118TH CONGRESS
2D SESSION

H. R. 6544

IN THE SENATE OF THE UNITED STATES

FEBRUARY 29, 2024

Received; read twice and referred to the Committee on Environment and Public Works

AN ACT

To advance the benefits of nuclear energy by enabling efficient, timely, and predictable licensing, regulation, and deployment of nuclear energy technologies, 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 ''Atomic Energy Advancement Act''.

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

TITLE I—NUCLEAR REGULATORY COMMISSION

Subtitle A—Efficiency, Performance, and Preparation for the Future

SEC. 101. NRC MISSION ALIGNMENT.

(a) MISSION OF THE COMMISSION.—

(1) UPDATE.—Not later than 1 year after the date of enactment of this Act, the Nuclear Regu-

latory Commission shall, while remaining consistent with the policies of the Atomic Energy Act of 1954 (including to provide reasonable assurance of adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment), update the mission statement of the Commission to include that licensing and regulation of nuclear energy activities be conducted in a manner that is efficient and does not unnecessarily limit—

(A) the potential of nuclear energy to improve the general welfare; and

(B) the benefits of nuclear energy technology to society.

(2) REPORT.—Upon completion of the update to the mission statement required under paragraph (1), the Nuclear Regulatory Commission shall submit to Congress a report that describes—

(A) the updated mission statement; and

(B) the guidance that the Nuclear Regulatory Commission will provide to staff of the Nuclear Regulatory Commission to ensure effective performance of such mission.

(b) OFFICE OF NUCLEAR REACTOR REGULATION.—Section 203 of the Energy Reorganization Act of 1974 (42 U.S.C. 5843) is amended—

(1) in subsection (a), by striking ''(a) There'' and inserting the following:

''(a) ESTABLISHMENT; APPOINTMENT OF DIRECTOR.—There'';

(2) in subsection (b)—

(A) in the matter preceding paragraph (1)—

(i) by striking ''(b) Subject'' and inserting the following:

''(b) FUNCTIONS OF DIRECTOR.—Subject''; and

(ii) by striking ''delegate including:'' and inserting ''delegate, including the following:''; and

(B) in paragraph (3), by striking ''for the discharge of the'' and inserting ''to fulfill the licensing and regulatory oversight'';

(3) in subsection (c), by striking ''(c) Nothing'' and inserting the following:

''(d) RESPONSIBILITY FOR SAFE OPERATION OF FACILITIES.—Nothing''; and

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

''(c) LICENSING PROCESS.—In carrying out the principal licensing and regulation functions under subsection (b)(1), the Director of Nuclear Reactor Regulation shall—

''(1) establish techniques and guidance for evaluating applications for licenses for nuclear reactors to support efficient, timely, and predictable reviews of applications for such licenses to enable the safe and secure use of nuclear reactors;

''(2) maintain the techniques and guidance established under paragraph (1) by periodically assessing and, if necessary, modifying such techniques and guidance; and

''(3) obtain approval from the Commission if establishment or modification of the techniques and guidance established under paragraph (1) or (2) involves policy formulation.''.

SEC. 102. NUCLEAR LICENSING EFFICIENCY.

(a) EFFICIENT LICENSING REVIEWS.—

(1) GENERAL.—Section 181 of the Atomic Energy Act of 1954 (42 U.S.C. 2231) is amended—

(A) by striking ''The provisions of'' and inserting the following:

''(a) The provisions of''; and

(B) by adding at the end the following:

''(b) Consistent with the declaration in section 1, the Commission shall provide for efficient, timely, and predictable reviews and proceedings for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licenses.''.

(2) CONSTRUCTION PERMITS AND OPERATING LICENSES.—Section 185 of the Atomic Energy Act of 1954 (42 U.S.C. 2235) is amended by adding at the end the following:

''c. APPLICATION REVIEWS FOR PRODUCTION AND UTILIZATION FACILITIES OF AN EXISTING SITE.—In reviewing an application for an early site permit, construction permit, operating license, or combined construction permit and operating license for a production facility or utilization facility located at the site of a production facility or utilization facility licensed by the Commission, the Commission shall, to the extent practicable, use information that was part of the licensing basis of the licensed production facility or utilization facility.''.

(b) PERFORMANCE METRICS AND MILESTONES.—Section 102(c) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(c)) is amended—

(1) in paragraph (3)—

(A) in the paragraph heading, by striking ''180'' and inserting ''90''; and

(B) by striking ''180'' and inserting ''90''; and

(2) by adding at the end the following:

''(4) PERIODIC UPDATES TO METRICS AND SCHEDULES.—

''(A) REVIEW AND ASSESSMENT.—Not less frequently than once every 3 years, the Commission shall review and assess, based on the licensing and regulatory activities of the Commission, the performance metrics and milestone schedules developed under paragraph (1).

''(B) REVISIONS.—After each review and assessment under subparagraph (A), the Commission shall revise, as appropriate, the performance metrics and milestone schedules developed under paragraph (1) to provide the most efficient performance metrics and milestone schedules reasonably achievable.''.

(c) CLARIFICATION ON FUSION REGULATION.—Section 103(a)(4) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2133 note; Public Law 115–439) is amended—

(1) by striking ''Not later'' and inserting the following:

''(A) IN GENERAL.—Not later''; and

(2) by adding at the end the following:

''(B) EXCLUSION OF FUSION REACTORS.—Notwithstanding section 3(1), for purposes of subparagraph (A), the term 'advanced nuclear reactor applicant' does not include an applicant for a license for a nuclear fusion reactor.''.

(d) 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 operating 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''.

(e) FUSION MACHINES.—

(1) DEFINITION.—Section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014) is amended by adding at the end the following:

''kk. FUSION MACHINE.—The term 'fusion machine' means a particle accelerator that is capable of—

''(1) transforming atomic nuclei, through fusion processes, into other elements, isotopes, or particles; and

''(2) directly capturing and using the resultant products, including particles, heat, and other electromagnetic radiation.''.

(2) TECHNOLOGY-INCLUSIVE REGULATORY FRAMEWORK.—

(A) IN GENERAL.—Section 103(a) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2133 note) is further amended—

(i) in paragraph (4), by adding at the end the following:

''(C) FUSION MACHINE APPLICANTS.—Not later than December 31, 2027, the Commission shall complete a rulemaking to establish a technology-inclusive, regulatory framework for optional use by fusion machine applicants for new license applications.''; and

(ii) in paragraph (5)(B)(ii), by inserting ''and fusion machine license applications'' after ''commercial advanced nuclear reactor license applications''.

(B) DEFINITIONS.—Section 3 of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215 note) is amended by adding at the end the following:

''(21) FUSION MACHINE.—The term 'fusion machine' has the meaning given such term in subsection kk. of section 11 of the Atomic Energy Act of 1954.''.

(3) REPORT.—Not later than 1 year after the date of enactment of this Act, the Nuclear Regulatory Commission shall submit to Congress a report on—

(A) the results of a study, conducted in consultation with Agreement States (as defined in section 3 of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215 note) and the private fusion sector, on risk- and performance-based, design-specific licensing frameworks for mass-manufactured fusion machines (as defined in subsection kk. of section 11 of the Atomic Energy Act of 1954, as added by this subsection), that includes evaluation of the Federal Aviation Administration's design, manufacturing, and operations certification process for aircraft as a potential model for mass-manufactured fusion machine regulations; and

(B) the estimated timeline for the Commission to issue consolidated guidance or regulations for licensing mass-manufactured fusion

machines, taking into account the results of such study and the anticipated need for such guidance or regulations.

