(Original Signature of Member)

118TH CONGRESS 1ST SESSION

# H. R. 6544

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

Mr. Duncan introduced	the following	bill; which	was referre	d to the
Committee on				

# 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.

### 1 TITLE I—NUCLEAR

## 2 REGULATORY COMMISSION

- 3 Subtitle A—Efficiency, Perform-
- 4 ance, and Preparation for the
- 5 Future
- 6 SEC. 101. NRC MISSION ALIGNMENT.
- 7 (a) Mission of the Commission.—
- 8 (1) UPDATE.—Not later than 1 year after the
- 9 date of enactment of this Act, the Nuclear Regu-
- 10 latory Commission shall, while remaining consistent
- with the policies of the Atomic Energy Act of 1954
- 12 (including to provide reasonable assurance of ade-
- quate protection of the public health and safety, to
- promote the common defense and security, and to

1	protect the environment), update the mission state-
2	ment of the Commission to include that licensing
3	and regulation of nuclear energy activities be con-
4	ducted in a manner that is efficient and does not
5	unnecessarily limit—
6	(A) the potential of nuclear energy to im-
7	prove the general welfare; and
8	(B) the benefits of nuclear energy tech-
9	nology to society.
10	(2) Report.—Upon completion of the update
11	to the mission statement required under paragraph
12	(1), the Nuclear Regulatory Commission shall sub-
13	mit to Congress a report that describes—
14	(A) the updated mission statement; and
15	(B) the guidance that the Nuclear Regu-
16	latory Commission will provide to staff of the
17	Nuclear Regulatory Commission to ensure ef-
18	fective performance of such mission.
19	(b) Office of Nuclear Reactor Regulation.—
20	Section 203 of the Energy Reorganization Act of 1974
21	(42 U.S.C. 5843) is amended—
22	(1) in subsection (a), by striking "(a) There"
23	and inserting the following:
24	"(a) Establishment; Appointment of Direc-
25	TOR.—There';

1	(2) in subsection (b)—
2	(A) in the matter preceding paragraph
3	(1)—
4	(i) by striking "(b) Subject" and in-
5	serting the following:
6	"(b) Functions of Director.—Subject"; and
7	(ii) by striking "delegate including:"
8	and inserting "delegate, including the fol-
9	lowing:"; and
10	(B) in paragraph (3), by striking "for the
11	discharge of the" and inserting "to fulfill the li-
12	censing and regulatory oversight";
13	(3) in subsection (c), by striking "(c) Nothing"
14	and inserting the following:
15	"(d) Responsibility for Safe Operation of Fa-
16	CILITIES.—Nothing"; and
17	(4) by inserting after subsection (b) the fol-
18	lowing:
19	"(c) Licensing Process.—In carrying out the prin-
20	cipal licensing and regulation functions under subsection
21	(b)(1), the Director of Nuclear Reactor Regulation shall—
22	"(1) establish techniques and guidance for eval-
23	uating applications for licenses for nuclear reactors
24	to support efficient, timely, and predictable reviews

1	of applications for such licenses to enable the safe
2	and secure use of nuclear reactors;
3	"(2) maintain the techniques and guidance es-
4	tablished under paragraph (1) by periodically assess-
5	ing and, if necessary, modifying such techniques and
6	guidance; and
7	"(3) obtain approval from the Commission if es-
8	tablishment or modification of the techniques and
9	guidance established under paragraph (1) or (2) in-
10	volves policy formulation.".
11	SEC. 102. NUCLEAR LICENSING EFFICIENCY.
12	(a) Efficient Licensing Reviews.—
13	(1) General.—Section 181 of the Atomic En-
14	ergy Act of 1954 (42 U.S.C. 2231) is amended—
15	(A) by striking "The provisions of" and in-
16	serting the following:
17	"(a) The provisions of"; and
18	(B) by adding at the end the following:
19	"(b) Consistent with the declaration in section 1, the
20	Commission shall provide for efficient, timely, and predict-
21	able reviews and proceedings for the granting, suspending,
22	revoking, or amending of any license or construction per-
23	mit, or application to transfer control, and in any pro-
24	ceeding for the issuance or modification of rules and regu-
25	lations dealing with the activities of licenses.".

1	(2) Construction permits and operating
2	LICENSES.—Section 185 of the Atomic Energy Act
3	of 1954 (42 U.S.C. 2235) is amended by adding at
4	the end the following:
5	"c. Application Reviews for Production and
6	UTILIZATION FACILITIES OF AN EXISTING SITE.—In re-
7	viewing an application for an early site permit, construc-
8	tion permit, operating license, or combined construction
9	permit and operating license for a production facility or
10	utilization facility located at the site of a production facil-
11	ity or utilization facility licensed by the Commission, the
12	Commission shall, to the extent practicable, use informa-
13	tion that was part of the licensing basis of the licensed
14	production facility or utilization facility.".
15	(b) Performance Metrics and Milestones.—
16	Section 102(c) of the Nuclear Energy Innovation and
17	Modernization Act (42 U.S.C. 2215(c)) is amended—
18	(1) in paragraph (3)—
19	(A) in the paragraph heading, by striking
20	"180" and inserting "90"; and
21	(B) by striking "180" and inserting "90";
22	and
23	(2) by adding at the end the following:
24	"(4) Periodic updates to metrics and
25	SCHEDULES.—

1	"(A) REVIEW AND ASSESSMENT.—Not less
2	frequently than once every 3 years, the Com-
3	mission shall review and assess, based on the li-
4	censing and regulatory activities of the Com-
5	mission, the performance metrics and milestone
6	schedules developed under paragraph (1).
7	"(B) Revisions.—After each review and
8	assessment under subparagraph (A), the Com-
9	mission shall revise, as appropriate, the per-
10	formance metrics and milestone schedules devel-
11	oped under paragraph (1) to provide the most
12	efficient performance metrics and milestone
13	schedules reasonably achievable.".
14	(e) Clarification on Fusion Regulation.—Sec-
15	tion 103(a)(4) of the Nuclear Energy Innovation and
16	Modernization Act (42 U.S.C. 2133 note; Public Law
17	115–439) is amended—
18	(1) by striking "Not later" and inserting the
19	following:
20	"(A) IN GENERAL.—Not later"; and
21	(2) by adding at the end the following:
22	"(B) Exclusion of fusion reactors.—
23	Notwithstanding section 3(1), for purposes of
24	subparagraph (A), the term 'advanced nuclear

1	reactor applicant' does not include an applicant
2	for a license for a nuclear fusion reactor.".
3	(d) Technical Correction.—Section 104 c. of the
4	Atomic Energy Act of 1954 (42 U.S.C. 2134(e)) is amend-
5	ed—
6	(1) by striking the third sentence and inserting
7	the following:
8	"(3) Limitation on utilization facili-
9	TIES.—The Commission may issue a license under
10	this section for a utilization facility useful in the
11	conduct of research and development activities of the
12	types specified in section 31 if—
13	"(A) not more than 75 percent of the an-
14	nual costs to the licensee of owning and oper-
15	ating the facility are devoted to the sale, other
16	than for research and development or education
17	and training, of—
18	"(i) nonenergy services;
19	"(ii) energy; or
20	"(iii) a combination of nonenergy
21	services and energy; and
22	"(B) not more than 50 percent of the an-
23	nual costs to the licensee of owning and oper-
24	ating the facility are devoted to the sale of en-
25	ergy.'';

1	(2) in the second sentence, by striking "The
2	Commission" and inserting the following:
3	"(2) Regulation.—The Commission"; and
4	(3) by striking "c. The Commission" and in-
5	serting the following:
6	"C. RESEARCH AND DEVELOPMENT ACTIVITIES.
7	"(1) In general.—Subject to paragraphs (2)
8	and (3), the Commission".
9	SEC. 103. STRENGTHENING THE NRC WORKFORCE.
10	(a) Commission Workforce.—
11	(1) General Authority.—The Atomic En-
12	ergy Act of 1954 (42 U.S.C. 2011 et seq.) is amend-
13	ed by inserting after section 161A the following:
14	"SEC. 161B. COMMISSION WORKFORCE.
15	"(a) DIRECT HIRE AUTHORITY.—
16	"(1) In General.—Notwithstanding section
17	161 d. of this Act and section 2(b) of Reorganiza-
18	tion Plan No. 1 of 1980 (94 Stat. 3585; 5 U.S.C.
19	app.), and without regard to any provision of title 5
20	(except sections 3303 and 3328), United States
21	Code, governing appointments in the civil service, if
22	the Chairman of the Nuclear Regulatory Commis-
23	sion (in this section referred to as the 'Chairman')
24	issues or renews a certification that there is a severe
25	shortage of candidates or a critical hiring need for

1	covered positions to carry out the Nuclear Regu-
2	latory Commission's (in this section referred to as
3	the 'Commission') responsibilities and activities in a
4	timely, efficient, and effective manner, the Chairman
5	may, during any period when such a certification is
6	in effect—
7	"(A) recruit and directly appoint highly
8	qualified individuals into the excepted service
9	for covered positions; and
10	"(B) establish in the excepted service
11	term-limited covered positions and recruit and
12	directly appoint highly qualified individuals into
13	such term-limited covered positions, which may
14	not exceed a term of 4 years.
15	"(2) Limitations.—
16	"(A) MERIT PRINCIPLES.—To the max-
17	imum extent practicable, any action authorized
18	pursuant to paragraph (1) shall be consistent
19	with the merit principles of section 2301 of title
20	5, United States Code.
21	"(B) Number.—The number of highly
22	qualified individuals serving in—
23	"(i) covered positions pursuant to
24	paragraph (1)(A) may not exceed 210 at
25	any one time; and

1	"(ii) term-limited covered positions
2	pursuant to paragraph (1)(B) may not ex-
3	ceed 80 at any one time.
4	"(C) Compensation.—The Chairman
5	may not use authority under paragraph (1)(A)
6	or paragraph (1)(B) to compensate individuals
7	recruited and directly appointed into a covered
8	position or a term-limited covered position at an
9	annual rate of basic pay higher than the annual
10	salary payable for level III of the Executive
11	Schedule under section 5314 of title 5, United
12	States Code.
13	"(D) Senior executive service posi-
14	TION.—The Chairman may not, under para-
15	graph (1)(A) or paragraph (1)(B), appoint
16	highly qualified individuals to any Senior Exec-
17	utive Service position, as defined in section
18	3132 of title 5, United States Code.
19	"(3) Renewal.—The Chairman may renew a
20	certification issued or renewed under this subsection
21	if the Chairman determines there is still a severe
22	shortage of candidates or a critical hiring need for
23	covered positions to carry out the Commission's re-
24	sponsibilities and activities in a timely, efficient, and
25	effective manner.

