

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.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

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

2 (a) SHORT TITLE.—This Act may be cited as the
3 “Atomic Energy Advancement Act”.

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

Sec. 1. Short title; table of contents.

TITLE I—NUCLEAR REGULATORY COMMISSION

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

Sec. 101. NRC mission alignment.

Sec. 102. Nuclear licensing efficiency.

Sec. 103. Strengthening the NRC workforce.

Subtitle B—Fee Reduction

Sec. 111. Advanced reactor fee reduction.

Sec. 112. Advanced nuclear reactor prize.

Subtitle C—Siting, Licensing, and Oversight Reviews

Sec. 121. Modernization of nuclear reactor environmental reviews.

Sec. 122. Nuclear for Brownfield sites.

Sec. 123. Advancement of nuclear regulatory oversight.

TITLE II—NUCLEAR TECHNOLOGY DEPLOYMENT

Sec. 201. Advanced nuclear deployment.

Sec. 202. Global nuclear cooperation.

Sec. 203. American nuclear competitiveness.

6 **TITLE I—NUCLEAR**
7 **REGULATORY COMMISSION**
8 **Subtitle A—Efficiency, Perform-**
9 **ance, and Preparation for the**
10 **Future**

11 **SEC. 101. NRC MISSION ALIGNMENT.**

12 (a) MISSION OF THE COMMISSION.—

13 (1) UPDATE.—Not later than 1 year after the
14 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.

1 (b) OFFICE OF NUCLEAR REACTOR REGULATION.—
2 Section 203 of the Energy Reorganization Act of 1974
3 (42 U.S.C. 5843) is amended—

4 (1) in subsection (a), by striking “(a) There”
5 and inserting the following:

6 “(a) ESTABLISHMENT; APPOINTMENT OF DIREC-
7 TOR.—There”;

8 (2) in subsection (b)—

9 (A) in the matter preceding paragraph
10 (1)—

11 (i) by striking “(b) Subject” and in-
12 serting the following:

13 “(b) FUNCTIONS OF DIRECTOR.—Subject”; and

14 (ii) by striking “delegate including:”
15 and inserting “delegate, including the fol-
16 lowing:”; and

17 (B) in paragraph (3), by striking “for the
18 discharge of the” and inserting “to fulfill the li-
19 censing and regulatory oversight”;

20 (3) in subsection (c), by striking “(c) Nothing”
21 and inserting the following:

22 “(d) RESPONSIBILITY FOR SAFE OPERATION OF FA-
23 CILITIES.—Nothing”; and

24 (4) by inserting after subsection (b) the fol-
25 lowing:

1 “(c) LICENSING PROCESS.—In carrying out the prin-
2 cipal licensing and regulation functions under subsection
3 (b)(1), the Director of Nuclear Reactor Regulation shall—

4 “(1) establish techniques and guidance for eval-
5 uating applications for licenses for nuclear reactors
6 to support efficient, timely, and predictable reviews
7 of applications for such licenses to enable the safe
8 and secure use of nuclear reactors;

9 “(2) maintain the techniques and guidance es-
10 tablished under paragraph (1) by periodically assess-
11 ing and, if necessary, modifying such techniques and
12 guidance; and

13 “(3) obtain approval from the Commission if es-
14 tablishment or modification of the techniques and
15 guidance established under paragraph (1) or (2) in-
16 volves policy formulation.”.

17 **SEC. 102. NUCLEAR LICENSING EFFICIENCY.**

18 (a) EFFICIENT LICENSING REVIEWS.—

19 (1) GENERAL.—Section 181 of the Atomic En-
20 ergy Act of 1954 (42 U.S.C. 2231) is amended—

21 (A) by striking “The provisions of” and in-
22 serting the following:

23 “(a) The provisions of”; and

24 (B) by adding at the end the following:

1 “(b) Consistent with the declaration in section 1, the
2 Commission shall provide for efficient, timely, and predict-
3 able reviews and proceedings for the granting, suspending,
4 revoking, or amending of any license or construction per-
5 mit, or application to transfer control, and in any pro-
6 ceeding for the issuance or modification of rules and regu-
7 lations dealing with the activities of licenses.”.

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

12 “c. APPLICATION REVIEWS FOR PRODUCTION AND
13 UTILIZATION FACILITIES OF AN EXISTING SITE.—In re-
14 viewing an application for an early site permit, construc-
15 tion permit, operating license, or combined construction
16 permit and operating license for a production facility or
17 utilization facility located at the site of a production facil-
18 ity or utilization facility licensed by the Commission, the
19 Commission shall, to the extent practicable, use informa-
20 tion that was part of the licensing basis of the licensed
21 production facility or utilization facility.”.

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

25 (1) in paragraph (3)—

1 (A) in the paragraph heading, by striking
2 “180” and inserting “90”; and

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

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

6 “(4) PERIODIC UPDATES TO METRICS AND
7 SCHEDULES.—

8 “(A) REVIEW AND ASSESSMENT.—Not less
9 frequently than once every 3 years, the Com-
10 mission shall review and assess, based on the li-
11 censing and regulatory activities of the Com-
12 mission, the performance metrics and milestone
13 schedules developed under paragraph (1).

14 “(B) REVISIONS.—After each review and
15 assessment under subparagraph (A), the Com-
16 mission shall revise, as appropriate, the per-
17 formance metrics and milestone schedules devel-
18 oped under paragraph (1) to provide the most
19 efficient performance metrics and milestone
20 schedules reasonably achievable.”.

21 (c) CLARIFICATION ON FUSION REGULATION.—Sec-
22 tion 103(a)(4) of the Nuclear Energy Innovation and
23 Modernization Act (42 U.S.C. 2133 note; Public Law
24 115–439) is amended—

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

3 “(A) IN GENERAL.—Not later”; and

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

5 “(B) EXCLUSION OF FUSION REACTORS.—
6 Notwithstanding section 3(1), for purposes of
7 subparagraph (A), the term ‘advanced nuclear
8 reactor applicant’ does not include an applicant
9 for a license for a nuclear fusion reactor.”.

10 (d) TECHNICAL CORRECTION.—Section 104 c. of the
11 Atomic Energy Act of 1954 (42 U.S.C. 2134(c)) is amend-
12 ed—

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

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

20 “(A) not more than 75 percent of the an-
21 nual costs to the licensee of owning and oper-
22 ating the facility are devoted to the sale, other
23 than for research and development or education
24 and training, of—

25 “(i) nonenergy services;

1 “(ii) energy; or

2 “(iii) a combination of nonenergy
3 services and energy; and

4 “(B) not more than 50 percent of the an-
5 nual costs to the licensee of owning and oper-
6 ating the facility are devoted to the sale of en-
7 ergy.”;

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

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

11 (3) by striking “C. The Commission” and in-
12 serting the following:

13 “C. RESEARCH AND DEVELOPMENT ACTIVITIES.—

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

16 (e) FUSION MACHINES.—

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

20 “kk. FUSION MACHINE.—The term ‘fusion machine’
21 means a particle accelerator that is capable of—

22 “(1) transforming atomic nuclei, through fusion
23 processes, into other elements, isotopes, or particles;
24 and

1 “(2) directly capturing and using the resultant
2 products, including particles, heat, and other electro-
3 magnetic radiation.”.

4 (2) TECHNOLOGY-INCLUSIVE REGULATORY
5 FRAMEWORK.—

6 (A) IN GENERAL.—Section 103(a) of the
7 Nuclear Energy Innovation and Modernization
8 Act (42 U.S.C. 2133 note) is further amend-
9 ed—

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

12 “(C) FUSION MACHINE APPLICANTS.—Not
13 later than December 31, 2027, the Commission
14 shall complete a rulemaking to establish a tech-
15 nology-inclusive, regulatory framework for op-
16 tional use by fusion machine applicants for new
17 license applications.”; and

18 (ii) in paragraph (5)(B)(ii), by insert-
19 ing “and fusion machine license applica-
20 tions” after “commercial advanced nuclear
21 reactor license applications”.