SEC. 103. STRENGTHENING THE NRC WORKFORCE.

(a) COMMISSION WORKFORCE.—

(1) GENERAL AUTHORITY.—The Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) is amended by inserting after section 161A the following:

"SEC. 161B. COMMISSION WORKFORCE.

''(a) DIRECT HIRE AUTHORITY.—

''(1) IN GENERAL.—Notwithstanding section 161 d. of this Act and section 2(b) of Reorganization Plan No. 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and without regard to any provision of title 5 (except sections 3303 and 3328), United States Code, governing appointments in the civil service, if the Chairman of the Nuclear Regulatory Commission (in this section referred to as the 'Chairman') issues or renews a certification that there is a severe shortage of candidates or a critical hiring need for covered positions to carry out the Nuclear Regulatory Commission's (in this section referred to as the 'Commission') responsibilities and activities in a timely, efficient, and effective manner, the Chairman

may, during any period when such a certification is in effect—

"(A) recruit and directly appoint highly qualified individuals into the excepted service for covered positions; and

"(B) establish in the excepted service term-limited covered positions and recruit and directly appoint highly qualified individuals into such term-limited covered positions, which may not exceed a term of 4 years.

"(2) LIMITATIONS.—

"(A) MERIT PRINCIPLES.—To the maximum extent practicable, any action authorized pursuant to paragraph (1) shall be consistent with the merit principles of section 2301 of title 5, United States Code.

"(B) NUMBER.—The number of highly qualified individuals serving in—

"(i) covered positions pursuant to paragraph (1)(A) may not exceed 210 at any one time; and

"(ii) term-limited covered positions pursuant to paragraph (1)(B) may not exceed 80 at any one time.

"(C) COMPENSATION.—The Chairman may not use authority under paragraph (1)(A) or paragraph (1)(B) to compensate individuals recruited and directly appointed into a covered position or a term-limited covered position at an annual rate of basic pay higher than the annual salary payable for level III of the Executive Schedule under section 5314 of title 5, United States Code.

"(D) SENIOR EXECUTIVE SERVICE POSITION.—The Chairman may not, under paragraph (1)(A) or paragraph (1)(B), appoint highly qualified individuals to any Senior Executive Service position, as defined in section 3132 of title 5, United States Code.

"(3) RENEWAL.—The Chairman may renew a certification issued or renewed under this subsection if the Chairman determines there is still a severe shortage of candidates or a critical hiring need for covered positions to carry out the Commission's responsibilities and activities in a timely, efficient, and effective manner.

"(4) TERMINATION.—A certification issued or renewed under this subsection shall terminate on the earlier of—

''(A) the date that is 10 years after the certification is renewed or issued; or

''(B) the date on which the Chairman determines there is no longer a severe shortage of candidates or a critical hiring need for covered positions to carry out the Commission's responsibilities and activities in a timely, efficient, and effective manner.

''(5) LEVEL OF POSITIONS.—To the extent practicable, in carrying out paragraph (1) the Chairman shall recruit and directly appoint highly qualified individuals into the excepted service to entry, mid, and senior level covered positions, including term-limited covered positions.

''(b) ADDRESSING INSUFFICIENT COMPENSATION OF EMPLOYEES AND OTHER PERSONNEL OF THE COMMISSION.—

''(1) IN GENERAL.—Notwithstanding any other provision of law, if the Chairman issues or renews a certification that compensation for employees or other personnel of the Commission serving in a covered position is insufficient to retain or attract such employees and other personnel to allow the Commission to carry out the responsibilities and activities of the Commission in a timely, efficient, and effective

manner, the Chairman may, during any period when such a certification is in effect, fix the compensation for such employees or other personnel serving in a covered position without regard to any provision of title 5, United States Code, governing General Schedule classification and pay rates.

''(2) CERTIFICATION REQUIREMENTS.—A certification issued or renewed under this subsection shall—

''(A) apply to employees or other personnel who serve in covered positions;

''(B) terminate on the earlier of—

''(i) the date that is 10 years after the certification is issued or renewed; or

''(ii) the date on which the Chairman determines that the use of the authority of the Chairman under this subsection to fix compensation for employees or other personnel serving in a covered position is no longer necessary to retain or attract such employees and other personnel to allow the Commission to carry out the Commission's responsibilities and activities in a timely, efficient, and effective manner; and

"(C) be no broader than necessary to achieve the objective of retaining or attracting employees and other personnel serving in a covered position to allow the Commission to carry out the Commission's responsibilities and activities in a timely, efficient, and effective manner.

"(3) RENEWAL.—The Chairman may renew a certification issued or renewed under this subsection if the Chairman determines that use of the authority of the Chairman under this subsection to fix compensation for employees or other personnel serving in a covered position is still necessary to retain or attract such employees or other personnel to allow the Commission to carry out the Commission's responsibilities and activities in a timely, efficient, and effective manner.

"(4) APPLICABILITY.—The authority under this subsection to fix the compensation of employees or other personnel during any period when a certification issued or renewed under paragraph (1) is in effect shall apply with respect to an employee or other personnel serving in a covered position regardless of when the employee or other personnel was hired.

''(5) RETENTION OF LEVEL OF FIXED COMPENSATION.—The termination of a certification issued or renewed under paragraph (1) shall not affect the compensation of an employee or other personnel serving in a covered position whose compensation was fixed by the Chairman in accordance with paragraph (1).

''(6) LIMITATION ON COMPENSATION.—The Chairman may not use the authority under paragraph (1) to fix the compensation of employees or other personnel at an annual rate of basic pay higher than the annual salary payable for level III of the Executive Schedule under section 5314 of title 5, United States Code.

''(7) EXPERTS AND CONSULTANTS.—

''(A) IN GENERAL.—Subject to subparagraph (B), the Chairman may—

''(i) obtain the services of experts and consultants in accordance with section 3109 of title 5, United States Code;

''(ii) compensate those experts and consultants for each day (including travel time) at rates not in excess of the rate of pay for level IV of the Executive Schedule under section 5315 of that title; and

"(iii) pay to the experts and consultants serving away from the homes or regular places of business of the experts and consultants travel expenses and per diem in lieu of subsistence at rates authorized by sections 5702 and 5703 of that title for persons in Government service employed intermittently.

"(B) LIMITATIONS.—The Chairman shall—

"(i) to the maximum extent practicable, limit the use of experts and consultants pursuant to subparagraph (A); and

"(ii) ensure that the employment contract of each expert and consultant employed pursuant to subparagraph (A) is subject to renewal not less frequently than annually.

"(c) ADDITIONAL COMPENSATION AUTHORITY.—

"(1) FOR NEW EMPLOYEES.—The Chairman may pay a person recruited and directly appointed under subsection (a) a 1-time hiring bonus in an amount not to exceed $25,000.

"(2) FOR EXISTING EMPLOYEES.—

"(A) IN GENERAL.—Subject to subparagraph (B), an employee or other personnel who the Chairman determines exhibited exceptional performance in a fiscal year may be paid a performance bonus in an amount not to exceed the least of—

"(i) $25,000; and

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

"(B) LIMITATIONS.—

"(i) SUBSEQUENT BONUSES.—Any person who receives a performance bonus under subparagraph (A) may not receive another performance bonus under that subparagraph for a period of 5 years thereafter.

"(ii) HIRING BONUSES.—Any person who receives a 1-time hiring bonus under paragraph (1) may not receive a performance bonus under subparagraph (A) unless more than one year has elapsed since the payment of such 1-time hiring bonus.

