114TH CONGRESS
2D SESSION

S. _____

To modernize the regulation of nuclear energy.

IN THE SENATE OF THE UNITED STATES

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

A BILL

To modernize the regulation of nuclear energy.

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

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Nuclear Energy Innovation and Modernization Act''.

SEC. 2. FINDINGS.

Congress finds that—

(1) the safe and secure operation of nuclear reactors in the United States must remain the paramount focus of the Nuclear Regulatory Commission;

(2) the existing fleet of nuclear reactors in the United States is operating safely and securely;

(3) nuclear energy is the largest source of affordable, reliable, emissions-free energy in the United States, providing approximately 20 percent of the electricity consumed in the United States and 60 percent of emissions-free electricity generation in the United States;

(4) a 1,000-megawatt nuclear plant—

(A) provides approximately 500 permanent jobs;

(B) pays approximately $40,000,000 annually in wages;

(C) generates approximately $470,000,000 annually in goods and services in the local community; and

(D) pays approximately $83,000,000 annually in Federal, State, and local taxes;

(5) nuclear energy is of critical importance to United States energy security and worldwide influence on nonproliferation;

(6) nuclear energy uses widely available fuel resources to enable scientific progress, emissions-free and reliable electricity generation, heat generation

for industrial applications, and power for deep space exploration;

(7) the private sector, the National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)), and institutions of higher education are pursuing innovations in nuclear energy technology that will play a crucial role in—

(A) the future global and United States energy supply; and

(B) the exports, manufacturing, and economy of the United States;

(8) eventual deployment of commercial advanced nuclear reactors will require—

(A) modernizing the regulatory framework; and

(B) making other necessary changes to facilitate the efficient, predictable, and affordable deployment of advanced nuclear reactor technologies;

(9) 2 impediments to the commercialization of advanced nuclear reactors are the high costs and long durations associated with applying the existing nuclear regulatory framework to advanced nuclear reactors;

(10) license application reviews should be as predictable and efficient as practicable without compromising safety or security;

(11) the existing nuclear regulatory framework and the requirements of that framework have not adapted to advances in scientific understanding or the features and performance characteristics of advanced nuclear reactor designs;

(12) the existing nuclear reactor licensing process does not provide iterative feedback to manage risk as needed for typical technology development and investment cycles;

(13) a staged licensing structure that provides clear and periodic feedback to applicants on an agreed schedule will help to enable the commercialization of safer and innovative technologies that will benefit the economy, national security, and environment of the United States;

(14) a technology-inclusive Commission regulatory framework will—

(A) allow greater technological innovation; and

(B) enable inventors, scientists, engineers, and students to pursue licensing advanced reactor concepts;

(15) further preparation by the Commission of the research and test reactor licensing process will enable the Commission to more efficiently process applications for research and test reactors when the applications are received;

(16) it is incumbent on the Commission—

(A) to budget for adequate resources to conduct licensing reviews and other work requested by licensees and applicants; and

(B) to preserve those budgeted funds to ensure responsiveness to licensees and applicants in recognition of the dependence of the licensees and applicants on Commission approval before the benefits of the technology of the licensees and applicants can be realized; and

(17) both prospective commercial advanced nuclear reactor applicants and the existing fleet of nuclear reactors in the United States would benefit from modernizing the outdated fee recovery structure of the Commission to better manage fluctuations in workload and the number of licensees in a fair and equitable manner.

SEC. 3. PURPOSE.

The purpose of this Act is to provide—

(1) a program to develop the expertise and regulatory processes necessary to allow innovation and the commercialization of advanced nuclear reactors; and

(2) a revised fee recovery structure to ensure the availability of resources to meet industry needs without burdening existing licensees unfairly for inaccurate workload projections or premature existing reactor closures.

SEC. 4. DEFINITIONS.

In this Act:

(1) ADVANCED NUCLEAR REACTOR.—The term ''advanced nuclear reactor'' means a nuclear fission or fusion reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations), with significant improvements over existing commercial nuclear reactors, including improvements such as—

(A) additional inherent safety features;

(B) lower waste yields;

(C) greater fuel utilization;

(D) enhanced reliability;

(E) increased proliferation resistance;

(F) increased thermal efficiency; or

(G) ability to integrate into electric and nonelectric applications.