22 (B) DEFINITIONS.—Section 3 of the Nu-
23 clear Energy Innovation and Modernization Act
24 (42 U.S.C. 2215 note) is amended by adding at
25 the end the following:

1 “(21) FUSION MACHINE.—The term ‘fusion
2 machine’ has the meaning given such term in sub-
3 section kk. of section 11 of the Atomic Energy Act
4 of 1954.’”.

5 (3) REPORT.—Not later than 1 year after the
6 date of enactment of this Act, the Nuclear Regu-
7 latory Commission shall submit to Congress a report
8 on—

9 (A) the results of a study, conducted in
10 consultation with Agreement States (as defined
11 in section 3 of the Nuclear Energy Innovation
12 and Modernization Act (42 U.S.C. 2215 note)
13 and the private fusion sector, on risk- and per-
14 formance-based, design-specific licensing frame-
15 works for mass-manufactured fusion machines
16 (as defined in subsection kk. of section 11 of
17 the Atomic Energy Act of 1954, as added by
18 this subsection), that includes evaluation of the
19 Federal Aviation Administration’s design, man-
20 ufacturing, and operations certification process
21 for aircraft as a potential model for mass-man-
22 ufactured fusion machine regulations; and

23 (B) the estimated timeline for the Commis-
24 sion to issue consolidated guidance or regula-
25 tions for licensing mass-manufactured fusion

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

4 **SEC. 103. STRENGTHENING THE NRC WORKFORCE.**

5 (a) COMMISSION WORKFORCE.—

6 (1) GENERAL AUTHORITY.—The Atomic En-
7 ergy Act of 1954 (42 U.S.C. 2011 et seq.) is amend-
8 ed by inserting after section 161A the following:

9 **“SEC. 161B. COMMISSION WORKFORCE.**

10 **“(a) DIRECT HIRE AUTHORITY.—**

11 **“(1) IN GENERAL.—**Notwithstanding section
12 161 d. of this Act and section 2(b) of Reorganiza-
13 tion Plan No. 1 of 1980 (94 Stat. 3585; 5 U.S.C.
14 app.), and without regard to any provision of title 5
15 (except sections 3303 and 3328), United States
16 Code, governing appointments in the civil service, if
17 the Chairman of the Nuclear Regulatory Commis-
18 sion (in this section referred to as the ‘Chairman’)
19 issues or renews a certification that there is a severe
20 shortage of candidates or a critical hiring need for
21 covered positions to carry out the Nuclear Regu-
22 latory Commission’s (in this section referred to as
23 the ‘Commission’) responsibilities and activities in a
24 timely, efficient, and effective manner, the Chairman

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

3 “(A) recruit and directly appoint highly
4 qualified individuals into the excepted service
5 for covered positions; and

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

11 “(2) LIMITATIONS.—

12 “(A) MERIT PRINCIPLES.—To the max-
13 imum extent practicable, any action authorized
14 pursuant to paragraph (1) shall be consistent
15 with the merit principles of section 2301 of title
16 5, United States Code.

17 “(B) NUMBER.—The number of highly
18 qualified individuals serving in—

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

22 “(ii) term-limited covered positions
23 pursuant to paragraph (1)(B) may not ex-
24 ceed 80 at any one time.

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

10 “(D) SENIOR EXECUTIVE SERVICE POSI-
11 TION.—The Chairman may not, under para-
12 graph (1)(A) or paragraph (1)(B), appoint
13 highly qualified individuals to any Senior Exec-
14 utive Service position, as defined in section
15 3132 of title 5, United States Code.

16 “(3) RENEWAL.—The Chairman may renew a
17 certification issued or renewed under this subsection
18 if the Chairman determines there is still a severe
19 shortage of candidates or a critical hiring need for
20 covered positions to carry out the Commission’s re-
21 sponsibilities and activities in a timely, efficient, and
22 effective manner.

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

1 “(A) the date that is 10 years after the
2 certification is renewed or issued; or

3 “(B) the date on which the Chairman de-
4 termines there is no longer a severe shortage of
5 candidates or a critical hiring need for covered
6 positions to carry out the Commission’s respon-
7 sibilities and activities in a timely, efficient, and
8 effective manner.

9 “(5) LEVEL OF POSITIONS.—To the extent
10 practicable, in carrying out paragraph (1) the Chair-
11 man shall recruit and directly appoint highly quali-
12 fied individuals into the excepted service to entry,
13 mid, and senior level covered positions, including
14 term-limited covered positions.

15 “(b) ADDRESSING INSUFFICIENT COMPENSATION OF
16 EMPLOYEES AND OTHER PERSONNEL OF THE COMMIS-
17 SION.—

18 “(1) IN GENERAL.—Notwithstanding any other
19 provision of law, if the Chairman issues or renews
20 a certification that compensation for employees or
21 other personnel of the Commission serving in a cov-
22 ered position is insufficient to retain or attract such
23 employees and other personnel to allow the Commis-
24 sion to carry out the responsibilities and activities of
25 the Commission in a timely, efficient, and effective

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

7 “(2) CERTIFICATION REQUIREMENTS.—A cer-
8 tification issued or renewed under this subsection
9 shall—

10 “(A) apply to employees or other personnel
11 who serve in covered positions;

12 “(B) terminate on the earlier of—

13 “(i) the date that is 10 years after the
14 certification is issued or renewed; or

15 “(ii) the date on which the Chairman
16 determines that the use of the authority of
17 the Chairman under this subsection to fix
18 compensation for employees or other per-
19 sonnel serving in a covered position is no
20 longer necessary to retain or attract such
21 employees and other personnel to allow the
22 Commission to carry out the Commission’s
23 responsibilities and activities in a timely,
24 efficient, and effective manner; and

1 “(C) be no broader than necessary to
2 achieve the objective of retaining or attracting
3 employees and other personnel serving in a cov-
4 ered position to allow the Commission to carry
5 out the Commission’s responsibilities and activi-
6 ties in a timely, efficient, and effective manner.

7 “(3) RENEWAL.—The Chairman may renew a
8 certification issued or renewed under this subsection
9 if the Chairman determines that use of the authority
10 of the Chairman under this subsection to fix com-
11 pensation for employees or other personnel serving
12 in a covered position is still necessary to retain or
13 attract such employees or other personnel to allow
14 the Commission to carry out the Commission’s re-
15 sponsibilities and activities in a timely, efficient, and
16 effective manner.

17 “(4) APPLICABILITY.—The authority under this
18 subsection to fix the compensation of employees or
19 other personnel during any period when a certifi-
20 cation issued or renewed under paragraph (1) is in
21 effect shall apply with respect to an employee or
22 other personnel serving in a covered position regard-
23 less of when the employee or other personnel was
24 hired.

1 “(5) RETENTION OF LEVEL OF FIXED COM-
2 PENSATION.—The termination of a certification
3 issued or renewed under paragraph (1) shall not af-
4 fect the compensation of an employee or other per-
5 sonnel serving in a covered position whose com-
6 pensation was fixed by the Chairman in accordance
7 with paragraph (1).

8 “(6) LIMITATION ON COMPENSATION.—The
9 Chairman may not use the authority under para-
10 graph (1) to fix the compensation of employees or
11 other personnel at an annual rate of basic pay high-
12 er than the annual salary payable for level III of the
13 Executive Schedule under section 5314 of title 5,
14 United States Code.

15 “(7) EXPERTS AND CONSULTANTS.—

16 “(A) IN GENERAL.—Subject to subpara-
17 graph (B), the Chairman may—

18 “(i) obtain the services of experts and
19 consultants in accordance with section
20 3109 of title 5, United States Code;

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

1 “(iii) pay to the experts and consult-
2 ants serving away from the homes or reg-
3 ular places of business of the experts and
4 consultants travel expenses and per diem
5 in lieu of subsistence at rates authorized
6 by sections 5702 and 5703 of that title for
7 persons in Government service employed
8 intermittently.

9 “(B) LIMITATIONS.—The Chairman
10 shall—

11 “(i) to the maximum extent prac-
12 ticable, limit the use of experts and con-
13 sultants pursuant to subparagraph (A);
14 and

15 “(ii) ensure that the employment con-
16 tract of each expert and consultant em-
17 ployed pursuant to subparagraph (A) is
18 subject to renewal not less frequently than
19 annually.

