-assay, low-enriched ura-*
 10 *nium with an assay greater than 5*
 11 *weight percent, but less than 10 weight*
 12 *percent, of the uranium-235 isotope; or*

13 *(II) high-assay, low-enriched ura-*
 14 *nium with an assay greater than or*
 15 *equal to 10 weight percent, but less*
 16 *than 20 weight percent, of the ura-*
 17 *nium-235 isotope; or*

18 *(ii) are unique to—*

19 *(I) high-assay, low-enriched ura-*
 20 *nium with an assay greater than 5*
 21 *weight percent, but less than 10 weight*
 22 *percent, of the uranium-235 isotope; or*

23 *(II) high-assay, low-enriched ura-*
 24 *nium with an assay greater than or*
 25 *equal to 10 weight percent, but less*

1 *than 20 weight percent, of the ura-*
 2 *nium-235 isotope;*

3 *(B) the manner in which the data needs,*
 4 *regulatory requirements, or policies identified*
 5 *under subparagraph (A)(i) differ as described in*
 6 *that subparagraph; and*

7 *(C) the extent to which the data needs, regu-*
 8 *latory requirements, or policies identified under*
 9 *subparagraph (A)(ii) are unique to either—*

10 *(i) high-assay, low-enriched uranium*
 11 *with an assay greater than 5 weight per-*
 12 *cent, but less than 10 weight percent, of the*
 13 *uranium-235 isotope; or*

14 *(ii) high-assay, low-enriched uranium*
 15 *with an assay greater than or equal to 10*
 16 *weight percent, but less than 20 weight per-*
 17 *cent, of the uranium-235 isotope; and*

18 *(5) includes a timeline for completing the up-*
 19 *dates described in paragraphs (2) and (3) within the*
 20 *existing regulatory framework.*

21 **SEC. 402. NATIONAL STRATEGIC URANIUM RESERVE.**

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

23 *(1) PROGRAM.—The term “program” means the*
 24 *program established under subsection (b)(1).*

1 (2) *URANIUM RESERVE.*—*The term “Uranium*
 2 *Reserve” means the uranium reserve operated pursu-*
 3 *ant to the program.*

4 (b) *ESTABLISHMENT.*—

5 (1) *IN GENERAL.*—*Not later than 60 days after*
 6 *the date of enactment of this Act, the Secretary, sub-*
 7 *ject to the availability of appropriations, shall estab-*
 8 *lish a program to operate a uranium reserve in ac-*
 9 *cordance with this section.*

10 (2) *AUTHORITY.*—*In establishing the program*
 11 *and operating the Uranium Reserve, the Secretary*
 12 *shall use the authority granted to the Secretary by*
 13 *sections 53, 63, and 161 g. of the Atomic Energy Act*
 14 *of 1954 (42 U.S.C. 2073, 2093, 2201(g)).*

15 (c) *PURPOSES.*—*The purposes of the Uranium Reserve*
 16 *are—*

17 (1) *to provide assurance of the availability of*
 18 *uranium recovered in the United States in the event*
 19 *of a market disruption; and*

20 (2) *to support strategic fuel cycle capabilities in*
 21 *the United States.*

22 (d) *EXCLUSION.*—*The Secretary shall exclude from the*
 23 *Uranium Reserve uranium that is recovered in the United*
 24 *States by an entity that—*

1 (1) *is owned or controlled by the Government of*
 2 *the Russian Federation or the Government of the Peo-*
 3 *ple's Republic of China; or*

4 (2) *is organized under the laws of, or otherwise*
 5 *subject to the jurisdiction of, the Russian Federation*
 6 *or the People's Republic of China.*

7 (e) *ACQUISITION.*—

8 (1) *IN GENERAL.*—*The Secretary may acquire*
 9 *for the Uranium Reserve only uranium recovered*
 10 *from a facility described in paragraph (2), including,*
 11 *subject to paragraph (3), uranium ore that has been*
 12 *mined.*

13 (2) *FACILITIES DESCRIBED.*—*A facility referred*
 14 *to in paragraph (1) is a facility that—*

15 (A)(i) *is licensed by the Commission as of*
 16 *the date of enactment of this Act;*