1	"(4) Termination.—A certification issued or
2	renewed under this subsection shall terminate on the
3	earlier of—
4	"(A) the date that is 10 years after the
5	certification is renewed or issued; or
6	"(B) the date on which the Chairman de-
7	termines there is no longer a severe shortage of
8	candidates or a critical hiring need for covered
9	positions to carry out the Commission's respon-
10	sibilities and activities in a timely, efficient, and
11	effective manner.
12	"(5) Level of Positions.—To the extent
13	practicable, in carrying out paragraph (1) the Chair-
14	man shall recruit and directly appoint highly quali-
15	fied individuals into the excepted service to entry,
16	mid, and senior level covered positions, including
17	term-limited covered positions.
18	"(b) Addressing Insufficient Compensation of
19	EMPLOYEES AND OTHER PERSONNEL OF THE COMMIS-
20	SION.—
21	"(1) In general.—Notwithstanding any other
22	provision of law, if the Chairman issues or renews
23	a certification that compensation for employees or
24	other personnel of the Commission serving in a cov-
25	ered position is insufficient to retain or attract such

1	employees and other personnel to allow the Commis-
2	sion to carry out the responsibilities and activities of
3	the Commission in a timely, efficient, and effective
4	manner, the Chairman may, during any period when
5	such a certification is in effect, fix the compensation
6	for such employees or other personnel serving in a
7	covered position without regard to any provision of
8	title 5, United States Code, governing General
9	Schedule classification and pay rates.
10	"(2) Certification requirements.—A cer-
11	tification issued or renewed under this subsection
12	shall—
13	"(A) apply to employees or other personnel
14	who serve in covered positions;
15	"(B) terminate on the earlier of—
16	"(i) the date that is 10 years after the
17	certification is issued or renewed; or
18	"(ii) the date on which the Chairman
19	determines that the use of the authority of
20	the Chairman under this subsection to fix
21	compensation for employees or other per-
22	sonnel serving in a covered position is no
23	longer necessary to retain or attract such
24	employees and other personnel to allow the
25	Commission to carry out the Commission's

1	responsibilities and activities in a timely,
2	efficient, and effective manner; and
3	"(C) be no broader than necessary to
4	achieve the objective of retaining or attracting
5	employees and other personnel serving in a cov-
6	ered position to allow the Commission to carry
7	out the Commission's responsibilities and activi-
8	ties in a timely, efficient, and effective manner.
9	"(3) Renewal.—The Chairman may renew a
10	certification issued or renewed under this subsection
11	if the Chairman determines that use of the authority
12	of the Chairman under this subsection to fix com-
13	pensation for employees or other personnel serving
14	in a covered position is still necessary to retain or
15	attract such employees or other personnel to allow
16	the Commission to carry out the Commission's re-
17	sponsibilities and activities in a timely, efficient, and
18	effective manner.
19	"(4) APPLICABILITY.—The authority under this
20	subsection to fix the compensation of employees or
21	other personnel during any period when a certifi-
22	cation issued or renewed under paragraph (1) is in
23	effect shall apply with respect to an employee or
24	other personnel serving in a covered position regard-

1	less of when the employee or other personnel was
2	hired.
3	"(5) Retention of Level of Fixed com-
4	PENSATION.—The termination of a certification
5	issued or renewed under paragraph (1) shall not af-
6	fect the compensation of an employee or other per-
7	sonnel serving in a covered position whose com-
8	pensation was fixed by the Chairman in accordance
9	with paragraph (1).
10	"(6) Limitation on compensation.—The
11	Chairman may not use the authority under para-
12	graph (1) to fix the compensation of employees or
13	other personnel at an annual rate of basic pay high-
14	er than the annual salary payable for level III of the
15	Executive Schedule under section 5314 of title 5,
16	United States Code.
17	"(7) Experts and consultants.—
18	"(A) In General.—Subject to subpara-
19	graph (B), the Chairman may—
20	"(i) obtain the services of experts and
21	consultants in accordance with section
22	3109 of title 5, United States Code;
23	"(ii) compensate those experts and
24	consultants for each day (including travel
25	time) at rates not in excess of the rate of

1	pay for level IV of the Executive Schedule
2	under section 5315 of that title; and
3	"(iii) pay to the experts and consult-
4	ants serving away from the homes or reg-
5	ular places of business of the experts and
6	consultants travel expenses and per diem
7	in lieu of subsistence at rates authorized
8	by sections 5702 and 5703 of that title for
9	persons in Government service employed
10	intermittently.
11	"(B) Limitations.—The Chairman
12	shall—
13	"(i) to the maximum extent prac-
14	ticable, limit the use of experts and con-
15	sultants pursuant to subparagraph (A);
16	and
17	"(ii) ensure that the employment con-
18	tract of each expert and consultant em-
19	ployed pursuant to subparagraph (A) is
20	subject to renewal not less frequently than
21	annually.
22	"(c) Additional Compensation Authority.—
23	"(1) For New Employees.—The Chairman
24	may pay a person recruited and directly appointed

1	under subsection (a) a 1-time hiring bonus in an
2	amount not to exceed \$25,000.
3	"(2) For existing employees.—
4	"(A) In General.—Subject to subpara-
5	graph (B), an employee or other personnel who
6	the Chairman determines exhibited exceptional
7	performance in a fiscal year may be paid a per-
8	formance bonus in an amount not to exceed the
9	least of—
10	"(i) \$25,000; and
11	"(ii) the amount of the limitation that
12	is applicable for a calendar year under sec-
13	tion 5307(a)(1) of title 5, United States
14	Code.
15	"(B) Limitations.—
16	"(i) Subsequent bonuses.—Any
17	person who receives a performance bonus
18	under subparagraph (A) may not receive
19	another performance bonus under that
20	subparagraph for a period of 5 years there-
21	after.
22	"(ii) Hiring bonuses.—Any person
23	who receives a 1-time hiring bonus under
24	paragraph (1) may not receive a perform-
25	ance bonus under subparagraph (A) unless

1	more than one year has elapsed since the
2	payment of such 1-time hiring bonus.
3	"(d) Implementation Plan and Report.—
4	"(1) In general.—Not later than 180 days
5	after the date of enactment of this section, the
6	Chairman shall develop and implement a plan to
7	carry out this section. Before implementing such
8	plan, the Chairman shall submit to the Committee
9	on Energy and Commerce of the House of Rep-
10	resentatives, the Committee on Environment and
11	Public Works of the Senate, and the Office of Per-
12	sonnel Management a report on the details of the
13	plan.
14	"(2) Report content.—The report submitted
15	under paragraph (1) shall include—
16	"(A) evidence and supporting documenta-
17	tion justifying the plan; and
18	"(B) budgeting projections on costs and
19	benefits resulting from the plan.
20	"(3) Consultation.—The Chairman may con-
21	sult with the Office of Personnel Management, the
22	Office of Management and Budget, and the Comp-
23	troller General of the United States in developing
24	the plan under paragraph (1).

1	"(e) Delegation.—The Chairman shall delegate,
2	subject to the direction and supervision of the Chairman,
3	the authority provided by subsections (a), (b), and (c) to
4	the Executive Director for Operations of the Commission.
5	"(f) Information on Hiring, Vacancies, and
6	Compensation.—
7	"(1) In General.—The Commission shall in-
8	clude in its budget materials submitted in support of
9	the budget of the President (submitted to Congress
10	pursuant to section 1105 of title 31, United States
11	Code), for each fiscal year beginning after the date
12	of enactment of this section, information relating to
13	hiring, vacancies, and compensation at the Commis-
14	sion.
15	"(2) Inclusions.—The information described
16	in paragraph (1) shall include—
17	"(A) an analysis of any trends with respect
18	to hiring, vacancies, and compensation at the
19	Commission;
20	"(B) a description of the efforts to retain
21	and attract employees or other personnel to
22	serve in covered positions at the Commission;
23	"(C) information that describes—
24	"(i) if a certification under subsection
25	(a) was in effect at any point in the pre-

1	vious year, how the authority provided by
2	that subsection is being used to address
3	the hiring needs of the Commission;
4	"(ii) the total number of highly quali-
5	fied individuals serving in—
6	"(I) covered positions pursuant
7	to subsection (a)(1)(A); and
8	"(II) term-limited covered posi-
9	tions pursuant to subsection
10	(a)(1)(B);
11	"(iii) if a certification under sub-
12	section (b) was in effect at any point in the
13	previous year, how the authority provided
14	by that subsection is being used to address
15	the hiring or retention needs of the Com-
16	mission;
17	"(iv) the total number of employees or
18	other personnel serving in a covered posi-
19	tion that have their compensation fixed
20	pursuant to subsection (b);
21	"(v) if a certification under subsection
22	(a) or (b) was terminated or was not in ef-
23	fect at any point in the previous year, why
24	such a certification was terminated or was
25	not in effect;

1	"(vi) the attrition levels with respect
2	to term-limited covered positions appointed
3	under subsection (a)(1)(B), including the
4	number of individuals leaving a term-lim-
5	ited covered position before completion of
6	the applicable term of service and the aver-
7	age length of service for such individuals
8	as a percentage of the applicable term of
9	service; and
10	"(vii) the number of experts and con-
11	sultants retained under subsection (b)(7);
12	and
13	"(D) an assessment of—
14	"(i) the current critical workforce
15	needs of the Commission and any critical
16	workforce needs that the Commission an-
17	ticipates in the next five years; and
18	"(ii) additional skillsets that are or
19	likely will be needed for the Commission to
20	fulfill the licensing and oversight respon-
21	sibilities of the Commission.
22	"(g) COVERED POSITION.—In this section, the term
23	'covered position' means a position in which an employee
24	or other personnel is responsible for conducting work of
25	a scientific, technical, engineering, mathematical, legal,