(2) AGREEMENT STATE.—The term ''Agreement State'' means any State with which the Commission has entered into an effective agreement under section 274 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2021(b)).

(3) APPLICANT.—The term ''applicant'' means an applicant for a license, certification, permit, or other form of approval from the Commission for a commercial advanced nuclear reactor or a research and test reactor.

(4) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term ''appropriate congressional committees'' means the Committee on the Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives.

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

(6) CORPORATE SUPPORT COSTS.—The term ''corporate support costs'' means expenditures for acquisitions, administrative services, financial management, human resource management, information management, information technology, policy support,

outreach, and training, as those categories are described and calculated in Appendix A of the Congressional Budget Justification for Fiscal Year 2017 of the Commission.

(7) LICENSING PROJECT PLAN.—The term ''licensing project plan'' means a plan that describes—

(A) the interactions between an applicant and the Commission; and

(B) project schedules and deliverables in specific detail to support long-range resource planning undertaken by the Commission and an applicant.

(8) REGULATORY FRAMEWORK.—The term ''regulatory framework'' means the framework for reviewing requests for certifications, permits, approvals, and licenses for nuclear power plants.

(9) REQUESTED ACTIVITY OF THE COMMISSION.—The term ''requested activity of the Commission'' means—

(A) the processing of applications for—

(i) design certifications or approvals;

(ii) licenses;

(iii) permits;

(iv) license amendments;

(v) license renewals;

(vi) certificates of compliance; and

(vii) power uprates; and

(B) any other activity requested by a licensee or applicant.

(10) RESEARCH AND TEST REACTOR.—

(A) IN GENERAL.—The term ''research and test reactor'' means a reactor that—

(i) falls within the licensing and related regulatory authority of the Commission under section 202 of the Energy Reorganization Act of 1974 (42 U.S.C. 5842); and

(ii) is useful in the conduct of research and development activities as licensed under section 104 c. of the Atomic Energy Act (42 U.S.C. 2134(c)).

(B) EXCLUSION.—The term ''research and test reactor'' does not include a commercial advanced nuclear reactor.

(11) STANDARD DESIGN APPROVAL.—The term ''standard design approval'' means the approval of a final standard design or a major portion of a final design standard as described in subpart E of part 52 of title 10, Code of Federal Regulations.

(12) STATEMENT OF LICENSING FEASIBILITY.—The term ''statement of licensing feasibility'' means an early-stage review by the Commission that—

(A) assesses preliminary design information for consistency with applicable regulatory requirements of the Commission;

(B) is performed on a set of topic areas agreed to in the licensing project plan; and

(C) is performed at a cost and schedule agreed to in the licensing project plan.

(13) TECHNOLOGY-INCLUSIVE REGULATORY FRAMEWORK.—The term ''technology-inclusive regulatory framework'' means a regulatory framework developed using methods of evaluation that are flexible and practicable for application to a variety of reactor technologies, including the use of risk-informed and performance-based techniques and other tools and methods.

(14) TOPICAL REPORT.—The term ''topical report'' means a document submitted to the Commission that addresses a technical topic related to nuclear power plant safety or design.

SEC. 5. NUCLEAR REGULATORY COMMISSION USER FEES AND ANNUAL CHARGES THROUGH FISCAL YEAR 2018.

(a) IN GENERAL.—Section 6101(c)(2)(A) of the Omnibus Budget Reconciliation Act of 1990 (42 U.S.C. 2214(c)(2)(A)) is amended—

(1) in clause (iii), by striking ''and'' at the end;

(2) in clause (iv), by striking the period at the end and inserting ''; and''; and

(3) by adding at the end the following:

''(v) amounts appropriated to the Commission for the fiscal year for activities related to the development of a regulatory framework for advanced nuclear reactor technologies, including activities required under section 7 of the Nuclear Energy Innovation and Modernization Act.''.

(b) REPEAL.—Effective October 1, 2018, section 6101 of the Omnibus Budget Reconciliation Act of 1990 (42 U.S.C. 2214) is repealed.

SEC. 6. NUCLEAR REGULATORY COMMISSION USER FEES AND ANNUAL CHARGES FOR FISCAL YEAR 2019 AND EACH FISCAL YEAR THEREAFTER.