"(d) IMPLEMENTATION PLAN AND REPORT.—

''(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Chairman shall develop and implement a plan to carry out this section. Before implementing such plan, the Chairman shall submit to the Committee on Energy and Commerce of the House of Representatives, the Committee on Environment and Public Works of the Senate, and the Office of Personnel Management a report on the details of the plan.

''(2) REPORT CONTENT.—The report submitted under paragraph (1) shall include—

''(A) evidence and supporting documentation justifying the plan; and

''(B) budgeting projections on costs and benefits resulting from the plan.

''(3) CONSULTATION.—The Chairman may consult with the Office of Personnel Management, the Office of Management and Budget, and the Comptroller General of the United States in developing the plan under paragraph (1).

''(e) DELEGATION.—The Chairman shall delegate, subject to the direction and supervision of the Chairman, the authority provided by subsections (a), (b), and (c) to the Executive Director for Operations of the Commission.

''(f) INFORMATION ON HIRING, VACANCIES, AND COMPENSATION.—

''(1) IN GENERAL.—The Commission shall include in its budget materials submitted in support of the budget of the President (submitted to Congress pursuant to section 1105 of title 31, United States Code), for each fiscal year beginning after the date of enactment of this section, information relating to hiring, vacancies, and compensation at the Commission.

''(2) INCLUSIONS.—The information described in paragraph (1) shall include—

''(A) an analysis of any trends with respect to hiring, vacancies, and compensation at the Commission;

''(B) a description of the efforts to retain and attract employees or other personnel to serve in covered positions at the Commission;

''(C) information that describes—

''(i) if a certification under subsection (a) was in effect at any point in the previous year, how the authority provided by that subsection is being used to address the hiring needs of the Commission;

"(ii) the total number of highly qualified individuals serving in—

"(I) covered positions pursuant to subsection (a)(1)(A); and

"(II) term-limited covered positions pursuant to subsection (a)(1)(B);

"(iii) if a certification under subsection (b) was in effect at any point in the previous year, how the authority provided by that subsection is being used to address the hiring or retention needs of the Commission;

"(iv) the total number of employees or other personnel serving in a covered position that have their compensation fixed pursuant to subsection (b);

"(v) if a certification under subsection (a) or (b) was terminated or was not in effect at any point in the previous year, why such a certification was terminated or was not in effect;

"(vi) the attrition levels with respect to term-limited covered positions appointed under subsection (a)(1)(B), including the

number of individuals leaving a term-limited covered position before completion of the applicable term of service and the average length of service for such individuals as a percentage of the applicable term of service; and

''(vii) the number of experts and consultants retained under subsection (b)(7); and

''(D) an assessment of—

''(i) the current critical workforce needs of the Commission and any critical workforce needs that the Commission anticipates in the next five years; and

''(ii) additional skillsets that are or likely will be needed for the Commission to fulfill the licensing and oversight responsibilities of the Commission.

''(g) COVERED POSITION.—In this section, the term 'covered position' means a position in which an employee or other personnel is responsible for conducting work of a scientific, technical, engineering, mathematical, legal, managerial, or otherwise highly specialized or skilled nature.''.

(2) TABLE OF CONTENTS.—The table of contents of the Atomic Energy Act of 1954 is amended by inserting after the item relating to section 161 the following:

"Sec. 161A. Use of firearms by security personnel.
"Sec. 161B. Commission workforce.".

(b) GOVERNMENT ACCOUNTABILITY OFFICE REPORT.—Not later than September 30, 2032, the Comptroller General of the United States shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report that—

(1) evaluates the extent to which the authorities provided under subsections (a), (b), and (c) of section 161B of the Atomic Energy Act of 1954 (as added by this Act) have been utilized;

(2) describes the role in which the highly qualified individuals recruited and directly appointed pursuant to section 161B(a) of the Atomic Energy Act of 1954 (as added by this Act) have been utilized to support the licensing of advanced nuclear reactors;

(3) assesses the effectiveness of the authorities provided under subsections (a), (b), and (c) of section 161B of the Atomic Energy Act of 1954 (as added by this Act) in helping the Nuclear Regulatory Commission fulfill its mission;

(4) makes recommendations to improve the Nuclear Regulatory Commission's strategic workforce management; and

(5) makes recommendations with respect to whether Congress should enhance, modify, or discontinue the authorities provided under subsections (a), (b), and (c) of section 161B of the Atomic Energy Act of 1954 (as added by this Act).

(c) ANNUAL SOLICITATION FOR NUCLEAR REGULATOR APPRENTICESHIP NETWORK APPLICATIONS.—The Nuclear Regulatory Commission, on an annual basis, shall solicit applications for the Nuclear Regulator Apprenticeship Network.

Subtitle B—Fee Reduction

SEC. 111. ADVANCED REACTOR FEE REDUCTION.

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

(1) by redesignating paragraphs (2) through (15) as paragraphs (3), (6), (7), (8), (9), (10), (11), (14), (15), (16), (17), (18), (19), and (20), respectively;

(2) by inserting after paragraph (1) the following:

''(2) ADVANCED NUCLEAR REACTOR APPLICANT.—The term 'advanced nuclear reactor applicant' means an entity that has submitted to the Commission an application for a license for an advanced nuclear reactor under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).'';

(3) by inserting after paragraph (3) (as so redesignated) the following:

''(4) ADVANCED NUCLEAR REACTOR PREAPPLICANT.—The term 'advanced nuclear reactor preapplicant' means an entity that has submitted to the Commission a licensing project plan for the purposes of submitting a future application for a license for an advanced nuclear reactor under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

''(5) AGENCY SUPPORT.—The term 'agency support' has the meaning given the term 'agency support (corporate support and the IG)' in section 170.3 of title 10, Code of Federal Regulations (or any successor regulation).''; and

(4) by inserting after paragraph (11) (as so redesignated) the following:

''(12) MISSION-DIRECT PROGRAM SALARIES AND BENEFITS.—The term 'mission-direct program

salaries and benefits' has the meaning given such term in section 170.3 of title 10, Code of Federal Regulations (or any successor regulation).

''(13) MISSION-INDIRECT PROGRAM SUPPORT.—The term 'mission-indirect program support' has the meaning given such term in section 170.3 of title 10, Code of Federal Regulations (or any successor regulation).''.

(b) EXCLUDED ACTIVITIES.—Section 102(b)(1)(B) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)(1)(B)) is amended by adding at the end the following:

''(iv) The total costs of mission-indirect program support and agency support that, under paragraph (2)(B)(ii), may not be included in the professional hourly rate charged for fees assessed and collected from advanced nuclear reactor applicants.

''(v) The total costs of mission-indirect program support and agency support that, under paragraph (2)(C)(ii), may not be included in the professional hourly rate charged for fees assessed and collected from advanced nuclear reactor preapplicants.''.

(c) FEES FOR SERVICE OR THING OF VALUE.—Section 102(b) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)) is amended by striking paragraph (2) and inserting the following:

"(2) FEES FOR SERVICE OR THING OF VALUE.—

"(A) IN GENERAL.—In accordance with section 9701 of title 31, United States Code, the Commission shall assess and collect fees from any person who receives a service or thing of value from the Commission to cover the costs to the Commission of providing the service or thing of value.

"(B) ADVANCED NUCLEAR REACTOR APPLICANTS.—The professional hourly rate charged for fees assessed and collected from an advanced nuclear reactor applicant under this paragraph relating to the review of a submitted application for an advanced nuclear reactor may not—

"(i) exceed the professional hourly rate for mission-direct program salaries and benefits of the Nuclear Reactor Safety Program; and

"(ii) include the costs of mission-indirect program support and agency support.

