

Union Calendar No. 320

118TH CONGRESS
2^D SESSION

H. R. 6544

[Report No. 118–391, Part I]

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.

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 1, 2023

Mr. DUNCAN (for himself and Ms. DEGETTE) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Space, and Technology, and Foreign Affairs, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

FEBRUARY 16, 2024

Reported from the Committee on Energy and Commerce with an amendment
[Strike out all after the enacting clause and insert the part printed in *italic*]

FEBRUARY 16, 2024

Committees on Science, Space, and Technology and Foreign Affairs discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of introduced bill, see copy of bill as introduced on December 1, 2023]

A BILL

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,*

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

4 (a) *SHORT TITLE.*—*This Act may be cited as the*
 5 *“Atomic Energy Advancement Act”.*

6 (b) *TABLE OF CONTENTS.*—*The table of contents for*
 7 *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.

8 **TITLE I—NUCLEAR REGULATORY**
 9 **COMMISSION**

10 **Subtitle A—Efficiency, Perform-**
 11 **ance, and Preparation for the**
 12 **Future**

13 **SEC. 101. NRC MISSION ALIGNMENT.**

14 (a) *MISSION OF THE COMMISSION.*—

1 (1) *UPDATE.*—Not later than 1 year after the
2 date of enactment of this Act, the Nuclear Regulatory
3 Commission shall, while remaining consistent with
4 the policies of the Atomic Energy Act of 1954 (includ-
5 ing to provide reasonable assurance of adequate pro-
6 tection of the public health and safety, to promote the
7 common defense and security, and to protect the envi-
8 ronment), update the mission statement of the Com-
9 mission to include that licensing and regulation of
10 nuclear energy activities be conducted in a manner
11 that is efficient and does not unnecessarily limit—

12 (A) the potential of nuclear energy to im-
13 prove the general welfare; and

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

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

20 (A) the updated mission statement; and

21 (B) the guidance that the Nuclear Regu-
22 latory Commission will provide to staff of the
23 Nuclear Regulatory Commission to ensure effec-
24 tive performance of such mission.

1 (b) *OFFICE OF NUCLEAR REACTOR REGULATION.*—
2 *Section 203 of the Energy Reorganization Act of 1974 (42*
3 *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 DIRECTOR.*—
7 *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 evalu-
5 ating applications for licenses for nuclear reactors to
6 support efficient, timely, and predictable reviews of
7 applications for such licenses to enable the safe and
8 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 regula-*
7 *tions dealing with the activities of licenses.”.*

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

12 “c. *APPLICATION REVIEWS FOR PRODUCTION AND UTI-*
13 *LIZATION FACILITIES OF AN EXISTING SITE.—In reviewing*
14 *an application for an early site permit, construction per-*
15 *mit, operating license, or combined construction permit and*
16 *operating license for a production facility or utilization fa-*
17 *cility located at the site of a production facility or utiliza-*
18 *tion facility licensed by the Commission, the Commission*
19 *shall, to the extent practicable, use information that was*
20 *part of the licensing basis of the licensed production facility*
21 *or utilization facility.”.*

22 (b) *PERFORMANCE METRICS AND MILESTONES.—Sec-*
23 *tion 102(c) of the Nuclear Energy Innovation and Mod-*
24 *ernization 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 Commis-*
10 *sion shall review and assess, based on the licens-*
11 *ing and regulatory activities of the Commission,*
12 *the performance metrics and milestone schedules*
13 *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 perform-*
17 *ance metrics and milestone schedules developed*
18 *under paragraph (1) to provide the most efficient*
19 *performance metrics and milestone schedules rea-*
20 *sonably achievable.”.*

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

1 (1) by striking “Not later” and inserting the fol-
2 lowing:

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 FACILITIES.*—
16 The Commission may issue a license under this sec-
17 tion for a utilization facility useful in the conduct of
18 research and development activities of the types speci-
19 fied 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 serv-
3 ices 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 insert-
12 ing 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 En-*
18 *ergy Act of 1954 (42 U.S.C. 2014) is amended by*
19 *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 amended—*

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

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

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

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

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

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

7 (A) the results of a study, conducted in con-
8 sultation with Agreement States (as defined in
9 section 3 of the Nuclear Energy Innovation and
10 Modernization Act (42 U.S.C. 2215 note) and
11 the private fusion sector, on risk- and perform-
12 ance-based, design-specific licensing frameworks
13 for mass-manufactured fusion machines (as de-
14 fined in subsection *kk.* of section 11 of the Atom-
15 ic Energy Act of 1954, as added by this sub-
16 section), that includes evaluation of the Federal
17 Aviation Administration’s design, manufac-
18 turing, and operations certification process for
19 aircraft as a potential model for mass-manufac-
20 tured fusion machine regulations; and

21 (B) the estimated timeline for the Commis-
22 sion to issue consolidated guidance or regulations
23 for licensing mass-manufactured fusion ma-
24 chines, taking into account the results of such

1 *study and the anticipated need for such guidance*
2 *or regulations.*

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

4 *(a) COMMISSION WORKFORCE.—*

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

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

9 *“(a) DIRECT HIRE AUTHORITY.—*

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

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

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

9 “(2) LIMITATIONS.—

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

15 “(B) NUMBER.—The number of highly
16 qualified individuals serving in—

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

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

23 “(C) COMPENSATION.—The Chairman may
24 not use authority under paragraph (1)(A) or
25 paragraph (1)(B) to compensate individuals re-

1 *cruted and directly appointed into a covered po-*
2 *sition or a term-limited covered position at an*
3 *annual rate of basic pay higher than the annual*
4 *salary payable for level III of the Executive*
5 *Schedule under section 5314 of title 5, United*
6 *States Code.*

7 “(D) *SENIOR EXECUTIVE SERVICE POSI-*
8 *TION.—The Chairman may not, under para-*
9 *graph (1)(A) or paragraph (1)(B), appoint high-*
10 *ly qualified individuals to any Senior Executive*
11 *Service position, as defined in section 3132 of*
12 *title 5, United States Code.*

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

20 “(4) *TERMINATION.—A certification issued or re-*
21 *newed under this subsection shall terminate on the*
22 *earlier of—*

23 “(A) *the date that is 10 years after the cer-*
24 *tification is renewed or issued; or*

1 “(B) *the date on which the Chairman deter-*
2 *mines there is no longer a severe shortage of can-*
3 *didates or a critical hiring need for covered posi-*
4 *tions to carry out the Commission’s responsibil-*
5 *ities and activities in a timely, efficient, and ef-*
6 *fective manner.*

7 “(5) *LEVEL OF POSITIONS.—To the extent prac-*
8 *ticable, in carrying out paragraph (1) the Chairman*
9 *shall recruit and directly appoint highly qualified in-*
10 *dividuals into the excepted service to entry, mid, and*
11 *senior level covered positions, including term-limited*
12 *covered positions.*

13 “(b) *ADDRESSING INSUFFICIENT COMPENSATION OF*
14 *EMPLOYEES AND OTHER PERSONNEL OF THE COMMIS-*
15 *SION.—*

16 “(1) *IN GENERAL.—Notwithstanding any other*
17 *provision of law, if the Chairman issues or renews a*
18 *certification that compensation for employees or other*
19 *personnel of the Commission serving in a covered po-*
20 *sition is insufficient to retain or attract such employ-*
21 *ees and other personnel to allow the Commission to*
22 *carry out the responsibilities and activities of the*
23 *Commission in a timely, efficient, and effective man-*
24 *ner, the Chairman may, during any period when*
25 *such a certification is in effect, fix the compensation*

1 *for such employees or other personnel serving in a*
2 *covered position without regard to any provision of*
3 *title 5, United States Code, governing General Sched-*
4 *ule classification and pay rates.*

5 “(2) *CERTIFICATION REQUIREMENTS.*—*A certifi-*
6 *cation issued or renewed under this subsection shall—*

7 “(A) *apply to employees or other personnel*
8 *who serve in covered positions;*

9 “(B) *terminate on the earlier of—*

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

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

22 “(C) *be no broader than necessary to*
23 *achieve the objective of retaining or attracting*
24 *employees and other personnel serving in a cov-*
25 *ered position to allow the Commission to carry*

1 *out the Commission’s responsibilities and activi-*
2 *ties in a timely, efficient, and effective manner.*

3 “(3) *RENEWAL.*—*The Chairman may renew a*
4 *certification issued or renewed under this subsection*
5 *if the Chairman determines that use of the authority*
6 *of the Chairman under this subsection to fix com-*
7 *penetration for employees or other personnel serving in*
8 *a covered position is still necessary to retain or at-*
9 *tract such employees or other personnel to allow the*
10 *Commission to carry out the Commission’s respon-*
11 *sibilities and activities in a timely, efficient, and ef-*
12 *fective manner.*

13 “(4) *APPLICABILITY.*—*The authority under this*
14 *subsection to fix the compensation of employees or*
15 *other personnel during any period when a certifi-*
16 *cation issued or renewed under paragraph (1) is in*
17 *effect shall apply with respect to an employee or other*
18 *personnel serving in a covered position regardless of*
19 *when the employee or other personnel was hired.*

