

# BUSINESS MEETING

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## MEETING

BEFORE THE

### COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

MAY 31, 2023

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COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED EIGHTEENTH CONGRESS  
FIRST SESSION

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SHELLEY MOORE CAPITO, West Virginia, *Ranking Member*

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## **BUSINESS MEETING**

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**WEDNESDAY, MAY 31, 2023**

U.S. SENATE,  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,  
*Washington, DC.*

The committee met, pursuant to notice, at 9:47 a.m. in room 406, Dirksen Senate Office Building, Hon. Thomas R. Carper (chairman of the committee) presiding.

Present: Senators Carper, Capito, Cardin, Sanders, Whitehouse, Merkley, Markey, Stabenow, Kelly, Padilla, Cramer, Lummis, Boozman, Wicker, Mullin, Ricketts.

### **OPENING STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE**

Senator CARPER. Good morning, everyone. I call this business meeting to order.

I want to thank everyone for joining us today as we consider the nomination of Jeffrey Baran to serve as Commissioner of the Nuclear Regulatory Commission. We will also consider Senator Capito's Accelerating Deployment of Versatile Advanced Nuclear for Clean Energy, or the ADVANCE Act. As soon as a voting quorum is present, we will proceed to a vote on Jeff Baran, President Biden's nominee to serve another term as Commissioner of the Nuclear Regulatory Commission.

I want to pause for a moment to say a special thanks to you and to everybody who has worked to help shape the ADVANCE Act. We all know we need to provide, to meet our energy needs in this Country, we need to do it in a way that does not exacerbate the challenges that we face with respect to climate. Nuclear is a great compromise.

I want to thank you very much for your work and members on both sides, and Sheldon, for your support as we have crafted this legislation.

Senator WHITEHOUSE. Happy to do it, Chairman.

Senator CARPER. Let me say a word or two if I can about Jeff Baran. Jeff Baran is a dedicated public servant who has served on the Nuclear Regulatory Commission since 2014. Throughout his time on the NRC, he has demonstrated his commitment to ensuring the safety and security of our Nation's use of nuclear energy and materials.

Commissioner Baran has also advanced America's energy security and efforts to slow climate change through the Commission's work to establish the right regulatory framework for the safe licensing and operation of new carbon-free technologies. This in-

cludes the next generation of nuclear reactors and fusion energy systems.

In addition, Commissioner Baran understands that his job is to serve the public, the people of this Country. He has focused on providing opportunities for engagement and input from all stakeholders, especially those in disadvantaged and underserved communities.

Finally, maintaining a full slate of commissioners will help the NRC continue to carry out its responsibilities effectively and efficiently. With that in mind, I will vote yes on Jeff Baran's nomination. I urge my colleagues to do the same.

With that said, Senator Capito, let me yield to you for anything you would like to share with us. Again, thank you for your leadership on this.

**OPENING STATEMENT OF HON. SHELLEY MOORE CAPITO,  
U.S. SENATOR FROM THE STATE OF WEST VIRGINIA**

Senator CAPITO. Thank you, Chairman Carper. I want to begin by saying the news we got over the week is happy/sad for us, to know that you are going to be joining Senator Cardin into a better life, and that is life after the Senate.

[Laughter.]

Senator CAPITO. I do want to pay tribute to your service, but I will do that as we move through the year, because you are not going anywhere.

Senator CARPER. Many people have been so kind in the last week. If I had known folks were going to be that nice, I might have recessed earlier.

[Laughter.]

Senator CAPITO. The one thing I will say is we have a lot in common. We are both native West Virginians, as we both remark about our love for our State. Also through your entire service, you have served on this committee. That is the same with me, although my service is much shorter than yours.

I will move to the issues at hand. Nuclear energy is critical to strengthening our energy and national security, providing for energy reliability and achieving our environmental goals. Our geostrategic rivals are offering long-term nuclear energy deals to establish energy dependent relationships around the globe and dominate the nuclear energy landscape into the 21st century.

America can and should lead in nuclear energy, and that is why I introduced the ADVANCE Act. The ADVANCE Act is bipartisan, with 16 cosponsors. The Chairman is on the bill, Senator Lummis, Senator Whitehouse, Senator Ricketts, Senator Cardin, Senator Graham and Senator Kelly, all members of this committee. It will assert America's global leadership in nuclear energy.

The legislation will assist States like my home State of West Virginia to repurpose brownfields sites by deploying advanced nuclear reactors at previously developed facilities like decommissioned conventional power plants. The bill incentivizes nuclear innovators to rapidly develop new technologies.

The bill requires the Nuclear Regulatory Commission to identify and resolve key regulatory issues like advanced manufacturing and construction techniques, advanced nuclear fuel licensing and non-

electric uses of nuclear to enable greater use of technologies. It extends a key Federal policy to provide backstop insurance coverage to help deploy more nuclear energy. The bill reduces excess regulatory costs and cumbersome red tape.

The Carper-Capito manager's amendment makes targeted improvements to the introduced bill based on the bipartisan feedback that we got from our colleagues. The amendment supports early licensing work to enable the deployment of advanced nuclear reactors at critical national security infrastructure sites. The amendment adds clarity to the NRC's new authority to hire and retain expert staff, to ensure licensing reviews are successfully completed.

In short, the bipartisan ADVANCE Act will jumpstart the deployment of new, safe, and reliable nuclear technologies. As The ADVANCE Act moves forward, I hope we will continue to work together to incorporate additional bipartisan policies that arise to enable efficient, safe licensing reviews.

The NRC is tasked with licensing and regulating nuclear material to ensure reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, protect the environment, and improve the general welfare. Advancement of the NRC's important mission is why I so strongly support the aptly named ADVANCE Act, but why I oppose the other business item we are considering today, which is the renomination of Jeff Baran to serve as a commissioner.

We stand at a pivotal moment, ready to accelerate the liftoff of new advanced reactors and renew American leadership in nuclear. Unfortunately, Commissioner Baran is not the right fit for this moment. NRC commissioners establish the standards and safety regulations to enable America's nuclear companies to fulfill our Nation's established nuclear energy policy goals.

Since Commissioner Baran joined the Commission in 2014, he has pursued policies supporting his regulatory philosophy. That philosophy has frustrated, I believe, the mission of the NRC. He has called for unjustifiably increasing regulatory burdens and reducing regulatory predictability. His record supports ratcheting up regulations and associated compliance costs to really no useful end.

During his renomination hearing, he tried to distance himself from that record, espousing priorities that are 180 degrees removed from how he actually voted during his two terms as a commissioner.

I am considering his renomination based on his record and continued service of Commissioner Baran on the Commission, in my view, would impede America's advancement toward a future of nuclear energy leadership to the benefit of Russia's and China's geostrategic plans, and would limit access to clean baseload generation at home and abroad.

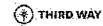
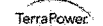
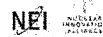
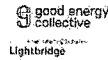
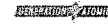
For these reasons, I cannot support and urge my colleagues to oppose Commissioner Baran's nomination. I thank the Chairman for scheduling this business meeting.

Senator CARPER. You bet. Happy to do it.

Senator CAPITO. I would like unanimous consent to enter letters of support from more than 30 labor-environmental NGO's and business groups and a letter of support from American Nuclear Insurance.

Senator CARPER. Without objection, so ordered.  
[The referenced information follows:]

May 31, 2023



The Honorable Tom Carper  
Chairman  
U.S. Senate Committee on  
Environment and Public Works

The Honorable Shelley Moore Capito  
Ranking Member  
U.S. Senate Committee on  
Environment and Public Works

Dear Chairman Carper and Ranking Member Capito:

We write to express our support for the *Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) Act of 2023*. The *ADVANCE Act* is an important step toward modernizing our regulatory infrastructure and rebuilding our nuclear industrial capabilities.

Your committee is considering the *ADVANCE Act* at a critical time for nuclear energy. Existing and advanced reactors are essential to meeting U.S. and global climate goals and providing reliable and affordable electricity at a time of rapidly increasing demand. Russia's invasion of Ukraine and China's global nuclear energy ambitions add urgency to U.S. efforts to build and export nuclear energy technologies that enhance U.S. national security and the security of our allies.

The *ADVANCE Act* will facilitate American leadership on nuclear energy internationally, improve the licensing process for advanced reactors, enhance the Nuclear Regulatory Commission's (NRC's) ability to qualify and license advanced nuclear fuels, prepare the NRC to license additional uranium conversion and enrichment facilities, fund cleanup of abandoned mine sites on Tribal lands, and improve the overall efficiency and effectiveness of the NRC.

We support your efforts to report the bill out of committee and look forward to working with you to pass the bill on the Senate floor.

Sincerely,

- American Nuclear Society
- ARC Clean Technology
- BPC Action
- BWX Technologies, Inc.
- Center for Climate and Energy Solutions
- Centrus Energy Corp.
- Clean Air Task Force
- ClearPath Action
- Core Power (US)
- Energy Northwest
- Framatome Inc.
- Generation Atomic
- Good Energy Collective
- International Brotherhood of Boilermakers
- International Brotherhood of Electrical Workers (IBEW)
- Lightbridge Corporation
- National Rural Electric Cooperative Association
- The Nature Conservancy
- Nuclear Energy Institute
- Nuclear Innovation Alliance
- Oklo
- Orano USA

May 31, 2023

Radiant Industries  
TerraPower  
Terrestrial Energy USA  
Third Way  
Urenco USA  
U.S. Chamber of Commerce  
U.S. Nuclear Industry Council  
Xcel Energy  
X-Energy, LLC



**Daniel C. DeMerchant**  
Vice President, Claims & General Counsel

May 26, 2023

The Honorable Thomas R. Carper  
Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, DC 20510

The Honorable Shelley Moore Capito  
Ranking Member  
Committee on Environment and Public Works  
United States Senate  
Washington, DC 20510

Re: ADVANCE Act of 2023

Dear Chairman Carper and Ranking Member Capito:

Thank you for the opportunity to offer the views of American Nuclear Insurers (ANI) on S.1111, the ADVANCE Act, currently under consideration by the Committee on Environment and Public Works. For all the below reasons, ANI supports the ADVANCE Act's reauthorization of the Price-Anderson Act and urges the Committee to consider an extension of the Act well beyond the currently proposed twenty-year period.