"(C) ADVANCED NUCLEAR REACTOR PREAPPLICANTS.—The professional hourly rate charged for fees assessed and collected from an advanced nuclear reactor preapplicant under this paragraph relating to the review of submitted materials as described in the licensing project plan of such advanced nuclear reactor preapplicant may not—

"(i) exceed the professional hourly rate for mission-direct program salaries and benefits of the Nuclear Reactor Safety Program; and

"(ii) include the costs of mission-indirect program support and agency support.

"(D) CALCULATION OF HOURLY RATE.—In this paragraph, the professional hourly rate for mission-direct program salaries and benefits of the Nuclear Reactor Safety Program equals the quotient obtained by dividing—

"(i) the full-time equivalent rate (within the meaning of the document of the Commission entitled 'FY 2023 Final Fee Rule Work Papers' (or a successor

document)) for mission-direct program salaries and benefits of the Nuclear Reactor Safety Program (as determined by the Commission) for a fiscal year; by

''(ii) the productive hours assumption for that fiscal year, determined in accordance with the formula established in the document referred to in clause (i) (or a successor document).''.

(d) SUNSET.—Section 102(f) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(f)) is amended to read as follows:

''(f) CESSATION OF EFFECTIVENESS.—Paragraphs (1)(B)(v) and (2)(C) of subsection (b) shall cease to be effective on September 30, 2029.''.

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

SEC. 112. ADVANCED NUCLEAR REACTOR PRIZE.

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) DEFINITION OF ELIGIBLE ENTITY.—In this subsection, the term 'eligible entity' means—

''(A) a non-Federal entity; and

''(B) the Tennessee Valley Authority.

''(2) PRIZE FOR ADVANCED NUCLEAR REACTOR LICENSING.—

''(A) IN GENERAL.—Notwithstanding section 169 of the Atomic Energy Act of 1954 (42 U.S.C. 2209) and 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 eligible entity—

''(i) to which the Commission issues 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 Commission as of the date of enactment of this subsection; or

''(ii) for which the Commission makes a finding described in section 52.103(g) of title 10, Code of Federal Regulations (or successor regulations), with respect to 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.—Subject to paragraph (3), 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 eligible 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 defined 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—

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

"(II) makes 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—

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

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

"(iii) an advanced nuclear reactor that—

"(I) is a nuclear integrated energy system—

"(aa) that is composed of 2 or more co-located or jointly operated subsystems of energy generation, energy storage, or other technologies;

"(bb) in which not fewer than 1 subsystem described in item (aa) is a nuclear energy system; and

"(cc) the purpose of which is—

"(AA) to reduce greenhouse gas emissions in both the power and nonpower sectors; and

"(BB) to maximize energy production and efficiency; and

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

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

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

"(iv) an advanced 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—

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

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

"(v) the first advanced nuclear reactor for which the Commission grants approval to load nuclear fuel pursuant to the technology-inclusive regulatory framework established under subsection (a)(4).

"(3) FEDERAL FUNDING LIMITATION.—

"(A) EXCLUSION OF TVA FUNDS.—In this paragraph, the term 'Federal funds' does not include funds received under the power program of the Tennessee Valley Authority established pursuant to the Tennessee Valley Authority Act of 1933 (16 U.S.C. 831 et seq.).

"(B) LIMITATION ON AMOUNTS EXPENDED.—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 eligible entity receiving the award for licensing costs relating to the project for which the award is made.

"(C) REPAYMENTS AND DIVIDENDS NOT REQUIRED.—Notwithstanding section 9104(a)(4) of title 31, United States Code, or any other provision of law, an eligible entity that received an award under this subsection shall not be required—

"(i) to repay that award or any part of that award; or

''(ii) to pay a dividend, interest, or other similar payment based on the sum of that award.''.

Subtitle C—Siting, Licensing, and Oversight Reviews

SEC. 121. MODERNIZATION OF NUCLEAR REACTOR ENVIRONMENTAL REVIEWS.

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Nuclear Regulatory Commission (in this section referred to as the ''Commission'') shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the efforts of the Commission to facilitate efficient, timely, and predictable environmental reviews of nuclear reactor applications, including through expanded use of categorical exclusions, environmental assessments, and generic environmental impact statements.

(b) REPORT.—In completing the report under subsection (a), the Commission shall—

(1) describe the actions the Commission will take to implement the amendments to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) made by section 321 of the Fiscal Responsibility Act of 2023;

(2) consider—

(A) using through adoption, incorporation by reference, or other appropriate means, categorical exclusions, environmental assessments, and environmental impact statements prepared by other Federal agencies to streamline environmental reviews of nuclear reactor applications by the Commission;

(B) using categorical exclusions, environmental assessments, and environmental impact statements prepared by the Commission to streamline environmental reviews of nuclear reactor applications by the Commission;

(C) using mitigated findings of no significant impact in environmental reviews of nuclear reactor applications by the Commission to reduce the impact of a proposed action to a level that is not significant;

(D) the extent to which the Commission may rely on prior studies or analyses prepared by Federal, State, and local governmental permitting agencies to streamline environmental reviews of nuclear reactor applications by the Commission;

(E) opportunities to coordinate the development of environmental assessments and environmental impact statements with other Federal agencies to avoid duplicative environmental reviews and to streamline environmental reviews of nuclear reactor applications by the Commission;

(F) opportunities to streamline formal and informal consultations and coordination with other Federal, State, and local governmental permitting agencies during environmental reviews of nuclear reactor applications by the Commission;

(G) opportunities to streamline the Commission's analyses of alternatives, including the Commission's analysis of alternative sites, in environmental reviews of nuclear reactor applications by the Commission;

(H) establishing new categorical exclusions that could be applied to actions relating to new nuclear reactors applications;

(I) amending section 51.20(b) of title 10, Code of Federal Regulations, to allow the Commission to determine on a case-specific basis whether an environmental assessment (rather

than an environmental impact statement or supplemental environmental impact statement) is appropriate for a particular nuclear reactor application, including in proceedings in which the Commission relies upon a generic environmental impact statement for advanced nuclear reactors;

(J) authorizing the use of an applicant's environmental impact statement as the Commission's draft environmental impact statement, consistent with section 107(f) of the National Environmental Policy Act of 1969 (42 U.S.C. 4336a(f));

(K) opportunities to adopt online and digital technologies, including technologies that would allow applicants and cooperating agencies to upload documents and coordinate with the Commission to edit documents in real time, that would streamline communications between—

(i) the Commission and applicants; and

(ii) the Commission and other relevant cooperating agencies;

(L) in addition to implementing measures under subsection (c), potential revisions to part 51 of title 10, Code of Federal Regulations, and relevant Commission guidance documents, to—

(i) facilitate efficient, timely, and predictable environmental reviews of nuclear reactor applications;

(ii) assist decision-making about relevant environmental issues;

(iii) maintain openness with the public;

(iv) meet obligations under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

(v) reduce burdens on licensees, applicants, and the Commission; and

(3) include a schedule for promulgating the rule required under subsection (c).

(c) RULEMAKING.—Not later than 2 years after the submission of the report under subsection (a), the Commission shall promulgate a final rule implementing, to the maximum extent practicable, measures considered by the Commission under subsection (b)(2) that are necessary to streamline the Commission's review of nuclear reactor applications.

SEC. 122. NUCLEAR FOR BROWNFIELD SITES.