1	managerial, or otherwise highly specialized or skilled na-
2	ture.".
3	(2) Table of contents.—The table of con-
4	tents of the Atomic Energy Act of 1954 is amended
5	by inserting after the item relating to section 161
6	the following:
	"Sec. 161A. Use of firearms by security personnel. "Sec. 161B. Commission workforce.".
7	(b) Government Accountability Office Re-
8	PORT.—Not later than September 30, 2032, the Comp-
9	troller General of the United States shall submit to the
10	Committee on Energy and Commerce of the House of
11	Representatives and the Committee on Environment and
12	Public Works of the Senate a report that—
13	(1) evaluates the extent to which the authorities
14	provided under subsections (a), (b), and (c) of sec-
15	tion 161B of the Atomic Energy Act of 1954 (as
16	added by this Act) have been utilized;
17	(2) describes the role in which the highly quali-
18	fied individuals recruited and directly appointed pur-
19	suant to section 161B(a) of the Atomic Energy Act
20	of 1954 (as added by this Act) have been utilized to
21	support the licensing of advanced nuclear reactors;
22	(3) assesses the effectiveness of the authorities
23	provided under subsections (a), (b), and (c) of sec-
24	tion 161B of the Atomic Energy Act of 1954 (as

1	added by this Act) in helping the Nuclear Regu-
2	latory Commission fulfill its mission;
3	(4) makes recommendations to improve the Nu-
4	clear Regulatory Commission's strategic workforce
5	management; and
6	(5) makes recommendations with respect to
7	whether Congress should enhance, modify, or dis-
8	continue the authorities provided under subsections
9	(a), (b), and (c) of section 161B of the Atomic En-
10	ergy Act of 1954 (as added by this Act).
11	(c) Annual Solicitation for Nuclear Regu-
12	LATOR APPRENTICESHIP NETWORK APPLICATIONS.—The
13	Nuclear Regulatory Commission, on an annual basis, shall
14	solicit applications for the Nuclear Regulator Apprentice-
15	ship Network.
16	Subtitle B—Fee Reduction
17	SEC. 111. ADVANCED REACTOR FEE REDUCTION.
18	(a) Definitions.—Section 3 of the Nuclear Energy
19	Innovation and Modernization Act (42 U.S.C. 2215 note;
20	Public Law 115–439) is amended—
21	(1) by redesignating paragraphs (2) through
22	(15) as paragraphs (3), (6), (7), (8), (9), (10), (11),
23	(14), $(15)$ , $(16)$ , $(17)$ , $(18)$ , $(19)$ , and $(20)$ , respec-
24	tively;

1	(2) by inserting after paragraph (1) the fol-
2	lowing:
3	"(2) Advanced nuclear reactor appli-
4	CANT.—The term 'advanced nuclear reactor appli-
5	cant' means an entity that has submitted to the
6	Commission an application for a license for an ad-
7	vanced nuclear reactor under the Atomic Energy Act
8	of 1954 (42 U.S.C. 2011 et seq.).";
9	(3) by inserting after paragraph (3) (as so re-
10	designated) the following:
11	"(4) Advanced nuclear reactor
12	PREAPPLICANT.—The term 'advanced nuclear reac-
13	tor preapplicant' means an entity that has submitted
14	to the Commission a licensing project plan for the
15	purposes of submitting a future application for a li-
16	cense for an advanced nuclear reactor under the
17	Atomic Energy Act of 1954 (42 U.S.C. 2011 et
18	seq.).
19	"(5) Agency support.—The term 'agency
20	support' has the meaning given the term 'agency
21	support (corporate support and the IG)' in section
22	170.3 of title 10, Code of Federal Regulations (or
23	any successor regulation)."; and
24	(4) by inserting after paragraph (11) (as so re-
25	designated) the following:

1	"(12) Mission-direct program salaries
2	AND BENEFITS.—The term 'mission-direct program
3	salaries and benefits' has the meaning given such
4	term in section 170.3 of title 10, Code of Federal
5	Regulations (or any successor regulation).
6	"(13) Mission-indirect program support.—
7	The term 'mission-indirect program support' has the
8	meaning given such term in section 170.3 of title 10,
9	Code of Federal Regulations (or any successor regu-
10	lation).".
11	(b) Excluded Activities.—Section 102(b)(1)(B)
12	of the Nuclear Energy Innovation and Modernization Act
13	(42 U.S.C. 2215(b)(1)(B)) is amended by adding at the
14	end the following:
15	"(iv) The total costs of mission-indi-
16	rect program support and agency support
17	that, under paragraph (2)(B)(ii), may not
18	be included in the professional hourly rate
19	charged for fees assessed and collected
20	from advanced nuclear reactor applicants.
21	"(v) The total costs of mission-indi-
22	rect program support and agency support
23	that, under paragraph (2)(C)(ii), may not
24	be included in the professional hourly rate
25	charged for fees assessed and collected

1	from advanced nuclear reactor
2	preapplicants.".
3	(c) Fees for Service or Thing of Value.—Sec-
4	tion 102(b) of the Nuclear Energy Innovation and Mod-
5	ernization Act (42 U.S.C. 2215(b)) is amended by striking
6	paragraph (2) and inserting the following:
7	"(2) Fees for service or thing of
8	VALUE.—
9	"(A) In General.—In accordance with
10	section 9701 of title 31, United States Code,
11	the Commission shall assess and collect fees
12	from any person who receives a service or thing
13	of value from the Commission to cover the costs
14	to the Commission of providing the service or
15	thing of value.
16	"(B) ADVANCED NUCLEAR REACTOR AP-
17	PLICANTS.—The professional hourly rate
18	charged for fees assessed and collected from an
19	advanced nuclear reactor applicant under this
20	paragraph relating to the review of a submitted
21	application for an advanced nuclear reactor may
22	not—
23	"(i) exceed the professional hourly
24	rate for mission-direct program salaries

1	and benefits of the Nuclear Reactor Safety
2	Program; and
3	"(ii) include the costs of mission-indi-
4	rect program support and agency support.
5	"(C) ADVANCED NUCLEAR REACTOR
6	PREAPPLICANTS.—The professional hourly rate
7	charged for fees assessed and collected from an
8	advanced nuclear reactor preapplicant under
9	this paragraph relating to the review of sub-
10	mitted materials as described in the licensing
11	project plan of such advanced nuclear reactor
12	preapplicant may not—
13	"(i) exceed the professional hourly
14	rate for mission-direct program salaries
15	and benefits of the Nuclear Reactor Safety
16	Program; and
17	"(ii) include the costs of mission-indi-
18	rect program support and agency support.
19	"(D) CALCULATION OF HOURLY RATE.—In
20	this paragraph, the professional hourly rate for
21	mission-direct program salaries and benefits of
22	the Nuclear Reactor Safety Program equals the
23	quotient obtained by dividing—
24	"(i) the full-time equivalent rate
25	(within the meaning of the document of

1	the Commission entitled 'FY 2023 Final
2	Fee Rule Work Papers' (or a successor
3	document)) for mission-direct program sal-
4	aries and benefits of the Nuclear Reactor
5	Safety Program (as determined by the
6	Commission) for a fiscal year; by
7	"(ii) the productive hours assumption
8	for that fiscal year, determined in accord-
9	ance with the formula established in the
10	document referred to in clause (i) (or a
11	successor document).".
12	(d) Sunset.—Section 102(f) of the Nuclear Energy
13	Innovation and Modernization Act (42 U.S.C. 2215(f)) is
14	amended to read as follows:
15	"(f) Cessation of Effectiveness.—Paragraphs
16	(1)(B)(v) and $(2)(C)$ of subsection (b) shall cease to be
17	effective on September 30, 2029.".
18	(e) Effective Date.—The amendments made by
19	this section shall take effect on October 1, 2024.
20	SEC. 112. ADVANCED NUCLEAR REACTOR PRIZE.
21	Section 103 of the Nuclear Energy Innovation and
22	Modernization Act (Public Law 115–439; 132 Stat. 5571)
23	is amended by adding at the end the following:
24	"(f) Prizes for Advanced Nuclear Reactor Li-
25	CENSING.—

1	"(1) Definition of Eligible Entity.—In
2	this subsection, the term 'eligible entity' means—
3	"(A) a non-Federal entity; and
4	"(B) the Tennessee Valley Authority.
5	"(2) Prize for advanced nuclear reactor
6	LICENSING.—
7	"(A) IN GENERAL.—Notwithstanding sec-
8	tion 169 of the Atomic Energy Act of 1954 (42
9	U.S.C. 2209) and subject to the availability of
10	appropriations, the Secretary is authorized to
11	make, with respect to each award category de-
12	scribed in subparagraph (C), an award in an
13	amount described in subparagraph (B) to the
14	first eligible entity—
15	"(i) to which the Commission issues
16	an operating license for an advanced nu-
17	clear reactor under part 50 of title 10,
18	Code of Federal Regulations (or successor
19	regulations), for which an application has
20	not been approved by the Commission as
21	of the date of enactment of this subsection;
22	$\mathbf{or}$
23	"(ii) for which the Commission makes
24	a finding described in section 52.103(g) of
25	title 10, Code of Federal Regulations (or

1	successor regulations), with respect to a
2	combined license for an advanced nuclear
3	reactor—
4	"(I) that is issued under subpart
5	C of part 52 of that title (or successor
6	regulations); and
7	"(II) for which an application
8	has not been approved by the Com-
9	mission as of the date of enactment of
10	this subsection.
11	"(B) Amount of Award.—Subject to
12	paragraph (3), an award under subparagraph
13	(A) shall be in an amount equal to the total
14	amount assessed by the Commission and col-
15	lected under section 102(b)(2) from the eligible
16	entity receiving the award for costs relating to
17	the issuance of the license described in that
18	subparagraph, including, as applicable, costs re-
19	lating to the issuance of an associated construc-
20	tion permit described in section 50.23 of title
21	10, Code of Federal Regulations (or successor
22	regulations), or early site permit (as defined in
23	section 52.1 of that title (or successor regula-
24	tions)).