ANI is a voluntary, unincorporated joint underwriting association of insurance companies that pools financial capacity in order to provide insurance for the U.S. commercial nuclear risk. ANI and its predecessor organizations were formed in 1956 when Congress approached U.S. insurance companies to determine how much coverage could be provided, and on what terms, to the then developing nuclear technologies. Congress took testimony from participating insurers, drafted, and enacted the Price-Anderson Act of 1957. From inception, ANI has been the sole provider of primary insurance capacity for all U.S. operating nuclear power reactors. ANI has also handled hundreds of reported claims and incident notifications, including quick emergency assistance payments to evacuees impacted by the 1979 accident at Three-Mile Island.

The Price-Anderson Act, renewed four times by Congress, has stood the test of time and continues to this day to represent a carefully crafted balance of society's interests. The Act demonstrates the United States' continued commitment toward the development of commercial nuclear power while, at the same time, protecting the public with a large source of ready compensation in the highly unlikely event of a nuclear accident. The Act has well-served the public by providing two separate connecting layers of insurance protection for U.S. nuclear power

reactors totaling today near \$13.660 billion, far exceeding all other global nuclear regimes. In fact, this two-layered insurance protection surpasses the sum of the next ten (10) highest non-government funded nuclear liability regimes in the world.

Since inception in 1957, the Act's financial protection provisions have attracted significant levels of private insurance capacity despite what would normally be overwhelming obstacles for insurers to cover the nuclear power risk. This is why the predictability created by the Act has never been more important. Not only does it promote new nuclear technology development and deployment, but also, it ensures continued insurance market commitment of considerable capacity for both new nuclear and the existing U.S. commercial nuclear power reactor fleet. With the emergence of new nuclear technologies and NRC license renewals extending operation of the current nuclear fleet out to mid-century, ANI encourages the adoption of no less than a forty (40) year Act extension or, in the alternative, a permanent extension of the Act:

Thank you again for the opportunity to express our views. Please do not hesitate to contact me if you need any additional information or with questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel C. DeMerchant". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Daniel C. DeMerchant

Senator CARPER. We are awaiting the arrival of Senator Fetterman. We will vote right away on the nomination of the NRC Commissioner.

I want to take just a minute until Senator Fetterman arrives here just to mention a couple of other things on the ADVANCE Act. As our Nation's largest source of reliable, carbon-free electricity, nuclear energy is critical to meeting our climate goals and maintaining our energy security.

This bipartisan legislation will help the United States remain a clean energy leader by providing the certainty needed to safely deploy the next generation of nuclear reactors and fuels. The bill will also aid tribal communities and communities facing economic challenges associated with retired nuclear plants and stranded waste.

Additionally, the ADVANCE Act will help ensure that the Nuclear Regulatory Commission has the tools and work force to keep our current reactors safe and to efficiently review new nuclear technologies.

Preserving and expanding our Nation's use of clean and reliable nuclear energy is also essential for our economic and for our national security interests. This bill will help strengthen the U.S. nuclear supply chain infrastructure and will support the export of American nuclear technologies, benefiting the domestic industrial base and filling a vacuum that would likely otherwise be filled by China and Russia.

I thank Senator Capito and Senator Whitehouse again for their leadership and collaboration on this legislation. I want to thank everybody on this committee who has participated in crafting this bipartisan legislation. I urge our colleagues to join us in voting yes on this bill.

We are still awaiting the arrival of Senator Fetterman. Senator Whitehouse, please.

Senator WHITEHOUSE. Let me just say some quick thanks to you, and to Ranking Member Capito. I think this is the fourth nuclear reform bill that I have worked on in a bipartisan fashion. I want to recognize Senator Barrasso and Senator Crapo, who have done good work in this space as well. Senator Capito has really been a terrific partner and I want to thank her for this.

Chairman, your work has been really exemplary, not only supporting us in the design of the bill but also putting together the manager's amendment that will enhance smooth passage forward of the measure. Much appreciation to the both of you. Let's hope for a good day on the committee.

Senator CARPER. All right. Senator Sanders?

Senator SANDERS. Senator Carper, any way that we could start the vote?

Senator CARPER. Yes, we are going to start the vote on the ADVANCE Act, I think. Okay. I now call up S. 1111, the ADVANCE Act. In early April, I joined Senator Capito and Senator Whitehouse in co-leading the introduction of the bipartisan ADVANCE Act.

Over the following weeks, Senator Capito and I worked to refine that legislation, with the help of a lot of you. Those refinements are embodied in an amendment in the nature of a substitute, which I circulated yesterday morning. This amendment represents non-con-

troversial changes from the legislation as introduced. By unanimous consent, the Carper-Capito amendment in the nature of a substitute is considered to be the base text for the purpose of today's markup.

Is there any objection? Hearing none, so ordered.

[The text of the amendment follows:]

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: In the nature of a substitute.

**IN THE SENATE OF THE UNITED STATES—118th Cong., 1st Sess.**

**S.1111**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. CARPER (for himself and Mrs. CAPITO)

Viz:

1 Strike all after the enacting clause and insert the following:  
2

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

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Accelerating Deployment of Versatile, Advanced Nuclear  
6 for Clean Energy Act of 2023” or the “ADVANCE Act  
7 of 2023”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.

## TITLE I—AMERICAN NUCLEAR LEADERSHIP

- Sec. 101. International nuclear reactor export and innovation activities.
- Sec. 102. Denial of certain domestic licenses for national security purposes.
- Sec. 103. Export license requirements.
- Sec. 104. Coordinated international engagement.

## TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR TECHNOLOGIES

- Sec. 201. Fees for advanced nuclear reactor application review.
- Sec. 202. Advanced nuclear reactor prizes.
- Sec. 203. Report on unique licensing considerations relating to the use of nuclear energy for nonelectric applications.
- Sec. 204. Enabling preparations for the demonstration of advanced nuclear reactors on Department of Energy sites or critical national security infrastructure sites.
- Sec. 205. Clarification on fusion regulation.
- Sec. 206. Regulatory issues for nuclear facilities at brownfield sites.
- Sec. 207. Appalachian Regional Commission nuclear energy development.

## TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION

- Sec. 301. Investment by allies.
- Sec. 302. Extension of the Price-Anderson Act.

## TITLE IV—NUCLEAR FUEL CYCLE, SUPPLY CHAIN, INFRASTRUCTURE, AND WORKFORCE

- Sec. 401. Report on advanced methods of manufacturing and construction for nuclear energy applications.
- Sec. 402. Nuclear energy traineeship.
- Sec. 403. Report on Commission readiness and capacity to license additional conversion and enrichment capacity to reduce reliance on uranium from Russia.
- Sec. 404. Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.
- Sec. 405. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.
- Sec. 406. Development, qualification, and licensing of advanced nuclear fuel concepts.

## TITLE V—IMPROVING COMMISSION EFFICIENCY

- Sec. 501. Commission workforce.
- Sec. 502. Commission corporate support funding.
- Sec. 503. Performance and reporting update.

## TITLE VI—MISCELLANEOUS

- Sec. 601. Nuclear closure communities.
- Sec. 602. Technical correction.
- Sec. 603. Report on engagement with the Government of Canada with respect to nuclear waste issues in the Great Lakes Basin.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ACCIDENT TOLERANT FUEL.—The term  
4 “accident tolerant fuel” has the meaning given the  
5 term in section 107(a) of the Nuclear Energy Inno-  
6 vation and Modernization Act (Public Law 115–439;  
7 132 Stat. 5577).

8 (2) ADMINISTRATOR.—The term “Adminis-  
9 trator” means the Administrator of the Environ-  
10 mental Protection Agency.

11 (3) ADVANCED NUCLEAR FUEL.—The term  
12 “advanced nuclear fuel” means—

13 (A) advanced nuclear reactor fuel; and

14 (B) accident tolerant fuel.

15 (4) ADVANCED NUCLEAR REACTOR.—The term  
16 “advanced nuclear reactor” has the meaning given  
17 the term in section 3 of the Nuclear Energy Inno-  
18 vation and Modernization Act (42 U.S.C. 2215 note;  
19 Public Law 115–439).

20 (5) ADVANCED NUCLEAR REACTOR FUEL.—The  
21 term “advanced nuclear reactor fuel” has the mean-  
22 ing given the term in section 3 of the Nuclear En-  
23 ergy Innovation and Modernization Act (42 U.S.C.  
24 2215 note; Public Law 115–439).

4

1           (6)    APPROPRIATE    COMMITTEES    OF  
2    CONGRESS.—The term “appropriate committees of  
3    Congress” means—

4                   (A) the Committee on Environment and  
5                   Public Works of the Senate; and

6                   (B) the Committee on Energy and Com-  
7                   merce of the House of Representatives.

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

10           (8)    INSTITUTION OF HIGHER EDUCATION.—The  
11    term “institution of higher education” has the  
12    meaning given the term in section 101(a) of the  
13    Higher Education Act of 1965 (20 U.S.C. 1001(a)).

14           (9)    NATIONAL LABORATORY.—The term “Na-  
15    tional Laboratory” has the meaning given the term  
16    in section 2 of the Energy Policy Act of 2005 (42  
17    U.S.C. 15801).