(a) ANNUAL BUDGET JUSTIFICATION.—

(1) IN GENERAL.—In the annual budget justification submitted by the Commission to Congress,

the Commission shall expressly identify anticipated expenditures necessary for completion of the requested activities of the Commission anticipated to occur during the applicable fiscal year.

(2) RESTRICTION.—Budget authority granted to the Commission for purposes of the requested activities of the Commission shall be used solely for conducting requested activities of the Commission.

(3) LIMITATION ON CORPORATE SUPPORT COSTS.—With respect to the annual budget justification submitted to Congress, corporate support costs, to the maximum extent practicable, shall not exceed the following percentages of the total budget authority of the Commission requested in the annual budget justification:

(A) 30 percent for each of fiscal years 2019 and 2020.

(B) 29 percent for each of fiscal year 2021 and 2022.

(C) 28 percent for fiscal year 2023 and each fiscal year thereafter.

(b) FEES AND CHARGES.—

(1) ANNUAL ASSESSMENT.—

(A) IN GENERAL.—Each fiscal year, the Commission shall assess and collect fees and

charges in accordance with paragraphs (2) and (3) in a manner that ensures that, to the maximum extent practicable, the amount collected is equal to an amount that approximates—

(i) the total budget authority of the Commission for that fiscal year; less

(ii) the budget authority of the Commission for the activities described in subparagraph (B).

(B) EXCLUDED ACTIVITIES DESCRIBED.—The activities referred to in subparagraph (A)(ii) are the following:

(i) An activity not attributable to an existing NRC licensee or class of licensee, including those activities identified by the Commission in Table III of the final rule of the Commission entitled ''Revision of Fee Schedules; Fee Recovery for Fiscal Year 2015'' (80 Fed. Reg. 37432 (June 30, 2015)).

(ii) Amounts appropriated for a fiscal year to the Commission—

(I) from the Nuclear Waste Fund established under section 302(c) of

the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10222(c));

(II) for implementation of section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (50 U.S.C. 2601 note; Public Law 108–375);

(III) for the homeland security activities of the Commission (other than for the costs of fingerprinting and background checks required under section 149 of the Atomic Energy Act of 1954 (42 U.S.C. 2169) and the costs of conducting security inspections);

(IV) for the Inspector General services of the Commission provided to the Defense Nuclear Facilities Safety Board; and

(V) for any other fee-relief activity described in the final rule of the Commission entitled ''Revision of Fee Schedules; Fee Recovery for Fiscal Year 2015'' (80 Fed. Reg. 37432 (June 30, 2015)).

(iii) Costs for activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies, including activities required under section 7.

(C) EXCEPTION.—The exclusion described in subparagraph (B)(iii) shall cease to be effective on January 1, 2030.

(D) REPORT.—Not later than December 31, 2028, the Commission shall submit to the Committee on Appropriations and the Committee on the Environment and Public Works of the Senate and the Committee on Appropriations and the Committee on Energy and Commerce of the House of Representatives a report describing the views of the Commission on the continued appropriateness and necessity of the funding described in subparagraph (B)(iii).

(2) FEES FOR SERVICE OR THING OF VALUE.—In accordance with section 9701 of title 31, United States Code, the Commission shall charge fees to 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.

(3) ANNUAL FEES.—

(A) IN GENERAL.—Subject to subparagraph (B) and except as provided in subparagraph (D), the Commission may charge to any licensee or certificate holder of the Commission an annual fee.

(B) CAP ON ANNUAL FEES OF CERTAIN LICENSEES.—

(i) IN GENERAL.—The annual fee under subparagraph (A) charged to an operating reactor licensee shall not exceed the annual fee amount per operating reactor licensee established in the final rule of the Commission entitled ''Revision of Fee Schedules; Fee Recovery for Fiscal Year 2015'' (80 Fed. Reg. 37432 (June 30, 2015)), as may be adjusted annually by the Commission to reflect changes in the Consumer Price Index published by the Bureau of Labor Statistics of the Department of Labor.

(ii) WAIVER.—If the Commission determines that the annual fee cap described in clause (i) may compromise the safety and security missions of the Commission, the Commission shall—

(I) notify the Committee on Appropriations and the Committee on the Environment and Public Works of the Senate and the Committee on Appropriations and the Committee on Energy and Commerce of the House of Representatives of the determination, including a detailed explanation of the cause and circumstances; and

(II) request from Congress a 1-year waiver of the cap.