20 “(5) *RETENTION OF LEVEL OF FIXED COMPENSA-*
21 *TION.*—*The termination of a certification issued or*
22 *renewed under paragraph (1) shall not affect the com-*
23 *penetration of an employee or other personnel serving*
24 *in a covered position whose compensation was fixed*
25 *by the Chairman in accordance with paragraph (1).*

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

8 “(7) *EXPERTS AND CONSULTANTS.*—

9 “(A) *IN GENERAL.*—*Subject to subpara-*
10 *graph (B), the Chairman may—*

11 “(i) *obtain the services of experts and*
12 *consultants in accordance with section 3109*
13 *of title 5, United States Code;*

14 “(ii) *compensate those experts and con-*
15 *sultants for each day (including travel*
16 *time) at rates not in excess of the rate of*
17 *pay for level IV of the Executive Schedule*
18 *under section 5315 of that title; and*

19 “(iii) *pay to the experts and consult-*
20 *ants serving away from the homes or reg-*
21 *ular places of business of the experts and*
22 *consultants travel expenses and per diem in*
23 *lieu of subsistence at rates authorized by*
24 *sections 5702 and 5703 of that title for per-*

1 *sons in Government service employed inter-*
2 *mittently.*

3 “(B) *LIMITATIONS.—The Chairman shall—*

4 *“(i) to the maximum extent prac-*
5 *ticable, limit the use of experts and consult-*
6 *ants pursuant to subparagraph (A); and*

7 *“(ii) ensure that the employment con-*
8 *tract of each expert and consultant em-*
9 *ployed pursuant to subparagraph (A) is*
10 *subject to renewal not less frequently than*
11 *annually.*

12 “(c) *ADDITIONAL COMPENSATION AUTHORITY.—*

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

17 *“(2) FOR EXISTING EMPLOYEES.—*

18 *“(A) IN GENERAL.—Subject to subpara-*
19 *graph (B), an employee or other personnel who*
20 *the Chairman determines exhibited exceptional*
21 *performance in a fiscal year may be paid a per-*
22 *formance bonus in an amount not to exceed the*
23 *least of—*

24 *“(i) \$25,000; and*

1 “(ii) *the amount of the limitation that*
2 *is applicable for a calendar year under sec-*
3 *tion 5307(a)(1) of title 5, United States*
4 *Code.*

5 “(B) *LIMITATIONS.—*

6 “(i) *SUBSEQUENT BONUSES.—Any*
7 *person who receives a performance bonus*
8 *under subparagraph (A) may not receive*
9 *another performance bonus under that sub-*
10 *paragraph for a period of 5 years thereafter.*

11 “(ii) *HIRING BONUSES.—Any person*
12 *who receives a 1-time hiring bonus under*
13 *paragraph (1) may not receive a perform-*
14 *ance bonus under subparagraph (A) unless*
15 *more than one year has elapsed since the*
16 *payment of such 1-time hiring bonus.*

17 “(d) *IMPLEMENTATION PLAN AND REPORT.—*

18 “(1) *IN GENERAL.—Not later than 180 days*
19 *after the date of enactment of this section, the Chair-*
20 *man shall develop and implement a plan to carry out*
21 *this section. Before implementing such plan, the*
22 *Chairman shall submit to the Committee on Energy*
23 *and Commerce of the House of Representatives, the*
24 *Committee on Environment and Public Works of the*

1 *Senate, and the Office of Personnel Management a re-*
2 *port on the details of the plan.*

3 “(2) *REPORT CONTENT.*—*The report submitted*
4 *under paragraph (1) shall include—*

5 “(A) *evidence and supporting documenta-*
6 *tion justifying the plan; and*

7 “(B) *budgeting projections on costs and ben-*
8 *efits resulting from the plan.*

9 “(3) *CONSULTATION.*—*The Chairman may con-*
10 *sult with the Office of Personnel Management, the Of-*
11 *ice of Management and Budget, and the Comptroller*
12 *General of the United States in developing the plan*
13 *under paragraph (1).*

14 “(e) *DELEGATION.*—*The Chairman shall delegate, sub-*
15 *ject to the direction and supervision of the Chairman, the*
16 *authority provided by subsections (a), (b), and (c) to the*
17 *Executive Director for Operations of the Commission.*

18 “(f) *INFORMATION ON HIRING, VACANCIES, AND COM-*
19 *PENSATION.*—

20 “(1) *IN GENERAL.*—*The Commission shall in-*
21 *clude in its budget materials submitted in support of*
22 *the budget of the President (submitted to Congress*
23 *pursuant to section 1105 of title 31, United States*
24 *Code), for each fiscal year beginning after the date of*

1 *enactment of this section, information relating to hir-*
2 *ing, vacancies, and compensation at the Commission.*

3 “(2) *INCLUSIONS.—The information described in*
4 *paragraph (1) shall include—*

5 “(A) *an analysis of any trends with respect*
6 *to hiring, vacancies, and compensation at the*
7 *Commission;*

8 “(B) *a description of the efforts to retain*
9 *and attract employees or other personnel to serve*
10 *in covered positions at the Commission;*

11 “(C) *information that describes—*

12 “(i) *if a certification under subsection*
13 *(a) was in effect at any point in the pre-*
14 *vious year, how the authority provided by*
15 *that subsection is being used to address the*
16 *hiring needs of the Commission;*

17 “(ii) *the total number of highly quali-*
18 *fied individuals serving in—*

19 “(I) *covered positions pursuant to*
20 *subsection (a)(1)(A); and*

21 “(II) *term-limited covered posi-*
22 *tions pursuant to subsection (a)(1)(B);*

23 “(iii) *if a certification under sub-*
24 *section (b) was in effect at any point in the*
25 *previous year, how the authority provided*

1 by that subsection is being used to address
2 the hiring or retention needs of the Commis-
3 sion;

4 “(iv) the total number of employees or
5 other personnel serving in a covered posi-
6 tion that have their compensation fixed pur-
7 suant to subsection (b);

8 “(v) if a certification under subsection
9 (a) or (b) was terminated or was not in ef-
10 fect at any point in the previous year, why
11 such a certification was terminated or was
12 not in effect;

13 “(vi) the attrition levels with respect to
14 term-limited covered positions appointed
15 under subsection (a)(1)(B), including the
16 number of individuals leaving a term-lim-
17 ited covered position before completion of
18 the applicable term of service and the aver-
19 age length of service for such individuals as
20 a percentage of the applicable term of serv-
21 ice; and

22 “(vii) the number of experts and con-
23 sultants retained under subsection (b)(7);
24 and

25 “(D) an assessment of—

1 “(i) *the current critical workforce*
2 *needs of the Commission and any critical*
3 *workforce needs that the Commission antici-*
4 *pates in the next five years; and*

5 “(ii) *additional skillsets that are or*
6 *likely will be needed for the Commission to*
7 *fulfill the licensing and oversight respon-*
8 *sibilities of the Commission.*

9 “(g) *COVERED POSITION.—In this section, the term*
10 *‘covered position’ means a position in which an employee*
11 *or other personnel is responsible for conducting work of a*
12 *scientific, technical, engineering, mathematical, legal, man-*
13 *agerial, or otherwise highly specialized or skilled nature.”.*

14 (2) *TABLE OF CONTENTS.—The table of contents*
15 *of the Atomic Energy Act of 1954 is amended by in-*
16 *serting after the item relating to section 161 the fol-*
17 *lowing:*

 “Sec. 161A. *Use of firearms by security personnel.*

 “Sec. 161B. *Commission workforce.”.*

18 (b) *GOVERNMENT ACCOUNTABILITY OFFICE RE-*
19 *PORT.—Not later than September 30, 2032, the Comptroller*
20 *General of the United States shall submit to the Committee*
21 *on Energy and Commerce of the House of Representatives*
22 *and the Committee on Environment and Public Works of*
23 *the Senate a report that—*

1 (1) *evaluates the extent to which the authorities*
2 *provided under subsections (a), (b), and (c) of section*
3 *161B of the Atomic Energy Act of 1954 (as added by*
4 *this Act) have been utilized;*

5 (2) *describes the role in which the highly quali-*
6 *fied individuals recruited and directly appointed pur-*
7 *suant to section 161B(a) of the Atomic Energy Act of*
8 *1954 (as added by this Act) have been utilized to sup-*
9 *port the licensing of advanced nuclear reactors;*

10 (3) *assesses the effectiveness of the authorities*
11 *provided under subsections (a), (b), and (c) of section*
12 *161B of the Atomic Energy Act of 1954 (as added by*
13 *this Act) in helping the Nuclear Regulatory Commis-*
14 *sion fulfill its mission;*

15 (4) *makes recommendations to improve the Nu-*
16 *clear Regulatory Commission's strategic workforce*
17 *management; and*

18 (5) *makes recommendations with respect to*
19 *whether Congress should enhance, modify, or dis-*
20 *continue the authorities provided under subsections*
21 *(a), (b), and (c) of section 161B of the Atomic Energy*
22 *Act of 1954 (as added by this Act).*

23 (c) *ANNUAL SOLICITATION FOR NUCLEAR REGULATOR*
24 *APPRENTICESHIP NETWORK APPLICATIONS.—The Nuclear*
25 *Regulatory Commission, on an annual basis, shall solicit*

1 applications for the Nuclear Regulator Apprenticeship Net-
2 work.