18           **TITLE I—AMERICAN NUCLEAR**  
19                           **LEADERSHIP**

20           **SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT**  
21                           **AND INNOVATION ACTIVITIES.**

22           (a)    COORDINATION.—

23                   (1)    IN GENERAL.—The Commission shall—

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

## 5

1 (i) nuclear reactor import and export  
2 licensing; and

3 (ii) international regulatory coopera-  
4 tion and assistance relating to nuclear re-  
5 actors, including with countries that are  
6 members of—

7 (I) the Organisation for Eco-  
8 nomic Co-operation and Development;

9 or

10 (II) the Nuclear Energy Agency;

11 and

12 (B) support interagency and international  
13 coordination with respect to—

14 (i) the consideration of international  
15 technical standards to establish the licens-  
16 ing and regulatory basis to assist the de-  
17 sign, construction, and operation of nu-  
18 clear systems;

19 (ii) efforts to help build competent nu-  
20 clear regulatory organizations and legal  
21 frameworks in countries seeking to develop  
22 nuclear power; and

23 (iii) exchange programs and training  
24 provided to other countries relating to nu-  
25 clear regulation and oversight to improve

## 6

1 nuclear technology licensing, in accordance  
2 with paragraph (2).

3 (2) EXCHANGE PROGRAMS AND TRAINING.—

4 With respect to the exchange programs and training  
5 described in paragraph (1)(B)(iii), the Commission  
6 shall coordinate, as applicable, with—

7 (A) the Secretary of Energy;

8 (B) National Laboratories;

9 (C) the private sector; and

10 (D) institutions of higher education.

11 (b) AUTHORITY TO ESTABLISH BRANCH.—The Com-  
12 mission may establish within the Office of International  
13 Programs a branch, to be known as the “International  
14 Nuclear Reactor Export and Innovation Branch”, to carry  
15 out such international nuclear reactor export and innova-  
16 tion activities as the Commission determines to be appro-  
17 priate and within the mission of the Commission.

18 (c) EXCLUSION OF INTERNATIONAL ACTIVITIES  
19 FROM THE FEE BASE.—

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

23 (A) in subsection (a), by adding at the end  
24 the following:

1           “(4) INTERNATIONAL NUCLEAR REACTOR EX-  
2           PORT AND INNOVATION ACTIVITIES.—The Commis-  
3           sion shall identify in the annual budget justification  
4           international nuclear reactor export and innovation  
5           activities described in section 101(a) of the AD-  
6           VANCE Act of 2023.”; and

7           (B) in subsection (b)(1)(B), by adding at  
8           the end the following:

9                       “(iv) Costs for international nuclear  
10                      reactor export and innovation activities de-  
11                      scribed in section 101(a) of the AD-  
12                      VANCE Act of 2023.”.

13           (2) EFFECTIVE DATE.—The amendments made  
14           by paragraph (1) shall take effect on October 1,  
15           2024.

16           (d) SAVINGS CLAUSE.—Nothing in this section alters  
17           the authority of the Commission to license and regulate  
18           the civilian use of radioactive materials.

19           **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**  
20                       **NATIONAL SECURITY PURPOSES.**

21           (a) DEFINITION OF COVERED FUEL.—In this sec-  
22           tion, the term “covered fuel” means enriched uranium  
23           that is fabricated into fuel assemblies for nuclear reactors  
24           by an entity that—

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

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

7           (b) PROHIBITION ON UNLICENSED POSSESSION OR  
8           OWNERSHIP OF COVERED FUEL.—Unless specifically au-  
9           thorized by the Commission in a license issued under sec-  
10          tion 53 of the Atomic Energy Act of 1954 (42 U.S.C.  
11          2073) and part 70 of title 10, Code of Federal Regulations  
12          (or successor regulations), no person subject to the juris-  
13          diction of the Commission may possess or own covered  
14          fuel.

15          (c) LICENSE TO POSSESS OR OWN COVERED  
16          FUEL.—

17                 (1) CONSULTATION REQUIRED PRIOR TO  
18                 ISSUANCE.—The Commission shall not issue a li-  
19                 cense to possess or own covered fuel under section  
20                 53 of the Atomic Energy Act of 1954 (42 U.S.C.  
21                 2073) and part 70 of title 10, Code of Federal Reg-  
22                 ulations (or successor regulations), unless the Com-  
23                 mission has first consulted with the Secretary of En-  
24                 ergy and the Secretary of State before issuing the li-  
25                 cense.

1 (2) PROHIBITION ON ISSUANCE OF LICENSE.—

2 (A) IN GENERAL.—Subject to subpara-  
3 graph (C), a license to possess or own covered  
4 fuel shall not be issued if the Secretary of En-  
5 ergy and the Secretary of State make the deter-  
6 mination described in subparagraph (B).

7 (B) DETERMINATION.—

8 (i) IN GENERAL.—The determination  
9 referred to in subparagraph (A) is a deter-  
10 mination that possession or ownership, as  
11 applicable, of covered fuel poses a threat to  
12 the national security of the United States  
13 that adversely impacts the physical and  
14 economic security of the United States.

15 (ii) JOINT DETERMINATION.—A deter-  
16 mination described in clause (i) shall be  
17 jointly made by the Secretary of Energy  
18 and the Secretary of State.

19 (iii) TIMELINE.—

20 (I) NOTICE OF APPLICATION.—  
21 Not later than 30 days after the date  
22 on which the Commission receives an  
23 application for a license to possess or  
24 own covered fuel, the Commission  
25 shall notify the Secretary of Energy

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1 and the Secretary of State of the ap-  
2 plication.

3 (II) DETERMINATION.—The Sec-  
4 retary of Energy and the Secretary of  
5 State shall have a period of 180 days,  
6 beginning on the date on which the  
7 Commission notifies the Secretary of  
8 Energy and the Secretary of State  
9 under subclause (I) of an application  
10 for a license to possess or own covered  
11 fuel, in which to make the determina-  
12 tion described in clause (i).

13 (III) COMMISSION NOTIFICA-  
14 TION.—On making the determination  
15 described in clause (i), the Secretary  
16 of Energy and the Secretary of State  
17 shall immediately notify the Commis-  
18 sion.

19 (IV) CONGRESSIONAL NOTIFICA-  
20 TION.—Not later than 30 days after  
21 the date on which the Secretary of  
22 Energy and the Secretary of State no-  
23 tify the Commission under subclause  
24 (III), the Commission shall notify the

## 11

1 appropriate committees of Congress of  
2 the determination.

3 (V) PUBLIC NOTICE.—Not later  
4 than 15 days after the date on which  
5 the Commission notifies Congress  
6 under subclause (IV) of a determina-  
7 tion made under clause (i), the Com-  
8 mission shall make that determination  
9 publicly available.

10 (C) EFFECT OF NO DETERMINATION.—  
11 The prohibition described in subparagraph (A)  
12 shall not apply if the Secretary of Energy and  
13 the Secretary of State do not make the deter-  
14 mination described in subparagraph (B) by the  
15 date described in clause (iii)(II) of that sub-  
16 paragraph.

17 (d) SAVINGS CLAUSE.—Nothing in this section alters  
18 any treaty or international agreement in effect on the date  
19 of enactment of this Act.

20 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

21 (a) DEFINITION OF LOW-ENRICHED URANIUM.—In  
22 this section, the term “low-enriched uranium” means ura-  
23 nium enriched to less than 20 percent of the uranium-  
24 235 isotope.

1 (b) REQUIREMENT.—The Commission shall not issue  
2 an export license for the transfer of any item described  
3 in subsection (d) to a country described in subsection (c)  
4 unless the Commission makes a determination that such  
5 transfer will not be inimical to the common defense and  
6 security of the United States.

7 (c) COUNTRIES DESCRIBED.—A country referred to  
8 in subsection (b) is a country that—

9 (1) has not concluded and ratified an Addi-  
10 tional Protocol to its safeguards agreement with the  
11 International Atomic Energy Agency; or

12 (2) has not ratified or acceded to the amend-  
13 ment to the Convention on the Physical Protection  
14 of Nuclear Material, adopted at Vienna October 26,  
15 1979, and opened for signature at New York March  
16 3, 1980 (TIAS 11080), described in the information  
17 circular of the International Atomic Energy Agency  
18 numbered INFCIRC/274/Rev.1/Mod.1 and dated  
19 May 9, 2016 (TIAS 16-508).

20 (d) ITEMS DESCRIBED.—An item referred to in sub-  
21 section (b) includes—

22 (1) unirradiated nuclear fuel containing special  
23 nuclear material (as defined in section 11 of the  
24 Atomic Energy Act of 1954 (42 U.S.C. 2014)), ex-  
25 cluding low-enriched uranium;

1           (2) a nuclear reactor that uses nuclear fuel de-  
2       scribed in paragraph (1); and

3           (3) any plant or component listed in Appendix  
4       I to part 110 of title 10, Code of Federal Regula-  
5       tions (or successor regulations), that is involved in—

6           (A) the reprocessing of irradiated nuclear  
7       reactor fuel elements;

8           (B) the separation of plutonium; or

9           (C) the separation of the uranium-233 iso-  
10      tope.

11       (e) NOTIFICATION.—If the Commission makes a de-  
12      termination under subsection (b) that the transfer of any  
13      item described in subsection (d) to a country described in  
14      subsection (e) will not be inimical to the common defense  
15      and security of the United States, the Commission shall  
16      notify the appropriate committees of Congress.