1	"(C) Award categories.—An award
2	under subparagraph (A) may be made for—
3	"(i) the first advanced nuclear reactor
4	for which the Commission—
5	"(I) issues a license in accord-
6	ance with clause (i) of subparagraph
7	(A); or
8	"(II) makes a finding in accord-
9	ance with clause (ii) of that subpara-
10	graph;
11	"(ii) an advanced nuclear reactor
12	that—
13	"(I) uses isotopes derived from
14	spent nuclear fuel (as defined in sec-
15	tion 2 of the Nuclear Waste Policy
16	Act of 1982 (42 U.S.C. 10101)) or
17	depleted uranium as fuel for the ad-
18	vanced nuclear reactor; and
19	"(II) is the first advanced nu-
20	clear reactor described in subclause
21	(I) for which the Commission—
22	"(aa) issues a license in ac-
23	cordance with clause (i) of sub-
24	paragraph (A); or

1	"(bb) makes a finding in ac-
2	cordance with clause (ii) of that
3	subparagraph;
4	"(iii) an advanced nuclear reactor
5	that—
6	"(I) is a nuclear integrated en-
7	ergy system—
8	"(aa) that is composed of 2
9	or more co-located or jointly op-
10	erated subsystems of energy gen-
11	eration, energy storage, or other
12	technologies;
13	"(bb) in which not fewer
14	than 1 subsystem described in
15	item (aa) is a nuclear energy sys-
16	tem; and
17	"(ce) the purpose of which
18	is—
19	"(AA) to reduce green-
20	house gas emissions in both
21	the power and nonpower sec-
22	tors; and
23	"(BB) to maximize en-
24	ergy production and effi-
25	ciency; and

1	"(II) is the first advanced nu-
2	clear reactor described in subclause
3	(I) for which the Commission—
4	"(aa) issues a license in ac-
5	cordance with clause (i) of sub-
6	paragraph (A); or
7	"(bb) makes a finding in ac-
8	cordance with clause (ii) of that
9	subparagraph;
10	"(iv) an advanced reactor that—
11	"(I) operates flexibly to generate
12	electricity or high temperature process
13	heat for nonelectric applications; and
14	"(II) is the first advanced nu-
15	clear reactor described in subclause
16	(I) for which the Commission—
17	"(aa) issues a license in ac-
18	cordance with clause (i) of sub-
19	paragraph (A); or
20	"(bb) makes a finding in ac-
21	cordance with clause (ii) of that
22	subparagraph; and
23	"(v) the first advanced nuclear reactor
24	for which the Commission grants approval
25	to load nuclear fuel pursuant to the tech-

1	nology-inclusive regulatory framework es-
2	tablished under subsection (a)(4).
3	"(3) Federal funding limitation.—
4	"(A) EXCLUSION OF TVA FUNDS.—In this
5	paragraph, the term 'Federal funds' does not
6	include funds received under the power program
7	of the Tennessee Valley Authority established
8	pursuant to the Tennessee Valley Authority Act
9	of 1933 (16 U.S.C. 831 et seq.).
10	"(B) Limitation on amounts ex-
11	PENDED.—An award under this subsection
12	shall not exceed the total amount expended (ex-
13	cluding any expenditures made with Federal
14	funds received for the applicable project and an
15	amount equal to the minimum cost-share re-
16	quired under section 988 of the Energy Policy
17	Act of 2005 (42 U.S.C. 16352)) by the eligible
18	entity receiving the award for licensing costs re-
19	lating to the project for which the award is
20	made.
21	"(C) Repayments and dividends not
22	REQUIRED.—Notwithstanding section
23	9104(a)(4) of title 31, United States Code, or
24	any other provision of law, an eligible entity

1	that received an award under this subsection
2	shall not be required—
3	"(i) to repay that award or any part
4	of that award; or
5	"(ii) to pay a dividend, interest, or
6	other similar payment based on the sum of
7	that award.".
8	Subtitle C—Siting, Licensing, and
9	Oversight Reviews
10	SEC. 121. MODERNIZATION OF NUCLEAR REACTOR ENVI-
11	RONMENTAL REVIEWS.
12	(a) In General.—Not later than 90 days after the
13	date of enactment of this Act, the Nuclear Regulatory
14	Commission (in this section referred to as the "Commis-
15	sion") shall submit to the Committee on Environment and
16	Public Works of the Senate and the Committee on Energy
17	and Commerce of the House of Representatives a report
18	on the efforts of the Commission to facilitate efficient,
19	timely, and predictable environmental reviews of nuclear
20	reactor applications, including through expanded use of
21	categorical exclusions, environmental assessments, and ge-
22	neric environmental impact statements.
23	(b) Report.—In completing the report under sub-
24	section (a), the Commission shall—

1	(1) describe the actions the Commission will
2	take to implement the amendments to the National
3	Environmental Policy Act of 1969 (42 U.S.C. 4321
4	et seq.) made by section 321 of the Fiscal Responsi-
5	bility Act 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 re-
22	duce the impact of a proposed action to a level
23	that 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
3	reviews of nuclear reactor applications by the
4	Commission;
5	(E) opportunities to coordinate the devel-
6	opment of environmental assessments and envi-
7	ronmental impact statements with other Fed-
8	eral agencies to avoid duplicative environmental
9	reviews 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 governmenta
15	permitting agencies during environmental re-
16	views of nuclear reactor applications by the
17	Commission;
18	(G) opportunities to streamline the Com-
19	mission's analyses of alternatives, including the
20	Commission's analysis of alternative sites, in
21	environmental reviews of nuclear reactor appli-
22	cations 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
6	supplemental environmental impact statement)
7	is appropriate for a particular nuclear reactor
8	application, including in proceedings in which
9	the Commission relies upon a generic environ-
10	mental impact statement for advanced nuclear
11	reactors;
12	(J) authorizing the use of an applicant's
13	environmental impact statement as the Com-
14	mission's draft environmental impact statement,
15	consistent with section 107(f) of the National
16	Environmental Policy Act of 1969 (42 U.S.C.
17	4336a(f));
18	(K) opportunities to adopt online and dig-
19	ital technologies, including technologies that
20	would allow applicants and cooperating agencies
21	to upload documents and coordinate with the
22	Commission to edit documents in real time,
23	that would streamline communications be-
24	tween—

1	(i) the Commission and applicants;
2	and
3	(ii) the Commission and other rel-
4	evant cooperating agencies;
5	(L) in addition to implementing measures
6	under subsection (c), potential revisions to part
7	51 of title 10, Code of Federal Regulations, and
8	relevant Commission guidance documents, to—
9	(i) facilitate efficient, timely, and pre-
10	dictable environmental reviews of nuclear
11	reactor applications;
12	(ii) assist decision-making about rel-
13	evant environmental issues;
14	(iii) maintain openness with the pub-
15	lie;
16	(iv) meet obligations under the Na-
17	tional Environmental Policy Act of 1969
18	(42 U.S.C. 4321 et seq.); and
19	(v) reduce burdens on licensees, appli-
20	cants, and the Commission; and
21	(3) include a schedule for promulgating the rule
22	required under subsection (c).
23	(c) Rulemaking.—Not later than 2 years after the
24	submission of the report under subsection (a), the Com-
25	mission shall promulgate a final rule implementing, to the

1	maximum extent practicable, measures considered by the
2	Commission under subsection (b)(2) that are necessary to
3	streamline the Commission's review of nuclear reactor ap-
4	plications.
5	SEC. 122. NUCLEAR FOR BROWNFIELD SITES.
6	(a) DEFINITIONS.—In this section:
7	(1) Brownfield site.—The term "brownfield
8	site" has the meaning given the term in section 101
9	of the Comprehensive Environmental Response,
10	Compensation, and Liability Act of 1980 (42 U.S.C.
11	9601).
12	(2) Commission.—The term "Commission"
13	means the Nuclear Regulatory Commission.
14	(3) COVERED SITE.—The term "covered site"
15	means a brownfield site, a retired fossil fuel site, or
16	a site that is both a retired fossil fuel site and a
17	brownfield site.
18	(4) PRODUCTION FACILITY.—The term "pro-
19	duction facility" has the meaning given the term in
20	section 11 of the Atomic Energy Act of 1954 (42
21	U.S.C. 2014).
22	(5) Retired fossil fuel site.—The term
23	"retired fossil fuel site" means the site of 1 or more
24	fossil fuel electric generation facilities that are re-

1	tired or scheduled to retire, including multiunit fa-
2	cilities that are partially shut down.
3	(6) Utilization facility.—The term "utiliza-
4	tion facility" has the meaning given the term in sec-
5	tion 11 of the Atomic Energy Act of 1954 (42
6	U.S.C. 2014).
7	(b) Identification of Regulatory Issues.—
8	(1) IN GENERAL.—Not later than 1 year after
9	the date of enactment of this Act, the Commission
10	shall evaluate the extent to which modification of
11	regulations, guidance, or policy is needed to enable
12	efficient, timely, and predictable licensing reviews
13	for, and to support the oversight of, production fa-
14	cilities or utilization facilities at covered sites.
15	(2) Requirement.—In carrying out paragraph
16	(1), the Commission shall consider how licensing re-
17	views for production facilities or utilization facilities
18	at covered sites may be expedited by—
19	(A) siting and operating a production facil-
20	ity or a utilization facility at or near existing
21	site infrastructure to support the reuse of such
22	infrastructure, including—
23	(i) electric switchyard components and
24	transmission infrastructure;
25	(ii) heat-sink components;