(C) AMOUNT PER LICENSEE.—

(i) IN GENERAL.—The Commission shall establish by rule a schedule of fees fairly and equitably allocating the aggregate amount of charges described in subparagraph (A) among licensees and certificate holders.

(ii) REQUIREMENT.—The schedule of fees under clause (i)—

(I) to the maximum extent practicable, shall be based on the cost of providing regulatory services; and

(II) may be based on the allocation of the resources of the Commis-

sion among licensees or certificate holders or classes of licensees or certificate holders.

(D) EXEMPTION.—

(i) DEFINITION OF RESEARCH REACTOR.—In this subparagraph, the term ''research reactor'' means a nuclear reactor that—

(I) is licensed by the Commission under section 104 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2134(c)) for operation at a thermal power level of not more than 10 megawatts; and

(II) if licensed under subclause (I) for operation at a thermal power level of more than 1 megawatt, does not contain—

(aa) a circulating loop through the core in which the licensee conducts fuel experiments;

(bb) a liquid fuel loading; or

(cc) an experimental facility in the core in excess of 16 square inches in cross-section.

(ii) EXEMPTION.—Subparagraph (A) shall not apply to the holder of any license for a federally owned research reactor used primarily for educational training and academic research purposes.

(c) PERFORMANCE AND REPORTING.—

(1) IN GENERAL.—The Commission shall develop for the requested activities of the Commission—

(A) performance metrics; and

(B) on each request, milestone schedules.

(2) DELAYS IN ISSUANCE OF FINAL SAFETY EVALUATION.—The Executive Director for Operations of the Commission shall inform the Commission of a delay in issuance of the final safety evaluation for a requested activity of the Commission by the completion date required by the performance metrics or milestone schedule under paragraph (1) by not later than 30 days after the completion date.

(3) DELAYS IN ISSUANCE OF FINAL SAFETY EVALUATION EXCEEDING 180 DAYS.—If the final safety evaluation for the requested activity of the Commission described in paragraph (2) is not completed by the date that is 180 days after the completion date required by the performance metrics or

milestone schedule under paragraph (1), the Commission shall submit to the appropriate congressional committees a timely report describing the delay, including a detailed explanation accounting for the delay and a plan for timely completion of the final safety evaluation.

(d) ACCURATE INVOICING.—With respect to invoices for fees and charges described in subsection (b)(2), the Commission shall—

(1) ensure appropriate management review and concurrence prior to the issuance of invoices;

(2) develop and implement processes to audit invoices to ensure accuracy, transparency, and fairness; and

(3) modify regulations to ensure fair and appropriate processes to provide licensees and applicants an opportunity to efficiently dispute or otherwise seek review and correction of errors in invoices for fees and charges.

(e) REPORT.—Not later than September 30, 2020, the Commission shall submit to the Committee on Appropriations and the Committee on the Environment and Public Works of the Senate and the Committee on Appropriations and the Committee on Energy and Commerce of the House of Representatives a report describing the

implementation of this section, including any impacts and recommendations for improvement.

(f) EFFECTIVE DATE.—This section takes effect on October 1, 2018.

SEC. 7. ADVANCED NUCLEAR REACTOR PROGRAM.

(a) LICENSING OF COMMERCIAL ADVANCED NUCLEAR REACTORS.—

(1) STAGED LICENSING.—For the purpose of predictable, efficient, and timely reviews, not later than 2 years after the date of enactment of this Act, the Commission shall develop and implement, within the existing regulatory framework, strategies for—

(A) establishing stages in the licensing process for commercial advanced nuclear reactors; and

(B) developing procedures and processes for—

(i) using a licensing project plan; and

(ii) optional use of a statement of licensing feasibility.

(2) RISK-INFORMED LICENSING.—Not later than 2 years after the date of enactment of this Act, the Commission shall develop and implement strategies for the increased use of risk-informed, performance-based licensing evaluation techniques and guid-

ance for commercial advanced nuclear reactors within existing regulatory frameworks, including evaluation techniques and guidance for the resolution of the following:

(A) Applicable policy issues identified during the course of review by the Commission of a commercial advanced nuclear reactor licensing application.