3 **Subtitle B—Fee Reduction**

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

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

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

11 (2) by inserting after paragraph (1) the fol-
12 lowing:

13 “(2) *ADVANCED NUCLEAR REACTOR APPLI-*
14 *CANT.*—The term ‘advanced nuclear reactor appli-
15 cant’ means an entity that has submitted to the Com-
16 mission an application for a license for an advanced
17 nuclear reactor under the Atomic Energy Act of 1954
18 (42 U.S.C. 2011 et seq.).”;

19 (3) by inserting after paragraph (3) (as so redес-
20 igned) the following:

21 “(4) *ADVANCED NUCLEAR REACTOR*
22 *PREAPPLICANT.*—The term ‘advanced nuclear reactor
23 preapplicant’ means an entity that has submitted to
24 the Commission a licensing project plan for the pur-
25 poses of submitting a future application for a license

1 *for an advanced nuclear reactor under the Atomic*
2 *Energy Act of 1954 (42 U.S.C. 2011 et seq.).*

3 “(5) *AGENCY SUPPORT.*—*The term ‘agency sup-*
4 *port’ has the meaning given the term ‘agency support*
5 *(corporate support and the IG)’ in section 170.3 of*
6 *title 10, Code of Federal Regulations (or any suc-*
7 *cessor regulation).’; and*

8 (4) *by inserting after paragraph (11) (as so re-*
9 *designated) the following:*

10 “(12) *MISSION-DIRECT PROGRAM SALARIES AND*
11 *BENEFITS.*—*The term ‘mission-direct program sala-*
12 *ries and benefits’ has the meaning given such term in*
13 *section 170.3 of title 10, Code of Federal Regulations*
14 *(or any successor regulation).*

15 “(13) *MISSION-INDIRECT PROGRAM SUPPORT.*—
16 *The term ‘mission-indirect program support’ has the*
17 *meaning given such term in section 170.3 of title 10,*
18 *Code of Federal Regulations (or any successor regula-*
19 *tion).’.*

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

24 “(iv) *The total costs of mission-indirect*
25 *program support and agency support that,*

1 under paragraph (2)(B)(ii), may not be in-
2 cluded in the professional hourly rate
3 charged for fees assessed and collected from
4 advanced nuclear reactor applicants.

5 “(v) The total costs of mission-indirect
6 program support and agency support that,
7 under paragraph (2)(C)(ii), may not be in-
8 cluded in the professional hourly rate
9 charged for fees assessed and collected from
10 advanced nuclear reactor preapplicants.”.

11 (c) *FEES FOR SERVICE OR THING OF VALUE.*—Section
12 102(b) of the Nuclear Energy Innovation and Moderniza-
13 tion Act (42 U.S.C. 2215(b)) is amended by striking para-
14 graph (2) and inserting the following:

15 “(2) *FEES FOR SERVICE OR THING OF VALUE.*—

16 “(A) *IN GENERAL.*—In accordance with sec-
17 tion 9701 of title 31, United States Code, the
18 Commission shall assess and collect fees from
19 any person who receives a service or thing of
20 value from the Commission to cover the costs to
21 the Commission of providing the service or thing
22 of value.

23 “(B) *ADVANCED NUCLEAR REACTOR APPLI-*
24 *CANTS.*—The professional hourly rate charged for
25 fees assessed and collected from an advanced nu-

1 *clear reactor applicant under this paragraph re-*
2 *lating to the review of a submitted application*
3 *for an advanced nuclear reactor may not—*

4 “(i) *exceed the professional hourly rate*
5 *for mission-direct program salaries and*
6 *benefits of the Nuclear Reactor Safety Pro-*
7 *gram; and*

8 “(ii) *include the costs of mission-indi-*
9 *rect program support and agency support.*

10 “(C) *ADVANCED NUCLEAR REACTOR*
11 *PREAPPLICANTS.—The professional hourly rate*
12 *charged for fees assessed and collected from an*
13 *advanced nuclear reactor preapplicant under*
14 *this paragraph relating to the review of sub-*
15 *mitted materials as described in the licensing*
16 *project plan of such advanced nuclear reactor*
17 *preapplicant may not—*

18 “(i) *exceed the professional hourly rate*
19 *for mission-direct program salaries and*
20 *benefits of the Nuclear Reactor Safety Pro-*
21 *gram; and*

22 “(ii) *include the costs of mission-indi-*
23 *rect program support and agency support.*

24 “(D) *CALCULATION OF HOURLY RATE.—In*
25 *this paragraph, the professional hourly rate for*

1 *mission-direct program salaries and benefits of*
2 *the Nuclear Reactor Safety Program equals the*
3 *quotient obtained by dividing—*

4 “(i) *the full-time equivalent rate (with-*
5 *in the meaning of the document of the Com-*
6 *mission entitled ‘FY 2023 Final Fee Rule*
7 *Work Papers’ (or a successor document)) for*
8 *mission-direct program salaries and benefits*
9 *of the Nuclear Reactor Safety Program (as*
10 *determined by the Commission) for a fiscal*
11 *year; by*

12 “(ii) *the productive hours assumption*
13 *for that fiscal year, determined in accord-*
14 *ance with the formula established in the*
15 *document referred to in clause (i) (or a suc-*
16 *cessor document).”.*

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

20 “(f) *CESSATION OF EFFECTIVENESS.—Paragraphs*
21 *(1)(B)(v) and (2)(C) of subsection (b) shall cease to be effec-*
22 *tive on September 30, 2029.”.*

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

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

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

5 “(f) *PRIZES FOR ADVANCED NUCLEAR REACTOR LI-*
6 *CENSING.—*

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

9 “(A) *a non-Federal entity; and*

10 “(B) *the Tennessee Valley Authority.*

11 “(2) *PRIZE FOR ADVANCED NUCLEAR REACTOR*
12 *LICENSING.—*

13 “(A) *IN GENERAL.—Notwithstanding sec-*
14 *tion 169 of the Atomic Energy Act of 1954 (42*
15 *U.S.C. 2209) and subject to the availability of*
16 *appropriations, the Secretary is authorized to*
17 *make, with respect to each award category de-*
18 *scribed in subparagraph (C), an award in an*
19 *amount described in subparagraph (B) to the*
20 *first eligible entity—*

21 “(i) *to which the Commission issues an*
22 *operating license for an advanced nuclear*
23 *reactor under part 50 of title 10, Code of*
24 *Federal Regulations (or successor regula-*
25 *tions), for which an application has not*

1 *been approved by the Commission as of the*
2 *date of enactment of this subsection; or*

3 *“(ii) for which the Commission makes*
4 *a finding described in section 52.103(g) of*
5 *title 10, Code of Federal Regulations (or*
6 *successor regulations), with respect to a*
7 *combined license for an advanced nuclear*
8 *reactor—*

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

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

16 *“(B) AMOUNT OF AWARD.—Subject to para-*
17 *graph (3), an award under subparagraph (A)*
18 *shall be in an amount equal to the total amount*
19 *assessed by the Commission and collected under*
20 *section 102(b)(2) from the eligible entity receiv-*
21 *ing the award for costs relating to the issuance*
22 *of the license described in that subparagraph, in-*
23 *cluding, as applicable, costs relating to the*
24 *issuance of an associated construction permit de-*
25 *scribed in section 50.23 of title 10, Code of Fed-*

1 *eral Regulations (or successor regulations), or*
2 *early site permit (as defined in section 52.1 of*
3 *that title (or successor regulations)).*

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

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

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

10 *“(II) makes a finding in accord-*
11 *ance with clause (ii) of that subpara-*
12 *graph;*

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

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

21 *“(II) is the first advanced nuclear*
22 *reactor described in subclause (I) for*
23 *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 “(iii) an advanced nuclear reactor
8 that—

9 “(I) is a nuclear integrated en-
10 ergy system—

11 “(aa) that is composed of 2
12 or more co-located or jointly oper-
13 ated subsystems of energy genera-
14 tion, energy storage, or other tech-
15 nologies;

16 “(bb) in which not fewer
17 than 1 subsystem described in
18 item (aa) is a nuclear energy sys-
19 tem; and

20 “(cc) the purpose of which
21 is—

22 “(AA) to reduce green-
23 house gas emissions in both
24 the power and nonpower sec-
25 tors; and

1 “(BB) to maximize en-
2 ergy production and effi-
3 ciency; and

4 “(II) is the first advanced nuclear
5 reactor described in subclause (I) for
6 which the Commission—

7 “(aa) issues a license in ac-
8 cordance with clause (i) of sub-
9 paragraph (A); or