20 “(c) ADDITIONAL COMPENSATION AUTHORITY.—

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

25 “(2) FOR EXISTING EMPLOYEES.—

1 “(A) IN GENERAL.—Subject to subpara-
2 graph (B), an employee or other personnel who
3 the Chairman determines exhibited exceptional
4 performance in a fiscal year may be paid a per-
5 formance bonus in an amount not to exceed the
6 least of—

7 “(i) \$25,000; and

8 “(ii) the amount of the limitation that
9 is applicable for a calendar year under sec-
10 tion 5307(a)(1) of title 5, United States
11 Code.

12 “(B) LIMITATIONS.—

13 “(i) SUBSEQUENT BONUSES.—Any
14 person who receives a performance bonus
15 under subparagraph (A) may not receive
16 another performance bonus under that
17 subparagraph for a period of 5 years there-
18 after.

19 “(ii) HIRING BONUSES.—Any person
20 who receives a 1-time hiring bonus under
21 paragraph (1) may not receive a perform-
22 ance bonus under subparagraph (A) unless
23 more than one year has elapsed since the
24 payment of such 1-time hiring bonus.

25 “(d) IMPLEMENTATION PLAN AND REPORT.—

1 “(1) IN GENERAL.—Not later than 180 days
2 after the date of enactment of this section, the
3 Chairman shall develop and implement a plan to
4 carry out this section. Before implementing such
5 plan, the Chairman shall submit to the Committee
6 on Energy and Commerce of the House of Rep-
7 resentatives, the Committee on Environment and
8 Public Works of the Senate, and the Office of Per-
9 sonnel Management a report on the details of the
10 plan.

11 “(2) REPORT CONTENT.—The report submitted
12 under paragraph (1) shall include—

13 “(A) evidence and supporting documenta-
14 tion justifying the plan; and

15 “(B) budgeting projections on costs and
16 benefits resulting from the plan.

17 “(3) CONSULTATION.—The Chairman may con-
18 sult with the Office of Personnel Management, the
19 Office of Management and Budget, and the Comp-
20 troller General of the United States in developing
21 the plan under paragraph (1).

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

1 “(f) INFORMATION ON HIRING, VACANCIES, AND
2 COMPENSATION.—

3 “(1) IN GENERAL.—The Commission shall in-
4 clude in its budget materials submitted in support of
5 the budget of the President (submitted to Congress
6 pursuant to section 1105 of title 31, United States
7 Code), for each fiscal year beginning after the date
8 of enactment of this section, information relating to
9 hiring, vacancies, and compensation at the Commis-
10 sion.

11 “(2) INCLUSIONS.—The information described
12 in paragraph (1) shall include—

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

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

19 “(C) information that describes—

20 “(i) if a certification under subsection
21 (a) was in effect at any point in the pre-
22 vious year, how the authority provided by
23 that subsection is being used to address
24 the hiring needs of the Commission;

1 “(ii) the total number of highly quali-
2 fied individuals serving in—

3 “(I) covered positions pursuant
4 to subsection (a)(1)(A); and

5 “(II) term-limited covered posi-
6 tions pursuant to subsection
7 (a)(1)(B);

8 “(iii) if a certification under sub-
9 section (b) was in effect at any point in the
10 previous year, how the authority provided
11 by that subsection is being used to address
12 the hiring or retention needs of the Com-
13 mission;

14 “(iv) the total number of employees or
15 other personnel serving in a covered posi-
16 tion that have their compensation fixed
17 pursuant to subsection (b);

18 “(v) if a certification under subsection
19 (a) or (b) was terminated or was not in ef-
20 fect at any point in the previous year, why
21 such a certification was terminated or was
22 not in effect;

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

1 number of individuals leaving a term-lim-
2 ited covered position before completion of
3 the applicable term of service and the aver-
4 age length of service for such individuals
5 as a percentage of the applicable term of
6 service; and

7 “(vii) the number of experts and con-
8 sultants retained under subsection (b)(7);
9 and

10 “(D) an assessment of—

11 “(i) the current critical workforce
12 needs of the Commission and any critical
13 workforce needs that the Commission an-
14 ticipates in the next five years; and

15 “(ii) additional skillsets that are or
16 likely will be needed for the Commission to
17 fulfill the licensing and oversight respon-
18 sibilities of the Commission.

19 “(g) COVERED POSITION.—In this section, the term
20 ‘covered position’ means a position in which an employee
21 or other personnel is responsible for conducting work of
22 a scientific, technical, engineering, mathematical, legal,
23 managerial, or otherwise highly specialized or skilled na-
24 ture.”.

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

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

5 (b) GOVERNMENT ACCOUNTABILITY OFFICE RE-
6 PORT.—Not later than September 30, 2032, the Comp-
7 troller General of the United States shall submit to the
8 Committee on Energy and Commerce of the House of
9 Representatives and the Committee on Environment and
10 Public Works of the Senate a report that—

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

15 (2) describes the role in which the highly quali-
16 fied individuals recruited and directly appointed pur-
17 suant to section 161B(a) of the Atomic Energy Act
18 of 1954 (as added by this Act) have been utilized to
19 support the licensing of advanced nuclear reactors;

20 (3) assesses the effectiveness of the authorities
21 provided under subsections (a), (b), and (c) of sec-
22 tion 161B of the Atomic Energy Act of 1954 (as
23 added by this Act) in helping the Nuclear Regu-
24 latory Commission fulfill its mission;

1 (4) makes recommendations to improve the Nu-
 2 clear Regulatory Commission’s strategic workforce
 3 management; and

4 (5) makes recommendations with respect to
 5 whether Congress should enhance, modify, or dis-
 6 continue the authorities provided under subsections
 7 (a), (b), and (c) of section 161B of the Atomic En-
 8 ergy Act of 1954 (as added by this Act).

9 (c) ANNUAL SOLICITATION FOR NUCLEAR REGU-
 10 LATOR APPRENTICESHIP NETWORK APPLICATIONS.—The
 11 Nuclear Regulatory Commission, on an annual basis, shall
 12 solicit applications for the Nuclear Regulator Apprentice-
 13 ship Network.

14 **Subtitle B—Fee Reduction**

15 **SEC. 111. ADVANCED REACTOR FEE REDUCTION.**

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

19 (1) by redesignating paragraphs (2) through
 20 (15) as paragraphs (3), (6), (7), (8), (9), (10), (11),
 21 (14), (15), (16), (17), (18), (19), and (20), respec-
 22 tively;

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

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

7 (3) by inserting after paragraph (3) (as so re-
8 designated) the following:

9 “(4) ADVANCED NUCLEAR REACTOR
10 PREAPPLICANT.—The term ‘advanced nuclear reac-
11 tor preapplicant’ means an entity that has submitted
12 to the Commission a licensing project plan for the
13 purposes of submitting a future application for a li-
14 cense for an advanced nuclear reactor under the
15 Atomic Energy Act of 1954 (42 U.S.C. 2011 et
16 seq.).

17 “(5) AGENCY SUPPORT.—The term ‘agency
18 support’ has the meaning given the term ‘agency
19 support (corporate support and the IG)’ in section
20 170.3 of title 10, Code of Federal Regulations (or
21 any successor regulation).”; and

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

24 “(12) MISSION-DIRECT PROGRAM SALARIES
25 AND BENEFITS.—The term ‘mission-direct program

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

4 “(13) MISSION-INDIRECT PROGRAM SUPPORT.—
5 The term ‘mission-indirect program support’ has the
6 meaning given such term in section 170.3 of title 10,
7 Code of Federal Regulations (or any successor regu-
8 lation).”.

9 (b) EXCLUDED ACTIVITIES.—Section 102(b)(1)(B)
10 of the Nuclear Energy Innovation and Modernization Act
11 (42 U.S.C. 2215(b)(1)(B)) is amended by adding at the
12 end the following:

13 “(iv) The total costs of mission-indi-
14 rect program support and agency support
15 that, under paragraph (2)(B)(ii), may not
16 be included in the professional hourly rate
17 charged for fees assessed and collected
18 from advanced nuclear reactor applicants.

19 “(v) The total costs of mission-indi-
20 rect program support and agency support
21 that, under paragraph (2)(C)(ii), may not
22 be included in the professional hourly rate
23 charged for fees assessed and collected
24 from advanced nuclear reactor
25 preapplicants.”.