1	(iii) steam cycle components;
2	(iv) roads;
3	(v) railroad access; and
4	(vi) water availability;
5	(B) using early site permits;
6	(C) using plant parameter envelopes or
7	similar standardized site parameters on a por-
8	tion of a larger site; and
9	(D) using a standardized application for
10	similar sites.
11	(3) Report.—Not later than 14 months after
12	the date of enactment of this Act, the Commission
13	shall submit to the appropriate committees of Con-
14	gress a report describing any regulations, guidance,
15	and policies evaluated under paragraph (1).
16	(c) Licensing.—
17	(1) In general.—Not later than 2 years after
18	the date of enactment of this Act, the Commission
19	shall, based on the evaluation under subsection (b)—
20	(A) develop and implement strategies to
21	enable efficient, timely, and predictable licens-
22	ing reviews for, and to support the oversight of,
23	production facilities or utilization facilities at
24	covered sites; and

1	(B) initiate a rulemaking to enable effi-
2	cient, timely, and predictable licensing reviews
3	for, and to support the oversight of, production
4	facilities or utilization facilities at covered sites.
5	(2) Requirements.—In carrying out para-
6	graph (1), consistent with the mission of the Com-
7	mission, the Commission shall consider matters re-
8	lating to—
9	(A) the use of existing site infrastructure;
10	(B) existing emergency preparedness orga-
11	nizations and planning;
12	(C) the availability of historical site-spe-
13	cific environmental data;
14	(D) previously completed environmental re-
15	views required by the National Environmental
16	Policy Act of 1969 (42 U.S.C. 4321 et seq.);
17	(E) activities associated with the potential
18	decommissioning of facilities or decontamina-
19	tion and remediation at covered sites; and
20	(F) community engagement and historical
21	experience with energy production.
22	(d) Report.—Not later than 3 years after the date
23	of enactment of this Act, the Commission shall submit to
24	the Committee on Energy and Commerce of the House
25	of Representatives and the Committee on Environment

1	and Public Works of the Senate a report describing the
2	actions taken by the Commission under subsection $(c)(1)$ .
3	SEC. 123. ADVANCEMENT OF NUCLEAR REGULATORY OVER-
4	SIGHT.
5	(a) Implementing Lessons Learned From the
6	COVID-19 HEALTH EMERGENCY.—
7	(1) In General.—Not later than 180 days
8	after the date of enactment of this Act, the Commis-
9	sion shall submit to the appropriate committees of
10	Congress a report on actions taken by the Commis-
11	sion during the public health emergency declared by
12	the Secretary of Health and Human Services under
13	section 319 of the Public Health Service Act (42
14	U.S.C. 247d) on January 31, 2020, with respect to
15	COVID-19.
16	(2) Contents.—The report submitted under
17	paragraph (1) shall—
18	(A) identify any processes, procedures, and
19	other regulatory policies that the Commission
20	revised or temporarily suspended during the
21	public health emergency described in paragraph
22	(1);
23	(B) examine how any revision or tem-
24	porary suspension of a process, procedure, or
25	other regulatory policy identified under sub-

1	paragraph (A) affected the ability of the Com-
2	mission to license and regulate the civilian use
3	of radioactive materials in the United States to
4	protect public health and safety, promote the
5	common defense and security, and protect the
6	environment;
7	(C) discuss lessons learned from the mat-
8	ters described in subparagraph (B);
9	(D) list actions that the Commission has
10	taken or will take to incorporate into the licens-
11	ing and oversight activities of the Commission,
12	without compromising the mission of the Com-
13	mission, the lessons described in subparagraph
14	(C); and
15	(E) describe when the actions listed under
16	subparagraph (D) were implemented or may be
17	implemented.
18	(b) Advancing Efficient, Risk-informed Over-
19	SIGHT AND INSPECTIONS.—
20	(1) In general.—Not later than 1 year after
21	the date of enactment of this Act, the Commission
22	shall develop and submit to the appropriate commit-
23	tees of Congress a report that identifies specific im-
24	provements to the nuclear reactor and materials
25	oversight and inspection programs carried out pur-

1	suant to the Atomic Energy Act of 1954 that the
2	Commission may implement to maximize the effi-
3	ciency of such programs through, where appropriate,
4	the use of risk-informed, performance-based proce-
5	dures, expanded incorporation of information tech-
6	nologies, and staff training.
7	(2) Stakeholder input.—In developing the
8	report under paragraph (1), the Commission shall,
9	as appropriate, seek input from—
10	(A) the Secretary of Energy;
11	(B) the National Laboratories;
12	(C) the nuclear energy industry; and
13	(D) nongovernmental organizations that
14	are related to nuclear energy.
15	(3) Contents.—The report submitted under
16	paragraph (1) shall—
17	(A) assess specific elements of oversight
18	and inspections that may be modified by the
19	use of technology, improved planning, and con-
20	tinually updated risk-informed, performance-
21	based assessment, including—
22	(i) use of travel resources;
23	(ii) planning and preparation for in-
24	spections, including entrance and exit
25	meetings with licensees;

1	(iii) document collection and prepara-
2	tion, including consideration of whether
3	nuclear reactor data are accessible prior to
4	onsite visits or requests to the licensee and
5	that document requests are timely and
6	within the scope of inspections;
7	(iv) the cross-cutting issues program;
8	and
9	(v) the scope of event reporting re-
10	quired by licensees to ensure decisions are
11	risk-informed;
12	(B) identify and assess measures to im-
13	prove oversight and inspections, including—
14	(i) elimination of areas of duplicative
15	or otherwise unnecessary activities;
16	(ii) increased use of templates in doc-
17	umenting inspection results; and
18	(iii) periodic training of Commission
19	staff and leadership on the application of
20	risk-informed criteria for—
21	(I) inspection planning and as-
22	sessments;
23	(II) agency decision making proc-
24	esses on the application of regulations
25	and guidance; and

1	(III) the application of the Com-
2	mission's standard of reasonable as-
3	surance of adequate protection;
4	(C) assess measures to advance risk-in-
5	formed procedures, including—
6	(i) increased use of inspection ap-
7	proaches that balance the level of resources
8	commensurate with safety significance;
9	(ii) increased review of the use of in-
10	spection program resources based on li-
11	censee performance;
12	(iii) expansion of modern information
13	technology, including artificial intelligence
14	and machine learning to risk inform over-
15	sight and inspection decisions; and
16	(iv) updating the Differing Profes-
17	sional Views or Opinions process to ensure
18	any impacts on agency decisions and
19	schedules are commensurate with the safe-
20	ty significance of the differing opinion;
21	(D) assess the ability of the Commission,
22	consistent with its obligations to provide reason-
23	able assurance of adequate protection of health
24	and safety pursuant to the Atomic Energy Act
25	of 1954, to enable licensee innovations that may

1	advance nuclear reactor operational efficiency
2	and safety, including the criteria of the Com-
3	mission for timely acceptance of licensee adop-
4	tion of advanced technologies, including digital
5	technologies;
6	(E) identify recommendations resulting
7	from the assessments described in subpara-
8	graphs (A) through (D);
9	(F) identify specific actions that the Com-
10	mission will take to incorporate into the train-
11	ing, inspection, oversight, and licensing activi-
12	ties, and regulations of the Commission, with-
13	out compromising the mission of the Commis-
14	sion, the recommendations identified under sub-
15	paragraph (E); and
16	(G) describe when the actions identified
17	under subparagraph (F) may be implemented.
18	(c) Office and Facility Space Review.—
19	(1) Report.—Not later than 1 year after the
20	date of enactment of this Act, the Comptroller Gen-
21	eral of the United States shall—
22	(A) review office and other facility space
23	requirements of the Commission; and

1	(B) submit to the appropriate committees
2	of Congress a report, with recommendations, on
3	the results of such review.
4	(2) Contents.—The report described in para-
5	graph (1) shall include—
6	(A) an examination of—
7	(i) the costs associated with the head-
8	quarters, regional offices, and technical
9	training center of the Commission, includ-
10	ing examination of—
11	(I) costs that do not support the
12	Commission's mission, including rent
13	subsidies for other Federal agencies;
14	and
15	(II) opportunities to reduce fu-
16	ture costs through reduction in unnec-
17	essary office space, consolidation of
18	offices, use of advanced information
19	technology, or any other appropriate
20	means; and
21	(ii) current and anticipated office and
22	facility requirements to efficiently accom-
23	plish the mission of the Commission; and
24	(B) recommendations to Congress, the
25	Commission, and the General Services Adminis-

1	tration for actions that may assist in reducing
2	office and facility costs to licensees and tax-
3	payers.
4	(d) Definitions.—In this section:
5	(1) Appropriate committees of con-
6	GRESS.—The term "appropriate committees of Con-
7	gress' means the Committee on Energy and Com-
8	merce of the House of Representatives and the Com-
9	mittee on Environment and Public Works of the
10	Senate.
11	(2) Commission.—The term "Commission"
12	means the Nuclear Regulatory Commission.
13	(3) LICENSEE.—The term "licensee" means $\epsilon$
14	person that holds a license issued under section 103
15	or section 104 of the Atomic Energy Act of 1954
16	(42 U.S.C. 2133; 2134).
17	TITLE II—NUCLEAR
18	TECHNOLOGY DEPLOYMENT
19	SEC. 201. ADVANCED NUCLEAR DEPLOYMENT.
20	(a) Enabling Preparations for Advanced Nu-
21	CLEAR REACTOR DEMONSTRATIONS ON FEDERAL
22	Sites.—
23	(1) In general.—Section 102(b)(1)(B) of the
24	Nuclear Energy Innovation and Modernization Act

1	(42 U.S.C. $2215(b)(1)(B)$ ) is further amended by
2	adding at the end the following:
3	"(vi) Costs for—
4	"(I) activities to review and ap-
5	prove or disapprove an application for
6	an early site permit (as defined in sec-
7	tion 52.1 of title 10, Code of Federal
8	Regulations (or any successor regula-
9	tion)) to demonstrate an advanced nu-
10	clear reactor on a Department of En-
11	ergy 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
16	Year 2019); and
17	"(II) pre-application activities re-
18	lating to an early site permit (as so
19	defined) to demonstrate an advanced
20	nuclear reactor on a Department of
21	Energy site or any site or installation
22	that is critical national security infra-
23	structure (as defined in section 327(d)
24	of the John S. McCain National De-