10 “(bb) makes a finding in ac-
11 cordance with clause (ii) of that
12 subparagraph;

13 “(iv) an advanced reactor that—

14 “(I) operates flexibly to generate
15 electricity or high temperature process
16 heat for nonelectric applications; and

17 “(II) is the first advanced nuclear
18 reactor described in subclause (I) for
19 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; and

1 “(v) *the first advanced nuclear reactor*
2 *for which the Commission grants approval*
3 *to load nuclear fuel pursuant to the tech-*
4 *nology-inclusive regulatory framework es-*
5 *tablished under subsection (a)(4).*

6 “(3) *FEDERAL FUNDING LIMITATION.—*

7 “(A) *EXCLUSION OF TVA FUNDS.—In this*
8 *paragraph, the term ‘Federal funds’ does not in-*
9 *clude funds received under the power program of*
10 *the Tennessee Valley Authority established pursu-*
11 *ant to the Tennessee Valley Authority Act of*
12 *1933 (16 U.S.C. 831 et seq.).*

13 “(B) *LIMITATION ON AMOUNTS EX-*
14 *PENDED.—An award under this subsection shall*
15 *not exceed the total amount expended (excluding*
16 *any expenditures made with Federal funds re-*
17 *ceived for the applicable project and an amount*
18 *equal to the minimum cost-share required under*
19 *section 988 of the Energy Policy Act of 2005 (42*
20 *U.S.C. 16352)) by the eligible entity receiving*
21 *the award for licensing costs relating to the*
22 *project for which the award is made.*

23 “(C) *REPAYMENTS AND DIVIDENDS NOT RE-*
24 *QUIRED.—Notwithstanding section 9104(a)(4) of*
25 *title 31, United States Code, or any other provi-*

1 sion of law, an eligible entity that received an
2 award under this subsection shall not be re-
3 quired—

4 “(i) to repay that award or any part
5 of that award; or

6 “(ii) to pay a dividend, interest, or
7 other similar payment based on the sum of
8 that award.”.

9 **Subtitle C—Siting, Licensing, and**
10 **Oversight Reviews**

11 **SEC. 121. MODERNIZATION OF NUCLEAR REACTOR ENVI-**
12 **RONMENTAL REVIEWS.**

13 (a) *IN GENERAL.*—Not later than 90 days after the
14 date of enactment of this Act, the Nuclear Regulatory Com-
15 mission (in this section referred to as the “Commission”)
16 shall submit to the Committee on Environment and Public
17 Works of the Senate and the Committee on Energy and
18 Commerce of the House of Representatives a report on the
19 efforts of the Commission to facilitate efficient, timely, and
20 predictable environmental reviews of nuclear reactor appli-
21 cations, including through expanded use of categorical ex-
22 clusions, environmental assessments, and generic environ-
23 mental impact statements.

24 (b) *REPORT.*—In completing the report under sub-
25 section (a), the Commission shall—

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

6 (2) consider—

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

14 (B) using categorical exclusions, environ-
15 mental assessments, and environmental impact
16 statements prepared by the Commission to
17 streamline environmental reviews of nuclear re-
18 actor applications by the Commission;

19 (C) using mitigated findings of no signifi-
20 cant impact in environmental reviews of nuclear
21 reactor applications by the Commission to reduce
22 the impact of a proposed action to a level that
23 is not significant;

24 (D) the extent to which the Commission
25 may rely on prior studies or analyses prepared

1 *by Federal, State, and local governmental per-*
2 *mitting agencies to streamline environmental re-*
3 *views of nuclear reactor applications by the*
4 *Commission;*

5 *(E) opportunities to coordinate the develop-*
6 *ment of environmental assessments and environ-*
7 *mental impact statements with other Federal*
8 *agencies to avoid duplicative environmental re-*
9 *views and to streamline environmental reviews*
10 *of nuclear reactor applications by the Commis-*
11 *sion;*

12 *(F) opportunities to streamline formal and*
13 *informal consultations and coordination with*
14 *other Federal, State, and local governmental per-*
15 *mitting agencies during environmental reviews*
16 *of nuclear reactor applications by the Commis-*
17 *sion;*

18 *(G) opportunities to streamline the Com-*
19 *mission's analyses of alternatives, including the*
20 *Commission's analysis of alternative sites, in en-*
21 *vironmental reviews of nuclear reactor applica-*
22 *tions by the Commission;*

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

1 (I) amending section 51.20(b) of title 10,
2 Code of Federal Regulations, to allow the Com-
3 mission to determine on a case-specific basis
4 whether an environmental assessment (rather
5 than an environmental impact statement or sup-
6 plemental environmental impact statement) is
7 appropriate for a particular nuclear reactor ap-
8 plication, including in proceedings in which the
9 Commission relies upon a generic environmental
10 impact statement for advanced nuclear reactors;

11 (J) authorizing the use of an applicant's en-
12 vironmental impact statement as the Commis-
13 sion's draft environmental impact statement,
14 consistent with section 107(f) of the National
15 Environmental Policy Act of 1969 (42 U.S.C.
16 4336a(f));

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

23 (i) the Commission and applicants;

24 and

1 (ii) the Commission and other relevant
2 cooperating agencies;

3 (L) in addition to implementing measures
4 under subsection (c), potential revisions to part
5 51 of title 10, Code of Federal Regulations, and
6 relevant Commission guidance documents, to—

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

10 (ii) assist decision-making about rel-
11 evant environmental issues;

12 (iii) maintain openness with the pub-
13 lic;

14 (iv) meet obligations under the Na-
15 tional Environmental Policy Act of 1969
16 (42 U.S.C. 4321 et seq.); and

17 (v) reduce burdens on licensees, appli-
18 cants, and the Commission; and

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

21 (c) RULEMAKING.—Not later than 2 years after the
22 submission of the report under subsection (a), the Commis-
23 sion shall promulgate a final rule implementing, to the
24 maximum extent practicable, measures considered by the
25 Commission under subsection (b)(2) that are necessary to

1 *streamline the Commission’s review of nuclear reactor ap-*
2 *plications.*

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

4 (a) *DEFINITIONS.—In this section:*

5 (1) *BROWNFIELD SITE.—The term “brownfield*
6 *site” has the meaning given the term in section 101*
7 *of the Comprehensive Environmental Response, Com-*
8 *ensation, and Liability Act of 1980 (42 U.S.C.*
9 *9601).*

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

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

16 (4) *PRODUCTION FACILITY.—The term “produc-*
17 *tion facility” has the meaning given the term in sec-*
18 *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*
19 *2014).*

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

1 (6) *UTILIZATION FACILITY.*—The term “utiliza-
2 tion facility” has the meaning given the term in sec-
3 tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.
4 2014).

5 (b) *IDENTIFICATION OF REGULATORY ISSUES.*—

6 (1) *IN GENERAL.*—Not later than 1 year after
7 the date of enactment of this Act, the Commission
8 shall evaluate the extent to which modification of reg-
9 ulations, guidance, or policy is needed to enable effi-
10 cient, timely, and predictable licensing reviews for,
11 and to support the oversight of, production facilities
12 or utilization facilities at covered sites.

13 (2) *REQUIREMENT.*—In carrying out paragraph
14 (1), the Commission shall consider how licensing re-
15 views for production facilities or utilization facilities
16 at covered sites may be expedited by—

17 (A) *siting and operating a production facil-*
18 *ity or a utilization facility at or near existing*
19 *site infrastructure to support the reuse of such*
20 *infrastructure, including—*

21 (i) *electric switchyard components and*
22 *transmission infrastructure;*

23 (ii) *heat-sink components;*

24 (iii) *steam cycle components;*

25 (iv) *roads;*

1 (v) railroad access; and

2 (vi) water availability;

3 (B) using early site permits;

4 (C) using plant parameter envelopes or
5 similar standardized site parameters on a por-
6 tion of a larger site; and

7 (D) using a standardized application for
8 similar sites.

9 (3) *REPORT.*—Not later than 14 months after the
10 date of enactment of this Act, the Commission shall
11 submit to the appropriate committees of Congress a
12 report describing any regulations, guidance, and poli-
13 cies evaluated under paragraph (1).