(a) DEFINITIONS.—In this section:

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

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

(3) COVERED SITE.—The term ''covered site'' means a brownfield site, a retired fossil fuel site, or a site that is both a retired fossil fuel site and a brownfield site.

(4) PRODUCTION FACILITY.—The term ''production facility'' has the meaning given the term in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014).

(5) RETIRED FOSSIL FUEL SITE.—The term ''retired fossil fuel site'' means the site of 1 or more fossil fuel electric generation facilities that are retired or scheduled to retire, including multiunit facilities that are partially shut down.

(6) UTILIZATION FACILITY.—The term ''utilization facility'' has the meaning given the term in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014).

(b) IDENTIFICATION OF REGULATORY ISSUES.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Commission shall evaluate the extent to which modification of regulations, guidance, or policy is needed to enable efficient, timely, and predictable licensing reviews for, and to support the oversight of, production facilities or utilization facilities at covered sites.

(2) REQUIREMENT.—In carrying out paragraph (1), the Commission shall consider how licensing reviews for production facilities or utilization facilities at covered sites may be expedited by—

(A) siting and operating a production facility or a utilization facility at or near existing site infrastructure to support the reuse of such infrastructure, including—

(i) electric switchyard components and transmission infrastructure;

(ii) heat-sink components;

(iii) steam cycle components;

(iv) roads;

(v) railroad access; and

(vi) water availability;

(B) using early site permits;

(C) using plant parameter envelopes or similar standardized site parameters on a portion of a larger site; and

(D) using a standardized application for similar sites.

(3) REPORT.—Not later than 14 months after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress a report describing any regulations, guidance, and policies evaluated under paragraph (1).

(c) LICENSING.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Commission shall, based on the evaluation under subsection (b)—

(A) develop and implement strategies to enable efficient, timely, and predictable licensing reviews for, and to support the oversight of, production facilities or utilization facilities at covered sites; and

(B) initiate a rulemaking to enable efficient, timely, and predictable licensing reviews for, and to support the oversight of, production facilities or utilization facilities at covered sites.

(2) REQUIREMENTS.—In carrying out paragraph (1), consistent with the mission of the Com-

mission, the Commission shall consider matters relating to—

(A) the use of existing site infrastructure;

(B) existing emergency preparedness organizations and planning;

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

(D) previously completed environmental reviews required by the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(E) activities associated with the potential decommissioning of facilities or decontamination and remediation at covered sites; and

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

(d) REPORT.—Not later than 3 years after the date of enactment of this Act, the Commission shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report describing the actions taken by the Commission under subsection (c)(1).

SEC. 123. ADVANCEMENT OF NUCLEAR REGULATORY OVERSIGHT.

(a) IMPLEMENTING LESSONS LEARNED FROM THE COVID–19 HEALTH EMERGENCY.—

(1) 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 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.

(2) CONTENTS.—The report submitted under paragraph (1) shall—

(A) identify any processes, procedures, and other regulatory policies that the Commission revised or temporarily suspended during the public health emergency described in paragraph (1);

(B) examine how any revision or temporary suspension of a process, procedure, or other regulatory policy identified under subparagraph (A) affected 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;

(C) discuss lessons learned from the matters described in subparagraph (B);

(D) list actions that the Commission has taken or will take to incorporate into the licensing and oversight activities of the Commission, without compromising the mission of the Commission, the lessons described in subparagraph (C); and

(E) describe when the actions listed under subparagraph (D) were implemented or may be implemented.

(b) ADVANCING EFFICIENT, RISK-INFORMED OVERSIGHT AND INSPECTIONS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Commission shall develop and submit to the appropriate committees of Congress a report that identifies specific improvements to the nuclear reactor and materials oversight and inspection programs carried out pursuant to the Atomic Energy Act of 1954 that the Commission may implement to maximize the efficiency of such programs through, where appropriate, the use of risk-informed, performance-based procedures, expanded incorporation of information technologies, and staff training.

(2) STAKEHOLDER INPUT.—In developing the report under paragraph (1), the Commission shall, as appropriate, seek input from—

(A) the Secretary of Energy;

(B) the National Laboratories;

(C) the nuclear energy industry; and

(D) nongovernmental organizations that are related to nuclear energy.

(3) CONTENTS.—The report submitted under paragraph (1) shall—

(A) assess specific elements of oversight and inspections that may be modified by the use of technology, improved planning, and continually updated risk-informed, performance-based assessment, including—

(i) use of travel resources;

(ii) planning and preparation for inspections, including entrance and exit meetings with licensees;

(iii) document collection and preparation, including consideration of whether nuclear reactor data are accessible prior to onsite visits or requests to the licensee and that document requests are timely and within the scope of inspections;

(iv) the cross-cutting issues program; and

(v) the scope of event reporting required by licensees to ensure decisions are risk-informed;

(B) identify and assess measures to improve oversight and inspections, including—

(i) elimination of areas of duplicative or otherwise unnecessary activities;

(ii) increased use of templates in documenting inspection results; and

(iii) periodic training of Commission staff and leadership on the application of risk-informed criteria for—

(I) inspection planning and assessments;

(II) agency decision making processes on the application of regulations and guidance; and

(III) the application of the Commission's standard of reasonable assurance of adequate protection;

(C) assess measures to advance risk-informed procedures, including—

(i) increased use of inspection approaches that balance the level of resources commensurate with safety significance;

(ii) increased review of the use of inspection program resources based on licensee performance;

(iii) expansion of modern information technology, including artificial intelligence and machine learning to risk inform oversight and inspection decisions; and

(iv) updating the Differing Professional Views or Opinions process to ensure any impacts on agency decisions and schedules are commensurate with the safety significance of the differing opinion;

(D) assess the ability of the Commission, consistent with its obligations to provide reasonable assurance of adequate protection of health and safety pursuant to the Atomic Energy Act of 1954, to enable licensee innovations that may advance nuclear reactor operational efficiency and safety, including the criteria of the Commission for timely acceptance of licensee adoption of advanced technologies, including digital technologies;

(E) identify recommendations resulting from the assessments described in subparagraphs (A) through (D);

(F) identify specific actions that the Commission will take to incorporate into the training, inspection, oversight, and licensing activities, and regulations of the Commission, without compromising the mission of the Commission, the recommendations identified under subparagraph (E); and

(G) describe when the actions identified under subparagraph (F) may be implemented.

(c) OFFICE AND FACILITY SPACE REVIEW.—

(1) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General of the United States shall—

(A) review office and other facility space requirements of the Commission; and

(B) submit to the appropriate committees of Congress a report, with recommendations, on the results of such review.

(2) CONTENTS.—The report described in paragraph (1) shall include—

(A) an examination of—

(i) the costs associated with the headquarters, regional offices, and technical training center of the Commission, including examination of—

(I) costs that do not support the Commission's mission, including rent subsidies for other Federal agencies; and

(II) opportunities to reduce future costs through reduction in unnecessary office space, consolidation of offices, use of advanced information technology, or any other appropriate means; and

(ii) current and anticipated office and facility requirements to efficiently accomplish the mission of the Commission; and

(B) recommendations to Congress, the Commission, and the General Services Administration for actions that may assist in reducing office and facility costs to licensees and taxpayers.

(d) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ''appropriate committees of Con-

gress'' means the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate.

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

(3) LICENSEE.—The term ''licensee'' means a person that holds a license issued under section 103 or section 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133; 2134).

TITLE II—NUCLEAR TECHNOLOGY DEPLOYMENT

SEC. 201. ADVANCED NUCLEAR DEPLOYMENT.