(B) The issues described in SECY–93–092 and SECY–15–077, including—

(i) licensing basis event selection and evaluation;

(ii) source terms;

(iii) containment performance; and

(iv) emergency preparedness.

(3) RESEARCH AND TEST REACTOR LICENSING.—For the purpose of predictable, efficient, and timely reviews, not later than 2 years after the date of enactment of this Act, the Commission shall develop and implement strategies to prepare an appropriate regulatory framework for licensing research and test reactors, including the issuance of guidance.

(4) TECHNOLOGY-INCLUSIVE REGULATORY FRAMEWORK.—Not later than December 31, 2023, the Commission shall complete a rulemaking to es-

tablish a technology-inclusive, regulatory framework for optional use by commercial advanced nuclear reactor applicants for new reactor license applications.

(5) TRAINING AND EXPERTISE.—As soon as practicable after the date of enactment of this Act, the Commission shall provide for staff training or the hiring of experts, as necessary—

(A) to support the activities described in paragraphs (1) through (4); and

(B) to support preparations—

(i) to conduct pre-application interactions; and

(ii) to review commercial advanced nuclear reactor license applications.

(6) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Commission to carry out this subsection such sums as are necessary.

(b) PLAN TO ESTABLISH STAGES IN THE COMMERCIAL ADVANCED NUCLEAR REACTOR LICENSING PROCESS.—

(1) PLAN REQUIRED.—Not later than 180 days after the date of enactment of this Act, the Commission shall submit to the appropriate congressional committees a plan for expediting and establishing

stages in the licensing process for commercial advanced nuclear reactors that will allow implementation of the licensing process by not later than 2 years after the date of enactment of this Act (referred to in this subsection as the ''plan'').

(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the plan, the Commission shall seek input from the Secretary of Energy, the nuclear energy industry, a diverse set of technology developers, and other public stakeholders.

(3) COST AND SCHEDULE ESTIMATES.—The plan shall include proposed cost estimates, budgets, and timeframes for implementing strategies to establish stages in the licensing process for commercial advanced nuclear reactor technologies.

(4) REQUIRED EVALUATIONS.—Consistent with the role of the Commission in protecting public health and safety and common defense and security, the plan shall evaluate—

(A)(i) the unique aspects of commercial advanced nuclear reactor licensing, including the use of alternative coolants or alternative fuels, operation at or near atmospheric pressure, and the use of passive safety strategies; and

(ii) for the purposes of predictable, efficient, and timely reviews, any associated legal, regulatory, and policy issues the Commission should address with regard to the licensing of commercial advanced nuclear reactor technologies;

(B) options for licensing commercial advanced nuclear reactors under the regulations of the Commission contained in title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act), including—

(i) the development and use under the regulatory framework of the Commission in effect on the date of enactment of this Act of a licensing project plan that could establish—

(I) milestones that—

(aa) correspond to stages of a licensing process for the specific situation of a commercial advanced nuclear reactor project; and

(bb) use knowledge of the ability of the Commission to review certain design aspects; and

(II) guidelines defining the roles and responsibilities between the Commission and the applicant at the onset of the interaction—

(aa) to provide the foundation for effective communication and effective project management; and

(bb) to ensure efficient progress and rapid resolution of conflicts;

(ii) the use of topical reports, standard design approval, and other appropriate mechanisms as tools to introduce stages into the commercial advanced nuclear reactor licensing process, including how the licensing project plan might structure the use of those mechanisms;

(iii) collaboration with standards-setting organizations to identify specific technical areas for which new or updated standards are needed and providing assistance if appropriate to ensure the new or updated standards are developed and finalized in a timely fashion;

(iv) the incorporation of consensus-based codes and standards developed under clause (iii) into the regulatory framework—

(I) to provide predictability for the regulatory processes of the Commission; and

(II) to ensure timely completion of specific licensing actions;

(v) the development of a process for, and the use of, statements of licensing feasibility; and

(vi) identification of any policies and guidance for staff that will be needed to implement clauses (i) and (ii);

(C) options for improving the efficiency, timeliness, and cost-effectiveness of licensing reviews of commercial advanced nuclear reactors, including opportunities to minimize the delays that may result from any necessary amendment or supplement to an application;

(D) options for improving the predictability of the commercial advanced nuclear reactor licensing process, including the evaluation of opportunities to improve the process by which ap-

plication review milestones are established and met; and

(E) the extent to which Commission action or modification of policy is needed to implement any part of the plan.