14 (c) *LICENSING.*—

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

18 (A) develop and implement strategies to en-
19 able efficient, timely, and predictable licensing
20 reviews for, and to support the oversight of, pro-
21 duction facilities or utilization facilities at cov-
22 ered sites; and

23 (B) initiate a rulemaking to enable effi-
24 cient, timely, and predictable licensing reviews

1 *for, and to support the oversight of, production*
2 *facilities or utilization facilities at covered sites.*

3 (2) *REQUIREMENTS.*—*In carrying out para-*
4 *graph (1), consistent with the mission of the Commis-*
5 *sion, the Commission shall consider matters relating*
6 *to—*

7 (A) *the use of existing site infrastructure;*

8 (B) *existing emergency preparedness orga-*
9 *nizations and planning;*

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

12 (D) *previously completed environmental re-*
13 *views required by the National Environmental*
14 *Policy Act of 1969 (42 U.S.C. 4321 et seq.);*

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

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

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

1 **SEC. 123. ADVANCEMENT OF NUCLEAR REGULATORY OVER-**
2 **SIGHT.**

3 *(a) IMPLEMENTING LESSONS LEARNED FROM THE*
4 *COVID-19 HEALTH EMERGENCY.—*

5 *(1) IN GENERAL.—Not later than 180 days after*
6 *the date of enactment of this Act, the Commission*
7 *shall submit to the appropriate committees of Con-*
8 *gress a report on actions taken by the Commission*
9 *during the public health emergency declared by the*
10 *Secretary of Health and Human Services under sec-*
11 *tion 319 of the Public Health Service Act (42 U.S.C.*
12 *247d) on January 31, 2020, with respect to COVID-*
13 *19.*

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

16 *(A) identify any processes, procedures, and*
17 *other regulatory policies that the Commission re-*
18 *vised or temporarily suspended during the public*
19 *health emergency described in paragraph (1);*

20 *(B) examine how any revision or temporary*
21 *suspension of a process, procedure, or other regu-*
22 *latory policy identified under subparagraph (A)*
23 *affected the ability of the Commission to license*
24 *and regulate the civilian use of radioactive mate-*
25 *rials in the United States to protect public*

1 *health and safety, promote the common defense*
2 *and security, and protect the environment;*

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

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

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

14 ***(b) ADVANCING EFFICIENT, RISK-INFORMED OVER-***
15 ***SIGHT AND INSPECTIONS.—***

16 ***(1) IN GENERAL.—****Not later than 1 year after*
17 *the date of enactment of this Act, the Commission*
18 *shall develop and submit to the appropriate commit-*
19 *tees of Congress a report that identifies specific im-*
20 *provements to the nuclear reactor and materials over-*
21 *sight and inspection programs carried out pursuant*
22 *to the Atomic Energy Act of 1954 that the Commis-*
23 *sion may implement to maximize the efficiency of*
24 *such programs through, where appropriate, the use of*
25 *risk-informed, performance-based procedures, ex-*

1 *panded incorporation of information technologies,*
2 *and staff training.*

3 (2) *STAKEHOLDER INPUT.*—*In developing the re-*
4 *port under paragraph (1), the Commission shall, as*
5 *appropriate, seek input from—*

6 (A) *the Secretary of Energy;*

7 (B) *the National Laboratories;*

8 (C) *the nuclear energy industry; and*

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

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

13 (A) *assess specific elements of oversight and*
14 *inspections that may be modified by the use of*
15 *technology, improved planning, and continually*
16 *updated risk-informed, performance-based assess-*
17 *ment, including—*

18 (i) *use of travel resources;*

19 (ii) *planning and preparation for in-*
20 *spections, including entrance and exit meet-*
21 *ings with licensees;*

22 (iii) *document collection and prepara-*
23 *tion, including consideration of whether nu-*
24 *clear reactor data are accessible prior to on-*
25 *site visits or requests to the licensee and*

1 that document requests are timely and with-
2 in the scope of inspections;

3 (iv) the cross-cutting issues program;

4 and

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

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

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

12 (ii) increased use of templates in docu-
13 menting inspection results; and

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

17 (I) inspection planning and as-
18 sessments;

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

22 (III) the application of the Com-
23 mission's standard of reasonable assur-
24 ance of adequate protection;

1 (C) assess measures to advance risk-in-
2 formed procedures, including—

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

6 (ii) increased review of the use of in-
7 spection program resources based on licensee
8 performance;

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

13 (iv) updating the Differing Profes-
14 sional Views or Opinions process to ensure
15 any impacts on agency decisions and sched-
16 ules are commensurate with the safety sig-
17 nificance of the differing opinion;

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

1 *advanced technologies, including digital tech-*
2 *nologies;*

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

6 *(F) identify specific actions that the Com-*
7 *mission will take to incorporate into the train-*
8 *ing, inspection, oversight, and licensing activi-*
9 *ties, and regulations of the Commission, without*
10 *compromising the mission of the Commission,*
11 *the recommendations identified under subpara-*
12 *graph (E); and*

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

15 (c) *OFFICE AND FACILITY SPACE REVIEW.—*

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

19 (A) *review office and other facility space re-*
20 *quirements of the Commission; and*

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

24 (2) *CONTENTS.—The report described in para-*
25 *graph (1) shall include—*

1 (A) an examination of—

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

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

10 (II) opportunities to reduce future
11 costs through reduction in unnecessary
12 office space, consolidation of offices, use
13 of advanced information technology, or
14 any other appropriate 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 Com-
19 mission, and the General Services Administra-
20 tion for actions that may assist in reducing of-
21 fice and facility costs to licensees and taxpayers.

22 (d) DEFINITIONS.—In this section:

23 (1) APPROPRIATE COMMITTEES OF CONGRESS.—
24 The term “appropriate committees of Congress”
25 means the Committee on Energy and Commerce of the

1 *House of Representatives and the Committee on Envi-*
2 *ronment and Public Works of the Senate.*

3 (2) *COMMISSION.*—*The term “Commission”*
4 *means the Nuclear Regulatory Commission.*

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

9 **TITLE II—NUCLEAR**
10 **TECHNOLOGY DEPLOYMENT**

11 **SEC. 201. ADVANCED NUCLEAR DEPLOYMENT.**

12 (a) *ENABLING PREPARATIONS FOR ADVANCED NU-*
13 *CLEAR REACTOR DEMONSTRATIONS ON FEDERAL SITES.*—

14 (1) *IN GENERAL.*—*Section 102(b)(1)(B) of the*
15 *Nuclear Energy Innovation and Modernization Act*
16 *(42 U.S.C. 2215(b)(1)(B)) is further amended by add-*
17 *ing at the end the following:*

18 “(vi) *Costs for—*

19 “(I) *activities to review and ap-*
20 *prove or disapprove an application for*
21 *an early site permit (as defined in sec-*
22 *tion 52.1 of title 10, Code of Federal*
23 *Regulations (or any successor regula-*
24 *tion)) to demonstrate an advanced nu-*
25 *clear reactor on a Department of En-*

1 *ergy site or any site or installation*
2 *that is critical national security infra-*
3 *structure (as defined in section 327(d)*
4 *of the John S. McCain National De-*
5 *fense Authorization Act for Fiscal Year*
6 *2019); and*

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

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

19 *(b) REGULATORY REQUIREMENTS FOR MICRO-REAC-*
20 *TORS.—*

21 *(1) MICRO-REACTOR LICENSING.—The Nuclear*
22 *Regulatory Commission (in this subsection referred to*
23 *as the “Commission”) shall—*

24 *(A) not later than 18 months after the date*
25 *of enactment of this Act, develop risk-informed*

1 *and performance-based strategies and guidance*
2 *to license and regulate micro-reactors pursuant*
3 *to section 103 of the Atomic Energy Act of 1954*
4 *(42 U.S.C. 2133), including strategies and guid-*
5 *ance for—*

6 *(i) staffing and operations;*

7 *(ii) oversight and inspections;*

8 *(iii) safeguards and security;*

9 *(iv) emergency preparedness;*

10 *(v) risk analysis methods, including al-*
11 *ternatives to probabilistic risk assessments;*

12 *(vi) decommissioning funding assur-*
13 *ance methods that permit the use of design-*
14 *and site-specific cost estimates;*

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

17 *(viii) siting, including in relation to—*

18 *(I) the population density cri-*
19 *terion limit described in the policy*
20 *issue paper on population-related*
21 *siting considerations for advanced re-*
22 *actors dated May 8, 2020, and num-*
23 *bered SECY–20–0045;*

24 *(II) licensing mobile deployment;*

25 *and*

1 (III) environmental reviews; and
2 (B) not later than 3 years after the date of
3 enactment of this Act, implement, as appro-
4 priate, the strategies and guidance developed
5 under subparagraph (A)—

6 (i) within the existing regulatory
7 framework;

8 (ii) through the technology-inclusive,
9 regulatory framework to be established
10 under section 103(a)(4)(A) of the Nuclear
11 Energy Innovation and Modernization Act
12 (42 U.S.C. 2133 note; Public Law 115–
13 439); or

14 (iii) through a pending or new rule-
15 making.

16 (2) CONSIDERATIONS.—In developing and imple-
17 menting strategies and guidance under paragraph
18 (1), the Commission shall consider—

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

21 (i) physical size;

22 (ii) design simplicity; and

23 (iii) source term;

24 (B) opportunities to address redundancies
25 and inefficiencies;

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

4 (D) opportunities to establish integrated re-
5 view teams to ensure continuity throughout the
6 review process; and

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

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

13 (A) the Secretary of Energy;

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

16 (C) micro-reactor technology developers; and

17 (D) other stakeholders.

18 (c) EXPEDITED SUBSEQUENT COMBINED LICENSES.—

19 (1) IN GENERAL.—In accordance with this sub-
20 section, the Nuclear Regulatory Commission (referred
21 to in this subsection as the “Commission”) shall es-
22 tablish and carry out an expedited procedure for
23 issuing a combined license pursuant to section 185 b.
24 of the Atomic Energy Act of 1954 (42 U.S.C. 2235).