1	fense Authorization Act for Fiscal
2	Year 2019).".
3	(2) Effective date.—The amendment made
4	by paragraph (1) shall take effect on October 1,
5	2024.
6	(b) REGULATORY REQUIREMENTS FOR MICRO-REAC-
7	TORS.—
8	(1) Micro-reactor licensing.—The Nuclear
9	Regulatory Commission (in this subsection referred
10	to as the "Commission") shall—
11	(A) not later than 18 months after the
12	date of enactment of this Act, develop risk-in-
13	formed and performance-based strategies and
14	guidance to license and regulate micro-reactors
15	pursuant to section 103 of the Atomic Energy
16	Act of 1954 (42 U.S.C. 2133), including strate-
17	gies and guidance for—
18	(i) staffing and operations;
19	(ii) oversight and inspections;
20	(iii) safeguards and security;
21	(iv) emergency preparedness;
22	(v) risk analysis methods, including
23	alternatives to probabilistic risk assess-
24	ments;

1	(vi) decommissioning funding assur-
2	ance methods that permit the use of
3	design- and site-specific cost estimates;
4	(vii) the transportation of fueled
5	micro-reactors; and
6	(viii) siting, including in relation to—
7	(I) the population density cri-
8	terion limit described in the policy
9	issue paper on population-related
10	siting considerations for advanced re-
11	actors dated May 8, 2020, and num-
12	bered SECY-20-0045;
13	(II) licensing mobile deployment;
14	and
15	(III) environmental reviews; and
16	(B) not later than 3 years after the date
17	of enactment of this Act, implement, as appro-
18	priate, the strategies and guidance developed
19	under subparagraph (A)—
20	(i) within the existing regulatory
21	framework;
22	(ii) through the technology-inclusive,
23	regulatory framework to be established
24	under section 103(a)(4) of the Nuclear En-
25	ergy Innovation and Modernization Act (42

1	U.S.C. 2133 note; Public Law 115-439);
2	or
3	(iii) through a pending or new rule-
4	making.
5	(2) Considerations.—In developing and im-
6	plementing strategies and guidance under paragraph
7	(1), the Commission shall consider—
8	(A) the unique characteristics of micro-re-
9	actors, including characteristics relating to—
10	(i) physical size;
11	(ii) design simplicity; and
12	(iii) source term;
13	(B) opportunities to address redundancies
14	and inefficiencies;
15	(C) opportunities to consolidate review
16	phases and reduce transitions between review
17	teams;
18	(D) opportunities to establish integrated
19	review teams to ensure continuity throughout
20	the review process; and
21	(E) other relevant considerations discussed
22	in the policy issue paper on policy and licensing
23	considerations related to micro-reactors dated
24	October 6, 2020, and numbered SECY-20-
25	0093.

1	(3) Consultation.—In carrying out para-
2	graph (1), the Commission shall consult with—
3	(A) the Secretary of Energy;
4	(B) the heads of other Federal agencies, as
5	appropriate;
6	(C) micro-reactor technology developers;
7	and
8	(D) other stakeholders.
9	(c) Expedited Subsequent Combined Li-
10	CENSES.—
11	(1) In general.—In accordance with this sub-
12	section, the Nuclear Regulatory Commission (re-
13	ferred to in this subsection as the "Commission")
14	shall establish and carry out an expedited procedure
15	for issuing a combined license pursuant to section
16	185 b. of the Atomic Energy Act of 1954 (42 U.S.C.
17	2235).
18	(2) QUALIFICATIONS.—To qualify for the expe-
19	dited procedure under paragraph (1), an applicant—
20	(A) shall submit a combined license appli-
21	cation for a new nuclear reactor based off a
22	previously licensed design;
23	(B) shall propose to construct the new nu-
24	clear reactor on or adjacent to a site on which

1	a nuclear reactor already operates or previously
2	operated; and
3	(C) may not be subject to an order of the
4	Commission to suspend or revoke a license
5	under section 2.202 of title 10, Code of Federal
6	Regulations (or any successor regulation).
7	(3) Expedited procedure.—With respect to
8	a combined license for which the applicant has satis-
9	fied the requirements described in paragraph (2),
10	the Commission shall, to the maximum extent prac-
11	ticable—
12	(A) not later than 1 year after the applica-
13	tion is accepted for docketing, issue a draft en-
14	vironmental impact statement;
15	(B) not later than 18 months after the ap-
16	plication is accepted for docketing—
17	(i) complete the technical review proc-
18	ess; and
19	(ii) issue a safety evaluation report
20	and final environmental impact statement;
21	(C) not later than 2 years after the appli-
22	cation is accepted for docketing, complete any
23	necessary public licensing hearings and related
24	processes; and

1	(D) not later than 25 months after the ap-
2	plication is accepted for docketing, make a final
3	decision on whether to issue the combined li-
4	cense.
5	(4) Performance and reporting.—
6	(A) Delays in issuance.—Not later than
7	30 days after the applicable deadline, the Exec-
8	utive Director for Operations of the Commis-
9	sion shall inform the Commission of any failure
10	to meet a deadline under paragraph (3).
11	(B) Delays in Issuance exceeding 90
12	DAYS.—If any deadline under paragraph (3) is
13	not met by the date that is 90 days after the
14	applicable date required under such paragraph,
15	the Commission shall submit to the Committee
16	on Environment and Public Works of the Sen-
17	ate and the Committee on Energy and Com-
18	merce of the House of Representatives a report
19	describing the delay, including a detailed expla-
20	nation accounting for the delay and a plan for
21	completion of the applicable action.
22	(d) Pilot Program for Nuclear Power Pur-
23	CHASE AGREEMENTS.—
24	(1) In general.—Subtitle B of title VI of the
25	Energy Policy Act of 2005 (Public Law 109–58; 119

1	Stat. 782) is amended by adding at the end the fol-
2	lowing:
3	"SEC. 639A. LONG-TERM NUCLEAR POWER PURCHASE
4	AGREEMENT PILOT PROGRAM.
5	"(a) Establishment.—The Secretary shall estab-
6	lish a pilot program under which the Secretary shall enter
7	into at least one long-term power purchase agreement for
8	power generated by a commercial nuclear reactor with re-
9	spect to which an operating license is issued by the Nu-
10	clear Regulatory Commission after January 1, 2024.
11	"(b) Requirements.—In establishing the pilot pro-
12	gram under this section, the Secretary shall—
13	"(1) consult with the heads of other Federal de-
14	partments and agencies that may benefit from pur-
15	chasing nuclear power for a period of longer than 10
16	years, including the Secretary of Defense; and
17	"(2) not later than December 31, 2028, enter
18	into at least one long-term agreement to purchase
19	power from a commercial nuclear reactor described
20	in subsection (a).
21	"(c) Period of Agreement.—Notwithstanding any
22	other provision of law, an agreement entered into pursuant
23	to subsection (b)(2) to purchase power from a commercial
24	nuclear reactor shall be made for a period of at least 10
25	years and not more than 40 years.

1 "(d) Priority.—In carrying out this section, the 2 Secretary shall prioritize entering into long-term power 3 purchase agreements for power generated by first-of-a-4 kind or early deployment commercial nuclear reactors that 5 will provide reliable and resilient power— 6 "(1) to high-value assets for national security 7 purposes; or "(2) for other purposes that the Secretary de-8 9 termines are in the national interest, including for 10 remote off-grid scenarios or grid-connected scenarios provide 11 capabilities commonly known 12 'islanding power capabilities' during an emergency. 13 "(e) Rates.—A long-term power purchase agreement entered into under this section may not be at a rate that 14 15 is higher than the average market rate, unless the agreement is for power generated by a commercial nuclear reac-16 17 tor described in subsection (d).". 18 (2) Table of contents.—The table of con-19 tents of the Energy Policy Act of 2005 (Public Law 20 109–58; 119 Stat. 594) is amended by inserting 21 after the item relating to section 639 the following: "Sec. 639A. Long-term nuclear power purchase agreement pilot program.". 22 SEC. 202. GLOBAL NUCLEAR COOPERATION. 23 (a) GLOBAL NUCLEAR ENERGY ASSESSMENT STUDY.— 24

1	(1) Study required.—Not later than 1 year
2	after the date of enactment of this Act, the Sec-
3	retary of Energy, in consultation with the Secretary
4	of State, the Secretary of Commerce, the Adminis-
5	trator of the Environmental Protection Agency, and
6	the Commission, shall conduct a study on the global
7	status of—
8	(A) the civilian nuclear energy industry;
9	and
10	(B) the supply chains of the civilian nu-
11	clear energy industry.
12	(2) Contents.—The study conducted under
13	paragraph (1) shall include—
14	(A) information on the status of the civil-
15	ian nuclear energy industry, the long-term risks
16	to such industry, and the basis for such risks;
17	(B) information on how the use of the ci-
18	vilian nuclear energy industry, relative to other
19	types of energy industries, can reduce the emis-
20	sion of criteria pollutants and carbon dioxide;
21	(C) information on the role the United
22	States civilian nuclear energy industry plays in
23	United States foreign policy;
24	(D) information on the importance of the
25	United States civilian nuclear energy industry

1	to countries that are allied to the United
2	States;
3	(E) information on how the United States
4	may collaborate with such countries in devel-
5	oping, deploying, and investing in nuclear tech-
6	nology;
7	(F) information on how foreign countries
8	use nuclear energy when crafting and imple-
9	menting their own foreign policy, including such
10	use by foreign countries that are strategic com-
11	petitors;
12	(G) an evaluation of how nuclear non-
13	proliferation and security efforts and nuclear
14	energy safety are affected by the involvement of
15	the United States in—
16	(i) international markets; and
17	(ii) setting civilian nuclear energy in-
18	dustry standards;
19	(H) an evaluation of how industries in the
20	United States, other than the civilian nuclear
21	energy industry, benefit from the generation of
22	electricity by nuclear power plants;
23	(I) information on utilities and companies
24	in the United States that are involved in the ci-

1	vilian nuclear energy supply chain, including,
2	with respect to such utilities and companies—
3	(i) financial challenges;
4	(ii) nuclear liability issues;
5	(iii) foreign strategic competition; and
6	(iv) risks to continued operation; and
7	(J) recommendations for how the United
8	States may—
9	(i) develop a national strategy to in-
10	crease the role nuclear energy plays in di-
11	plomacy and strategic energy policy;
12	(ii) develop a strategy to mitigate for-
13	eign competitor's utilization of their civil-
14	ian nuclear energy industries in diplomacy;
15	(iii) align its nuclear energy policy
16	with national security objectives; and
17	(iv) remove regulatory barriers to the
18	development of the United States civilian
19	nuclear energy supply chain.
20	(3) Report to congress.—Not later than 6
21	months after the study is conducted under para-
22	graph (1), the Secretary of Energy shall submit to
23	the appropriate committees of Congress a report, in-
24	cluding a classified annex as necessary, on the re-
25	sults of such study.