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

5 “(2) FEES FOR SERVICE OR THING OF
6 VALUE.—

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

14 “(B) ADVANCED NUCLEAR REACTOR AP-
15 PLICANTS.—The professional hourly rate
16 charged for fees assessed and collected from an
17 advanced nuclear reactor applicant under this
18 paragraph relating to the review of a submitted
19 application for an advanced nuclear reactor may
20 not—

21 “(i) exceed the professional hourly
22 rate for mission-direct program salaries
23 and benefits of the Nuclear Reactor Safety
24 Program; and

1 “(ii) include the costs of mission-indi-
2 rect program support and agency support.

3 “(C) ADVANCED NUCLEAR REACTOR
4 PREAPPLICANTS.—The professional hourly rate
5 charged for fees assessed and collected from an
6 advanced nuclear reactor preapplicant under
7 this paragraph relating to the review of sub-
8 mitted materials as described in the licensing
9 project plan of such advanced nuclear reactor
10 preapplicant may not—

11 “(i) exceed the professional hourly
12 rate for mission-direct program salaries
13 and benefits of the Nuclear Reactor Safety
14 Program; and

15 “(ii) include the costs of mission-indi-
16 rect program support and agency support.

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

22 “(i) the full-time equivalent rate
23 (within the meaning of the document of
24 the Commission entitled ‘FY 2023 Final
25 Fee Rule Work Papers’ (or a successor

1 document)) for mission-direct program sal-
 2 aries and benefits of the Nuclear Reactor
 3 Safety Program (as determined by the
 4 Commission) for a fiscal year; by

5 “(ii) the productive hours assumption
 6 for that fiscal year, determined in accord-
 7 ance with the formula established in the
 8 document referred to in clause (i) (or a
 9 successor document).”.

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

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

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

18 **SEC. 112. ADVANCED NUCLEAR REACTOR PRIZE.**

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

22 “(f) PRIZES FOR ADVANCED NUCLEAR REACTOR LI-
 23 CENSING.—

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

1 “(A) a non-Federal entity; and

2 “(B) the Tennessee Valley Authority.

3 “(2) PRIZE FOR ADVANCED NUCLEAR REACTOR
4 LICENSING.—

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

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

21 “(ii) for which the Commission makes
22 a finding described in section 52.103(g) of
23 title 10, Code of Federal Regulations (or
24 successor regulations), with respect to a

1 combined license for an advanced nuclear
2 reactor—

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

6 “(II) for which an application
7 has not been approved by the Com-
8 mission as of the date of enactment of
9 this subsection.

10 “(B) AMOUNT OF AWARD.—Subject to
11 paragraph (3), an award under subparagraph
12 (A) shall be in an amount equal to the total
13 amount assessed by the Commission and col-
14 lected under section 102(b)(2) from the eligible
15 entity receiving the award for costs relating to
16 the issuance of the license described in that
17 subparagraph, including, as applicable, costs re-
18 lating to the issuance of an associated construc-
19 tion permit described in section 50.23 of title
20 10, Code of Federal Regulations (or successor
21 regulations), or early site permit (as defined in
22 section 52.1 of that title (or successor regula-
23 tions)).

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

1 “(i) the first advanced nuclear reactor
2 for which the Commission—

3 “(I) issues a license in accord-
4 ance with clause (i) of subparagraph
5 (A); or

6 “(II) makes a finding in accord-
7 ance with clause (ii) of that subpara-
8 graph;

9 “(ii) an advanced nuclear reactor
10 that—

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

17 “(II) is the first advanced nu-
18 clear reactor described in subclause
19 (I) for which the Commission—

20 “(aa) issues a license in ac-
21 cordance with clause (i) of sub-
22 paragraph (A); or

23 “(bb) makes a finding in ac-
24 cordance with clause (ii) of that
25 subparagraph;

1 “(iii) an advanced nuclear reactor
2 that—

3 “(I) is a nuclear integrated en-
4 ergy system—

5 “(aa) that is composed of 2
6 or more co-located or jointly op-
7 erated subsystems of energy gen-
8 eration, energy storage, or other
9 technologies;

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

14 “(cc) the purpose of which
15 is—

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

20 “(BB) to maximize en-
21 ergy production and effi-
22 ciency; and

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

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

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

7 “(iv) an advanced reactor that—

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

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

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

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

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

25 “(3) FEDERAL FUNDING LIMITATION.—

1 “(A) EXCLUSION OF TVA FUNDS.—In this
2 paragraph, the term ‘Federal funds’ does not
3 include funds received under the power program
4 of the Tennessee Valley Authority established
5 pursuant to the Tennessee Valley Authority Act
6 of 1933 (16 U.S.C. 831 et seq.).

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

18 “(C) REPAYMENTS AND DIVIDENDS NOT
19 REQUIRED.—Notwithstanding section
20 9104(a)(4) of title 31, United States Code, or
21 any other provision of law, an eligible entity
22 that received an award under this subsection
23 shall not be required—

24 “(i) to repay that award or any part
25 of that award; or

1 “(ii) to pay a dividend, interest, or
2 other similar payment based on the sum of
3 that award.”.

4 **Subtitle C—Siting, Licensing, and** 5 **Oversight Reviews**

6 **SEC. 121. MODERNIZATION OF NUCLEAR REACTOR ENVI-** 7 **RONMENTAL REVIEWS.**

8 (a) IN GENERAL.—Not later than 90 days after the
9 date of enactment of this Act, the Nuclear Regulatory
10 Commission (in this section referred to as the “Commis-
11 sion”) shall submit to the Committee on Environment and
12 Public Works of the Senate and the Committee on Energy
13 and Commerce of the House of Representatives a report
14 on the efforts of the Commission to facilitate efficient,
15 timely, and predictable environmental reviews of nuclear
16 reactor applications, including through expanded use of
17 categorical exclusions, environmental assessments, and ge-
18 neric environmental impact statements.

19 (b) REPORT.—In completing the report under sub-
20 section (a), the Commission shall—

21 (1) describe the actions the Commission will
22 take to implement the amendments to the National
23 Environmental Policy Act of 1969 (42 U.S.C. 4321
24 et seq.) made by section 321 of the Fiscal Responsi-
25 bility Act of 2023;

1 (2) consider—

2 (A) using through adoption, incorporation
3 by reference, or other appropriate means, cat-
4 egorical exclusions, environmental assessments,
5 and environmental impact statements prepared
6 by other Federal agencies to streamline environ-
7 mental reviews of nuclear reactor applications
8 by the Commission;

9 (B) using categorical exclusions, environ-
10 mental assessments, and environmental impact
11 statements prepared by the Commission to
12 streamline environmental reviews of nuclear re-
13 actor applications by the Commission;

14 (C) using mitigated findings of no signifi-
15 cant impact in environmental reviews of nuclear
16 reactor applications by the Commission to re-
17 duce the impact of a proposed action to a level
18 that is not significant;

19 (D) the extent to which the Commission
20 may rely on prior studies or analyses prepared
21 by Federal, State, and local governmental per-
22 mitting agencies to streamline environmental
23 reviews of nuclear reactor applications by the
24 Commission;

1 (E) opportunities to coordinate the devel-
2 opment of environmental assessments and envi-
3 ronmental impact statements with other Fed-
4 eral agencies to avoid duplicative environmental
5 reviews and to streamline environmental reviews
6 of nuclear reactor applications by the Commis-
7 sion;

8 (F) opportunities to streamline formal and
9 informal consultations and coordination with
10 other Federal, State, and local governmental
11 permitting agencies during environmental re-
12 views of nuclear reactor applications by the
13 Commission;

14 (G) opportunities to streamline the Com-
15 mission's analyses of alternatives, including the
16 Commission's analysis of alternative sites, in
17 environmental reviews of nuclear reactor appli-
18 cations by the Commission;

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

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

1 than an environmental impact statement or
2 supplemental environmental impact statement)
3 is appropriate for a particular nuclear reactor
4 application, including in proceedings in which
5 the Commission relies upon a generic environ-
6 mental impact statement for advanced nuclear
7 reactors;