17      **SEC. 104. COORDINATED INTERNATIONAL ENGAGEMENT.**

18       (a) DEFINITIONS.—In this section:

19           (1) EMBARKING CIVIL NUCLEAR NATION.—

20           (A) IN GENERAL.—The term “embarking  
21      civil nuclear nation” means a country that—

22           (i) does not have a civil nuclear pro-  
23      gram;

24           (ii) is in the process of developing or  
25      expanding a civil nuclear program, includ-

1 ing safeguards and a legal and regulatory  
2 framework; or

3 (iii) is in the process of selecting, de-  
4 veloping, constructing, or utilizing an ad-  
5 vanced nuclear reactor or advanced civil  
6 nuclear technologies.

7 (B) EXCLUSIONS.—The term “embarking  
8 civil nuclear nation” does not include—

- 9 (i) the People’s Republic of China;  
10 (ii) the Russian Federation;  
11 (iii) the Republic of Belarus;  
12 (iv) the Islamic Republic of Iran;  
13 (v) the Democratic People’s Republic  
14 of Korea;  
15 (vi) the Republic of Cuba;  
16 (vii) the Bolivarian Republic of Ven-  
17 ezuela;  
18 (viii) the Syrian Arab Republic;  
19 (ix) Burma; or  
20 (x) any other country—

21 (I) the property or interests in  
22 property of the government of which  
23 are blocked pursuant to the Inter-  
24 national Emergency Economic Powers  
25 Act (50 U.S.C. 1701 et seq.); or

## 15

1 (II) the government of which the  
2 Secretary of State has determined has  
3 repeatedly provided support for acts  
4 of international terrorism for purposes  
5 of—

6 (aa) section 620A(a) of the  
7 Foreign Assistance Act of 1961  
8 (22 U.S.C. 2371(a));

9 (bb) section 40(d) of the  
10 Arms Export Control Act (22  
11 U.S.C. 2780(d));

12 (cc) section 1754(c)(1)(A)(i)  
13 of the Export Control Reform  
14 Act of 2018 (50 U.S.C.  
15 4813(c)(1)(A)(i)); or

16 (dd) any other relevant pro-  
17 vision of law.

18 (2) SECRETARIES.—The term “Secretaries”  
19 means the Secretary of Commerce and the Secretary  
20 of Energy, acting—

21 (A) in consultation with each other; and

22 (B) in coordination with—

23 (i) the Secretary of State;

24 (ii) the Commission;

25 (iii) the Secretary of the Treasury;

1 (iv) the President of the Export-Im-  
2 port Bank of the United States; and

3 (v) officials of other Federal agencies,  
4 as the Secretary of Commerce determines  
5 to be appropriate.

6 (3) U.S. NUCLEAR ENERGY COMPANY.—The  
7 term “U.S. nuclear energy company” means a com-  
8 pany that—

9 (A) is organized under the laws of, or oth-  
10 erwise subject to the jurisdiction of, the United  
11 States; and

12 (B) is involved in the nuclear energy indus-  
13 try.

14 (b) INTERNATIONAL CIVIL NUCLEAR MODERNIZA-  
15 TION INITIATIVE.—

16 (1) IN GENERAL.—The Secretaries shall estab-  
17 lish and carry out, in accordance with applicable nu-  
18 clear technology export laws (including regulations),  
19 an international initiative to modernize civil nuclear  
20 outreach to embarking civil nuclear nations.

21 (2) ACTIVITIES.—In carrying out the initiative  
22 described in paragraph (1)—

23 (A) the Secretary of Commerce shall—

24 (i) expand outreach by the Executive  
25 Branch to the private investment commu-

1 nity to create public-private financing rela-  
2 tionships to assist in the export of civil nu-  
3 clear technology to embarking civil nuclear  
4 nations;

5 (ii) seek to coordinate, to the max-  
6 imum extent practicable, the work carried  
7 out by each of—

8 (I) the Commission;

9 (II) the Department of Energy;

10 (III) the Department of State;

11 (IV) the Nuclear Energy Agency;

12 (V) the International Atomic En-  
13 ergy Agency; and

14 (VI) other agencies, as the Sec-  
15 retary of Commerce determines to be  
16 appropriate; and

17 (iii) improve the regulatory framework  
18 to allow for the efficient and expeditious  
19 exporting and importing of items under the  
20 jurisdiction of the Secretary of Commerce;  
21 and

22 (B) the Secretary of Energy shall—

23 (i) assist nongovernmental organiza-  
24 tions and appropriate offices, administra-  
25 tions, agencies, laboratories, and programs

1 of the Federal Government in providing  
2 education and training to foreign govern-  
3 ments in nuclear safety, security, and safe-  
4 guards—

5 (I) through engagement with the  
6 International Atomic Energy Agency;  
7 or

8 (II) independently, if the applica-  
9 ble nongovernmental organization, of-  
10 fice, administration, agency, labora-  
11 tory, or program determines that it  
12 would be more advantageous under  
13 the circumstances to provide the ap-  
14 plicable education and training inde-  
15 pendently;

16 (ii) assist the efforts of the Inter-  
17 national Atomic Energy Agency to expand  
18 the support provided by the International  
19 Atomic Energy Agency to embarking civil  
20 nuclear nations for nuclear safety, security,  
21 and safeguards; and

22 (iii) assist U.S. nuclear energy compa-  
23 nies to integrate security and safeguards  
24 by design in international outreach carried

1 out by those U.S. nuclear energy compa-  
 2 nies.

3 (c) REPORT.—Not later than 2 years after the date  
 4 of enactment of this Act, the Secretary of Commerce, in  
 5 consultation with the Secretary of Energy, shall submit  
 6 to Congress a report describing the activities carried out  
 7 under this section.

8 **TITLE II—DEVELOPING AND DE-**  
 9 **PLOYING NEW NUCLEAR**  
 10 **TECHNOLOGIES**

11 **SEC. 201. FEES FOR ADVANCED NUCLEAR REACTOR APPLI-**  
 12 **CATION REVIEW.**

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

16 (1) by redesignating paragraphs (2) through  
 17 (15) as paragraphs (3), (6), (7), (8), (9), (10), (12),  
 18 (15), (16), (17), (18), (19), (20), and (21), respec-  
 19 tively;

20 (2) by inserting after paragraph (1) the fol-  
 21 lowing:

22 “(2) ADVANCED NUCLEAR REACTOR APPLI-  
 23 CANT.—The term ‘advanced nuclear reactor appli-  
 24 cant’ means an entity that has submitted to the  
 25 Commission an application to receive a license for an

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

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

5 “(4) ADVANCED NUCLEAR REACTOR PRE-APPLI-  
6 CANT.—The term ‘advanced nuclear reactor pre-ap-  
7 plicant’ means an entity that has submitted to the  
8 Commission a licensing project plan for the purposes  
9 of submitting a future application to receive a li-  
10 cense for an advanced nuclear reactor under the  
11 Atomic Energy Act of 1954 (42 U.S.C. 2011 et  
12 seq.).

13 “(5) AGENCY SUPPORT.—The term ‘agency  
14 support’ means the resources of the Commission  
15 that are located in executive, administrative, and  
16 other support offices of the Commission, as de-  
17 scribed in the document of the Commission entitled  
18 ‘FY 2022 Final Fee Rule Work Papers’ (or a suc-  
19 cessor document).”;

20 (4) by inserting after paragraph (10) (as so re-  
21 designated) the following:

22 “(11) HOURLY RATE FOR MISSION-DIRECT PRO-  
23 GRAM SALARIES AND BENEFITS FOR THE NUCLEAR  
24 REACTOR SAFETY PROGRAM.—The term ‘hourly rate  
25 for mission-direct program salaries and benefits for

1 the Nuclear Reactor Safety Program’ means the  
2 quotient obtained by dividing—

3 “(A) the full-time equivalent rate (within  
4 the meaning of the document of the Commis-  
5 sion entitled ‘FY 2022 Final Fee Rule Work  
6 Papers’ (or a successor document)) for mission-  
7 direct program salaries and benefits for the Nu-  
8 clear Reactor Safety Program (as determined  
9 by the Commission) for a fiscal year; by

10 “(B) the productive hours assumption for  
11 that fiscal year, determined in accordance with  
12 the formula established in the document re-  
13 ferred to in subparagraph (A) (or a successor  
14 document).”; and

15 (5) by inserting after paragraph (12) (as so re-  
16 designated) the following:

17 “(13) MISSION-DIRECT PROGRAM SALARIES  
18 AND BENEFITS FOR THE NUCLEAR REACTOR SAFETY  
19 PROGRAM.—The term ‘mission-direct program sala-  
20 ries and benefits for the Nuclear Reactor Safety  
21 Program’ means the resources of the Commission  
22 that are allocated to the Nuclear Reactor Safety  
23 Program (as determined by the Commission) to per-  
24 form core work activities committed to fulfilling the  
25 mission of the Commission, as described in the docu-

1       ment of the Commission entitled ‘FY 2022 Final  
2       Fee Rule Work Papers’ (or a successor document).

3               “(14) MISSION-INDIRECT PROGRAM SUPPORT.—  
4       The term ‘mission-indirect program support’ means  
5       the resources of the Commission that support the  
6       core mission-direct activities for the Nuclear Reactor  
7       Safety Program of the Commission (as determined  
8       by the Commission), as described in the document of  
9       the Commission entitled ‘FY 2022 Final Fee Rule  
10       Work Papers’ (or a successor document).”.

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)) (as amended by section  
14 101(c)(1)(B)) is amended by adding at the end the fol-  
15 lowing:

16               “(v) The total costs of mission-indi-  
17       rect program support and agency support  
18       that, under paragraph (2)(B), may not be  
19       included in the hourly rate charged for fees  
20       assessed to advanced nuclear reactor appli-  
21       cants.