1	(b) Program to Train and Share Expertise.—
2	(1) In general.—Not later than 1 year after
3	the date of enactment of this Act, the Secretary of
4	Energy, in consultation with the Secretary of State
5	and the Commission, shall develop and carry out a
6	program under which the Secretary of Energy shall
7	train foreign nuclear energy experts and standardize
8	practices.
9	(2) Requirements.—In carrying out the pro-
10	gram developed under paragraph (1), the Secretary
11	of Energy shall—
12	(A) issue guidance for best safety practices
13	in the global civilian nuclear energy industry
14	based on practices established in the United
15	States;
16	(B) train foreign nuclear energy experts on
17	the operation and safety and security practices
18	used by the United States civilian nuclear en-
19	ergy industry;
20	(C) review global supply chain risks for
21	foreign civilian nuclear energy industries;
22	(D) identify weaknesses and concerns
23	found in foreign civilian nuclear energy indus-
24	tries; and

1	(E) establish partnerships with foreign
2	countries that have developed or are developing
3	civilian nuclear energy industries.
4	(3) Foreign nuclear energy expert.—In
5	this subsection, the term "foreign nuclear energy ex-
6	pert" does not include a person who is from a coun-
7	try—
8	(A) in which intellectual property theft is
9	legal;
10	(B) that takes actions to undermine the ci-
11	vilian nuclear energy industry or other critical
12	industries of the United States; or
13	(C) which the Secretary of Energy deter-
14	mines is inimical to the interest of the United
15	States.
16	(e) International Nuclear Reactor Export
17	AND INNOVATION ACTIVITIES.—
18	(1) Coordination.—The Commission shall—
19	(A) coordinate all work of the Commission
20	relating to—
21	(i) issuing a license for the import or
22	export of a nuclear reactor under section
23	103 of the Atomic Energy Act of 1954 (42
24	U.S.C. 2133); and

1	(ii) international regulatory coopera-
2	tion and assistance relating to nuclear re-
3	actors; and
4	(B) support—
5	(i) the consideration of international
6	technical standards to assist the design, li-
7	censing, and construction of advanced nu-
8	clear systems;
9	(ii) efforts to help build competent nu-
10	clear regulatory organizations and legal
11	frameworks in foreign countries that are
12	seeking to develop civilian nuclear energy
13	industries; and
14	(iii) exchange programs and training
15	provided in coordination with the Secretary
16	of State to foreign countries relating to ci-
17	vilian nuclear energy industry regulation
18	and oversight to improve nuclear tech-
19	nology licensing.
20	(2) Consultation.—In supporting exchange
21	programs and training under paragraph (1)(B)(iii),
22	the Commission shall consult with—
23	(A) the Secretary of Energy;
24	(B) the Secretary of State;
25	(C) the National Laboratories;

1	(D) the private sector; and
2	(E) institutions of higher education.
3	(3) Nuclear reactor export and innova-
4	TION BRANCH.—The Commission may establish
5	within the Office of International Programs of the
6	Commission a branch, to be known as the "Inter-
7	national Nuclear Reactor Export and Innovation
8	Branch", to carry out the nuclear reactor export and
9	innovation activities described in paragraph (1) as
10	the Commission determines appropriate.
11	(4) Exclusion of international activities
12	FROM THE FEE BASE.—
13	(A) In General.—Section 102 of the Nu-
14	clear Energy Innovation and Modernization Act
15	(42 U.S.C. 2215) is amended—
16	(i) in subsection (a), by adding at the
17	end the following:
18	"(4) International nuclear reactor ex-
19	PORT AND INNOVATION ACTIVITIES.—The Commis-
20	sion shall identify in the annual budget justification
21	international nuclear reactor export and innovation
22	activities described in section 202(c)(1) of the Atom-
23	ic Energy Advancement Act."; and
24	(ii) in subsection (b)(1)(B), by adding
25	at the end the following:

1	"(vii) Costs for international nuclear
2	reactor export and innovation activities de-
3	scribed in section 202(c)(1) of the Atomic
4	Energy Advancement Act.".
5	(B) Effective date.—The amendments
6	made by subparagraph (A) shall take effect on
7	October 1, 2024.
8	(d) Denial of Certain Domestic Licenses for
9	NATIONAL SECURITY PURPOSES.—
10	(1) Definition of Covered fuel.—In this
11	subsection, the term "covered fuel" means enriched
12	uranium that is fabricated into fuel assemblies for
13	nuclear reactors by an entity that—
14	(A) is owned or controlled by the Govern-
15	ment of the Russian Federation or the Govern-
16	ment of the People's Republic of China; or
17	(B) is organized under the laws of, or oth-
18	erwise subject to the jurisdiction of, the Rus-
19	sian Federation or the People's Republic of
20	China.
21	(2) Prohibition on unlicensed possession
22	OR OWNERSHIP OF COVERED FUEL.—Unless specifi-
23	cally authorized by the Commission in a license
24	issued under section 53 of the Atomic Energy Act
25	of 1954 (42 U.S.C. 2073), no person subject to the

1	jurisdiction of the Commission may possess or own
2	covered fuel.
3	(3) License to possess or own covered
4	FUEL.—
5	(A) Consultation required prior to
6	ISSUANCE.—The Commission shall not issue a
7	license to possess or own covered fuel under
8	section 53 of the Atomic Energy Act of 1954
9	(42 U.S.C. 2073) unless the Commission has
10	first consulted with the Secretary of Energy
11	and the Secretary of State before issuing the li-
12	cense.
13	(B) Prohibition on issuance of Li-
14	CENSE.—
15	(i) In general.—Subject to clause
16	(iii), a license to possess or own covered
17	fuel shall not be issued if the Secretary of
18	Energy and the Secretary of State make
19	the determination described in clause (ii).
20	(ii) Determination.—
21	(I) IN GENERAL.—The deter-
22	mination referred to in clause (i) is a
23	determination that possession or own-
24	ership, as applicable, of covered fuel
25	poses a threat to the national security

1	of the United States that adversely
2	impacts the physical and economic se-
3	curity of the United States.
4	(II) Joint Determination.—A
5	determination described in subclause
6	(I) shall be jointly made by the Sec-
7	retary of Energy and the Secretary of
8	State.
9	(III) TIMELINE.—
10	(aa) Notice of Applica-
11	TION.—Not later than 30 days
12	after the date on which the Com-
13	mission receives an application
14	for a license to possess or own
15	covered fuel, the Commission
16	shall notify the Secretary of En-
17	ergy and the Secretary of State
18	of the application.
19	(bb) Determination.—The
20	Secretary of Energy and the Sec-
21	retary of State shall have a pe-
22	riod of 180 days, beginning on
23	the date on which the Commis-
24	sion notifies the Secretary of En-
25	ergy and the Secretary of State

1	under item (aa) of an application
2	for a license to possess or own
3	covered fuel, in which to make
4	the determination described in
5	subclause (I).
6	(cc) Commission Notifica-
7	TION.—On making the deter-
8	mination described in subclause
9	(I), the Secretary of Energy and
10	the Secretary of State shall im-
11	mediately notify the Commission.
12	(dd) Congressional noti-
13	FICATION.—Not later than 30
14	days after the date on which the
15	Secretary of Energy and the Sec-
16	retary of State notify the Com-
17	mission under item (cc), the
18	Commission shall notify the ap-
19	propriate committees of Congress
20	of the determination.
21	(ee) Public notice.—Not
22	later than 15 days after the date
23	on which the Commission notifies
24	Congress under item (dd) of a
25	determination made under sub-

1	clause (I), the Commission shall
2	make that determination publicly
3	available.
4	(iii) Effect of no determina-
5	TION.—The prohibition described in clause
6	(i) shall not apply if the Secretary of En-
7	ergy and the Secretary of State do not
8	make the determination described in clause
9	(ii) by the date described in subclause
10	(III)(bb) of that clause.
11	(e) Definitions.—In this section:
12	(1) Appropriate committees of con-
13	GRESS.—The term "appropriate committees of Con-
14	gress" means each of the following:
15	(A) The Committee on Energy and Com-
16	merce of the House of Representatives.
17	(B) The Committee on Foreign Affairs of
18	the House of Representatives.
19	(C) The Committee on Environment and
20	Public Works of the Senate.
21	(D) The Committee on Energy and Nat-
22	ural Resources of the Senate.
23	(E) The Committee on Foreign Relations
24	of the Senate.