17 (ii) *is not located on Tribal land; and*

18 (iii) *is not the subject of an enforcement ac-*
 19 *tion that—*

20 (I) *was taken—*

21 (aa) *in response to a violation of*
 22 *a regulation in part 40 of title 10,*
 23 *Code of Federal Regulations (or suc-*
 24 *cessor regulations); and*

1 (bb) during the 1-year period end-
2 ing on the date on which the uranium
3 is acquired for the Uranium Reserve;
4 and

5 (II) was characterized as “escalated
6 enforcement”; or

7 (B)(i) as of the date of enactment of this
8 Act, is licensed by a State that has entered into
9 an agreement with the Commission under section
10 274 b. of the Atomic Energy Act of 1954 (42
11 U.S.C. 2021(b));

12 (ii) is not located on Tribal land; and

13 (iii) is not the subject of an enforcement ac-
14 tion that—

15 (I) was taken—

16 (aa) in response to a violation of
17 an applicable State requirement that is
18 compatible with the regulations of the
19 Commission in part 40 of title 10,
20 Code of Federal Regulations (or suc-
21 cessor regulations); and

22 (bb) during the 1-year period end-
23 ing on the date on which the uranium
24 is acquired for the Uranium Reserve;
25 and

1 (II) was subject to further administra-
 2 tive actions, further orders, or the equiva-
 3 lent of further administrative actions or or-
 4 ders that, alone or in combination, are
 5 equivalent to an enforcement action of the
 6 Commission that would be characterized as
 7 “escalated enforcement” by the Commission,
 8 as described in subparagraph (A)(iii)(II).

9 (3) *REQUIREMENT.*—

10 (A) *IN GENERAL.*—Except as provided in
 11 subparagraph (B), with respect to any uranium
 12 ore acquired by a facility described in paragraph
 13 (2) that has been mined, the Secretary may ac-
 14 quire for the Uranium Reserve only uranium ex-
 15 tracted from a conventional mine that is not lo-
 16 cated on—

17 (i) Tribal land;

18 (ii) land located within the outer
 19 boundaries of the parcels of land described
 20 in Public Land Order 7787 (77 Fed. Reg.
 21 2563 (January 18, 2012)); or

22 (iii) Federal land that, as of October 1,
 23 2020, is permanently withdrawn from loca-
 24 tion and entry under sections 2319 through
 25 2344 of the Revised Statutes (commonly

1 *known as the “Mining Law of 1872”*) (30
2 *U.S.C. 22 et seq.*).

3 *(B) REMOVAL AND REMEDIAL ACTIONS.—*

4 *The Secretary may acquire for the Uranium Re-*
5 *serve uranium recovered from material obtained*
6 *as a result of removal or remedial actions car-*
7 *ried out on abandoned mine land located on*
8 *Tribal land.*

9 *(f) REQUEST FOR INFORMATION.—Not later than 90*
10 *days after the date of enactment of this Act, the Secretary*
11 *shall publish a request for information to help the Secretary*
12 *evaluate—*

13 *(1) options for the operation and management of*
14 *the Uranium Reserve;*

15 *(2) contractual mechanisms pursuant to which*
16 *the Secretary could acquire uranium; and*

17 *(3) the quantities, form, transportation, and*
18 *storage of uranium in the Uranium Reserve.*

19 *(g) BUDGET REQUEST.—For each fiscal year begin-*
20 *ning after the date of enactment of this Act, the Secretary*
21 *shall include in the budget justification submitted to Con-*
22 *gress pursuant to section 1105 of title 31, United States*
23 *Code—*

1 (1) *a request for amounts for the acquisition,*
 2 *transportation, and storage of uranium in the Ura-*
 3 *anium Reserve; or*

4 (2) *an explanation of why amounts are not re-*
 5 *quested for the acquisition, transportation, or storage*
 6 *of uranium in the Uranium Reserve.*

7 **SEC. 403. REPORT ON ADVANCED METHODS OF MANUFAC-**
 8 **TURING AND CONSTRUCTION FOR NUCLEAR**
 9 **ENERGY APPLICATIONS.**