8 (J) authorizing the use of an applicant's
9 environmental impact statement as the Com-
10 mission's draft environmental impact statement,
11 consistent with section 107(f) of the National
12 Environmental Policy Act of 1969 (42 U.S.C.
13 4336a(f));

14 (K) opportunities to adopt online and dig-
15 ital technologies, including technologies that
16 would allow applicants and cooperating agencies
17 to upload documents and coordinate with the
18 Commission to edit documents in real time,
19 that would streamline communications be-
20 tween—

21 (i) the Commission and applicants;

22 and

23 (ii) the Commission and other rel-
24 evant cooperating agencies;

1 (L) in addition to implementing measures
2 under subsection (c), potential revisions to part
3 51 of title 10, Code of Federal Regulations, and
4 relevant Commission guidance documents, to—

5 (i) facilitate efficient, timely, and pre-
6 dictable environmental reviews of nuclear
7 reactor applications;

8 (ii) assist decision-making about rel-
9 evant environmental issues;

10 (iii) maintain openness with the pub-
11 lic;

12 (iv) meet obligations under the Na-
13 tional Environmental Policy Act of 1969
14 (42 U.S.C. 4321 et seq.); and

15 (v) reduce burdens on licensees, appli-
16 cants, and the Commission; and

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

19 (c) RULEMAKING.—Not later than 2 years after the
20 submission of the report under subsection (a), the Com-
21 mission shall promulgate a final rule implementing, to the
22 maximum extent practicable, measures considered by the
23 Commission under subsection (b)(2) that are necessary to
24 streamline the Commission’s review of nuclear reactor ap-
25 plications.

1 **SEC. 122. NUCLEAR FOR BROWNFIELD SITES.**

2 (a) DEFINITIONS.—In this section:

3 (1) BROWNFIELD SITE.—The term “brownfield
4 site” has the meaning given the term in section 101
5 of the Comprehensive Environmental Response,
6 Compensation, and Liability Act of 1980 (42 U.S.C.
7 9601).

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

10 (3) COVERED SITE.—The term “covered site”
11 means a brownfield site, a retired fossil fuel site, or
12 a site that is both a retired fossil fuel site and a
13 brownfield site.

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

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

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

1 (b) IDENTIFICATION OF REGULATORY ISSUES.—

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

9 (2) REQUIREMENT.—In carrying out paragraph
10 (1), the Commission shall consider how licensing re-
11 views for production facilities or utilization facilities
12 at covered sites may be expedited by—

13 (A) siting and operating a production facil-
14 ity or a utilization facility at or near existing
15 site infrastructure to support the reuse of such
16 infrastructure, including—

17 (i) electric switchyard components and
18 transmission infrastructure;

19 (ii) heat-sink components;

20 (iii) steam cycle components;

21 (iv) roads;

22 (v) railroad access; and

23 (vi) water availability;

24 (B) using early site permits;

1 (C) using plant parameter envelopes or
2 similar standardized site parameters on a por-
3 tion of a larger site; and

4 (D) using a standardized application for
5 similar sites.

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

11 (c) LICENSING.—

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

15 (A) develop and implement strategies to
16 enable efficient, timely, and predictable licens-
17 ing reviews for, and to support the oversight of,
18 production facilities or utilization facilities at
19 covered sites; and

20 (B) initiate a rulemaking to enable effi-
21 cient, timely, and predictable licensing reviews
22 for, and to support the oversight of, production
23 facilities or utilization facilities at covered sites.

24 (2) REQUIREMENTS.—In carrying out para-
25 graph (1), consistent with the mission of the Com-

1 mission, the Commission shall consider matters re-
2 lating to—

3 (A) the use of existing site infrastructure;

4 (B) existing emergency preparedness orga-
5 nizations and planning;

6 (C) the availability of historical site-spe-
7 cific environmental data;

8 (D) previously completed environmental re-
9 views required by the National Environmental
10 Policy Act of 1969 (42 U.S.C. 4321 et seq.);

11 (E) activities associated with the potential
12 decommissioning of facilities or decontamina-
13 tion and remediation at covered sites; and

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

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

22 **SEC. 123. ADVANCEMENT OF NUCLEAR REGULATORY OVER-**
23 **SIGHT.**

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

1 (1) IN GENERAL.—Not later than 180 days
2 after the date of enactment of this Act, the Commis-
3 sion shall submit to the appropriate committees of
4 Congress a report on actions taken by the Commis-
5 sion during the public health emergency declared by
6 the Secretary of Health and Human Services under
7 section 319 of the Public Health Service Act (42
8 U.S.C. 247d) on January 31, 2020, with respect to
9 COVID–19.

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

12 (A) identify any processes, procedures, and
13 other regulatory policies that the Commission
14 revised or temporarily suspended during the
15 public health emergency described in paragraph
16 (1);

17 (B) examine how any revision or tem-
18 porary suspension of a process, procedure, or
19 other regulatory policy identified under sub-
20 paragraph (A) affected the ability of the Com-
21 mission to license and regulate the civilian use
22 of radioactive materials in the United States to
23 protect public health and safety, promote the
24 common defense and security, and protect the
25 environment;

1 (C) discuss lessons learned from the mat-
2 ters described in subparagraph (B);

3 (D) list actions that the Commission has
4 taken or will take to incorporate into the licens-
5 ing and oversight activities of the Commission,
6 without compromising the mission of the Com-
7 mission, the lessons described in subparagraph
8 (C); and

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

12 (b) ADVANCING EFFICIENT, RISK-INFORMED OVER-
13 SIGHT AND INSPECTIONS.—

14 (1) IN GENERAL.—Not later than 1 year after
15 the date of enactment of this Act, the Commission
16 shall develop and submit to the appropriate commit-
17 tees of Congress a report that identifies specific im-
18 provements to the nuclear reactor and materials
19 oversight and inspection programs carried out pur-
20 suant to the Atomic Energy Act of 1954 that the
21 Commission may implement to maximize the effi-
22 ciency of such programs through, where appropriate,
23 the use of risk-informed, performance-based proce-
24 dures, expanded incorporation of information tech-
25 nologies, and staff training.

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

4 (A) the Secretary of Energy;

5 (B) the National Laboratories;

6 (C) the nuclear energy industry; and

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

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

11 (A) assess specific elements of oversight
12 and inspections that may be modified by the
13 use of technology, improved planning, and con-
14 tinually updated risk-informed, performance-
15 based assessment, including—

16 (i) use of travel resources;

17 (ii) planning and preparation for in-
18 spections, including entrance and exit
19 meetings with licensees;

20 (iii) document collection and prepara-
21 tion, including consideration of whether
22 nuclear reactor data are accessible prior to
23 onsite visits or requests to the licensee and
24 that document requests are timely and
25 within the scope of inspections;

1 (iv) the cross-cutting issues program;

2 and

3 (v) the scope of event reporting re-
4 quired by licensees to ensure decisions are
5 risk-informed;

6 (B) identify and assess measures to im-
7 prove oversight and inspections, including—

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

10 (ii) increased use of templates in doc-
11 umenting inspection results; and

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

15 (I) inspection planning and as-
16 sessments;

17 (II) agency decision making proc-
18 esses on the application of regulations
19 and guidance; and

20 (III) the application of the Com-
21 mission's standard of reasonable as-
22 surance of adequate protection;

23 (C) assess measures to advance risk-in-
24 formed procedures, including—

1 (i) increased use of inspection ap-
2 proaches that balance the level of resources
3 commensurate with safety significance;

4 (ii) increased review of the use of in-
5 spection program resources based on li-
6 censee performance;

7 (iii) expansion of modern information
8 technology, including artificial intelligence
9 and machine learning to risk inform over-
10 sight and inspection decisions; and

11 (iv) updating the Differing Profes-
12 sional Views or Opinions process to ensure
13 any impacts on agency decisions and
14 schedules are commensurate with the safe-
15 ty significance of the differing opinion;

16 (D) assess the ability of the Commission,
17 consistent with its obligations to provide reason-
18 able assurance of adequate protection of health
19 and safety pursuant to the Atomic Energy Act
20 of 1954, to enable licensee innovations that may
21 advance nuclear reactor operational efficiency
22 and safety, including the criteria of the Com-
23 mission for timely acceptance of licensee adop-
24 tion of advanced technologies, including digital
25 technologies;