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

2
3 *(A) shall submit a combined license application for a new nuclear reactor based off a previously licensed design;*

4
5
6 *(B) shall propose to construct the new nuclear reactor on or adjacent to a site on which a nuclear reactor already operates or previously operated; and*

7
8
9
10 *(C) may not be subject to an order of the Commission to suspend or revoke a license under section 2.202 of title 10, Code of Federal Regulations (or any successor regulation).*

11
12
13
14 (3) *EXPEDITED PROCEDURE.*—*With respect to a combined license for which the applicant has satisfied the requirements described in paragraph (2), the Commission shall, to the maximum extent practicable—*

15
16
17
18 *(A) not later than 1 year after the application is accepted for docketing, issue a draft environmental impact statement;*

19
20
21
22 *(B) not later than 18 months after the application is accepted for docketing—*

23
24 *(i) complete the technical review process; and*

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

3 (C) not later than 2 years after the applica-
4 tion is accepted for docketing, complete any nec-
5 essary public licensing hearings and related
6 processes; and

7 (D) not later than 25 months after the ap-
8 plication is accepted for docketing, make a final
9 decision on whether to issue the combined license.

10 (4) PERFORMANCE AND REPORTING.—

11 (A) DELAYS IN ISSUANCE.—Not later than
12 30 days after the applicable deadline, the Execu-
13 tive Director for Operations of the Commission
14 shall inform the Commission of any failure to
15 meet a deadline under paragraph (3).

16 (B) DELAYS IN ISSUANCE EXCEEDING 90
17 DAYS.—If any deadline under paragraph (3) is
18 not met by the date that is 90 days after the ap-
19 plicable date required under such paragraph, the
20 Commission shall submit to the Committee on
21 Environment and Public Works of the Senate
22 and the Committee on Energy and Commerce of
23 the House of Representatives a report describing
24 the delay, including a detailed explanation ac-

1 *counting for the delay and a plan for completion*
2 *of the applicable action.*

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

5 *(1) IN GENERAL.—Subtitle B of title VI of the*
6 *Energy Policy Act of 2005 (Public Law 109–58; 119*
7 *Stat. 782) is amended by adding at the end the fol-*
8 *lowing:*

9 **“SEC. 639A. LONG-TERM NUCLEAR POWER PURCHASE**
10 **AGREEMENT PILOT PROGRAM.**

11 **“(a) ESTABLISHMENT.—***The Secretary shall establish*
12 *a pilot program under which the Secretary shall enter into*
13 *at least one long-term power purchase agreement for power*
14 *generated by a commercial nuclear reactor with respect to*
15 *which an operating license is issued by the Nuclear Regu-*
16 *latory Commission after January 1, 2024.*

17 **“(b) REQUIREMENTS.—***In establishing the pilot pro-*
18 *gram under this section, the Secretary shall—*

19 **“(1) consult with the heads of other Federal de-**
20 *partments and agencies that may benefit from pur-*
21 *chasing nuclear power for a period of longer than 10*
22 *years, including the Secretary of Defense; and*

23 **“(2) not later than December 31, 2028, enter**
24 *into at least one long-term agreement to purchase*

1 *power from a commercial nuclear reactor described in*
2 *subsection (a).*

3 “(c) *PERIOD OF AGREEMENT.*—*Notwithstanding any*
4 *other provision of law, an agreement entered into pursuant*
5 *to subsection (b)(2) to purchase power from a commercial*
6 *nuclear reactor shall be made for a period of at least 10*
7 *years and not more than 40 years.*

8 “(d) *PRIORITY.*—*In carrying out this section, the Sec-*
9 *retary shall prioritize entering into long-term power pur-*
10 *chase agreements for power generated by first-of-a-kind or*
11 *early deployment commercial nuclear reactors that will*
12 *provide reliable and resilient power—*

13 “(1) *to high-value assets for national security*
14 *purposes; or*

15 “(2) *for other purposes that the Secretary deter-*
16 *mines are in the national interest, including for re-*
17 *remote off-grid scenarios or grid-connected scenarios*
18 *that provide capabilities commonly known as*
19 *‘islanding power capabilities’ during an emergency.*

20 “(e) *RATES.*—*A long-term power purchase agreement*
21 *entered into under this section may not be at a rate that*
22 *is higher than the average market rate, unless the agreement*
23 *is for power generated by a commercial nuclear reactor de-*
24 *scribed in subsection (d).”.*

1 (2) *TABLE OF CONTENTS.*—*The table of contents*
 2 *of the Energy Policy Act of 2005 (Public Law 109–*
 3 *58; 119 Stat. 594) is amended by inserting after the*
 4 *item relating to section 639 the following:*

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

5 **SEC. 202. GLOBAL NUCLEAR COOPERATION.**

6 (a) *GLOBAL NUCLEAR ENERGY ASSESSMENT*
 7 *STUDY.*—

8 (1) *STUDY REQUIRED.*—*Not later than 1 year*
 9 *after the date of enactment of this Act, the Secretary*
 10 *of Energy, in consultation with the Secretary of*
 11 *State, the Secretary of Commerce, the Administrator*
 12 *of the Environmental Protection Agency, and the*
 13 *Commission, shall conduct a study on the global sta-*
 14 *tus of—*

15 (A) *the civilian nuclear energy industry;*
 16 *and*

17 (B) *the supply chains of the civilian nu-*
 18 *clear energy industry.*

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

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

24 (B) *information on how the use of the civil-*
 25 *ian nuclear energy industry, relative to other*

1 *types of energy industries, can reduce the emis-*
2 *sion of criteria pollutants and carbon dioxide;*

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

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

9 *(E) information on how the United States*
10 *may collaborate with such countries in devel-*
11 *oping, deploying, and investing in nuclear tech-*
12 *nology;*

13 *(F) information on how foreign countries*
14 *use nuclear energy when crafting and imple-*
15 *menting their own foreign policy, including such*
16 *use by foreign countries that are strategic com-*
17 *petitors;*

18 *(G) an evaluation of how nuclear non-*
19 *proliferation and security efforts and nuclear en-*
20 *ergy safety are affected by the involvement of the*
21 *United States in—*

22 *(i) international markets; and*

23 *(ii) setting civilian nuclear energy in-*
24 *dustry standards;*

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

5 (I) information on utilities and companies
6 in the United States that are involved in the ci-
7 vilian nuclear energy supply chain, including,
8 with respect to such utilities and companies—

9 (i) financial challenges;

10 (ii) nuclear liability issues;

11 (iii) foreign strategic competition; and

12 (iv) risks to continued operation; and

13 (J) recommendations for how the United
14 States may—

15 (i) develop a national strategy to in-
16 crease the role nuclear energy plays in di-
17 plomacy and strategic energy policy;

18 (ii) develop a strategy to mitigate for-
19 eign competitor's utilization of their civil-
20 ian nuclear energy industries in diplomacy;

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

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

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

7 (b) *PROGRAM TO TRAIN AND SHARE EXPERTISE.*—

8 (1) *IN GENERAL.*—Not later than 1 year after
9 the date of enactment of this Act, the Secretary of En-
10 ergy, in consultation with the Secretary of State and
11 the Commission, shall develop and carry out a pro-
12 gram under which the Secretary of Energy shall train
13 foreign nuclear energy experts and standardize prac-
14 tices.

15 (2) *REQUIREMENTS.*—In carrying out the pro-
16 gram developed under paragraph (1), the Secretary of
17 Energy shall—

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

22 (B) train foreign nuclear energy experts on
23 the operation and safety and security practices
24 used by the United States civilian nuclear en-
25 ergy industry;

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

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

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

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

13 (A) in which intellectual property theft is
14 legal;

15 (B) that takes actions to undermine the ci-
16 vilian nuclear energy industry or other critical
17 industries of the United States; or

18 (C) which the Secretary of Energy deter-
19 mines is inimical to the interest of the United
20 States.