22               “(vi) The total costs of mission-indi-  
23       rect program support and agency support  
24       that, under paragraph (2)(C), may not be  
25       included in the hourly rate charged for fees

1                   assessed to advanced nuclear reactor pre-  
2                   applicants.”.

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 hourly rate charged for fees  
18   assessed to advanced nuclear reactor applicants  
19   under this paragraph relating to the review of  
20   a submitted application described in section  
21   3(1) shall not exceed the hourly rate for mis-  
22   sion-direct program salaries and benefits for the  
23   Nuclear Reactor Safety Program.

24           “(C) ADVANCED NUCLEAR REACTOR PRE-  
25   APPLICANTS.—The hourly rate charged for fees

1           assessed to advanced nuclear reactor pre-appli-  
 2           cants under this paragraph relating to the re-  
 3           view of submitted materials as described in the  
 4           licensing project plan of an advanced nuclear  
 5           reactor pre-applicant shall not exceed the hour-  
 6           ly rate for mission-direct program salaries and  
 7           benefits for the Nuclear Reactor Safety Pro-  
 8           gram.”.

9           (d) SUNSET.—Section 102 of the Nuclear Energy In-  
 10          novation and Modernization Act (42 U.S.C. 2215) is  
 11          amended by adding at the end the following:

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

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

17          **SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.**

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

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

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

25                          “(A) a non-Federal entity; and

1                   “(B) the Tennessee Valley Authority.

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

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

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

20                   “(ii) for which the Commission makes  
21 a finding described in section 52.103(g) of  
22 title 10, Code of Federal Regulations (or  
23 successor regulations), with respect to a  
24 combined license for an advanced nuclear  
25 reactor—

26

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

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

8 “(B) AMOUNT OF AWARD.—An award  
9 under subparagraph (A) shall be in an amount  
10 equal to the total amount assessed by the Com-  
11 mission and collected under section 102(b)(2)  
12 from the eligible entity receiving the award for  
13 costs relating to the issuance of the license de-  
14 scribed in that subparagraph, including, as ap-  
15 plicable, costs relating to the issuance of an as-  
16 sociated construction permit described in sec-  
17 tion 50.23 of title 10, Code of Federal Regula-  
18 tions (or successor regulations), or early site  
19 permit (as defined in section 52.1 of that title  
20 (or successor regulations)).

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

23 “(i) the first advanced nuclear reactor  
24 for which the Commission—

27

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

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

7           “(ii) an advanced nuclear reactor  
8           that—

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

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

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

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

24           “(iii) an advanced nuclear reactor  
25           that—

28

1 “(I) is a nuclear integrated en-  
2 ergy system—

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

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

12 “(cc) the purpose of which  
13 is—

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

18 “(BB) to maximize en-  
19 ergy production and effi-  
20 ciency; and

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

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

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

7                   “(iv) an advanced reactor that—

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

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

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

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

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

25                   “(3) FEDERAL FUNDING LIMITATIONS.—

1           “(A) EXCLUSION OF TVA FUNDS.—In this  
2 paragraph, the term ‘Federal funds’ does not  
3 include funds received under the power program  
4 of the Tennessee Valley Authority.

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

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

22           “(i) to repay that award or any part  
23 of that award; or

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

4 **SEC. 203. REPORT ON UNIQUE LICENSING CONSIDER-**  
5 **ATIONS RELATING TO THE USE OF NUCLEAR**  
6 **ENERGY FOR NONELECTRIC APPLICATIONS.**

7       (a) IN GENERAL.—Not later than 270 days after the  
8 date of enactment of this Act, the Commission shall sub-  
9 mit to the appropriate committees of Congress a report  
10 (referred to in this section as the “report”) addressing any  
11 unique licensing issues or requirements relating to—

12           (1) the flexible operation of nuclear reactors,  
13       such as ramping power output and switching be-  
14       tween electricity generation and nonelectric applica-  
15       tions;

16           (2) the use of advanced nuclear reactors exclu-  
17       sively for nonelectric applications; and

18           (3) the colocation of nuclear reactors with in-  
19       dustrial plants or other facilities.

20       (b) STAKEHOLDER INPUT.—In developing the report,  
21 the Commission shall seek input from—

22           (1) the Secretary of Energy;

23           (2) the nuclear energy industry;

24           (3) technology developers;

1           (4) the industrial, chemical, and medical sec-  
2       tors;

3           (5) nongovernmental organizations; and

4           (6) other public stakeholders.

5       (c) CONTENTS.—

6           (1) IN GENERAL.—The report shall describe—

7                (A) any unique licensing issues or require-  
8                ments relating to the matters described in para-  
9                graphs (1) through (3) of subsection (a), in-  
10               cluding, with respect to the nonelectric applica-  
11               tions referred to in paragraphs (1) and (2) of  
12               that subsection, any licensing issues or require-  
13               ments relating to the use of nuclear energy in—

14                   (i) hydrogen or other liquid and gas-  
15                   eous fuel or chemical production;

16                   (ii) water desalination and wastewater  
17                   treatment;

18                   (iii) heat for industrial processes;

19                   (iv) district heating;

20                   (v) energy storage;

21                   (vi) industrial or medical isotope pro-  
22                   duction; and

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

1 (B) options for addressing those issues or  
2 requirements—

3 (i) within the existing regulatory  
4 framework of the Commission;

5 (ii) as part of the technology-inclusive  
6 regulatory framework required under sub-  
7 section (a)(4) of section 103 of the Nuclear  
8 Energy Innovation and Modernization Act  
9 (42 U.S.C. 2133 note; Public Law 115–  
10 439) or described in the report required  
11 under subsection (e) of that section (Public  
12 Law 115–439; 132 Stat. 5575); or

13 (iii) through a new rulemaking; and

14 (C) the extent to which Commission action  
15 is needed to implement any matter described in  
16 the report.

17 (2) COST ESTIMATES, BUDGETS, AND TIME-  
18 FRAMES.—The report shall include cost estimates,  
19 proposed budgets, and proposed timeframes for im-  
20 plementing risk-informed and performance-based  
21 regulatory guidance in the licensing of nuclear reac-  
22 tors for nonelectric applications.

1 **SEC. 204. ENABLING PREPARATIONS FOR THE DEMONSTRATION OF ADVANCED NUCLEAR REACTORS ON**  
2 **DEPARTMENT OF ENERGY SITES OR CRITICAL NATIONAL SECURITY INFRASTRUCTURE**  
3 **SITES.**

4  
5  
6 (a) IN GENERAL.—Section 102(b)(1)(B) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)(1)(B)) (as amended by section 201(b)) is  
7  
8  
9 amended by adding at the end the following:

10 “(vi) Costs for—

11 “(I) activities to review and approve or disapprove an application for  
12 an early site permit (as defined in section 52.1 of title 10, Code of Federal  
13 Regulations (or a successor regulation)) to demonstrate an advanced nuclear reactor on a Department of Energy site or critical national security  
14 infrastructure (as defined in section 327(d) of the John S. McCain National Defense Authorization Act for  
15 Fiscal Year 2019 (Public Law 115–232; 132 Stat. 1722)) site; and

16  
17  
18  
19  
20  
21  
22  
23  
24 “(II) pre-application activities relating to an early site permit (as defined in section 52.1 of title 10, Code  
25  
26

1 of Federal Regulations (or a successor  
 2 regulation)) to demonstrate an ad-  
 3 vanced nuclear reactor on a Depart-  
 4 ment of Energy site or critical na-  
 5 tional security infrastructure (as de-  
 6 fined in section 327(d) of the John S.  
 7 McCain National Defense Authoriza-  
 8 tion Act for Fiscal Year 2019 (Public  
 9 Law 115–232; 132 Stat. 1722))  
 10 site.”.

11 (b) EFFECTIVE DATE.—The amendment made by  
 12 subsection (a) shall take effect on October 1, 2024.

13 **SEC. 205. CLARIFICATION ON FUSION REGULATION.**

14 Section 103(a)(4) of the Nuclear Energy Innovation  
 15 and Modernization Act (42 U.S.C. 2133 note; Public Law  
 16 115–439) is amended—

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

19 “(A) IN GENERAL.—Not later”; and

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

21 “(B) EXCLUSION OF FUSION REACTORS.—

22 For purposes of subparagraph (A), the term  
 23 ‘advanced reactor applicant’ does not include an  
 24 applicant seeking a license for a fusion reac-  
 25 tor.”.

1 **SEC. 206. REGULATORY ISSUES FOR NUCLEAR FACILITIES**  
2 **AT BROWNFIELD SITES.**

3 (a) DEFINITIONS.—

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

9 (2) PRODUCTION FACILITY.—The term “pro-  
10 duction facility” has the meaning given the term in  
11 section 11 of the Atomic Energy Act of 1954 (42  
12 U.S.C. 2014).

13 (3) RETIRED FOSSIL FUEL SITE.—The term  
14 “retired fossil fuel site” means the site of 1 or more  
15 fossil fuel electric generation facilities that are re-  
16 tired or scheduled to retire, including multi-unit fa-  
17 cilities that are partially shut down.

18 (4) UTILIZATION FACILITY.—The term “utiliza-  
19 tion facility” has the meaning given the term in sec-  
20 tion 11 of the Atomic Energy Act of 1954 (42  
21 U.S.C. 2014).

22 (b) IDENTIFICATION OF REGULATORY ISSUES.—

23 (1) IN GENERAL.—Not later than 1 year after  
24 the date of enactment of this Act, the Commission  
25 shall evaluate the extent to which modification of  
26 regulations, guidance, or policy is needed to enable

1 timely licensing reviews for, and to support the over-  
2 sight of, production facilities or utilization facilities  
3 at brownfield sites.