10 (a) *IN GENERAL.*—*Not later than 180 days after the*
 11 *date of enactment of this Act, the Commission shall submit*
 12 *to the appropriate committees of Congress a report (referred*
 13 *to in this subsection as the “report”) on manufacturing and*
 14 *construction for nuclear energy applications.*

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

- 17 (1) *the Secretary;*
- 18 (2) *the nuclear energy industry;*
- 19 (3) *National Laboratories;*
- 20 (4) *institutions of higher education;*
- 21 (5) *nuclear and manufacturing technology devel-*
 22 *opers;*
- 23 (6) *the manufacturing and construction indus-*
 24 *tries;*
- 25 (7) *standards development organizations;*

- 1 (8) *labor unions;*
- 2 (9) *nongovernmental organizations; and*
- 3 (10) *other public stakeholders.*

4 (c) *CONTENTS.—*

5 (1) *IN GENERAL.—The report shall—*

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

8 (i) *advanced manufacturing processes;*
 9 *and*

10 (ii) *advanced construction techniques;*

11 (B) *examine—*

12 (i) *the requirements for nuclear-grade*
 13 *components in manufacturing and construc-*
 14 *tion for nuclear energy applications;*

15 (ii) *opportunities to use standard ma-*
 16 *terials, parts, or components in manufac-*
 17 *turing and construction for nuclear energy*
 18 *applications; and*

19 (iii) *opportunities to use standard ma-*
 20 *terials that are in compliance with existing*
 21 *codes to provide acceptable approaches to*
 22 *support or encapsulate new materials that*
 23 *do not yet have applicable codes;*

24 (C) *identify any safety aspects of innovative*
 25 *advanced manufacturing processes and advanced*

1 *construction techniques that are not addressed by*
 2 *existing codes and standards, so that generic*
 3 *guidance may be updated or created, as nec-*
 4 *essary;*

5 *(D) identify options for addressing the*
 6 *issues, requirements, and opportunities examined*
 7 *under subparagraphs (A) and (B)—*

8 *(i) within the existing regulatory*
 9 *framework; or*

10 *(ii) through a new rulemaking; and*

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

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

20 ***TITLE V—MISCELLANEOUS***

21 ***SEC. 501. NUCLEAR ENERGY WORKFORCE DEVELOPMENT.***

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 (b), in the matter preceding*
 25 *paragraph (1), by striking “in each of fiscal years*

1 2009 to 2019” and inserting “for each of fiscal years
2 2021 through 2030,”; and

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

4 “(d) NUCLEAR ENERGY TRAINEESHIP SUBPRO-
5 GRAM.—

6 “(1) DEFINITIONS.—In this subsection:

7 “(A) COMMISSION.—The term ‘Commission’
8 means the Nuclear Regulatory Commission.

9 “(B) INSTITUTION OF HIGHER EDU-
10 CATION.—The term ‘institution of higher edu-
11 cation’ has the meaning given the term in sec-
12 tion 101(a) of the Higher Education Act of 1965
13 (20 U.S.C. 1001(a)).

14 “(C) NATIONAL LABORATORY.—The term
15 ‘National Laboratory’ has the meaning given the
16 term in section 2 of the Energy Policy Act of
17 2005 (42 U.S.C 15801).

18 “(2) ESTABLISHMENT.—The Commission shall
19 establish, as a subprogram of the Integrated Univer-
20 sity Program established under this section, a work-
21 force development subprogram under which the Com-
22 mission, in coordination with institutions of higher
23 education and trade schools, shall competitively
24 award traineeships that provide focused training to

1 *meet critical mission needs of the Commission and*
 2 *nuclear workforce needs, including needs relating to—*

3 “(A) *nuclear criticality safety; and*

4 “(B) *the nuclear tradecraft workforce.*

5 “(3) *REQUIREMENTS.—In carrying out the*
 6 *workforce development program described in para-*
 7 *graph (2), the Commission shall—*

8 “(A) *coordinate with the Secretary to*
 9 *prioritize the funding of traineeships that focus*
 10 *on—*

11 “(i) *nuclear workforce needs; and*

12 “(ii) *critical mission needs of the Com-*
 13 *mission;*

14 “(B) *encourage appropriate partnerships*
 15 *among—*

16 “(i) *National Laboratories;*

17 “(ii) *institutions of higher education;*

18 “(iii) *trade schools; and*

19 “(iv) *the nuclear energy industry; and*

20 “(C) *on an annual basis, evaluate nuclear*
 21 *workforce needs for the purpose of implementing*
 22 *traineeships in focused topical areas that—*

23 “(i) *address the workforce needs of that*
 24 *community; and*

1 “(ii) support critical mission needs of
2 the Commission.”.