(a) ENABLING PREPARATIONS FOR ADVANCED NUCLEAR REACTOR DEMONSTRATIONS ON FEDERAL SITES.—

(1) IN GENERAL.—Section 102(b)(1)(B) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)(1)(B)) is further amended by adding at the end the following:

''(vi) 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 any successor regulation)) to demonstrate an advanced nuclear reactor on a Department of Energy site or any site or installation that is critical national security infrastructure (as defined in section 327(d) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019); 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 or any site or installation that is critical national security infrastructure (as defined in section 327(d) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019).''.

(2) EFFECTIVE DATE.—The amendment made by paragraph (1) shall take effect on October 1, 2024.

(b) REGULATORY REQUIREMENTS FOR MICRO-REACTORS.—

(1) MICRO-REACTOR LICENSING.—The Nuclear Regulatory Commission (in this subsection referred to as the ''Commission'') shall—

(A) not later than 18 months after the date of enactment of this Act, develop risk-informed and performance-based strategies and guidance to license and regulate micro-reactors pursuant to section 103 of the Atomic Energy Act of 1954 (42 U.S.C. 2133), including strategies and guidance for—

(i) staffing and operations;

(ii) oversight and inspections;

(iii) safeguards and security;

(iv) emergency preparedness;

(v) risk analysis methods, including alternatives to probabilistic risk assessments;

(vi) decommissioning funding assurance methods that permit the use of design- and site-specific cost estimates;

(vii) the transportation of fueled micro-reactors; and

(viii) siting, including in relation to—

(I) the population density criterion limit described in the policy

issue paper on population-related siting considerations for advanced reactors dated May 8, 2020, and numbered SECY–20–0045;

(II) licensing mobile deployment; and

(III) environmental reviews; and

(B) not later than 3 years after the date of enactment of this Act, implement, as appropriate, the strategies and guidance developed under subparagraph (A)—

(i) within the existing regulatory framework;

(ii) through the technology-inclusive, regulatory framework to be established under section 103(a)(4)(A) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2133 note; Public Law 115–439); or

(iii) through a pending or new rulemaking.

(2) CONSIDERATIONS.—In developing and implementing strategies and guidance under paragraph (1), the Commission shall consider—

(A) the unique characteristics of micro-reactors, including characteristics relating to—

(i) physical size;

(ii) design simplicity; and

(iii) source term;

(B) opportunities to address redundancies and inefficiencies;

(C) opportunities to consolidate review phases and reduce transitions between review teams;

(D) opportunities to establish integrated review teams to ensure continuity throughout the review process; and

(E) other relevant considerations discussed in the policy issue paper on policy and licensing considerations related to micro-reactors dated October 6, 2020, and numbered SECY–20–0093.

(3) CONSULTATION.—In carrying out paragraph (1), the Commission shall consult with—

(A) the Secretary of Energy;

(B) the heads of other Federal agencies, as appropriate;

(C) micro-reactor technology developers; and

(D) other stakeholders.

(c) EXPEDITED SUBSEQUENT COMBINED LICENSES.—

(1) IN GENERAL.—In accordance with this subsection, the Nuclear Regulatory Commission (referred to in this subsection as the ''Commission'') shall establish and carry out an expedited procedure for issuing a combined license pursuant to section 185 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2235).

(2) QUALIFICATIONS.—To qualify for the expedited procedure under paragraph (1), an applicant—

(A) shall submit a combined license application for a new nuclear reactor based off a previously licensed design;

(B) shall propose to construct the new nuclear reactor on or adjacent to a site on which a nuclear reactor already operates or previously operated; and

(C) may not be subject to an order of the Commission to suspend or revoke a license under section 2.202 of title 10, Code of Federal Regulations (or any successor regulation).

(3) EXPEDITED PROCEDURE.—With respect to a combined license for which the applicant has satis-

fied the requirements described in paragraph (2), the Commission shall, to the maximum extent practicable—

(A) not later than 1 year after the application is accepted for docketing, issue a draft environmental impact statement;

(B) not later than 18 months after the application is accepted for docketing—

(i) complete the technical review process; and

(ii) issue a safety evaluation report and final environmental impact statement;

(C) not later than 2 years after the application is accepted for docketing, complete any necessary public licensing hearings and related processes; and

(D) not later than 25 months after the application is accepted for docketing, make a final decision on whether to issue the combined license.

(4) PERFORMANCE AND REPORTING.—

(A) DELAYS IN ISSUANCE.—Not later than 30 days after the applicable deadline, the Executive Director for Operations of the Commis-

sion shall inform the Commission of any failure to meet a deadline under paragraph (3).

(B) DELAYS IN ISSUANCE EXCEEDING 90 DAYS.—If any deadline under paragraph (3) is not met by the date that is 90 days after the applicable date required under such paragraph, the Commission shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report describing the delay, including a detailed explanation accounting for the delay and a plan for completion of the applicable action.

(d) PILOT PROGRAM FOR NUCLEAR POWER PURCHASE AGREEMENTS.—

(1) IN GENERAL.—Subtitle B of title VI of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 782) is amended by adding at the end the following:

"SEC. 639A. LONG-TERM NUCLEAR POWER PURCHASE AGREEMENT PILOT PROGRAM.

''(a) ESTABLISHMENT.—The Secretary may establish a pilot program under which the Secretary may enter into at least one long-term power purchase agreement for power generated by a commercial nuclear reactor with re-

spect to which an initial operating license is issued by the Nuclear Regulatory Commission after January 1, 2024.

''(b) CONSULTATION.—In establishing a pilot program under this section, the Secretary shall consult with the heads of other Federal departments and agencies that may benefit from purchasing nuclear power for a period of longer than 10 years, including the Secretary of Defense.

''(c) PERIOD OF AGREEMENT.—Notwithstanding any other provision of law, an agreement entered into pursuant to this section to purchase power from a commercial nuclear reactor shall be made for a period of at least 10 years and not more than 40 years.

''(d) PRIORITY.—In carrying out this section, the Secretary shall prioritize entering into long-term power purchase agreements for power generated by first-of-a-kind or early deployment commercial nuclear reactors that will provide reliable and resilient power—

''(1) to high-value assets for national security purposes; or

''(2) for other purposes that the Secretary determines are in the national interest, including for remote off-grid scenarios or grid-connected scenarios that provide capabilities commonly known as 'islanding power capabilities' during an emergency.

''(e) RATES.—A long-term power purchase agreement entered into under this section may not be at a rate that is higher than the average market rate, unless the agreement is for power generated by a commercial nuclear reactor described in subsection (d).

''(f) ADVANCED FUNDING.—The Secretary—

''(1) may not enter into any power purchase agreement under this section unless funds are specifically provided for such purposes in advance in appropriations Acts enacted after the date of enactment of this section; and

''(2) may only enter into such a power purchase agreement if the full extent of anticipated costs stemming from such agreement is recorded as an obligation up front and in full at the time such agreement is made.''.

(2) TABLE OF CONTENTS.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 594) is amended by inserting after the item relating to section 639 the following:

''Sec. 639A. Long-term nuclear power purchase agreement pilot program.''.

SEC. 202. GLOBAL NUCLEAR COOPERATION.

(a) GLOBAL NUCLEAR ENERGY ASSESSMENT STUDY.—

(1) STUDY REQUIRED.—Not later than 1 year after the date of enactment of this Act, the Sec-

retary of Energy, in consultation with the Secretary of State, the Secretary of Commerce, the Administrator of the Environmental Protection Agency, and the Commission, shall conduct a study on the global status of—

(A) the civilian nuclear energy industry; and

(B) the supply chains of the civilian nuclear energy industry.