4 (2) REQUIREMENT.—In carrying out paragraph  
5 (1), the Commission shall consider how licensing re-  
6 views for production facilities or utilization facilities  
7 at brownfield sites may be expedited by considering  
8 matters relating to siting and operating a production  
9 facility or a utilization facility at or near a retired  
10 fossil fuel site to support—

11 (A) the reuse of existing site infrastruc-  
12 ture, including—

13 (i) electric switchyard components and  
14 transmission infrastructure;

15 (ii) heat-sink components;

16 (iii) steam cycle components;

17 (iv) roads;

18 (v) railroad access; and

19 (vi) water availability;

20 (B) the use of early site permits;

21 (C) the utilization of plant parameter enve-  
22 lopes or similar standardized site parameters on  
23 a portion of a larger site; and

24 (D) the use of a standardized application  
25 for similar sites.

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

6           (c) LICENSING.—

7           (1) IN GENERAL.—Not later than 2 years after  
8 the date of enactment of this Act, the Commission  
9 shall—

10           (A) develop and implement strategies to  
11 enable timely licensing reviews for, and to sup-  
12 port the oversight of, production facilities or  
13 utilization facilities at brownfield sites, includ-  
14 ing retired fossil fuel sites; or

15           (B) initiate a rulemaking to enable timely  
16 licensing reviews for, and to support the over-  
17 sight of, of production facilities or utilization  
18 facilities at brownfield sites, including retired  
19 fossil fuel sites.

20           (2) REQUIREMENTS.—In carrying out para-  
21 graph (1), consistent with the mission of the Com-  
22 mission, the Commission shall consider matters re-  
23 lating to—

24           (A) the use of existing site infrastructure;

1 (B) existing emergency preparedness orga-  
2 nizations and planning;

3 (C) the availability of historical site-spe-  
4 cific environmental data;

5 (D) previously approved environmental re-  
6 views required by the National Environmental  
7 Policy Act of 1969 (42 U.S.C. 4321 et seq.);

8 (E) activities associated with the potential  
9 decommissioning of facilities or decontamina-  
10 tion and remediation at brownfield sites; and

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

13 (d) REPORT.—Not later than 3 years after the date  
14 of enactment of this Act, the Commission shall submit to  
15 the appropriate committees of Congress a report describ-  
16 ing the actions taken by the Commission under subsection  
17 (c).

18 **SEC. 207. APPALACHIAN REGIONAL COMMISSION NUCLEAR**  
19 **ENERGY DEVELOPMENT.**

20 (a) IN GENERAL.—Subchapter I of chapter 145 of  
21 subtitle IV of title 40, United States Code, is amended  
22 by adding at the end the following:

23 **“§ 14512. Appalachian Regional Commission nuclear**  
24 **energy development**

25 **“(a) DEFINITIONS.—In this section:**

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

6           “(2) PRODUCTION FACILITY.—The term ‘pro-  
7           duction facility’ has the meaning given the term in  
8           section 11 of the Atomic Energy Act of 1954 (42  
9           U.S.C. 2014).

10          “(3) RETIRED FOSSIL FUEL SITE.—The term  
11          ‘retired fossil fuel site’ means the site of 1 or more  
12          fossil fuel electric generation facilities that are re-  
13          tired or scheduled to retire, including multi-unit fa-  
14          cilities that are partially shut down.

15          “(4) UTILIZATION FACILITY.—The term ‘utili-  
16          zation facility’ has the meaning given the term in  
17          section 11 of the Atomic Energy Act of 1954 (42  
18          U.S.C. 2014).

19          “(b) AUTHORITY.—The Appalachian Regional Com-  
20          mission may provide technical assistance to, make grants  
21          to, enter into contracts with, or otherwise provide amounts  
22          to individuals or entities in the Appalachian region for  
23          projects and activities—

24                 “(1) to conduct research and analysis regarding  
25                 the economic impact of siting, constructing, and op-

1 erating a production facility or a utilization facility  
2 at a brownfield site, including a retired fossil fuel  
3 site;

4 “(2) to assist with workforce training or re-  
5 training to perform activities relating to the siting  
6 and operation of a production facility or a utilization  
7 facility at a brownfield site, including a retired fossil  
8 fuel site; and

9 “(3) to engage with the Nuclear Regulatory  
10 Commission, the Department of Energy, and other  
11 Federal agencies with expertise in civil nuclear en-  
12 ergy.

13 “(c) LIMITATION ON AVAILABLE AMOUNTS.—Of the  
14 cost of any project or activity eligible for a grant under  
15 this section—

16 “(1) except as provided in paragraphs (2) and  
17 (3), not more than 50 percent may be provided from  
18 amounts made available to carry out this section;

19 “(2) in the case of a project or activity to be  
20 carried out in a county for which a distressed county  
21 designation is in effect under section 14526, not  
22 more than 80 percent may be provided from  
23 amounts made available to carry out this section;  
24 and

1           “(3) in the case of a project or activity to be  
2           carried out in a county for which an at-risk county  
3           designation is in effect under section 14526, not  
4           more than 70 percent may be provided from  
5           amounts made available to carry out this section.

6           “(d) SOURCES OF ASSISTANCE.—Subject to sub-  
7           section (c), a grant provided under this section may be  
8           provided from amounts made available to carry out this  
9           section, in combination with amounts made available—

10           “(1) under any other Federal program; or

11           “(2) from any other source.

12           “(e) FEDERAL SHARE.—Notwithstanding any provi-  
13           sion of law limiting the Federal share under any other  
14           Federal program, amounts made available to carry out  
15           this section may be used to increase that Federal share,  
16           as the Appalachian Regional Commission determines to be  
17           appropriate.”.

18           (b) AUTHORIZATION OF APPROPRIATIONS.—Section  
19           14703 of title 40, United States Code, is amended—

20           (1) by redesignating subsections (e) and (f) as  
21           subsections (f) and (g), respectively; and

22           (2) by inserting after subsection (d) the fol-  
23           lowing:

24           “(e) APPALACHIAN REGIONAL COMMISSION NU-  
25           CLEAR ENERGY DEVELOPMENT.—Of the amounts made

1 available under subsection (a), \$5,000,000 may be used  
 2 to carry out section 14512 for each of fiscal years 2023  
 3 through 2026.”.

4 (c) CLERICAL AMENDMENT.—The analysis for sub-  
 5 chapter I of chapter 145 of subtitle IV of title 40, United  
 6 States Code, is amended by striking the item relating to  
 7 section 14511 and inserting the following:

“14511. Appalachian regional energy hub initiative.

“14512. Appalachian Regional Commission nuclear energy development.”.

8 **TITLE III—PRESERVING EXIST-**  
 9 **ING NUCLEAR ENERGY GEN-**  
 10 **ERATION**

11 **SEC. 301. INVESTMENT BY ALLIES.**

12 (a) IN GENERAL.—The prohibitions against issuing  
 13 certain licenses for utilization facilities to certain corpora-  
 14 tions and other entities described in the second sentence  
 15 of section 103 d. of the Atomic Energy Act of 1954 (42  
 16 U.S.C. 2133(d)) and the second sentence of section 104  
 17 d. of that Act (42 U.S.C. 2134(d)) shall not apply to an  
 18 entity described in subsection (b) if the Commission deter-  
 19 mines that issuance of the applicable license to that entity  
 20 is not inimical to—

21 (1) the common defense and security; or

22 (2) the health and safety of the public.

23 (b) ENTITIES DESCRIBED.—

1           (1) IN GENERAL.—An entity referred to in sub-  
2           section (a) is a corporation or other entity that is  
3           owned, controlled, or dominated by—

4                   (A) the government of—

5                           (i) a country that is a member of the  
6                   Organisation for Economic Co-operation  
7                   and Development on the date of enactment  
8                   of this Act, subject to paragraph (2); or

9                           (ii) the Republic of India;

10                   (B) a corporation that is incorporated in a  
11                   country described in clause (i) or (ii) of sub-  
12                   paragraph (A); or

13                   (C) an alien who is a national of a country  
14                   described in clause (i) or (ii) of subparagraph  
15                   (A).

16           (2) EXCLUSION.—An entity described in para-  
17           graph (1)(A)(i) is not an entity referred to in sub-  
18           section (a), and subsection (a) shall not apply to  
19           that entity, if—

20                   (A) the entity (or any department, agency,  
21                   or instrumentality of the entity) is a person  
22                   subject to sanctions under section 231 of the  
23                   Countering America’s Adversaries Through  
24                   Sanctions Act (22 U.S.C. 9525); or

1 (B) any citizen of the entity, or any entity  
2 organized under the laws of, or otherwise sub-  
3 ject to the jurisdiction of, the entity, is a person  
4 subject to sanctions under that section.

5 (c) TECHNICAL AMENDMENT.—Section 103 d. of the  
6 Atomic Energy Act of 1954 (42 U.S.C. 2133(d)) is  
7 amended, in the second sentence, by striking “any any”  
8 and inserting “any”.

9 (d) SAVINGS CLAUSE.—Nothing in this section af-  
10 fects the requirements of section 721 of the Defense Pro-  
11 duction Act of 1950 (50 U.S.C. 4565).

12 **SEC. 302. EXTENSION OF THE PRICE-ANDERSON ACT.**

13 (a) EXTENSION.—Section 170 of the Atomic Energy  
14 Act of 1954 (42 U.S.C. 2210) (commonly known as the  
15 “Price-Anderson Act”) is amended by striking “December  
16 31, 2025” each place it appears and inserting “December  
17 31, 2045”.