3 **SEC. 502. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**
4 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**
5 **VENTORY IN THE UNITED STATES.**

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

7 (1) *HIGH-LEVEL RADIOACTIVE WASTE.*—*The*
8 *term “high-level radioactive waste” has the meaning*
9 *given the term in section 2 of the Nuclear Waste Pol-*
10 *icy Act of 1982 (42 U.S.C. 10101).*

11 (2) *SPENT NUCLEAR FUEL.*—*The term “spent*
12 *nuclear fuel” has the meaning given the term in sec-*
13 *tion 2 of the Nuclear Waste Policy Act of 1982 (42*
14 *U.S.C. 10101).*

15 (3) *STANDARD CONTRACT.*—*The term “standard*
16 *contract” has the meaning given the term “contract”*
17 *in section 961.3 of title 10, Code of Federal Regula-*
18 *tions (or a successor regulation).*

19 (b) *REPORT.*—*Not later than January 1, 2022, and*
20 *annually thereafter, the Secretary shall submit to Congress*
21 *a report that describes—*

22 (1) *the annual and cumulative amount of pay-*
23 *ments made by the United States to the holder of a*
24 *standard contract due to a partial breach of contract*
25 *under the Nuclear Waste Policy Act of 1982 (42*

1 *U.S.C. 10101 et seq.) resulting in financial damages*
2 *to the holder;*

3 *(2) the amount spent by the Department to re-*
4 *duce future payments projected to be made by the*
5 *United States to any holder of a standard contract*
6 *due to a partial breach of contract under the Nuclear*
7 *Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.);*

8 *(3) the cumulative amount spent by the Depart-*
9 *ment to store, manage, and dispose of spent nuclear*
10 *fuel and high-level radioactive waste in the United*
11 *States as of the date of the report;*

12 *(4) the projected lifecycle costs to store, manage,*
13 *transport, and dispose of the projected inventory of*
14 *spent nuclear fuel and high-level radioactive waste in*
15 *the United States, including spent nuclear fuel and*
16 *high-level radioactive waste expected to be generated*
17 *from existing reactors through 2050;*

18 *(5) any mechanisms for better accounting of li-*
19 *abilities for the lifecycle costs of the spent nuclear fuel*
20 *and high-level radioactive waste inventory in the*
21 *United States; and*

22 *(6) any recommendations for improving the*
23 *methods used by the Department for the accounting of*
24 *spent nuclear fuel and high-level radioactive waste*
25 *costs and liabilities.*

1 **SEC. 503. 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 that—*

7 (A) *is not on the National Priorities List;*
8 *but*

9 (B) *the Administrator determines would be*
10 *eligible for listing on the National Priorities List*
11 *based on the presence of hazards from contami-*
12 *nation at the site, applying the hazard ranking*
13 *system described in section 105(c) of the Com-*
14 *prehensive Environmental Response, Compensa-*
15 *tion, and Liability Act of 1980 (42 U.S.C.*
16 *9605(c)).*

17 (2) *INDIAN TRIBE.—The term “Indian Tribe”*
18 *has the meaning given the term “Indian tribe” in sec-*
19 *tion 101 of the Comprehensive Environmental Re-*
20 *sponse, Compensation, and Liability Act of 1980 (42*
21 *U.S.C. 9601).*

22 (3) *NATIONAL PRIORITIES LIST.—The term “Na-*
23 *tional Priorities List” means the National Priorities*
24 *List developed by the President in accordance with*
25 *section 105(a)(8)(B) of the Comprehensive Environ-*

1 *mental Response, Compensation, and Liability Act of*
 2 *1980 (42 U.S.C. 9605(a)(8)(B)).*