1 (E) identify recommendations resulting
2 from the assessments described in subpara-
3 graphs (A) through (D);

4 (F) identify specific actions that the Com-
5 mission will take to incorporate into the train-
6 ing, inspection, oversight, and licensing activi-
7 ties, and regulations of the Commission, with-
8 out compromising the mission of the Commis-
9 sion, the recommendations identified under sub-
10 paragraph (E); and

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

13 (c) OFFICE AND FACILITY SPACE REVIEW.—

14 (1) REPORT.—Not later than 1 year after the
15 date of enactment of this Act, the Comptroller Gen-
16 eral of the United States shall—

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

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

22 (2) CONTENTS.—The report described in para-
23 graph (1) shall include—

24 (A) an examination of—

1 (i) the costs associated with the head-
2 quarters, regional offices, and technical
3 training center of the Commission, includ-
4 ing examination of—

5 (I) costs that do not support the
6 Commission’s mission, including rent
7 subsidies for other Federal agencies;
8 and

9 (II) opportunities to reduce fu-
10 ture costs through reduction in unnec-
11 essary office space, consolidation of
12 offices, use of advanced information
13 technology, or any other appropriate
14 means; and

15 (ii) current and anticipated office and
16 facility requirements to efficiently accom-
17 plish the mission of the Commission; and

18 (B) recommendations to Congress, the
19 Commission, and the General Services Adminis-
20 tration for actions that may assist in reducing
21 office and facility costs to licensees and tax-
22 payers.

23 (d) DEFINITIONS.—In this section:

24 (1) APPROPRIATE COMMITTEES OF CON-
25 GRESS.—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

1 Regulations (or any successor regula-
2 tion)) to demonstrate an advanced nu-
3 clear reactor on a Department of En-
4 ergy site or any site or installation
5 that is critical national security infra-
6 structure (as defined in section 327(d)
7 of the John S. McCain National De-
8 fense Authorization Act for Fiscal
9 Year 2019); and

10 “(II) pre-application activities re-
11 lating to an early site permit (as so
12 defined) to demonstrate an advanced
13 nuclear reactor on a Department of
14 Energy site or any site or installation
15 that is critical national security infra-
16 structure (as defined in section 327(d)
17 of the John S. McCain National De-
18 fense Authorization Act for Fiscal
19 Year 2019).”.

20 (2) EFFECTIVE DATE.—The amendment made
21 by paragraph (1) shall take effect on October 1,
22 2024.

23 (b) REGULATORY REQUIREMENTS FOR MICRO-REAC-
24 TORS.—

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

4 (A) not later than 18 months after the
5 date of enactment of this Act, develop risk-in-
6 formed and performance-based strategies and
7 guidance to license and regulate micro-reactors
8 pursuant to section 103 of the Atomic Energy
9 Act of 1954 (42 U.S.C. 2133), including strate-
10 gies and guidance for—

11 (i) staffing and operations;

12 (ii) oversight and inspections;

13 (iii) safeguards and security;

14 (iv) emergency preparedness;

15 (v) risk analysis methods, including
16 alternatives to probabilistic risk assess-
17 ments;

18 (vi) decommissioning funding assur-
19 ance methods that permit the use of
20 design- and site-specific cost estimates;

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

23 (viii) siting, including in relation to—

24 (I) the population density cri-
25 terion limit described in the policy

1 issue paper on population-related
2 siting considerations for advanced re-
3 actors dated May 8, 2020, and num-
4 bered SECY-20-0045;

5 (II) licensing mobile deployment;
6 and

7 (III) environmental reviews; and

8 (B) not later than 3 years after the date
9 of enactment of this Act, implement, as appro-
10 priate, the strategies and guidance developed
11 under subparagraph (A)—

12 (i) within the existing regulatory
13 framework;

14 (ii) through the technology-inclusive,
15 regulatory framework to be established
16 under section 103(a)(4)(A) of the Nuclear
17 Energy Innovation and Modernization Act
18 (42 U.S.C. 2133 note; Public Law 115-
19 439); or

20 (iii) through a pending or new rule-
21 making.

22 (2) CONSIDERATIONS.—In developing and im-
23 plementing strategies and guidance under paragraph
24 (1), the Commission shall consider—

1 (A) the unique characteristics of micro-re-
2 actors, including characteristics relating to—

- 3 (i) physical size;
4 (ii) design simplicity; and
5 (iii) source term;

6 (B) opportunities to address redundancies
7 and inefficiencies;

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

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

14 (E) other relevant considerations discussed
15 in the policy issue paper on policy and licensing
16 considerations related to micro-reactors dated
17 October 6, 2020, and numbered SECY-20-
18 0093.

19 (3) CONSULTATION.—In carrying out para-
20 graph (1), the Commission shall consult with—

21 (A) the Secretary of Energy;

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

24 (C) micro-reactor technology developers;
25 and

1 (D) other stakeholders.

2 (c) EXPEDITED SUBSEQUENT COMBINED LI-
3 CENSES.—

4 (1) IN GENERAL.—In accordance with this sub-
5 section, the Nuclear Regulatory Commission (re-
6 ferred to in this subsection as the “Commission”)
7 shall establish and carry out an expedited procedure
8 for issuing a combined license pursuant to section
9 185 b. of the Atomic Energy Act of 1954 (42 U.S.C.
10 2235).

11 (2) QUALIFICATIONS.—To qualify for the expe-
12 dited procedure under paragraph (1), an applicant—

13 (A) shall submit a combined license appli-
14 cation for a new nuclear reactor based off a
15 previously licensed design;

16 (B) shall propose to construct the new nu-
17 clear reactor on or adjacent to a site on which
18 a nuclear reactor already operates or previously
19 operated; and

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

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

1 fied the requirements described in paragraph (2),
2 the Commission shall, to the maximum extent prac-
3 ticable—

4 (A) not later than 1 year after the applica-
5 tion is accepted for docketing, issue a draft en-
6 vironmental impact statement;

7 (B) not later than 18 months after the ap-
8 plication is accepted for docketing—

9 (i) complete the technical review proc-
10 ess; and

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

13 (C) not later than 2 years after the appli-
14 cation is accepted for docketing, complete any
15 necessary public licensing hearings and related
16 processes; and

17 (D) not later than 25 months after the ap-
18 plication is accepted for docketing, make a final
19 decision on whether to issue the combined li-
20 cense.

21 (4) PERFORMANCE AND REPORTING.—

22 (A) DELAYS IN ISSUANCE.—Not later than
23 30 days after the applicable deadline, the Exec-
24 utive 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-

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

3 “(b) CONSULTATION.—In establishing a pilot pro-
4 gram under this section, the Secretary shall consult with
5 the heads of other Federal departments and agencies that
6 may benefit from purchasing nuclear power for a period
7 of longer than 10 years, including the Secretary of De-
8 fense.

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

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

19 “(1) to high-value assets for national security
20 purposes; or

21 “(2) for other purposes that the Secretary de-
22 termines are in the national interest, including for
23 remote off-grid scenarios or grid-connected scenarios
24 that provide capabilities commonly known as
25 ‘islanding power capabilities’ during an emergency.

1 “(e) RATES.—A long-term power purchase agreement
 2 entered into under this section may not be at a rate that
 3 is higher than the average market rate, unless the agree-
 4 ment is for power generated by a commercial nuclear reac-
 5 tor described in subsection (d).

6 “(f) ADVANCED FUNDING.—The Secretary—

7 “(1) may not enter into any power purchase
 8 agreement under this section unless funds are spe-
 9 cifically provided for such purposes in advance in ap-
 10 propriations Acts enacted after the date of enact-
 11 ment of this section; and

12 “(2) may only enter into such a power purchase
 13 agreement if the full extent of anticipated costs
 14 stemming from such agreement is recorded as an ob-
 15 ligation up front and in full at the time such agree-
 16 ment is made.”.