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

23 (1) *COORDINATION.*—The Commission shall—

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

1 (i) *issuing a license for the import or*
2 *export of a nuclear reactor under section*
3 *103 of the Atomic Energy Act of 1954 (42*
4 *U.S.C. 2133); and*

5 (ii) *international regulatory coopera-*
6 *tion and assistance relating to nuclear reac-*
7 *tors; and*

8 (B) *support—*

9 (i) *the consideration of international*
10 *technical standards to assist the design, li-*
11 *censing, and construction of advanced nu-*
12 *clear systems;*

13 (ii) *efforts to help build competent nu-*
14 *clear regulatory organizations and legal*
15 *frameworks in foreign countries that are*
16 *seeking to develop civilian nuclear energy*
17 *industries; and*

18 (iii) *exchange programs and training*
19 *provided in coordination with the Secretary*
20 *of State to foreign countries relating to ci-*
21 *vilian nuclear energy industry regulation*
22 *and oversight to improve nuclear technology*
23 *licensing.*

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

4 (A) *the Secretary of Energy;*

5 (B) *the Secretary of State;*

6 (C) *the National Laboratories;*

7 (D) *the private sector; and*

8 (E) *institutions of higher education.*

9 (3) *NUCLEAR REACTOR EXPORT AND INNOVATION*
10 *BRANCH.*—*The Commission may establish within the*
11 *Office of International Programs of the Commission*
12 *a branch, to be known as the “International Nuclear*
13 *Reactor Export and Innovation Branch”, to carry out*
14 *the nuclear reactor export and innovation activities*
15 *described in paragraph (1) as the Commission deter-*
16 *mines appropriate.*

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

19 (A) *IN GENERAL.*—*Section 102 of the Nu-*
20 *clear Energy Innovation and Modernization Act*
21 *(42 U.S.C. 2215) is amended—*

22 (i) *in subsection (a), by adding at the*
23 *end the following:*

24 “*(4) INTERNATIONAL NUCLEAR REACTOR EXPORT*
25 *AND INNOVATION ACTIVITIES.*—*The Commission shall*

1 *identify in the annual budget justification inter-*
2 *national nuclear reactor export and innovation ac-*
3 *tivities described in section 202(c)(1) of the Atomic*
4 *Energy Advancement Act.”; and*

5 *(ii) in subsection (b)(1)(B), as amend-*
6 *ed by the preceding provisions of this Act,*
7 *by adding at the end the following:*

8 *“(vii) Costs for international nuclear*
9 *reactor export and innovation activities de-*
10 *scribed in section 202(c)(1) of the Atomic*
11 *Energy Advancement Act.”.*

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

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

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

21 *(A) is owned or controlled by the Govern-*
22 *ment of the Russian Federation or the Govern-*
23 *ment of the People’s Republic of China; or*

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

4 (2) *PROHIBITION ON UNLICENSED POSSESSION*
5 *OR OWNERSHIP OF COVERED FUEL.*—Unless specifi-
6 cally authorized by the Commission in a license
7 issued under section 53 of the Atomic Energy Act of
8 1954 (42 U.S.C. 2073), no person subject to the juris-
9 diction of the Commission may possess or own covered
10 fuel.

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

13 (A) *CONSULTATION REQUIRED PRIOR TO*
14 *ISSUANCE.*—The Commission shall not issue a li-
15 cense to possess or own covered fuel under section
16 53 of the Atomic Energy Act of 1954 (42 U.S.C.
17 2073) unless the Commission has first consulted
18 with the Secretary of Energy and the Secretary
19 of State before issuing the license.

20 (B) *PROHIBITION ON ISSUANCE OF LI-*
21 *CENSE.*—

22 (i) *IN GENERAL.*—Subject to clause
23 (iii), a license to possess or own covered fuel
24 shall not be issued if the Secretary of En-

1 *ergy and the Secretary of State make the*
2 *determination described in clause (ii).*

3 *(ii) DETERMINATION.—*

4 *(I) IN GENERAL.—The determina-*
5 *tion referred to in clause (i) is a deter-*
6 *mination that possession or ownership,*
7 *as applicable, of covered fuel poses a*
8 *threat to the national security of the*
9 *United States that adversely impacts*
10 *the physical and economic security of*
11 *the United States.*

12 *(II) JOINT DETERMINATION.—A*
13 *determination described in subclause*
14 *(I) shall be jointly made by the Sec-*
15 *retary of Energy and the Secretary of*
16 *State.*

17 *(III) TIMELINE.—*

18 *(aa) NOTICE OF APPLICA-*
19 *TION.—Not later than 30 days*
20 *after the date on which the Com-*
21 *mission receives an application*
22 *for a license to possess or own cov-*
23 *ered fuel, the Commission shall*
24 *notify the Secretary of Energy*

1 *and the Secretary of State of the*
2 *application.*

3 *(bb) DETERMINATION.—The*
4 *Secretary of Energy and the Sec-*
5 *retary of State shall have a period*
6 *of 180 days, beginning on the date*
7 *on which the Commission notifies*
8 *the Secretary of Energy and the*
9 *Secretary of State under item*
10 *(aa) of an application for a li-*
11 *cence to possess or own covered*
12 *fuel, in which to make the deter-*
13 *mination described in subclause*
14 *(I).*

15 *(cc) COMMISSION NOTIFICA-*
16 *TION.—On making the determina-*
17 *tion described in subclause (I), the*
18 *Secretary of Energy and the Sec-*
19 *retary of State shall immediately*
20 *notify the Commission.*

21 *(dd) CONGRESSIONAL NOTIFI-*
22 *CATION.—Not later than 30 days*
23 *after the date on which the Sec-*
24 *retary of Energy and the Sec-*
25 *retary of State notify the Com-*

1 mission under item (cc), the Com-
2 mission shall notify the appro-
3 priate committees of Congress of
4 the determination.

5 (ee) *PUBLIC NOTICE.*—Not
6 later than 15 days after the date
7 on which the Commission notifies
8 Congress under item (dd) of a de-
9 termination made under subclause
10 (I), the Commission shall make
11 that determination publicly avail-
12 able.

13 (iii) *EFFECT OF NO DETERMINA-*
14 *TION.*—The prohibition described in clause
15 (i) shall not apply if the Secretary of En-
16 ergy and the Secretary of State do not make
17 the determination described in clause (ii) by
18 the date described in subclause (III)(bb) of
19 that clause.

20 (e) *DEFINITIONS.*—In this section:

21 (1) *APPROPRIATE COMMITTEES OF CONGRESS.*—
22 The term “appropriate committees of Congress”
23 means each of the following:

24 (A) *The Committee on Energy and Com-*
25 *merce of the House of Representatives.*

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

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

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

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

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

11 **SEC. 203. AMERICAN NUCLEAR COMPETITIVENESS.**

12 (a) *PROCESS FOR REVIEW AND AMENDMENT OF PART*
13 *810 GENERALLY AUTHORIZED DESTINATIONS.—*

14 (1) *IDENTIFICATION AND EVALUATION OF FAC-*
15 *TORS.—Not later than 90 days after the date of enact-*
16 *ment of this Act, the Secretary of Energy, with the*
17 *concurrence of the Secretary of State, shall identify*
18 *and evaluate factors, other than agreements for co-*
19 *operation entered into in accordance with section 123*
20 *of the Atomic Energy Act of 1954 (42 U.S.C. 2153),*
21 *that may be used to determine a country’s generally*
22 *authorized destination status under part 810 of title*
23 *10, Code of Federal Regulations, and to list such*
24 *country as a generally authorized destination in Ap-*

1 *pendix A to part 810 of title 10, Code of Federal Reg-*
2 *ulations.*

3 (2) *PROCESS UPDATE.*—*The Secretary of Energy*
4 *shall review and, as appropriate, update the Depart-*
5 *ment of Energy’s process for determining a country’s*
6 *generally authorized destination status under part*
7 *810 of title 10, Code of Federal Regulations, and for*
8 *listing such country as a generally authorized des-*
9 *tination in Appendix A to part 810 of title 10, Code*
10 *of Federal Regulations, taking into consideration,*
11 *and, as appropriate, incorporating factors identified*
12 *and evaluated under paragraph (1).*

13 (3) *REVISIONS TO LIST.*—*Not later than one*
14 *year after the date of enactment of this Act, and at*
15 *least once every 5 years thereafter, the Secretary of*
16 *Energy shall, in accordance with any process updated*
17 *pursuant to this subsection, review the list in Appen-*
18 *dix A to part 810 of title 10, Code of Federal Regula-*
19 *tions, and amend such list as appropriate.*

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

22 (1) *IN GENERAL.*—*The prohibitions against*
23 *issuing certain licenses for utilization facilities to cer-*
24 *tain aliens, corporations, and other entities described*
25 *in the second sentence of section 103 d. of the Atomic*

1 *Energy Act of 1954 (42 U.S.C. 2133(d)) and the sec-*
2 *ond sentence of section 104 d. of that Act (42 U.S.C.*
3 *2134(d)) shall not apply to an entity described in*
4 *paragraph (2) of this subsection if the Nuclear Regu-*
5 *latory Commission determines that issuance of the*
6 *applicable license to that entity is not inimical to—*

7 *(A) the common defense and security; or*

8 *(B) the health and safety of the public.*

9 *(2) ENTITIES DESCRIBED.—*

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

14 *(i) the government of—*

15 *(I) a country, other than a coun-*
16 *try described in subparagraph (B),*
17 *that is a member of the Organization*
18 *for Economic Co-operation and Devel-*
19 *opment on the date of enactment of*
20 *this Act; or*

21 *(II) the Republic of India;*

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

1 (iii) *an alien who is a citizen or na-*
2 *tional of a country described in subclause*
3 *(I) or (II) of clause (i).*

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

6 (i) *any department, agency, or instru-*
7 *mentality of the government of which, on*
8 *the date of enactment of this Act, is subject*
9 *to sanctions under section 231 of the Coun-*
10 *tering America’s Adversaries Through Sanc-*
11 *tions Act (22 U.S.C. 9525); or*