18 (b) REPORT.—Section 170 p. of the Atomic Energy  
19 Act of 1954 (42 U.S.C. 2210(p)) (commonly known as the  
20 “Price-Anderson Act”) is amended by striking “December  
21 31, 2021” and inserting “December 31, 2041”.

1 **TITLE IV—NUCLEAR FUEL**  
2 **CYCLE, SUPPLY CHAIN, IN-**  
3 **FRASTRUCTURE, AND WORK-**  
4 **FORCE**

5 **SEC. 401. REPORT ON ADVANCED METHODS OF MANUFAC-**  
6 **TURING AND CONSTRUCTION FOR NUCLEAR**  
7 **ENERGY APPLICATIONS.**

8 (a) IN GENERAL.—Not later than 180 days after the  
9 date of enactment of this Act, the Commission shall sub-  
10 mit to the appropriate committees of Congress a report  
11 (referred to in this section as the “report”) on manufac-  
12 turing and construction for nuclear energy applications.

13 (b) STAKEHOLDER INPUT.—In developing the report,  
14 the Commission shall seek input from—

- 15 (1) the Secretary of Energy;
- 16 (2) the nuclear energy industry;
- 17 (3) National Laboratories;
- 18 (4) institutions of higher education;
- 19 (5) nuclear and manufacturing technology de-  
20 velopers;
- 21 (6) the manufacturing and construction indus-  
22 tries, including manufacturing and construction  
23 companies with operating facilities in the United  
24 States;
- 25 (7) standards development organizations;

- 1 (8) labor unions;
- 2 (9) nongovernmental organizations; and
- 3 (10) other public stakeholders.
- 4 (c) CONTENTS.—
- 5 (1) IN GENERAL.—The report shall—
- 6 (A) examine any unique licensing issues or
- 7 requirements relating to the use of innovative—
- 8 (i) advanced manufacturing processes;
- 9 (ii) advanced construction techniques;
- 10 and
- 11 (iii) rapid improvement or iterative in-
- 12 novation processes;
- 13 (B) examine—
- 14 (i) the requirements for nuclear-grade
- 15 components in manufacturing and con-
- 16 struction for nuclear energy applications;
- 17 (ii) opportunities to use standard ma-
- 18 terials, parts, or components in manufac-
- 19 turing and construction for nuclear energy
- 20 applications;
- 21 (iii) opportunities to use standard ma-
- 22 terials that are in compliance with existing
- 23 codes to provide acceptable approaches to
- 24 support or encapsulate new materials that
- 25 do not yet have applicable codes; and

1 (iv) requirements relating to the  
2 transport of a fueled advanced nuclear re-  
3 actor core from a manufacturing licensee  
4 to a licensee that holds a license to con-  
5 struct and operate a facility at a particular  
6 site;

7 (C) identify any safety aspects of innova-  
8 tive advanced manufacturing processes and ad-  
9 vanced construction techniques that are not ad-  
10 dressed by existing codes and standards, so that  
11 generic guidance may be updated or created, as  
12 necessary;

13 (D) identify options for addressing the  
14 issues, requirements, and opportunities exam-  
15 ined under subparagraphs (A) and (B)—

16 (i) within the existing regulatory  
17 framework; or

18 (ii) through a new rulemaking;

19 (E) identify how addressing the issues, re-  
20 quirements, and opportunities examined under  
21 subparagraphs (A) and (B) will impact oppor-  
22 tunities for domestic nuclear manufacturing  
23 and construction developers; and

1 (F) describe the extent to which Commis-  
2 sion action is needed to implement any matter  
3 described in the report.

4 (2) COST ESTIMATES, BUDGETS, AND TIME-  
5 FRAMES.—The report shall include cost estimates,  
6 proposed budgets, and proposed timeframes for im-  
7 plementing risk-informed and performance-based  
8 regulatory guidance for manufacturing and construc-  
9 tion for nuclear energy applications.

10 **SEC. 402. NUCLEAR ENERGY TRAINEESHIP.**

11 Section 313 of division C of the Omnibus Appropria-  
12 tions Act, 2009 (42 U.S.C. 16274a), is amended—

13 (1) in subsection (a), by striking “Nuclear Reg-  
14 ulatory”;

15 (2) in subsection (b)(1), in the matter pre-  
16 ceding subparagraph (A), by inserting “and sub-  
17 section (c)” after “paragraph (2)”;

18 (3) in subsection (c)—

19 (A) by redesignating paragraph (2) as  
20 paragraph (5); and

21 (B) by striking paragraph (1) and insert-  
22 ing the following:

23 “(1) **ADVANCED NUCLEAR REACTOR.**—The  
24 term ‘advanced nuclear reactor’ has the meaning

1 given the term in section 951(b) of the Energy Pol-  
2 icy Act of 2005 (42 U.S.C. 16271(b)).

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

5 “(3) INSTITUTION OF HIGHER EDUCATION.—  
6 The term ‘institution of higher education’ has the  
7 meaning given the term in section 2 of the Energy  
8 Policy Act of 2005 (42 U.S.C. 15801).

9 “(4) NATIONAL LABORATORY.—The term ‘Na-  
10 tional Laboratory’ has the meaning given the term  
11 in section 951(b) of the Energy Policy Act of 2005  
12 (42 U.S.C. 16271(b)).”;

13 (4) in subsection (d)(2), by striking “Nuclear  
14 Regulatory”;

15 (5) by redesignating subsections (c) and (d) as  
16 subsections (d) and (e), respectively; and

17 (6) by inserting after subsection (b) the fol-  
18 lowing:

19 “(c) NUCLEAR ENERGY TRAINEESHIP SUBPRO-  
20 GRAM.—

21 “(1) IN GENERAL.—The Commission shall es-  
22 tablish, as a subprogram of the Program, a nuclear  
23 energy traineeship subprogram under which the  
24 Commission, in coordination with institutions of  
25 higher education and trade schools, shall competi-

1       tively award traineeships that provide focused train-  
2       ing to meet critical mission needs of the Commission  
3       and nuclear workforce needs, including needs relat-  
4       ing to the nuclear tradecraft workforce.

5       “(2) REQUIREMENTS.—In carrying out the nu-  
6       clear energy traineeship subprogram described in  
7       paragraph (1), the Commission shall—

8               “(A) coordinate with the Secretary of En-  
9       ergy to prioritize the funding of traineeships  
10       that focus on—

11                       “(i) nuclear workforce needs; and

12                       “(ii) critical mission needs of the  
13       Commission;

14               “(B) encourage appropriate partnerships  
15       among—

16                       “(i) National Laboratories;

17                       “(ii) institutions of higher education;

18                       “(iii) trade schools;

19                       “(iv) the nuclear energy industry; and

20                       “(v) other entities, as the Commission  
21       determines to be appropriate; and

22               “(C) on an annual basis, evaluate nuclear  
23       workforce needs for the purpose of imple-  
24       menting traineeships in focused topical areas  
25       that—

1                   “(i) address the workforce needs of  
2                   the nuclear energy community; and

3                   “(ii) support critical mission needs of  
4                   the Commission.”.

5 **SEC. 403. REPORT ON COMMISSION READINESS AND CA-**  
6 **PACITY TO LICENSE ADDITIONAL CONVER-**  
7 **SION AND ENRICHMENT CAPACITY TO RE-**  
8 **DUCE RELIANCE ON URANIUM FROM RUSSIA.**

9           (a) IN GENERAL.—Not later than 180 days after the  
10 date of enactment of this Act, the Commission shall sub-  
11 mit to the appropriate committees of Congress a report  
12 on the readiness and capacity of the Commission to license  
13 additional conversion and enrichment capacity at existing  
14 and new fuel cycle facilities to reduce reliance on nuclear  
15 fuel that is recovered, converted, enriched, or fabricated  
16 by an entity that—

17                   (1) is owned or controlled by the Government of  
18                   the Russian Federation; or

19                   (2) is organized under the laws of, or otherwise  
20                   subject to the jurisdiction of, the Russian Federa-  
21                   tion.

22           (b) CONTENTS.—The report required under sub-  
23 section (a) shall analyze how the capacity of the Commis-  
24 sion to license additional conversion and enrichment ca-  
25 pacity at existing and new fuel cycle facilities may conflict

1 with or restrict the readiness of the Commission to review  
2 advanced nuclear reactor applications.

3 **SEC. 404. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**  
4 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**  
5 **VENTORY IN THE UNITED STATES.**

6 (a) DEFINITIONS.—In this section:

7 (1) HIGH-LEVEL RADIOACTIVE WASTE.—The  
8 term “high-level radioactive waste” has the meaning  
9 given the term in section 2 of the Nuclear Waste  
10 Policy Act of 1982 (42 U.S.C. 10101).

11 (2) SPENT NUCLEAR FUEL.—The term “spent  
12 nuclear fuel” has the meaning given the term in sec-  
13 tion 2 of the Nuclear Waste Policy Act of 1982 (42  
14 U.S.C. 10101).

15 (3) STANDARD CONTRACT.—The term “stand-  
16 ard contract” has the meaning given the term “con-  
17 tract” in section 961.3 of title 10, Code of Federal  
18 Regulations (or a successor regulation).