3 *(b) AUTHORIZATION OF APPROPRIATIONS.—There are*
 4 *authorized to be appropriated for each of fiscal years 2021*
 5 *through 2030, to remain available until expended—*

6 *(1) \$97,000,000 to the Administrator to carry*
 7 *out this section (except for subsection (d)); and*

8 *(2) \$3,000,000 to the Administrator of the Agen-*
 9 *cy for Toxic Substances and Disease Registry to carry*
 10 *out subsection (d).*

11 *(c) USES OF AMOUNTS.—Amounts appropriated under*
 12 *subsection (b)(1) shall be used by the Administrator—*

13 *(1) to carry out removal actions on abandoned*
 14 *mine land located on Tribal land;*

15 *(2) to carry out remedial actions 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 (e) *GRANTS FOR TECHNICAL ASSISTANCE.*—

2 (1) *IN GENERAL.*—*The Administrator may use*
 3 *amounts appropriated under subsection (b)(1) to*
 4 *make grants to Indian Tribes on whose land is lo-*
 5 *cated an eligible non-NPL site.*

6 (2) *USE OF GRANT FUNDS.*—*A grant under*
 7 *paragraph (1) shall be used in accordance with the*
 8 *second sentence of section 117(e)(1) of the Comprehen-*
 9 *sive Environmental Response, Compensation, and Li-*
 10 *ability Act of 1980 (42 U.S.C. 9617(e)(1)).*

11 (3) *LIMITATIONS.*—*A grant under paragraph (1)*
 12 *shall be governed by the rules, procedures, and limita-*
 13 *tions described in section 117(e)(2) of the Comprehen-*
 14 *sive Environmental Response, Compensation, and Li-*
 15 *ability Act of 1980 (42 U.S.C. 9617(e)(2)), except*
 16 *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 503 of the American Nuclear In-*
 23 *frastructure Act of 2020” shall be substituted for*
 24 *“under this subsection”.*

1 (f) *STATUTE OF LIMITATIONS.*—If a remedial action
 2 described in subsection (c)(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 1980
 6 (42 U.S.C. 9601)) with respect to that eligible non-NPL site
 7 unless the action is commenced within the timeframe pro-
 8 vided for such actions with respect to facilities on the Na-
 9 tional Priorities List in the first sentence of the matter fol-
 10 lowing subparagraph (B) of section 113(g)(1) of that Act
 11 (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 removal
 16 actions and remedial actions under paragraphs (1)
 17 and (2) of subsection (c); and

18 (2) carrying out those removal actions and reme-
 19 dial actions.

20 **SEC. 504. NUCLEAR CLOSURE COMMUNITIES.**

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

22 (1) *COMMUNITY ADVISORY BOARD.*—The term
 23 “community advisory board” means a community
 24 committee or other advisory organization that aims to
 25 foster communication and information exchange be-

1 *tween a licensee planning for and involved in decom-*
 2 *missioning activities and members of the community*
 3 *that decommissioning activities may affect.*

4 (2) *DECOMMISSION.*—*The term “decommission”*
 5 *has the meaning given the term in section 50.2 of title*
 6 *10, Code of Federal Regulations (or successor regula-*
 7 *tions).*

8 (3) *ELIGIBLE RECIPIENT.*—*The term “eligible re-*
 9 *cipient” has the meaning given the term in section 3*
 10 *of the Public Works and Economic Development Act*
 11 *of 1965 (42 U.S.C. 3122).*

12 (4) *LICENSEE.*—*The term “licensee” has the*
 13 *meaning given the term in section 50.2 of title 10,*
 14 *Code of Federal Regulations (or successor regula-*
 15 *tions).*

16 (5) *NUCLEAR CLOSURE COMMUNITY.*—*The term*
 17 *“nuclear closure community” means a unit of local*
 18 *government, including a county, city, town, village,*
 19 *school district, or special district that has been im-*
 20 *pacted, or reasonably demonstrates to the satisfaction*
 21 *of the Secretary, that it will be impacted, by a nu-*
 22 *clear power plant licensed by the Commission that*
 23 *has ceased operation or has provided a written notifi-*
 24 *cation to the Commission that it will cease operations*
 25 *as of the date of enactment of this Act.*