12 (ii) *any citizen, national, or entity of*
13 *which, as of the date of enactment of this*
14 *Act, is included on the List of Specially*
15 *Designated Nationals and Blocked Persons*
16 *maintained by the Office of Foreign Assets*
17 *Control of the Department of the Treasury*
18 *pursuant to sanctions imposed under sec-*
19 *tion 231 of the Countering America’s Adver-*
20 *saries Through Sanctions Act (22 U.S.C.*
21 *9525).*

22 (3) *TECHNICAL AMENDMENT.—Section 103 d. of*
23 *the Atomic Energy Act of 1954 (42 U.S.C. 2133(d))*
24 *is amended, in the second sentence, by striking “any*
25 *any” and inserting “any”.*

1 (4) *SAVINGS CLAUSE.*—*Nothing in this sub-*
2 *section affects the requirements of section 721 of the*
3 *Defense Production Act of 1950 (50 U.S.C. 4565).*

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

6 (1) *IN GENERAL.*—*Not later than 1 year after*
7 *the date of enactment of this Act, the Nuclear Regu-*
8 *latory Commission (in this subsection referred to as*
9 *the “Commission”) shall submit to the Committee on*
10 *Energy and Commerce of the House of Representa-*
11 *tives and the Committee on Environment and Public*
12 *Works of the Senate a report addressing any unique*
13 *licensing issues or requirements relating to—*

14 (A) *the flexible operation of advanced nu-*
15 *clear reactors, such as ramping power output*
16 *and switching between electricity generation and*
17 *nonelectric applications;*

18 (B) *the use of advanced nuclear reactors ex-*
19 *clusively for nonelectric applications; and*

20 (C) *the collocation of advanced nuclear re-*
21 *actors with industrial plants or other facilities.*

22 (2) *STAKEHOLDER INPUT.*—*In developing the re-*
23 *port under paragraph (1), the Commission shall seek*
24 *input from—*

25 (A) *the Secretary of Energy;*

- 1 (B) the nuclear energy industry;
2 (C) technology developers;
3 (D) the industrial, chemical, and medical
4 sectors;
5 (E) nongovernmental organizations; and
6 (F) other public stakeholders.

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

9 (A) any unique licensing issues or require-
10 ments relating to the matters described in sub-
11 paragraphs (A) through (C) of paragraph (1),
12 including, with respect to the nonelectric appli-
13 cations referred to in subparagraphs (A) and (B)
14 of that paragraph, any licensing issues or re-
15 quirements relating to the use of nuclear en-
16 ergy—

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

19 (ii) for water desalination and waste-
20 water treatment;

21 (iii) for heat used in industrial proc-
22 esses;

23 (iv) for district heating;

24 (v) in relation to energy storage;

1 (vi) for industrial or medical isotope
2 production; and

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

5 (B) options for addressing such issues or re-
6 quirements—

7 (i) within the existing regulatory
8 framework;

9 (ii) through the technology-inclusive,
10 regulatory framework to be established
11 under section 103(a)(4)(A) of the Nuclear
12 Energy Innovation and Modernization Act
13 (42 U.S.C. 2133 note; Public Law 115-
14 439); or

15 (iii) through a new rulemaking;

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

19 (D) cost estimates, proposed budgets, and
20 proposed timeframes for implementing risk-in-
21 formed and performance-based regulatory guid-
22 ance for licensing advanced nuclear reactors for
23 nonelectric applications.

1 (d) *REPORT ON ADVANCED METHODS OF MANUFAC-*
2 *TURING AND CONSTRUCTION FOR NUCLEAR ENERGY*
3 *PROJECTS.—*

4 (1) *IN GENERAL.—Not later than 180 days after*
5 *the date of enactment of this Act, the Nuclear Regu-*
6 *latory Commission (in this subsection referred to as*
7 *the “Commission”) shall submit to the Committee on*
8 *Energy and Commerce of the House of Representa-*
9 *tives and the Committee on Environment and Public*
10 *Works of the Senate a report on advanced methods of*
11 *manufacturing and construction for nuclear energy*
12 *projects.*

13 (2) *STAKEHOLDER INPUT.—In developing the re-*
14 *port under paragraph (1), the Commission shall seek*
15 *input from—*

16 (A) *the Secretary of Energy;*

17 (B) *the nuclear energy industry;*

18 (C) *the National Laboratories;*

19 (D) *institutions of higher education;*

20 (E) *nuclear and manufacturing technology*
21 *developers;*

22 (F) *the manufacturing and construction in-*
23 *dustries;*

24 (G) *standards development organizations;*

25 (H) *labor unions;*

1 (I) nongovernmental organizations; and

2 (J) other public stakeholders.

3 (3) CONTENTS.—

4 (A) IN GENERAL.—The report under para-
5 graph (1) shall—

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

9 (I) advanced manufacturing tech-
10 niques; and

11 (II) advanced construction tech-
12 niques;

13 (ii) examine—

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

18 (II) opportunities to use standard
19 materials, parts, or components in
20 manufacturing and construction for
21 nuclear energy applications; and

22 (III) opportunities to use stand-
23 ard materials that are in compliance
24 with existing codes and standards to
25 provide acceptable approaches to sup-

1 port or encapsulate new materials that
2 do not yet have applicable codes or
3 standards;

4 (iii) identify safety aspects of advanced
5 manufacturing processes and advanced con-
6 struction techniques that are not addressed
7 by existing codes and standards, so that ge-
8 neric guidance for nuclear energy projects
9 may be updated or created as necessary by
10 the Commission;

11 (iv) identify options for addressing the
12 issues, requirements, and opportunities ex-
13 amined under clauses (i) and (ii)—

14 (I) within the existing regulatory
15 framework; or

16 (II) through a new rulemaking;
17 and

18 (v) describe the extent to which Com-
19 mission action is needed to implement any
20 matter described in the report.

21 (B) *COST ESTIMATES, BUDGETS, AND TIME-*
22 *FRAMES.*—The report under paragraph (1) shall
23 include cost estimates, proposed budgets, and
24 proposed timeframes for implementing risk-in-
25 formed and performance-based regulatory guid-

1 *ance for advanced manufacturing and construc-*
2 *tion for nuclear energy projects.*

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

4 (1) *EXTENSION.—Section 170 of the Atomic En-*
5 *ergy Act of 1954 (42 U.S.C. 2210) (commonly known*
6 *as the “Price-Anderson Act”) is amended by striking*
7 *“December 31, 2025” each place it appears and in-*
8 *serting “December 31, 2065”.*

9 (2) *LIABILITY.—Section 170 of the Atomic En-*
10 *ergy Act of 1954 (42 U.S.C. 2210) (commonly known*
11 *as the “Price-Anderson Act”) is amended—*

12 (A) *in subsection d. (5), by striking*
13 *“\$500,000,000” and inserting “\$2,000,000,000”;*
14 *and*

15 (B) *in subsection e. (4), by striking*
16 *“\$500,000,000” and inserting “\$2,000,000,000”.*

17 (3) *REPORT.—Section 170 p. of the Atomic En-*
18 *ergy Act of 1954 (42 U.S.C. 2210(p)) (commonly*
19 *known as the “Price-Anderson Act”) is amended by*
20 *striking “December 31, 2021” and inserting “Decem-*
21 *ber 31, 2061”.*

22 (4) *DEFINITION OF NUCLEAR INCIDENT.—Section*
23 *11 q. of the Atomic Energy Act of 1954 (42 U.S.C.*
24 *2014(q)) is amended, in the second proviso, by strik-*

1 *ing “if such occurrence” and all that follows through*
2 *“United States:” and inserting a colon.*

3 *(f) RISK POOLING PROGRAM ASSESSMENT.—*

4 *(1) REPORT.—Not later than 1 year after the*
5 *date of enactment of this Act, the Comptroller General*
6 *shall carry out a review of, and submit to the Com-*
7 *mittee on Energy and Commerce of the House of Rep-*
8 *resentatives and the Committee on Environment and*
9 *Public Works of the Senate a report on, the Secretary*
10 *of Energy’s actions with respect to the program de-*
11 *scribed in section 934(e) of the Energy Independence*
12 *and Security Act of 2007 (42 U.S.C. 17373(e)).*

13 *(2) CONTENTS.—The report described in para-*
14 *graph (1) shall include—*

15 *(A) an evaluation of the Secretary of Ener-*
16 *gy’s actions to determine the risk-informed as-*
17 *essment formula under section 934(e)(2)(C) of*
18 *the Energy Independence and Security Act of*
19 *2007 (42 U.S.C. 17373(e)(2)(C)); and*

20 *(B) a review of the Secretary of Energy’s*
21 *methodology to collect information to determine*
22 *and implement the formula.*

Union Calendar No. 320

118TH CONGRESS
2^D SESSION

H. R. 6544

[Report No. 118-391, Part I]

A BILL

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.

FEBRUARY 16, 2024

Reported from the Committee on Energy and Commerce
with an amendment

FEBRUARY 16, 2024

Committees on Science, Space, and Technology and Foreign Affairs discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed