117TH CONGRESS
1ST SESSION

S. _____

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

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

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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''American Nuclear Infrastructure Act of 2021''.

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

SEC. 2. DEFINITIONS.

In this Act:

(1) ACCIDENT TOLERANT FUEL.—The term ''accident tolerant fuel'' has the meaning given the term in section 107(a) of the Nuclear Energy Inno-

vation and Modernization Act (Public Law 115–439; 132 Stat. 5577).

(2) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(3) ADVANCED NUCLEAR FUEL.—The term ''advanced nuclear fuel'' means—

(A) advanced nuclear reactor fuel (as defined in section 3 of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215 note; Public Law 115–439)); and

(B) accident tolerant fuel.

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

(5) APPROPRIATE COMMITTEES OF CONGRESS.—The term ''appropriate committees of Congress'' means—

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

(B) the Committee on Energy and Commerce of the House of Representatives.

(6) CHAIRMAN.—The term ''Chairman'' means the Chairman of the Nuclear Regulatory Commission.

(7) COMMISSION.—The term ''Commission'' means the Nuclear Regulatory Commission.

(8) DEPARTMENT.—The term ''Department'' means the Department of Energy.

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

(10) HIGH-ASSAY, LOW-ENRICHED URANIUM.—The term ''high-assay, low-enriched uranium'' means uranium with an assay greater than 5 weight percent, but less than 20 weight percent, of the uranium-235 isotope.

(11) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the meaning 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—

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

(i) nuclear reactor import and export licensing; and

(ii) international regulatory cooperation and assistance relating to nuclear reactors, including with countries that are

members of the Organisation for Economic Co-operation and Development; and

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

(i) the consideration of international technical standards to establish the licensing and regulatory basis to assist the design, construction, and operation of nuclear systems;

(ii) efforts to help build competent nuclear regulatory organizations and legal frameworks in countries seeking to develop nuclear power; and

(iii) exchange programs and training provided to other countries relating to nuclear regulation and oversight to improve nuclear technology licensing, in accordance with paragraph (2).

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

(A) the Secretary;

(B) National Laboratories;

(C) the private sector; and

(D) institutions of higher education.

(b) AUTHORITY TO ESTABLISH BRANCH.—The Commission may establish within the Office of International Programs a branch, to be known as the ''International Nuclear Reactor Export and Innovation Branch'', to carry out such international nuclear reactor export and innovation activities as the Commission determines to be appropriate and within the mission of the Commission.

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

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

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

''(4) INTERNATIONAL NUCLEAR REACTOR EXPORT AND INNOVATION ACTIVITIES.—The Commission shall identify in the annual budget justification international nuclear reactor export and innovation activities described in section 101(a) of the American Nuclear Infrastructure Act of 2021.''; and

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

''(iv) Costs for international nuclear reactor export and innovation activities de-

scribed in section 101(a) of the American Nuclear Infrastructure Act of 2021.''.

(2) EFFECTIVE DATE.—The amendments made by paragraph (1) shall take effect on October 1, 2022.

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

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

(a) DEFINITION OF COVERED FUEL.—In this section, the term ''covered fuel'' means enriched uranium that is fabricated into fuel assemblies for nuclear reactors by an entity that—

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

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

(b) PROHIBITION ON UNLICENSED POSSESSION OR OWNERSHIP OF COVERED FUEL.—Unless specifically authorized by the Commission in a license issued under section 53 of the Atomic Energy Act of 1954 (42 U.S.C. 2073) and part 70 of title 10, Code of Federal Regulations

(or successor regulations), no person subject to the jurisdiction of the Commission may possess or own covered fuel.

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

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

(2) PROHIBITION ON ISSUANCE OF LICENSE.—

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

(B) DETERMINATION.—

(i) IN GENERAL.—The determination referred to in subparagraph (A) is a determination that possession or ownership, as applicable, of covered fuel poses a threat to the national security of the United States

that adversely impacts the physical and economic security of the United States.

(ii) JOINT DETERMINATION.—A determination described in clause (i) shall be jointly made by the Secretary and the Secretary of State.

(iii) TIMELINE.—

(I) NOTICE OF APPLICATION.—Not later than 30 days after the date on which the Commission receives an application for a license to possess or own covered fuel, the Commission shall notify the Secretary and the Secretary of State of the application.

(II) DETERMINATION.—The Secretary and the Secretary of State shall have a period of 180 days, beginning on the date on which the Commission notifies the Secretary and the Secretary of State under subclause (I) of an application for a license to possess or own covered fuel, in which to make the determination described in clause (i).

(III) COMMISSION NOTIFICATION.—On making the determination described in clause (i), the Secretary and the Secretary of State shall immediately notify the Commission.

(IV) CONGRESSIONAL NOTIFICATION.—Not later than 30 days after the date on which the Secretary and the Secretary of State notify the Commission under subclause (III), the Commission shall notify the appropriate committees of Congress of the determination.

(V) PUBLIC NOTICE.—Not later than 15 days after the date on which the Commission notifies Congress under subclause (IV) of a determination made under clause (i), the Commission shall make that determination publicly available.

(C) EFFECT OF NO DETERMINATION.—The prohibition described in subparagraph (A) shall not apply if the Secretary and the Secretary of State do not make the determination

described in subparagraph (B) by the date described in clause (iii)(II) of that subparagraph.

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

SEC. 103. EXPORT LICENSE REQUIREMENTS.

(a) DEFINITION OF LOW-ENRICHED URANIUM.—In this section, the term ''low-enriched uranium'' means uranium enriched to less than 20 percent of the uranium-235 isotope.

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

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

(1) has not concluded and ratified an Additional Protocol to its safeguards agreement with the International Atomic Energy Agency; or

(2) has not ratified or acceded to the amendment to the Convention on the Physical Protection of Nuclear Material, signed at Vienna and New York March 3, 1980, described in the information circular

of the International Atomic Energy Agency numbered INFCIRC/274/Rev.1/Mod.1 and dated May 9, 2016.

(d) ITEMS DESCRIBED.—An item referred to in subsection (b) includes—

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

(2) a nuclear reactor that uses nuclear fuel described in paragraph (1); and

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

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

(B) the separation of plutonium; or

(C) the separation of the uranium-233 isotope.

(e) NOTIFICATION.—If the Commission makes a determination under subsection (b) that the transfer of any item described in subsection (d) to a country described in subsection (c) will not be inimical to the interests of the United States, the Commission shall notify the appropriate committees of Congress.

TITLE II—EXPANDING NUCLEAR ENERGY THROUGH ADVANCED NUCLEAR TECHNOLOGIES

SEC. 201. 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 title 10, Code of Federal Regulations (or successor regulations), for which an application has not been approved by the Com-

mission as of the date of enactment of this subsection; or

"(ii) a finding required under section 52.103(g) of title 10, Code of Federal Regulations (or successor regulations), for a combined license for an advanced nuclear reactor—

"(I) that is issued under subpart C of part 52 of that title (or successor regulations); and

"(II) for which an application has not been approved by the Commission as of the date of enactment of this subsection.

"(B) AMOUNT OF AWARD.—An award under subparagraph (A) shall be in an amount equal to the total amount assessed by the Commission and collected under section 102(b)(2) from the entity receiving the award for costs relating to the issuance of the license described in that subparagraph, including, as applicable, costs relating to the issuance of an associated construction permit described in section 50.23 of title 10, Code of Federal Regulations (or successor regulations), or early site permit (as de-

fined in section 52.1 of that title (or successor regulations)).

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

''(i) the first advanced nuclear reactor for which the Commission issues—

''(I) a license in accordance with clause (i) of subparagraph (A); or

''(II) a finding in accordance with clause (ii) of that subparagraph;

''(ii) an advanced nuclear reactor that—

''(I) uses isotopes derived from spent nuclear fuel (as defined in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101)) or depleted uranium as fuel for the advanced nuclear reactor; and

''(II) is the first advanced nuclear reactor described in subclause (I) for which the Commission issues—

''(aa) a license in accordance with clause (i) of subparagraph (A); or

"(bb) a finding in accordance with clause (ii) of that subparagraph; and

"(iii) an advanced nuclear reactor that—

"(I) operates flexibly to generate electricity or high temperature process heat for nonelectric applications; and

"(II) is the first advanced nuclear reactor described in subclause (I) for which the Commission issues—

"(aa) a license in accordance with clause (i) of subparagraph (A); or

"(bb) a finding in accordance with clause (ii) of that subparagraph.

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

ceiving the award for licensing costs relating to the project for which the award is made.''.

SEC. 202. REPORT ON UNIQUE LICENSING CONSIDERATIONS RELATING TO THE USE OF NUCLEAR ENERGY FOR NONELECTRIC APPLICATIONS.

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

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

(2) the use of advanced nuclear reactors exclusively for nonelectric applications; and

(3) the colocation of nuclear reactors with industrial plants or other facilities.

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

(1) the Secretary;

(2) the nuclear energy industry;

(3) technology developers;

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

(5) nongovernmental organizations; and

(6) other public stakeholders.

(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 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 TIMEFRAMES.—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:

"(v) Costs for—

"(I) activities to review and approve or disapprove an application for an early site permit (as defined in section 52.1 of title 10, Code of Federal Regulations (or a successor regulation)) to demonstrate an advanced nuclear reactor on a Department of Energy site; and

"(II) pre-application activities relating to an early site permit (as so defined) to demonstrate an advanced nuclear reactor on a Department of Energy site.".

(b) EFFECTIVE DATE.—The amendment made by subsection (a) shall take effect on October 1, 2022.

TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION

SEC. 301. NUCLEAR REACTOR INCENTIVES.

(a) DEFINITIONS.—In this section:

(1) CERTIFIED NUCLEAR REACTOR.—The term ''certified nuclear reactor'' means a nuclear reactor that—

(A) operates in a competitive electricity market; and

(B) is certified under subsection (c)(2)(A)(i) to submit a sealed bid in accordance with subsection (d).

(2) CREDIT.—The term ''credit'' means a credit allocated to a certified nuclear reactor under subsection (e)(2).

(b) ESTABLISHMENT OF PROGRAM.—Subject to the availability of appropriations, the Administrator, in consultation with the Secretary, shall establish an emissions avoidance program—

(1) to evaluate nuclear reactors that are projected to cease operations due to economic factors; and

(2) to allocate credits to certified nuclear reactors that are selected under paragraph (1)(B) of subsection (e) to receive credits under paragraph (2) of that subsection.

(c) CERTIFICATION.—

(1) APPLICATION.—

(A) IN GENERAL.—In order to be certified under paragraph (2)(A)(i), the owner or operator of a nuclear reactor that is projected to cease operations due to economic factors shall submit to the Administrator an application at such time, in such manner, and containing such information as the Administrator determines to be appropriate, including—

(i) information on the operating costs necessary to make the examination described in paragraph (2)(A)(ii)(II), including—

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

(II) any private or publicly available data with respect to current or projected bulk power market prices;

(III) out-of-market revenue streams;

(IV) operations and maintenance costs;

(V) capital costs, including fuel; and

(VI) operational and market risks;

(ii) an estimate of the potential incremental emissions of carbon dioxide, nitrogen oxides, sulfur oxides, particulate matter, and hazardous air pollutants that would result if the nuclear reactor were to cease operations;

(iii) information on the source of recovered uranium and the location where the uranium is converted, enriched, and fabricated into fuel assemblies for the nuclear reactor for the 4-year period for which credits would be allocated; and

(iv) a detailed plan to sustain operations at the conclusion of the applicable 4-year period for which credits would be allocated—

(I) without receiving additional credits; or

(II) with the receipt of additional credits of a lower amount than the

credits allocated during that 4-year credit period.

(B) TIMELINE.—The Administrator shall accept applications described in subparagraph (A)—

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

(ii) not less frequently than every year thereafter.

(2) DETERMINATION TO CERTIFY.—

(A) DETERMINATION.—

(i) IN GENERAL.—Not later than 60 days after the applicable date under subparagraph (B) of paragraph (1), the Administrator, in consultation with the Secretary, shall determine whether to certify, in accordance with clauses (ii) and (iii), each nuclear reactor for which an application is submitted under subparagraph (A) of that paragraph.

(ii) MINIMUM REQUIREMENTS.—To the maximum extent practicable, the Administrator, in consultation with the Sec-

retary, shall only certify a nuclear reactor under clause (i) if—

(I) the nuclear reactor has a good safety record, as determined by the Action Matrix of the Commission or the Performance Indicators of the Reactor Oversight Process, such that the nuclear reactor falls under the ''licensee response'' column indicating no current significant safety issues;

(II) after considering the information submitted under paragraph (1)(A)(i), the Administrator determines that the nuclear reactor is projected to cease operations due to economic factors; and

(III) after considering the estimate submitted under paragraph (1)(A)(ii), the Administrator determines that emissions of carbon dioxide, nitrogen oxides, sulfur oxides, particulate matter, and hazardous air pollutants would increase if the nuclear reactor were to cease operations

and be replaced with other types of power generation.

(iii) PRIORITY.—In determining whether to certify a nuclear reactor under clause (i), the Administrator, in consultation with the Secretary, shall give priority to a nuclear reactor that uses uranium that is recovered, converted, enriched, and fabricated into fuel assemblies in the United States.

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

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

(ii) a notice that describes the reasons why the certification of the applicable nuclear reactor was denied.

(d) BIDDING PROCESS.—

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

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

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

(2) REQUIREMENT.—The deadline established under paragraph (1) shall be not later than 30 days after the first date on which the Administrator has made the determination described in paragraph (2)(A)(i) of subsection (c) with respect to each application submitted under paragraph (1)(A) of that subsection.

(e) ALLOCATION.—

(1) AUCTION.—The Administrator, in consultation with the Secretary, shall—

(A) in consultation with the heads of applicable Federal agencies, establish a process for evaluating bids submitted under subsection (d)(1) through an auction process; and

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

(2) CREDITS.—Subject to subsection (f)(2), on selection under paragraph (1), a certified nuclear reactor shall be allocated credits for a 4-year period beginning on the date of the selection.

(3) REQUIREMENT.—To the maximum extent practicable, the Administrator shall use the amounts made available for credits under this section to allocate credits to as many certified nuclear reactors as possible.

(f) RENEWAL.—

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

(2) LIMITATION.—Notwithstanding any other provision of this section, the Administrator may not allocate any credits after September 30, 2027.

(g) ADDITIONAL REQUIREMENTS.—

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

(2) RECAPTURE.—The Administrator shall, by regulation, provide for the recapture of the alloca-

tion of any credit to a certified nuclear reactor that, during the period described in paragraph (1)—

(A) terminates operations; or

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

(3) CONFIDENTIALITY.—The Administrator, in consultation with the Secretary, shall establish procedures to ensure that any confidential, private, proprietary, or privileged information that is included in a sealed bid submitted under this section is not publicly disclosed or otherwise improperly used.

(h) REPORT.—Not later than January 1, 2025, the Comptroller General of the United States shall submit to Congress a report with respect to the credits allocated to certified nuclear reactors, which shall include—

(1) an evaluation of the effectiveness of the credits in avoiding emissions of carbon dioxide, nitrogen oxides, sulfur oxides, particulate matter, and hazardous air pollutants while ensuring grid reliability;

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

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

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2022 through 2027.

SEC. 302. REPORT ON LESSONS LEARNED DURING THE COVID–19 PUBLIC HEALTH EMERGENCY.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress and make publicly available a report on actions taken by the Commission during the public health emergency declared by the Secretary of Health and Human Services under section 319 of the Public Health Service Act (42 U.S.C. 247d) on January 31, 2020, with respect to COVID–19.

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

(1) an identification of the processes, procedures, and other regulatory policies that were revised or temporarily suspended during the public health emergency described in subsection (a);

(2) a review of actions, if any, taken by the Commission that examines how any revision or temporary suspension of a process, procedure, or other regulatory policy identified under paragraph (1) may or may not have compromised the ability of the

Commission to license and regulate the civilian use of radioactive materials in the United States to protect public health and safety, promote the common defense and security, and protect the environment;

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

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

(5) a list of actions that the Commission may take to incorporate into the licensing activities and regulations of the Commission, without compromising the mission of the Commission—

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

(B) the information provided under paragraphs (2) and (3); and

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

SEC. 303. INVESTMENT BY ALLIES.

(a) IN GENERAL.—The prohibitions against issuing certain licenses for utilization facilities to certain corporations and other entities described in the second sentence of section 103 d. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(d)) and the second sentence of section 104

d. of that Act (42 U.S.C. 2134(d)) shall not apply to an entity described in subsection (b) if the Commission determines that issuance of the applicable license to that entity is not inimical to—

(1) the common defense and security; or

(2) the health and safety of the public.

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

(1) the government of—

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

(B) the Republic of Korea;

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

(3) an alien who is a national of a country described in subparagraph (A) or (B) of paragraph (1).

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

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

TITLE IV—REVITALIZING AMERICA'S NUCLEAR SUPPLY CHAIN INFRASTRUCTURE AND WORKFORCE

SEC. 401. REPORT ON ADVANCED METHODS OF MANUFACTURING AND CONSTRUCTION FOR NUCLEAR ENERGY APPLICATIONS.

(a) IN GENERAL.—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 (referred to in this section as the ''report'') on manufacturing and construction for nuclear energy applications.