(c) PLAN TO INCREASE THE USE OF RISK-INFORMED AND PERFORMANCE-BASED EVALUATION TECHNIQUES AND REGULATORY GUIDANCE.—

(1) PLAN REQUIRED.—Not later than 180 days after the date of enactment of this Act, the Commission shall submit to the appropriate congressional committees a plan for increasing the use of risk-informed and performance-based evaluation techniques and regulatory guidance in licensing commercial advanced nuclear reactors within the existing regulatory framework (referred to in this subsection as the ''plan'').

(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the plan, the Commission shall seek input from the Secretary of Energy, the nuclear energy industry, technology developers, and other public stakeholders.

(3) COST AND SCHEDULE ESTIMATE.—The plan shall include proposed cost estimates, budgets, and timeframes for implementing a strategy to increase

the use of risk-informed and performance-based evaluation techniques and regulatory guidance in licensing commercial advanced nuclear reactors.

(4) REQUIRED EVALUATIONS.—Consistent with the role of the Commission in protecting public health and safety and common defense and security, the plan shall evaluate—

(A) the ability of the Commission to develop and implement risk-informed and performance-based licensing evaluation techniques and guidance for commercial advanced nuclear reactors within existing regulatory frameworks not later than 2 years after the date of enactment of this Act, including policies and guidance for the resolution of—

(i) issues relating to—

(I) licensing basis event selection and evaluation;

(II) use of mechanistic source terms;

(III) containment performance; and

(IV) emergency preparedness; and

(ii) other policy issues previously identified; and

(B) the extent to which Commission action is needed to implement any part of the plan.

(d) PLAN TO COMPLETE A RULEMAKING TO ESTABLISH A TECHNOLOGY-INCLUSIVE REGULATORY FRAMEWORK FOR OPTIONAL USE BY COMMERCIAL ADVANCED NUCLEAR REACTOR TECHNOLOGIES IN NEW REACTOR LICENSE APPLICATIONS.—

(1) PLAN REQUIRED.—Not later than 18 months after the date of enactment of this Act, the Commission shall submit to the appropriate congressional committees a plan for completing a rulemaking to establish a technology-inclusive regulatory framework for optional use by applicants in licensing commercial advanced nuclear reactor technologies in new reactor license applications (referred to in this subsection as the ''plan'').

(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the plan, the Commission shall seek input from the Secretary of Energy, the nuclear energy industry, a diverse set of technology developers, and other public stakeholders.

(3) COST AND SCHEDULE ESTIMATE.—The plan shall include proposed cost estimates, budgets, and

timeframes for developing and implementing a technology-inclusive regulatory framework for licensing commercial advanced nuclear reactor technologies, including completion of a rulemaking.

(4) REQUIRED EVALUATIONS.—Consistent with the role of the Commission in protecting public health and safety and common defense and security, the plan shall evaluate—

(A) the ability of the Commission to complete a rulemaking to establish a technology-inclusive regulatory framework for licensing commercial advanced nuclear reactor technologies by December 31, 2023; and

(B) the extent to which additional legislation, or Commission action or modification of policy, is needed to implement any part of the plan.

(e) PLAN TO PREPARE THE RESEARCH AND TEST REACTOR LICENSING PROCESS.—

(1) PLAN REQUIRED.—Not later than 1 year after the date of enactment of this Act, the Commission shall submit to the appropriate congressional committees a plan for preparing the licensing process for research and test reactors (referred to in this subsection as the ''plan'').

(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the plan, the Commission shall seek input from the Secretary of Energy, the nuclear energy industry, a diverse set of technology developers, and other public stakeholders.

(3) COST AND SCHEDULE ESTIMATES.—The plan shall include proposed cost estimates, budgets, and timeframes for preparing the licensing process for research and test reactors.

(4) REQUIRED EVALUATIONS.—Consistent with the role of the Commission in protecting public health and safety and common defense and security, the plan shall evaluate—

(A) the unique aspects of research and test reactor licensing and any associated legal, regulatory, and policy issues the Commission should address to prepare the licensing process for research and test reactors;

(B) the feasibility of developing guidelines for advanced reactor demonstrations to support the review process for advanced reactors designs, including designs that use alternative coolants or alternative fuels, operate at or near atmospheric pressure, and use passive safety strategies; and

(C) the extent to which Commission action or modification of policy is needed to implement any part of the plan.