1	(2) Commission.—The term "Commission"
2	means the Nuclear Regulatory Commission.
3	SEC. 203. AMERICAN NUCLEAR COMPETITIVENESS.
4	(a) Process for Review and Amendment of
5	PART 810 GENERALLY AUTHORIZED DESTINATIONS.—
6	(1) Identification and evaluation of fac-
7	TORS.—Not later than 90 days after the date of en-
8	actment of this Act, the Secretary of Energy, with
9	the concurrence of the Secretary of State, shall iden-
10	tify and evaluate factors, other than agreements for
11	cooperation entered into in accordance with section
12	123 of the Atomic Energy Act of 1954 (42 U.S.C.
13	2153), that may be used to determine a country's
14	generally authorized destination status under part
15	810 of title 10, Code of Federal Regulations, and to
16	list such country as a generally authorized destina-
17	tion in Appendix A to part 810 of title 10, Code of
18	Federal Regulations.
19	(2) Process update.—The Secretary of En-
20	ergy shall review and, as appropriate, update the
21	Department of Energy's process for determining a
22	country's generally authorized destination status
23	under part 810 of title 10, Code of Federal Regula-
24	tions, and for listing such country as a generally au-
25	thorized destination in Appendix A to part 810 of

1	title 10, Code of Federal Regulations, taking into
2	consideration, and, as appropriate, incorporating
3	factors identified and evaluated under paragraph
4	(1).
5	(3) REVISIONS TO LIST.—Not later than one
6	year after the date of enactment of this Act, and at
7	least once every 5 years thereafter, the Secretary of
8	Energy shall, in accordance with any process up-
9	dated pursuant to this subsection, review the list in
10	Appendix A to part 810 of title 10, Code of Federal
11	Regulations, and amend such list as appropriate.
12	(b) Licensing Domestic Nuclear Projects in
13	WHICH UNITED STATES ALLIES INVEST.—
14	(1) In general.—The prohibitions against
15	issuing certain licenses for utilization facilities to
16	certain aliens, corporations, and other entities de-
17	scribed in the second sentence of section 103 d. of
18	the Atomic Energy Act of 1954 (42 U.S.C. 2133(d))
19	and the second sentence of section 104 d. of that
20	Act (42 U.S.C. 2134(d)) shall not apply to an entity
21	described in paragraph (2) of this subsection if the
22	Nuclear Regulatory Commission determines that
23	issuance of the applicable license to that entity is
24	not inimical to—
25	(A) the common defense and security; or

1	(B) the health and safety of the public.
2	(2) Entities described.—
3	(A) In general.—An entity referred to in
4	paragraph (1) is an alien, corporation, or other
5	entity that is owned, controlled, or dominated
6	by—
7	(i) the government of—
8	(I) a country, other than a coun-
9	try described in subparagraph (B),
10	that is a member of the Organization
11	for Economic Co-operation and Devel-
12	opment on the date of enactment of
13	this Act; or
14	(II) the Republic of India;
15	(ii) a corporation that is incorporated
16	in a country described in subclause (I) or
17	(II) of clause (i); or
18	(iii) an alien who is a citizen or na-
19	tional of a country described in subclause
20	(I) or (II) of clause (i).
21	(B) Exclusion.—A country described in
22	this subparagraph is a country—
23	(i) any department, agency, or instru-
24	mentality of the government of which, on
25	the date of enactment of this Act, is sub-

1	ject to sanctions under section 231 of the
2	Countering America's Adversaries Through
3	Sanctions Act (22 U.S.C. 9525); or
4	(ii) any citizen, national, or entity of
5	which, as of the date of enactment of this
6	Act, is included on the List of Specially
7	Designated Nationals and Blocked Persons
8	maintained by the Office of Foreign Assets
9	Control of the Department of the Treasury
10	pursuant to sanctions imposed under sec-
11	tion 231 of the Countering America's Ad-
12	versaries Through Sanctions Act (22
13	U.S.C. 9525).
14	(3) Technical amendment.—Section 103 d.
15	of the Atomic Energy Act of 1954 (42 U.S.C.
16	2133(d)) is amended, in the second sentence, by
17	striking "any any" and inserting "any".
18	(4) Savings clause.—Nothing in this sub-
19	section affects the requirements of section 721 of
20	the Defense Production Act of 1950 (50 U.S.C.
21	4565).
22	(e) Licensing Considerations Relating to Use
23	of Nuclear Energy for Nonelectric Applica-
24	TIONS.—

1	(1) In General.—Not later than 1 year after
2	the date of enactment of this Act, the Nuclear Regu-
3	latory Commission (in this subsection referred to as
4	the "Commission") shall submit to the Committee
5	on Energy and Commerce of the House of Rep-
6	resentatives and the Committee on Environment and
7	Public Works of the Senate a report addressing any
8	unique licensing issues or requirements relating to—
9	(A) the flexible operation of advanced nu-
10	clear reactors, such as ramping power output
11	and switching between electricity generation
12	and nonelectric applications;
13	(B) the use of advanced nuclear reactors
14	exclusively for nonelectric applications; and
15	(C) the collocation of advanced nuclear re-
16	actors with industrial plants or other facilities.
17	(2) STAKEHOLDER INPUT.—In developing the
18	report under paragraph (1), the Commission shall
19	seek input from—
20	(A) the Secretary of Energy;
21	(B) the nuclear energy industry;
22	(C) technology developers;
23	(D) the industrial, chemical, and medical
24	sectors;
25	(E) nongovernmental organizations; and

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

1	(i) within the existing regulatory
2	framework;
3	(ii) through the technology-inclusive,
4	regulatory framework to be established
5	under section 103(a)(4) of the Nuclear En-
6	ergy Innovation and Modernization Act (42
7	U.S.C. 2133 note; Public Law 115–439);
8	or
9	(iii) through a new rulemaking;
10	(C) the extent to which Commission action
11	is needed to implement any matter described in
12	the report; and
13	(D) cost estimates, proposed budgets, and
14	proposed timeframes for implementing risk-in-
15	formed and performance-based regulatory guid-
16	ance for licensing advanced nuclear reactors for
17	nonelectric applications.
18	(d) Report on Advanced Methods of Manufac-
19	TURING AND CONSTRUCTION FOR NUCLEAR ENERGY
20	Projects.—
21	(1) In general.—Not later than 180 days
22	after the date of enactment of this Act, the Nuclear
23	Regulatory Commission (in this subsection referred
24	to as the "Commission") shall submit to the Com-
25	mittee on Energy and Commerce of the House of

1	Representatives and the Committee on Environment
2	and Public Works of the Senate a report on ad-
3	vanced methods of manufacturing and construction
4	for nuclear energy projects.
5	(2) STAKEHOLDER INPUT.—In developing the
6	report under paragraph (1), the Commission shall
7	seek input from—
8	(A) the Secretary of Energy;
9	(B) the nuclear energy industry;
10	(C) the National Laboratories;
11	(D) institutions of higher education;
12	(E) nuclear and manufacturing technology
13	developers;
14	(F) the manufacturing and construction
15	industries;
16	(G) standards development organizations;
17	(H) labor unions;
18	(I) nongovernmental organizations; and
19	(J) other public stakeholders.
20	(3) Contents.—
21	(A) IN GENERAL.—The report under para-
22	graph (1) shall—
23	(i) examine any unique licensing
24	issues or requirements relating to the use,
25	for nuclear energy projects, of—

1	(I) advanced manufacturing tech-
2	niques; and
3	(II) advanced construction tech-
4	niques;
5	(ii) examine—
6	(I) the requirements for nuclear-
7	grade components in manufacturing
8	and construction for nuclear energy
9	projects;
10	(II) opportunities to use standard
11	materials, parts, or components in
12	manufacturing and construction for
13	nuclear energy applications; and
14	(III) opportunities to use stand-
15	ard materials that are in compliance
16	with existing codes and standards to
17	provide acceptable approaches to sup-
18	port or encapsulate new materials
19	that do not yet have applicable codes
20	or standards;
21	(iii) identify safety aspects of ad-
22	vanced manufacturing processes and ad-
23	vanced construction techniques that are
24	not addressed by existing codes and stand-
25	ards, so that generic guidance for nuclear

1	energy projects may be updated or created
2	as necessary by the Commission;
3	(iv) identify options for addressing the
4	issues, requirements, and opportunities ex-
5	amined under clauses (i) and (ii)—
6	(I) within the existing regulatory
7	framework; or
8	(II) through a new rulemaking;
9	and
10	(v) describe the extent to which Com-
11	mission action is needed to implement any
12	matter described in the report.
13	(B) Cost estimates, budgets, and
14	TIMEFRAMES.—The report under paragraph (1)
15	shall include cost estimates, proposed budgets,
16	and proposed timeframes for implementing risk-
17	informed and performance-based regulatory
18	guidance for advanced manufacturing and con-
19	struction for nuclear energy projects.
20	(e) Extension of the Price-Anderson Act.—
21	(1) Extension.—Section 170 of the Atomic
22	Energy Act of 1954 (42 U.S.C. 2210) (commonly
23	known as the "Price-Anderson Act") is amended by
24	striking "December 31, 2025" each place it appears
25	and inserting "December 31, 2065".

1	(2) Liability.—Section 170 of the Atomic En-
2	ergy Act of 1954 (42 U.S.C. 2210) (commonly
3	known as the "Price-Anderson Act") is amended—
4	(A) in subsection d. (5), by striking
5	"\$500,000,000" and inserting
6	"\$2,000,000,000"; and
7	(B) in subsection e. (4), by striking
8	"\$500,000,000" and inserting
9	``\$2,000,000,000``.
10	(3) Report.—Section 170 p. of the Atomic
11	Energy Act of 1954 (42 U.S.C. 2210(p)) (commonly
12	known as the "Price-Anderson Act") is amended by
13	striking "December 31, 2021" and inserting "De-
14	cember 31, 2061".
15	(4) Definition of Nuclear incident.—Sec-
16	tion 11 q. of the Atomic Energy Act of 1954 (42
17	U.S.C. 2014(q)) is amended, in the second proviso,
18	by striking "if such occurrence" and all that follows
19	through "United States:" and inserting a colon.
20	(f) RISK POOLING PROGRAM ASSESSMENT.—
21	(1) Report.—Not later than 1 year after the
22	date of enactment of this Act, the Comptroller Gen-
23	eral shall carry out a review of, and submit to the
24	Committee on Energy and Commerce of the House
25	of Representatives and the Committee on Environ-

1	ment and Public Works of the Senate a report on,
2	the Secretary of Energy's actions with respect to the
3	program described in section 934(e) of the Energy
4	Independence and Security Act of 2007 (42 U.S.C.
5	17373(e)).
6	(2) Contents.—The report described in para-
7	graph (1) shall include—
8	(A) an evaluation of the Secretary of Ener-
9	gy's actions to determine the risk-informed as-
10	sessment formula under section 934(e)(2)(C) of
11	the Energy Independence and Security Act of
12	2007 (42 U.S.C. $17373(e)(2)(C)$ ); and
13	(B) a review of the Secretary of Energy's
14	methodology to collect information to determine
15	and implement the formula.