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

(1) the Secretary;

(2) the nuclear energy industry;

(3) National Laboratories;

(4) institutions of higher education;

(5) nuclear and manufacturing technology developers;

(6) the manufacturing and construction industries;

(7) standards development organizations;

(8) labor unions;

(9) nongovernmental organizations; and

(10) other public stakeholders.

(c) CONTENTS.—

(1) IN GENERAL.—The report shall—

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

(i) advanced manufacturing processes; and

(ii) advanced construction techniques;

(B) examine—

(i) the requirements for nuclear-grade components in manufacturing and construction for nuclear energy applications;

(ii) opportunities to use standard materials, parts, or components in manufacturing and construction for nuclear energy applications; and

(iii) opportunities to use standard materials that are in compliance with existing codes to provide acceptable approaches to support or encapsulate new materials that do not yet have applicable codes;

(C) identify any safety aspects of innovative advanced manufacturing processes and advanced 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.

SEC. 402. NUCLEAR ENERGY TRAINEESHIP.

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

(1) in subsection (a), by striking ''Nuclear Regulatory'';

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

(3) in subsection (c)—

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

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

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

''(2) COMMISSION.—The term 'Commission' means the Nuclear Regulatory Commission.

''(3) INSTITUTION OF HIGHER EDUCATION.—The term 'institution of higher education' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

''(4) NATIONAL LABORATORY.—The term 'National Laboratory' has the meaning given the term in section 951(b) of the Energy Policy Act of 2005 (42 U.S.C. 16271(b)).'';

(4) in subsection (d)(2), by striking ''Nuclear Regulatory'';

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

(6) by inserting after subsection (b) the following:

''(c) NUCLEAR ENERGY TRAINEESHIP SUBPROGRAM.—

''(1) IN GENERAL.—The Commission shall establish, as a subprogram of the Program, a nuclear energy traineeship subprogram under which the Commission, in coordination with institutions of higher education and trade schools, shall competitively award traineeships that provide focused training 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.

''(2) REQUIREMENTS.—In carrying out the nuclear energy traineeship subprogram described in paragraph (1), the Commission shall—

''(A) coordinate with the Secretary of Energy 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—

''(i) address the workforce needs of the nuclear energy community; and

''(ii) support critical mission needs of the Commission.''.

TITLE V—MISCELLANEOUS

SEC. 501. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE INVENTORY IN THE UNITED STATES.

(a) DEFINITIONS.—In this section:

(1) HIGH-LEVEL RADIOACTIVE WASTE.—The term ''high-level radioactive waste'' has the meaning

given the term in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(2) SPENT NUCLEAR FUEL.—The term ''spent nuclear fuel'' has the meaning given the term in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101).

(3) STANDARD CONTRACT.—The term ''standard contract'' has the meaning given the term ''contract'' in section 961.3 of title 10, Code of Federal Regulations (or a successor regulation).

(b) REPORT.—Not later than January 1, 2023, and annually thereafter, the Secretary shall submit to Congress a report that describes—

(1) the annual and cumulative amount of payments made by the United States to the holder of a standard contract due to a partial breach of contract under the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.) resulting in financial damages to the holder;

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

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

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

(5) any mechanisms for better accounting of liabilities for the lifecycle costs of the spent nuclear fuel and high-level radioactive waste inventory in the 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. 502. AUTHORIZATION OF APPROPRIATIONS FOR SUPERFUND ACTIONS AT ABANDONED MINING 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(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9605(c)).

(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).

(3) NATIONAL PRIORITIES LIST.—The term ''National Priorities List'' means the National Priorities List developed by the President in accordance with section 105(a)(8)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9605(a)(8)(B)).

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for each of fiscal years 2022 through 2031, to remain available until expended—

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

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

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

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

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

(A) eligible non-NPL sites; and

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

(3) to make grants under subsection (e).

(d) HEALTH ASSESSMENTS.—Subject to the availability of appropriations, the Agency for Toxic Substances and Disease Registry, in coordination with Tribal health authorities, shall perform 1 or more health assessments at each eligible non-NPL site that is located on Tribal land.

(e) GRANTS FOR TECHNICAL ASSISTANCE.—

(1) IN GENERAL.—The Administrator may use amounts appropriated under subsection (b)(1) to

make grants to Indian Tribes on whose land is located an eligible non-NPL site.