(2) CONTENTS.—The study conducted under paragraph (1) shall include—

(A) information on the status of the civilian nuclear energy industry, the long-term risks to such industry, and the basis for such risks;

(B) information on how the use of the civilian nuclear energy industry, relative to other types of energy industries, can reduce the emission of criteria pollutants and carbon dioxide;

(C) information on the role the United States civilian nuclear energy industry plays in United States foreign policy;

(D) information on the importance of the United States civilian nuclear energy industry to countries that are allied to the United States;

(E) information on how the United States may collaborate with such countries in developing, deploying, and investing in nuclear technology;

(F) information on how foreign countries use nuclear energy when crafting and implementing their own foreign policy, including such use by foreign countries that are strategic competitors;

(G) an evaluation of how nuclear nonproliferation and security efforts and nuclear energy safety are affected by the involvement of the United States in—

(i) international markets; and

(ii) setting civilian nuclear energy industry standards;

(H) an evaluation of how industries in the United States, other than the civilian nuclear energy industry, benefit from the generation of electricity by nuclear power plants;

(I) information on utilities and companies in the United States that are involved in the civilian nuclear energy supply chain, including, with respect to such utilities and companies—

(i) financial challenges;

(ii) nuclear liability issues;

(iii) foreign strategic competition; and

(iv) risks to continued operation; and

(J) recommendations for how the United States may—

(i) develop a national strategy to increase the role nuclear energy plays in diplomacy and strategic energy policy;

(ii) develop a strategy to mitigate foreign competitor's utilization of their civilian nuclear energy industries in diplomacy;

(iii) align its nuclear energy policy with national security objectives; and

(iv) remove regulatory barriers to the development of the United States civilian nuclear energy supply chain.

(3) REPORT TO CONGRESS.—Not later than 6 months after the study is conducted under paragraph (1), the Secretary of Energy shall submit to the appropriate committees of Congress a report, including a classified annex as necessary, on the results of such study.

(b) PROGRAM TO TRAIN AND SHARE EXPERTISE.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary of

Energy, in consultation with the Secretary of State and the Commission, shall develop and carry out a program under which the Secretary of Energy shall train foreign nuclear energy experts and standardize practices.

(2) REQUIREMENTS.—In carrying out the program developed under paragraph (1), the Secretary of Energy shall—

(A) issue guidance for best safety practices in the global civilian nuclear energy industry based on practices established in the United States;

(B) train foreign nuclear energy experts on the operation and safety and security practices used by the United States civilian nuclear energy industry;

(C) review global supply chain risks for foreign civilian nuclear energy industries;

(D) identify weaknesses and concerns found in foreign civilian nuclear energy industries; and

(E) establish partnerships with foreign countries that have developed or are developing civilian nuclear energy industries.

(3) FOREIGN NUCLEAR ENERGY EXPERT.—In this subsection, the term ''foreign nuclear energy expert'' does not include a person who is from a country—

(A) in which intellectual property theft is legal;

(B) that takes actions to undermine the civilian nuclear energy industry or other critical industries of the United States; or

(C) which the Secretary of Energy determines is inimical to the interest of the United States.

(c) INTERNATIONAL NUCLEAR REACTOR EXPORT AND INNOVATION ACTIVITIES.—

(1) COORDINATION.—The Commission shall—

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

(i) issuing a license for the import or export of a nuclear reactor under section 103 of the Atomic Energy Act of 1954 (42 U.S.C. 2133); and

(ii) international regulatory cooperation and assistance relating to nuclear reactors; and

(B) support—

(i) the consideration of international technical standards to assist the design, licensing, and construction of advanced nuclear systems;

(ii) efforts to help build competent nuclear regulatory organizations and legal frameworks in foreign countries that are seeking to develop civilian nuclear energy industries; and

(iii) exchange programs and training provided in coordination with the Secretary of State to foreign countries relating to civilian nuclear energy industry regulation and oversight to improve nuclear technology licensing.

(2) CONSULTATION.—In supporting exchange programs and training under paragraph (1)(B)(iii), the Commission shall consult with—

(A) the Secretary of Energy;

(B) the Secretary of State;

(C) the National Laboratories;

(D) the private sector; and

(E) institutions of higher education.

(3) NUCLEAR REACTOR EXPORT AND INNOVATION BRANCH.—The Commission may establish

within the Office of International Programs of the Commission a branch, to be known as the ''International Nuclear Reactor Export and Innovation Branch'', to carry out the nuclear reactor export and innovation activities described in paragraph (1) as the Commission determines appropriate.

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

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

(i) 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 202(c)(1) of the Atomic Energy Advancement Act.''; and

(ii) in subsection (b)(1)(B), as amended by the preceding provisions of this Act, by adding at the end the following:

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

scribed in section 202(c)(1) of the Atomic Energy Advancement Act.''.

(B) EFFECTIVE DATE.—The amendments made by subparagraph (A) shall take effect on October 1, 2024.

(d) DENIAL OF CERTAIN DOMESTIC LICENSES FOR NATIONAL SECURITY PURPOSES.—

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

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

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

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

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

(A) 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) unless the Commission has first consulted with the Secretary of Energy and the Secretary of State before issuing the license.

(B) PROHIBITION ON ISSUANCE OF LICENSE.—

(i) IN GENERAL.—Subject to clause (iii), a license to possess or own covered fuel shall not be issued if the Secretary of Energy and the Secretary of State make the determination described in clause (ii).

(ii) DETERMINATION.—

(I) IN GENERAL.—The determination referred to in clause (i) 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 subclause (I) shall be jointly made by the Secretary of Energy and the Secretary of State.

(III) TIMELINE.—

(aa) 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 of Energy and the Secretary of State of the application.

(bb) DETERMINATION.—The Secretary of Energy and the Secretary of State shall have a period of 180 days, beginning on the date on which the Commission notifies the Secretary of Energy and the Secretary of State under item (aa) of an application

for a license to possess or own covered fuel, in which to make the determination described in subclause (I).

(cc) COMMISSION NOTIFICATION.—On making the determination described in subclause (I), the Secretary of Energy and the Secretary of State shall immediately notify the Commission.

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

(ee) PUBLIC NOTICE.—Not later than 15 days after the date on which the Commission notifies Congress under item (dd) of a determination made under subclause (I), the Commission shall

make that determination publicly available.

(iii) EFFECT OF NO DETERMINATION.—The prohibition described in clause (i) shall not apply if the Secretary of Energy and the Secretary of State do not make the determination described in clause (ii) by the date described in subclause (III)(bb) of that clause.

(e) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ''appropriate committees of Congress'' means each of the following:

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

(B) The Committee on Foreign Affairs of the House of Representatives.

(C) The Committee on Environment and Public Works of the Senate.

(D) The Committee on Energy and Natural Resources of the Senate.

(E) The Committee on Foreign Relations of the Senate.

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

SEC. 203. AMERICAN NUCLEAR COMPETITIVENESS.

(a) PROCESS FOR REVIEW AND AMENDMENT OF PART 810 GENERALLY AUTHORIZED DESTINATIONS.—

(1) IDENTIFICATION AND EVALUATION OF FACTORS.—Not later than 90 days after the date of enactment of this Act, the Secretary of Energy, with the concurrence of the Secretary of State, shall identify and evaluate factors, other than agreements for cooperation entered into in accordance with section 123 of the Atomic Energy Act of 1954 (42 U.S.C. 2153), that may be used to determine a country's generally authorized destination status under part 810 of title 10, Code of Federal Regulations, and to list such country as a generally authorized destination in Appendix A to part 810 of title 10, Code of Federal Regulations.