(f) PLAN TO ENHANCE COMMISSION EXPERTISE RELATING TO ADVANCED NUCLEAR REACTOR TECHNOLOGIES.—

(1) PLAN REQUIRED.—Not later than 1 year after the date of enactment of this Act, the Commission shall submit to the appropriate congressional committees a plan for ensuring that the Commission has adequate expertise, modeling, and simulation capabilities, or access to those capabilities, to support the evaluation of licensing applications for commercial advanced nuclear reactors and research and test reactors, including applications that use alternative coolants or alternative fuels, operate at or near atmospheric pressure, and use passive safety strategies (referred to in this subsection as the ''plan'').

(2) COST AND SCHEDULE ESTIMATES.—The plan shall include proposed cost estimates, budgets, and timeframes for acquiring or accessing the necessary expertise to support the evaluation of license applications for commercial advanced nuclear reactors and research and test reactors.

(3) ANNUAL UPDATES TO PLAN.—The Commission shall—

(A) update the plan on an annual basis; and

(B) submit for review to the appropriate congressional committees the updated plan.

SEC. 8. HEARINGS UNDER ATOMIC ENERGY ACT OF 1954.

(a) IN GENERAL.—Section 189 of the Atomic Energy Act of 1954 (42 U.S.C. 2239) is amended—

(1) in subsection a.—

(A) in paragraph (1)(A), by striking the second and third sentences and inserting the following: ''On each application under section 103 or 104 b. for a construction permit or an operating license, on application under section 104 c. for a construction permit or an operating license for a testing facility, and on application for an amendment to a construction permit or an operating license under those sections, the Commission may, in the absence of a request for a hearing by any person whose interest may be affected and after 30-day notice and publication of notice in the Federal Register, issue a construction permit, an operating license, or an

amendment to a construction permit or an operating license without a hearing.''; and

(B) in paragraph (2)(A), in the second sentence, by striking ''required hearing'' and inserting ''hearing held by the Commission under this section''; and

(2) in subsection b. (2), by striking ''to begin operating'' and inserting ''to operate''.

(b) CONFORMING AMENDMENTS.—

(1) Section 185 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2235(b)) is amended in the first sentence by striking ''After holding a public hearing under section 189 a. (1)(A),'' and inserting ''After holding a hearing under section 189 a. (1)(A), or as soon as practicable if the Commission has determined that no hearing is required to be held under that section,''.

(2) Section 193(b) of the Atomic Energy Act of 1954 (42 U.S.C. 2243(b)) is amended—

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

''(1) IN GENERAL.—The Commission shall conduct a single adjudicatory hearing if a person whose interest may be affected by the construction and operation of a facility under sections 53 and 63 has re-

quested a hearing regarding the licensing of the construction and operation of the facility.''; and

(B) in paragraph (2), by striking ''Such hearing'' and inserting ''If a hearing is held under paragraph (1), the hearing''.

(c) EFFECT.—The amendments made by this section shall apply to all applications and proceedings pending before the Commission on or after the date of enactment of this Act.

SEC. 9. ADVANCED NUCLEAR ENERGY LICENSING COST-SHARE GRANT PROGRAM.

(a) ESTABLISHMENT.—The Secretary of Energy (referred to in this section as the ''Secretary'') shall establish a grant program to be known as the ''Advanced Nuclear Energy Cost-Share Grant Program'' (referred to in this section as the ''program''), under which the Secretary shall make cost-share grants to applicants for the purpose of funding a portion of the Commission fees of the applicant for pre-application and application review activities.

(b) REQUIREMENT.—The Secretary shall seek out technology diversity in making grants under the program.

(c) COST-SHARE AMOUNT.—The Secretary shall determine the cost-share amount for each grant.

(d) USE OF FUNDS.—Recipients of grants under the program may use the grant funds to cover Commission fees, including those fees associated with—

(1) developing a licensing project plan;

(2) obtaining a statement of licensing feasibility;

(3) reviewing topical reports; and

(4) other pre-application and application review activities and interactions with the Commission.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section such sums as are necessary.