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

(3) LIMITATIONS.—A grant under paragraph (1) shall be governed by the rules, procedures, and limitations described in section 117(e)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9617(e)(2)), except that—

(A) ''Administrator of the Environmental Protection Agency'' shall be substituted for ''President'' each place it appears in that section; and

(B) in the first sentence of that section, ''under section 502 of the American Nuclear Infrastructure Act of 2021'' shall be substituted for ''under this subsection''.

(f) STATUTE OF LIMITATIONS.—If a remedial action described in subsection (c)(2) is scheduled at an eligible non-NPL site, no action may be commenced for damages (as defined in section 101 of the Comprehensive Environ-

mental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601)) with respect to that eligible non-NPL site unless the action is commenced within the time-frame provided for such actions with respect to facilities on the National Priorities List in the first sentence of the matter following subparagraph (B) of section 113(g)(1) of that Act (42 U.S.C. 9613(g)(1)).

(g) COORDINATION.—The Administrator shall coordinate with the Indian Tribe on whose land the applicable site is located in—

(1) selecting and prioritizing sites for removal actions and remedial actions under paragraphs (1) and (2) of subsection (c); and

(2) carrying out those removal actions and remedial actions.

SEC. 503. NUCLEAR CLOSURE COMMUNITIES.

(a) DEFINITIONS.—In this section:

(1) COMMUNITY ADVISORY BOARD.—The term ''community advisory board'' means a community committee or other advisory organization that aims to foster communication and information exchange between a licensee planning for and involved in decommissioning activities and members of the community that decommissioning activities may affect.

(2) DECOMMISSION.—The term ''decommission'' has the meaning given the term in section 50.2 of title 10, Code of Federal Regulations (or successor regulations).

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

(4) LICENSEE.—The term ''licensee'' has the meaning given the term in section 50.2 of title 10, Code of Federal Regulations (or successor regulations).

(5) NUCLEAR CLOSURE COMMUNITY.—The term ''nuclear closure community'' means a unit of local government, including a county, city, town, village, school district, or special district that has been impacted, or reasonably demonstrates to the satisfaction of the Secretary, that it will be impacted, by a nuclear power plant licensed by the Commission that has ceased operation or has provided a written notification to the Commission that it will cease operations as of the date of enactment of this Act.

(6) SECRETARY.—The term ''Secretary'' means the Secretary of Commerce, acting through the As-

sistant Secretary of Commerce for Economic Development.

(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a grant program to provide grants to eligible recipients—

(1) to assist with economic development in nuclear closure communities; and

(2) to fund community advisory boards in nuclear closure communities.

(c) REQUIREMENT.—In carrying out this section, to the maximum extent practicable, the Secretary shall implement the recommendations described in the report submitted to Congress under section 108 of the Nuclear Energy Innovation and Modernization Act (Public Law 115–439; 132 Stat. 5577) entitled ''Best Practices for Establishment and Operation of Local Community Advisory Boards Associated with Decommissioning Activities at Nuclear Power Plants''.

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

(e) AUTHORIZATION OF APPROPRIATIONS.—

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

(A) to carry out subsection (b)(1), $30,000,000 for each of fiscal years 2022 through 2027; and

(B) to carry out subsection (b)(2), $5,000,000 for each of fiscal years 2022 through 2024.

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

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

SEC. 504. REPORT ON CORPORATE SUPPORT.

Not later than 180 days after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress and make publicly available a report that describes—

(1) the progress on the implementation of section 102(a)(3) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(a)(3)); and

(2) whether the Commission is meeting and is expected to meet the total budget authority caps required for corporate support under that section.

SEC. 505. TECHNICAL CORRECTION.

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

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

"(3) LIMITATION ON UTILIZATION FACILITIES.—The Commission may issue a license under this section for a utilization facility useful in the conduct of research and development activities of the types specified in section 31 if—

"(A) not more than 75 percent of the annual costs to the licensee of owning and operating the facility are devoted to the sale, other than for research and development or education and training, of—

"(i) nonenergy services;

"(ii) energy; or

"(iii) a combination of nonenergy services and energy; and

"(B) not more than 50 percent of the annual costs to the licensee of owning and oper-

ating the facility are devoted to the sale of energy.'';

(2) in the second sentence, by striking ''The Commission'' and inserting the following:

''(2) REGULATION.—The Commission''; and

(3) by striking ''c. The Commission'' and inserting the following:

''c. RESEARCH AND DEVELOPMENT ACTIVITIES.—

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