17 (2) TABLE OF CONTENTS.—The table of con-
 18 tents of the Energy Policy Act of 2005 (Public Law
 19 109–58; 119 Stat. 594) is amended by inserting
 20 after the item relating to section 639 the following:

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

21 **SEC. 202. GLOBAL NUCLEAR COOPERATION.**

22 (a) GLOBAL NUCLEAR ENERGY ASSESSMENT
 23 STUDY.—

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

1 retary of Energy, in consultation with the Secretary
2 of State, the Secretary of Commerce, the Adminis-
3 trator of the Environmental Protection Agency, and
4 the Commission, shall conduct a study on the global
5 status of—

6 (A) the civilian nuclear energy industry;

7 and

8 (B) the supply chains of the civilian nu-
9 clear energy industry.

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

12 (A) information on the status of the civil-
13 ian nuclear energy industry, the long-term risks
14 to such industry, and the basis for such risks;

15 (B) information on how the use of the ci-
16 vilian nuclear energy industry, relative to other
17 types of energy industries, can reduce the emis-
18 sion of criteria pollutants and carbon dioxide;

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

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

1 (E) information on how the United States
2 may collaborate with such countries in devel-
3 oping, deploying, and investing in nuclear tech-
4 nology;

5 (F) information on how foreign countries
6 use nuclear energy when crafting and imple-
7 menting their own foreign policy, including such
8 use by foreign countries that are strategic com-
9 petitors;

10 (G) an evaluation of how nuclear non-
11 proliferation and security efforts and nuclear
12 energy safety are affected by the involvement of
13 the United States in—

14 (i) international markets; and

15 (ii) setting civilian nuclear energy in-
16 dustry standards;

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

21 (I) information on utilities and companies
22 in the United States that are involved in the ci-
23 vilian nuclear energy supply chain, including,
24 with respect to such utilities and companies—

25 (i) financial challenges;

1 (ii) nuclear liability issues;
2 (iii) foreign strategic competition; and
3 (iv) risks to continued operation; and
4 (J) recommendations for how the United
5 States may—

6 (i) develop a national strategy to in-
7 crease the role nuclear energy plays in di-
8 plomacy and strategic energy policy;
9 (ii) develop a strategy to mitigate for-
10 eign competitor's utilization of their civil-
11 ian nuclear energy industries in diplomacy;
12 (iii) align its nuclear energy policy
13 with national security objectives; and
14 (iv) remove regulatory barriers to the
15 development of the United States civilian
16 nuclear energy supply chain.

17 (3) REPORT TO CONGRESS.—Not later than 6
18 months after the study is conducted under para-
19 graph (1), the Secretary of Energy shall submit to
20 the appropriate committees of Congress a report, in-
21 cluding a classified annex as necessary, on the re-
22 sults of such study.

23 (b) PROGRAM TO TRAIN AND SHARE EXPERTISE.—

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

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

6 (2) REQUIREMENTS.—In carrying out the pro-
7 gram developed under paragraph (1), the Secretary
8 of Energy shall—

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

13 (B) train foreign nuclear energy experts on
14 the operation and safety and security practices
15 used by the United States civilian nuclear en-
16 ergy industry;

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

19 (D) identify weaknesses and concerns
20 found in foreign civilian nuclear energy indus-
21 tries; and

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

1 (3) FOREIGN NUCLEAR ENERGY EXPERT.—In
2 this subsection, the term “foreign nuclear energy ex-
3 pert” does not include a person who is from a coun-
4 try—

5 (A) in which intellectual property theft is
6 legal;

7 (B) that takes actions to undermine the ci-
8 vilian nuclear energy industry or other critical
9 industries of the United States; or

10 (C) which the Secretary of Energy deter-
11 mines is inimical to the interest of the United
12 States.

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

15 (1) COORDINATION.—The Commission shall—

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

18 (i) issuing a license for the import or
19 export of a nuclear reactor under section
20 103 of the Atomic Energy Act of 1954 (42
21 U.S.C. 2133); and

22 (ii) international regulatory coopera-
23 tion and assistance relating to nuclear re-
24 actors; and

25 (B) support—

1 (i) the consideration of international
2 technical standards to assist the design, li-
3 censing, and construction of advanced nu-
4 clear systems;

5 (ii) efforts to help build competent nu-
6 clear regulatory organizations and legal
7 frameworks in foreign countries that are
8 seeking to develop civilian nuclear energy
9 industries; and

10 (iii) exchange programs and training
11 provided in coordination with the Secretary
12 of State to foreign countries relating to ci-
13 vilian nuclear energy industry regulation
14 and oversight to improve nuclear tech-
15 nology licensing.

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

19 (A) the Secretary of Energy;

20 (B) the Secretary of State;

21 (C) the National Laboratories;

22 (D) the private sector; and

23 (E) institutions of higher education.

24 (3) NUCLEAR REACTOR EXPORT AND INNOVA-
25 TION BRANCH.—The Commission may establish

1 within the Office of International Programs of the
2 Commission a branch, to be known as the “Inter-
3 national Nuclear Reactor Export and Innovation
4 Branch”, to carry out the nuclear reactor export and
5 innovation activities described in paragraph (1) as
6 the Commission determines appropriate.

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

9 (A) IN GENERAL.—Section 102 of the Nu-
10 clear Energy Innovation and Modernization Act
11 (42 U.S.C. 2215) is amended—

12 (i) in subsection (a), by adding at the
13 end the following:

14 “(4) INTERNATIONAL NUCLEAR REACTOR EX-
15 PORT AND INNOVATION ACTIVITIES.—The Commis-
16 sion shall identify in the annual budget justification
17 international nuclear reactor export and innovation
18 activities described in section 202(c)(1) of the Atom-
19 ic Energy Advancement Act.”; and

20 (ii) in subsection (b)(1)(B), as amend-
21 ed by the preceding provisions of this Act,
22 by adding at the end the following:

23 “(vii) Costs for international nuclear
24 reactor export and innovation activities de-

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

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

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

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

12 (A) is owned or controlled by the Govern-
13 ment of the Russian Federation or the Govern-
14 ment of the People’s Republic of China; or

15 (B) is organized under the laws of, or oth-
16 erwise subject to the jurisdiction of, the Rus-
17 sian Federation or the People’s Republic of
18 China.

19 (2) PROHIBITION ON UNLICENSED POSSESSION
20 OR OWNERSHIP OF COVERED FUEL.—Unless specifi-
21 cally authorized by the Commission in a license
22 issued under section 53 of the Atomic Energy Act
23 of 1954 (42 U.S.C. 2073), no person subject to the
24 jurisdiction of the Commission may possess or own
25 covered fuel.

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

3 (A) CONSULTATION REQUIRED PRIOR TO
4 ISSUANCE.—The Commission shall not issue a
5 license to possess or own covered fuel under
6 section 53 of the Atomic Energy Act of 1954
7 (42 U.S.C. 2073) unless the Commission has
8 first consulted with the Secretary of Energy
9 and the Secretary of State before issuing the li-
10 cense.

11 (B) PROHIBITION ON ISSUANCE OF LI-
12 CENSE.—

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

18 (ii) DETERMINATION.—

19 (I) IN GENERAL.—The deter-
20 mination referred to in clause (i) is a
21 determination that possession or own-
22 ership, as applicable, of covered fuel
23 poses a threat to the national security
24 of the United States that adversely

1 impacts the physical and economic se-
2 curity of the United States.

3 (II) JOINT DETERMINATION.—A
4 determination described in subclause
5 (I) shall be jointly made by the Sec-
6 retary of Energy and the Secretary of
7 State.

8 (III) TIMELINE.—

9 (aa) NOTICE OF APPLICA-
10 TION.—Not later than 30 days
11 after the date on which the Com-
12 mission receives an application
13 for a license to possess or own
14 covered fuel, the Commission
15 shall notify the Secretary of En-
16 ergy and the Secretary of State
17 of the application.

18 (bb) DETERMINATION.—The
19 Secretary of Energy and the Sec-
20 retary of State shall have a pe-
21 riod of 180 days, beginning on
22 the date on which the Commis-
23 sion notifies the Secretary of En-
24 ergy and the Secretary of State
25 under item (aa) of an application

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

5 (cc) COMMISSION NOTIFICA-
6 TION.—On making the deter-
7 mination described in subclause
8 (I), the Secretary of Energy and
9 the Secretary of State shall im-
10 mediately notify the Commission.