(2) PROCESS UPDATE.—The Secretary of Energy shall review and, as appropriate, update the Department of Energy's process for determining a country's generally authorized destination status under part 810 of title 10, Code of Federal Regulations, and for listing such country as a generally authorized destination in Appendix A to part 810 of title 10, Code of Federal Regulations, taking into consideration, and, as appropriate, incorporating

factors identified and evaluated under paragraph (1).

(3) REVISIONS TO LIST.—Not later than one year after the date of enactment of this Act, and at least once every 5 years thereafter, the Secretary of Energy shall, in accordance with any process updated pursuant to this subsection, review the list in Appendix A to part 810 of title 10, Code of Federal Regulations, and amend such list as appropriate.

(b) LICENSING DOMESTIC NUCLEAR PROJECTS IN WHICH UNITED STATES ALLIES INVEST.—

(1) IN GENERAL.—The prohibitions against issuing certain licenses for utilization facilities to certain aliens, 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 paragraph (2) of this subsection if the Nuclear Regulatory Commission determines that issuance of the applicable license to that entity is not inimical to—

(A) the common defense and security; or

(B) the health and safety of the public.

(2) ENTITIES DESCRIBED.—

(A) IN GENERAL.—An entity referred to in paragraph (1) is an alien, corporation, or other entity that is owned, controlled, or dominated by—

(i) the government of—

(I) a country, other than a country described in subparagraph (B), that is a member of the Organization for Economic Co-operation and Development on the date of enactment of this Act; or

(II) the Republic of India;

(ii) a corporation that is incorporated in a country described in subclause (I) or (II) of clause (i); or

(iii) an alien who is a citizen or national of a country described in subclause (I) or (II) of clause (i).

(B) EXCLUSION.—A country described in this subparagraph is a country—

(i) any department, agency, or instrumentality of the government of which, on the date of enactment of this Act, is subject to sanctions under section 231 of the

Countering America's Adversaries Through Sanctions Act (22 U.S.C. 9525); or

(ii) any citizen, national, or entity of which, as of the date of enactment of this Act, is included on the List of Specially Designated Nationals and Blocked Persons maintained by the Office of Foreign Assets Control of the Department of the Treasury pursuant to sanctions imposed under section 231 of the Countering America's Adversaries Through Sanctions Act (22 U.S.C. 9525).

(3) 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''.

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

(c) LICENSING CONSIDERATIONS RELATING TO USE OF NUCLEAR ENERGY FOR NONELECTRIC APPLICATIONS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Nuclear Regu-

latory Commission (in this subsection referred to as the ''Commission'') shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report addressing any unique licensing issues or requirements relating to—

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

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

(C) the collocation of advanced nuclear reactors with industrial plants or other facilities.

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

(A) the Secretary of Energy;

(B) the nuclear energy industry;

(C) technology developers;

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

(E) nongovernmental organizations; and

(F) other public stakeholders.

(3) CONTENTS.—The report under paragraph (1) shall describe—

(A) any unique licensing issues or requirements relating to the matters described in subparagraphs (A) through (C) of paragraph (1), including, with respect to the nonelectric applications referred to in subparagraphs (A) and (B) of that paragraph, any licensing issues or requirements relating to the use of nuclear energy—

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

(ii) for water desalination and wastewater treatment;

(iii) for heat used in industrial processes;

(iv) for district heating;

(v) in relation to energy storage;

(vi) for industrial or medical isotope production; and

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

(B) options for addressing such issues or requirements—

(i) within the existing regulatory framework;

(ii) through the technology-inclusive, regulatory framework to be established under section 103(a)(4)(A) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2133 note; Public Law 115–439); or

(iii) through a new rulemaking;

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

(D) cost estimates, proposed budgets, and proposed timeframes for implementing risk-informed and performance-based regulatory guidance for licensing advanced nuclear reactors for nonelectric applications.

(d) REPORT ON ADVANCED METHODS OF MANUFACTURING AND CONSTRUCTION FOR NUCLEAR ENERGY PROJECTS.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Nuclear Regulatory Commission (in this subsection referred to as the ''Commission'') shall submit to the Committee on Energy and Commerce of the House of

Representatives and the Committee on Environment and Public Works of the Senate a report on advanced methods of manufacturing and construction for nuclear energy projects.

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

(A) the Secretary of Energy;

(B) the nuclear energy industry;

(C) the National Laboratories;

(D) institutions of higher education;

(E) nuclear and manufacturing technology developers;

(F) the manufacturing and construction industries;

(G) standards development organizations;

(H) labor unions;

(I) nongovernmental organizations; and

(J) other public stakeholders.

(3) CONTENTS.—

(A) IN GENERAL.—The report under paragraph (1) shall—

(i) examine any unique licensing issues or requirements relating to the use, for nuclear energy projects, of—

(I) advanced manufacturing techniques; and

(II) advanced construction techniques;

(ii) examine—

(I) the requirements for nuclear-grade components in manufacturing and construction for nuclear energy projects;

(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 and standards to provide acceptable approaches to support or encapsulate new materials that do not yet have applicable codes or standards;

(iii) identify safety aspects of advanced manufacturing processes and advanced construction techniques that are not addressed by existing codes and standards, so that generic guidance for nuclear

energy projects may be updated or created as necessary by the Commission;

(iv) identify options for addressing the issues, requirements, and opportunities examined under clauses (i) and (ii)—

(I) within the existing regulatory framework; or

(II) through a new rulemaking; and

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

(B) COST ESTIMATES, BUDGETS, AND TIMEFRAMES.—The report under paragraph (1) shall include cost estimates, proposed budgets, and proposed timeframes for implementing risk-informed and performance-based regulatory guidance for advanced manufacturing and construction for nuclear energy projects.

(e) EXTENSION OF THE PRICE-ANDERSON ACT.—

(1) EXTENSION.—Section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) (commonly known as the ''Price-Anderson Act'') is amended by striking ''December 31, 2025'' each place it appears and inserting ''December 31, 2065''.

(2) LIABILITY.—Section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) (commonly known as the ''Price-Anderson Act'') is amended—

(A) in subsection d. (5), by striking ''$500,000,000'' and inserting ''$2,000,000,000''; and

(B) in subsection e. (4), by striking ''$500,000,000'' and inserting ''$2,000,000,000''.

(3) REPORT.—Section 170 p. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(p)) (commonly known as the ''Price-Anderson Act'') is amended by striking ''December 31, 2021'' and inserting ''December 31, 2061''.

(4) DEFINITION OF NUCLEAR INCIDENT.—Section 11 q. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(q)) is amended, in the second proviso, by striking ''if such occurrence'' and all that follows through ''United States:'' and inserting a colon.

(f) RISK POOLING PROGRAM ASSESSMENT.—

(1) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall carry out a review of, and submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environ-

ment and Public Works of the Senate a report on, the Secretary of Energy's actions with respect to the program described in section 934(e) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17373(e)).

(2) CONTENTS.—The report described in paragraph (1) shall include—

(A) an evaluation of the Secretary of Energy's actions to determine the risk-informed assessment formula under section 934(e)(2)(C) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17373(e)(2)(C)); and

(B) a review of the Secretary of Energy's methodology to collect information to determine and implement the formula.

Passed the House of Representatives February 28, 2024.

Attest: KEVIN F. MCCUMBER,

Clerk.