1 (6) *SECRETARY.*—*The term “Secretary” means*
2 *the Secretary of Commerce, acting through the Assist-*
3 *ant Secretary of Commerce for Economic Develop-*
4 *ment.*

5 (b) *ESTABLISHMENT.*—*Not later than 180 days after*
6 *the date of enactment of this Act, the Secretary shall estab-*
7 *lish a grant program to provide grants to eligible recipi-*
8 *ents—*

9 (1) *to assist with economic development in nu-*
10 *clear closure communities; and*

11 (2) *to fund community advisory boards in nu-*
12 *clear closure communities.*

13 (c) *REQUIREMENT.*—*In carrying out this section, to*
14 *the maximum extent practicable, the Secretary shall imple-*
15 *ment the recommendations described in the report sub-*
16 *mitted to Congress under section 108 of the Nuclear Energy*
17 *Innovation and Modernization Act (Public Law 115–439;*
18 *132 Stat. 5577) entitled “Best Practices for Establishment*
19 *and Operation of Local Community Advisory Boards Asso-*
20 *ciated with Decommissioning Activities at Nuclear Power*
21 *Plants”.*

22 (d) *DISTRIBUTION OF FUNDS.*—*The Secretary shall es-*
23 *tablish a formula to ensure, to the maximum extent prac-*
24 *ticable, geographic diversity among grant recipients under*
25 *this section.*

1 (e) *AUTHORIZATION OF APPROPRIATIONS.*—

2 (1) *IN GENERAL.*—*There are authorized to be ap-*
3 *propriated to the Secretary—*

4 (A) *to carry out subsection (b)(1),*
5 *\$30,000,000 for each of fiscal years 2021 through*
6 *2026; and*

7 (B) *to carry out subsection (b)(2),*
8 *\$5,000,000 for each of fiscal years 2021 through*
9 *2023.*

10 (2) *AVAILABILITY.*—*Amounts made available*
11 *under this section shall remain available for a period*
12 *of 5 years beginning on the date on which the*
13 *amounts are made available.*

14 (3) *NO OFFSET.*—*None of the funds made avail-*
15 *able under this section may be used to offset the fund-*
16 *ing for any other Federal program.*

17 **SEC. 505. REPORT ON CORPORATE SUPPORT.**

18 *Not later than 180 days after the date of enactment*
19 *of this Act, the Commission shall submit to the appropriate*
20 *committees of Congress and make publicly available a re-*
21 *port 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 **SEC. 506. TECHNICAL CORRECTION.**

5 *Section 104 c. of the Atomic Energy Act of 1954 (42*
 6 *U.S.C. 2134(c)) is amended—*

7 (1) *by striking the third sentence and inserting*
 8 *the following:*

9 “(3) *LIMITATION ON UTILIZATION FACILITIES.—*
 10 *The Commission may issue a license under this sec-*
 11 *tion for a utilization facility useful in the conduct of*
 12 *research and development activities of the types speci-*
 13 *fied in section 31 if—*

14 “(A) *not more than 75 percent of the an-*
 15 *nuual costs to the licensee of owning and oper-*
 16 *ating the facility are devoted to the sale, other*
 17 *than for research and development or education*
 18 *and training, of—*

19 “(i) *nonenergy services;*

20 “(ii) *energy; or*

21 “(iii) *a combination of nonenergy serv-*
 22 *ices and energy; and*

23 “(B) *not more than 50 percent of the an-*
 24 *nuual costs to the licensee of owning and oper-*

1 *ating the facility are devoted to the sale of en-*
2 *ergy.”;*

3 *(2) in the second sentence, by striking “The*
4 *Commission” and inserting the following:*

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

6 *(3) by striking “c. The Commission” and insert-*
7 *ing the following:*

8 *“c. RESEARCH AND DEVELOPMENT ACTIVITIES.—*

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

Calendar No. 598

116TH CONGRESS
2D Session

S. 4897

A BILL

To reestablish United States global leadership in nuclear energy; revitalize domestic nuclear energy supply chain infrastructure, support the licensing of advanced nuclear technologies, and improve the regulation of nuclear energy; and for other purposes.

DECEMBER 2, 2020

Reported with an amendment