11 (dd) CONGRESSIONAL NOTI-
12 FICATION.—Not later than 30
13 days after the date on which the
14 Secretary of Energy and the Sec-
15 retary of State notify the Com-
16 mission under item (cc), the
17 Commission shall notify the ap-
18 propriate committees of Congress
19 of the determination.

20 (ee) PUBLIC NOTICE.—Not
21 later than 15 days after the date
22 on which the Commission notifies
23 Congress under item (dd) of a
24 determination made under sub-
25 clause (I), the Commission shall

1 make that determination publicly
2 available.

3 (iii) EFFECT OF NO DETERMINA-
4 TION.—The prohibition described in clause
5 (i) shall not apply if the Secretary of En-
6 ergy and the Secretary of State do not
7 make the determination described in clause
8 (ii) by the date described in subclause
9 (III)(bb) of that clause.

10 (e) DEFINITIONS.—In this section:

11 (1) APPROPRIATE COMMITTEES OF CON-
12 GRESS.—The term “appropriate committees of Con-
13 gress” means each of the following:

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

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

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

20 (D) The Committee on Energy and Nat-
21 ural Resources of the Senate.

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

24 (2) COMMISSION.—The term “Commission”
25 means the Nuclear Regulatory Commission.

1 **SEC. 203. AMERICAN NUCLEAR COMPETITIVENESS.**

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

4 (1) IDENTIFICATION AND EVALUATION OF FAC-
5 TORS.—Not later than 90 days after the date of en-
6 actment of this Act, the Secretary of Energy, with
7 the concurrence of the Secretary of State, shall iden-
8 tify and evaluate factors, other than agreements for
9 cooperation entered into in accordance with section
10 123 of the Atomic Energy Act of 1954 (42 U.S.C.
11 2153), that may be used to determine a country's
12 generally authorized destination status under part
13 810 of title 10, Code of Federal Regulations, and to
14 list such country as a generally authorized destina-
15 tion in Appendix A to part 810 of title 10, Code of
16 Federal Regulations.

17 (2) PROCESS UPDATE.—The Secretary of En-
18 ergy shall review and, as appropriate, update the
19 Department of Energy's process for determining a
20 country's generally authorized destination status
21 under part 810 of title 10, Code of Federal Regula-
22 tions, and for listing such country as a generally au-
23 thorized destination in Appendix A to part 810 of
24 title 10, Code of Federal Regulations, taking into
25 consideration, and, as appropriate, incorporating

1 factors identified and evaluated under paragraph
2 (1).

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

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

12 (1) IN GENERAL.—The prohibitions against
13 issuing certain licenses for utilization facilities to
14 certain aliens, corporations, and other entities de-
15 scribed in the second sentence of section 103 d. of
16 the Atomic Energy Act of 1954 (42 U.S.C. 2133(d))
17 and the second sentence of section 104 d. of that
18 Act (42 U.S.C. 2134(d)) shall not apply to an entity
19 described in paragraph (2) of this subsection if the
20 Nuclear Regulatory Commission determines that
21 issuance of the applicable license to that entity is
22 not inimical to—

23 (A) the common defense and security; or

24 (B) the health and safety of the public.

25 (2) ENTITIES DESCRIBED.—

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

5 (i) the government of—

6 (I) a country, other than a coun-
7 try described in subparagraph (B),
8 that is a member of the Organization
9 for Economic Co-operation and Devel-
10 opment on the date of enactment of
11 this Act; or

12 (II) the Republic of India;

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

16 (iii) an alien who is a citizen or na-
17 tional of a country described in subclause
18 (I) or (II) of clause (i).

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

21 (i) any department, agency, or instru-
22 mentality of the government of which, on
23 the date of enactment of this Act, is sub-
24 ject to sanctions under section 231 of the

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

3 (ii) any citizen, national, or entity of
4 which, as of the date of enactment of this
5 Act, is included on the List of Specially
6 Designated Nationals and Blocked Persons
7 maintained by the Office of Foreign Assets
8 Control of the Department of the Treasury
9 pursuant to sanctions imposed under sec-
10 tion 231 of the Countering America’s Ad-
11 versaries Through Sanctions Act (22
12 U.S.C. 9525).

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

17 (4) SAVINGS CLAUSE.—Nothing in this sub-
18 section affects the requirements of section 721 of
19 the Defense Production Act of 1950 (50 U.S.C.
20 4565).

21 (c) LICENSING CONSIDERATIONS RELATING TO USE
22 OF NUCLEAR ENERGY FOR NONELECTRIC APPLICA-
23 TIONS.—

24 (1) IN GENERAL.—Not later than 1 year after
25 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.

- 1 (3) CONTENTS.—The report under paragraph
2 (1) shall describe—
- 3 (A) any unique licensing issues or require-
4 ments relating to the matters described in sub-
5 paragraphs (A) through (C) of paragraph (1),
6 including, with respect to the nonelectric appli-
7 cations referred to in subparagraphs (A) and
8 (B) of that paragraph, any licensing issues or
9 requirements relating to the use of nuclear en-
10 ergy—
- 11 (i) for hydrogen or other liquid and
12 gaseous fuel or chemical production;
- 13 (ii) for water desalination and waste-
14 water treatment;
- 15 (iii) for heat used in industrial proc-
16 esses;
- 17 (iv) for district heating;
- 18 (v) in relation to energy storage;
- 19 (vi) for industrial or medical isotope
20 production; and
- 21 (vii) other applications, as identified
22 by the Commission;
- 23 (B) options for addressing such issues or
24 requirements—

1 (i) within the existing regulatory
2 framework;

3 (ii) through the technology-inclusive,
4 regulatory framework to be established
5 under section 103(a)(4)(A) of the Nuclear
6 Energy Innovation and Modernization Act
7 (42 U.S.C. 2133 note; Public Law 115–
8 439); or

9 (iii) through a new rulemaking;

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

13 (D) cost estimates, proposed budgets, and
14 proposed timeframes for implementing risk-in-
15 formed and performance-based regulatory guid-
16 ance for licensing advanced nuclear reactors for
17 nonelectric applications.

18 (d) REPORT ON ADVANCED METHODS OF MANUFAC-
19 TURING AND CONSTRUCTION FOR NUCLEAR ENERGY
20 PROJECTS.—

21 (1) IN GENERAL.—Not later than 180 days
22 after the date of enactment of this Act, the Nuclear
23 Regulatory Commission (in this subsection referred
24 to as the “Commission”) shall submit to the Com-
25 mittee 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—

1 (I) advanced manufacturing tech-
2 niques; and

3 (II) advanced construction tech-
4 niques;

5 (ii) examine—

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

10 (II) opportunities to use standard
11 materials, parts, or components in
12 manufacturing and construction for
13 nuclear energy applications; and

14 (III) opportunities to use stand-
15 ard materials that are in compliance
16 with existing codes and standards to
17 provide acceptable approaches to sup-
18 port or encapsulate new materials
19 that do not yet have applicable codes
20 or standards;

21 (iii) identify safety aspects of ad-
22 vanced manufacturing processes and ad-
23 vanced construction techniques that are
24 not addressed by existing codes and stand-
25 ards, so that generic guidance for nuclear

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

3 (iv) identify options for addressing the
4 issues, requirements, and opportunities ex-
5 amined under clauses (i) and (ii)—

6 (I) within the existing regulatory
7 framework; or

8 (II) through a new rulemaking;
9 and

10 (v) describe the extent to which Com-
11 mission action is needed to implement any
12 matter described in the report.

13 (B) COST ESTIMATES, BUDGETS, AND
14 TIMEFRAMES.—The report under paragraph (1)
15 shall include cost estimates, proposed budgets,
16 and proposed timeframes for implementing risk-
17 informed and performance-based regulatory
18 guidance for advanced manufacturing and con-
19 struction for nuclear energy projects.

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

21 (1) EXTENSION.—Section 170 of the Atomic
22 Energy Act of 1954 (42 U.S.C. 2210) (commonly
23 known as the “Price-Anderson Act”) is amended by
24 striking “December 31, 2025” each place it appears
25 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-

(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

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