19 (b) REPORT.—Not later than January 1, 2025, and  
20 annually thereafter, the Secretary of Energy shall submit  
21 to Congress a report that describes—

22 (1) the annual and cumulative amount of pay-  
23 ments made by the United States to the holder of  
24 a standard contract due to a partial breach of con-  
25 tract under the Nuclear Waste Policy Act of 1982

1 (42 U.S.C. 10101 et seq.) resulting in financial  
2 damages to the holder;

3 (2) the cumulative amount spent by the Depart-  
4 ment of Energy since fiscal year 2008 to reduce fu-  
5 ture payments projected to be made by the United  
6 States to any holder of a standard contract due to  
7 a partial breach of contract under the Nuclear  
8 Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.);

9 (3) the cumulative amount spent by the Depart-  
10 ment of Energy to store, manage, and dispose of  
11 spent nuclear fuel and high-level radioactive waste in  
12 the United States as of the date of the report;

13 (4) the projected lifecycle costs to store, man-  
14 age, transport, and dispose of the projected inven-  
15 tory of spent nuclear fuel and high-level radioactive  
16 waste in the United States, including spent nuclear  
17 fuel and high-level radioactive waste expected to be  
18 generated from existing reactors through 2050;

19 (5) any mechanisms for better accounting of li-  
20 abilities for the lifecycle costs of the spent nuclear  
21 fuel and high-level radioactive waste inventory in the  
22 United States;

23 (6) any recommendations for improving the  
24 methods used by the Department of Energy for the

1 accounting of spent nuclear fuel and high-level ra-  
 2 dioactive waste costs and liabilities;

3 (7) any actions taken in the previous fiscal year  
 4 by the Department of Energy with respect to in-  
 5 terim storage; and

6 (8) any activities taken in the previous fiscal  
 7 year by the Department of Energy to develop and  
 8 deploy nuclear technologies and fuels that enhance  
 9 the safe transportation or storage of spent nuclear  
 10 fuel or high-level radioactive waste, including tech-  
 11 nologies to protect against seismic, flooding, and  
 12 other extreme weather events.

13 **SEC. 405. AUTHORIZATION OF APPROPRIATIONS FOR**  
 14 **SUPERFUND ACTIONS AT ABANDONED MIN-**  
 15 **ING SITES ON TRIBAL LAND.**

16 (a) DEFINITIONS.—In this section:

17 (1) ELIGIBLE NON-NPL SITE.—The term “eli-  
 18 gible non-NPL site” means a site—

19 (A) that is not on the National Priorities  
 20 List; but

21 (B) with respect to which the Adminis-  
 22 trator determines that—

23 (i) the site would be eligible for listing  
 24 on the National Priorities List based on  
 25 the presence of hazards from contamina-

1           tion at the site, applying the hazard rank-  
2           ing system described in section 105(c) of  
3           the Comprehensive Environmental Re-  
4           sponse, Compensation, and Liability Act of  
5           1980 (42 U.S.C. 9605(c)); and

6                   (ii) for removal site evaluations, engi-  
7           neering evaluations/cost analyses, remedial  
8           planning activities, remedial investigations  
9           and feasibility studies, and other actions  
10          taken pursuant to section 104(b) of that  
11          Act (42 U.S.C. 9604), the site—

12                   (I) has undergone a pre-  
13           CERCLA screening; and

14                   (II) is included in the Superfund  
15          Enterprise Management System.

16          (2) INDIAN TRIBE.—The term “Indian Tribe”  
17          has the meaning given the term in section 4 of the  
18          Indian Self-Determination and Education Assistance  
19          Act (25 U.S.C. 5304).

20          (3) NATIONAL PRIORITIES LIST.—The term  
21          “National Priorities List” means the National Prior-  
22          ities List developed by the President in accordance  
23          with section 105(a)(8)(B) of the Comprehensive En-  
24          vironmental Response, Compensation, and Liability  
25          Act of 1980 (42 U.S.C. 9605(a)(8)(B)).

1           (4) REMEDIAL ACTION; REMOVAL; RESPONSE.—  
2       The terms “remedial action”, “removal”, and “re-  
3       sponse” have the meanings given those terms in sec-  
4       tion 101 of the Comprehensive Environmental Re-  
5       sponse, Compensation, and Liability Act of 1980 (42  
6       U.S.C. 9601).

7           (5) TRIBAL LAND.—The term “Tribal land”  
8       has the meaning given the term “Indian country” in  
9       section 1151 of title 18, United States Code.

10       (b) AUTHORIZATION OF APPROPRIATIONS.—There  
11       are authorized to be appropriated for each of fiscal years  
12       2023 through 2032, to remain available until expended—

13           (1) \$97,000,000 to the Administrator to carry  
14       out this section (except for subsection (d)); and

15           (2) \$3,000,000 to the Administrator of the  
16       Agency for Toxic Substances and Disease Registry  
17       to carry out subsection (d).

18       (c) USES OF AMOUNTS.—Amounts appropriated  
19       under subsection (b)(1) shall be used by the Adminis-  
20       trator—

21           (1) to carry out removal actions on abandoned  
22       mine land located on Tribal land;

23           (2) to carry out response actions, including re-  
24       moval and remedial planning activities, removal and  
25       remedial studies, remedial actions, and other actions

1 taken pursuant to section 104(b) of the Comprehen-  
2 sive Environmental Response, Compensation, and  
3 Liability Act of 1980 (42 U.S.C. 9604(b)) on aban-  
4 doned mine land located on Tribal land at—

5 (A) eligible non-NPL sites; and

6 (B) sites listed on the National Priorities  
7 List; and

8 (3) to make grants under subsection (e).

9 (d) HEALTH ASSESSMENTS.—Subject to the avail-  
10 ability of appropriations, the Agency for Toxic Substances  
11 and Disease Registry, in coordination with Tribal health  
12 authorities, shall perform 1 or more health assessments  
13 at each eligible non-NPL site that is located on Tribal  
14 land, in accordance with section 104(i)(6) of the Com-  
15 prehensive Environmental Response, Compensation, and  
16 Liability Act of 1980 (42 U.S.C. 9604(i)(6)).

17 (e) TRIBAL GRANTS.—

18 (1) IN GENERAL.—The Administrator may use  
19 amounts appropriated under subsection (b)(1) to  
20 make grants to eligible entities described in para-  
21 graph (2) for the purposes described in paragraph  
22 (3).

23 (2) ELIGIBLE ENTITIES DESCRIBED.—An eligi-  
24 ble entity referred to in paragraph (1) is—

1 (A) the governing body of an Indian Tribe;

2 or

3 (B) a legally established organization of  
4 Indians that—

5 (i) is controlled, sanctioned, or char-  
6 tered by the governing bodies of 2 or more  
7 Indian Tribes to be served, or that is  
8 democratically elected by the adult mem-  
9 bers of the Indian community to be served,  
10 by that organization; and

11 (ii) includes the maximum participa-  
12 tion of Indians in all phases of the activi-  
13 ties of that organization.

14 (3) USE OF GRANT FUNDS.—A grant under this  
15 subsection shall be used—

16 (A) in accordance with the second sentence  
17 of section 117(e)(1) of the Comprehensive Envi-  
18 ronmental Response, Compensation, and Liabil-  
19 ity Act of 1980 (42 U.S.C. 9617(e)(1));

20 (B) for obtaining technical assistance in  
21 carrying out response actions under subpara-  
22 graph (C); or

23 (C) for carrying out response actions, if  
24 the Administrator determines that the Indian  
25 Tribe has the capability to carry out any or all

1 of those response actions in accordance with the  
2 criteria and priorities established pursuant to  
3 section 105(a)(8) of the Comprehensive Envi-  
4 ronmental Response, Compensation, and Liabil-  
5 ity Act of 1980 (42 U.S.C. 9605(a)(8)).

6 (4) APPLICATIONS.—An eligible entity desiring  
7 a grant under this subsection shall submit to the  
8 Administrator an application at such time, in such  
9 manner, and containing such information as the Ad-  
10 ministrator may require.

11 (5) LIMITATIONS.—A grant under this sub-  
12 section shall be governed by the rules, procedures,  
13 and limitations described in section 117(e)(2) of the  
14 Comprehensive Environmental Response, Compensa-  
15 tion, and Liability Act of 1980 (42 U.S.C.  
16 9617(e)(2)), except that—

17 (A) “Administrator of the Environmental  
18 Protection Agency” shall be substituted for  
19 “President” each place it appears in that sec-  
20 tion; and

21 (B) in the first sentence of that section,  
22 “under section 405 of the ADVANCE Act of  
23 2023” shall be substituted for “under this sub-  
24 section”.

1 (f) STATUTE OF LIMITATIONS.—If a remedial action  
2 described in subsection (e)(2) is scheduled at an eligible  
3 non-NPL site, no action may be commenced for damages  
4 (as defined in section 101 of the Comprehensive Environ-  
5 mental Response, Compensation, and Liability Act of  
6 1980 (42 U.S.C. 9601)) with respect to that eligible non-  
7 NPL site unless the action is commenced within the time-  
8 frame provided for such actions with respect to facilities  
9 on the National Priorities List in the first sentence of the  
10 matter following subparagraph (B) of section 113(g)(1)  
11 of that Act (42 U.S.C. 9613(g)(1)).

12 (g) COORDINATION.—The Administrator shall coordi-  
13 nate with the Indian Tribe on whose land the applicable  
14 site is located in—

15 (1) selecting and prioritizing sites for response  
16 actions under paragraphs (1) and (2) of subsection  
17 (c); and

18 (2) carrying out those response actions.

19 **SEC. 406. DEVELOPMENT, QUALIFICATION, AND LICENSING**  
20 **OF ADVANCED NUCLEAR FUEL CONCEPTS.**

21 (a) IN GENERAL.—The Commission shall establish  
22 an initiative to enhance preparedness and coordination  
23 with respect to the qualification and licensing of advanced  
24 nuclear fuel.

1 (b) AGENCY COORDINATION.—Not later than 180  
2 days after the date of enactment of this Act, the Commis-  
3 sion and the Secretary of Energy shall enter into a memo-  
4 randum of understanding—

5 (1) to share technical expertise and knowledge  
6 through—

7 (A) enabling the testing and demonstration  
8 of accident tolerant fuels for existing commer-  
9 cial nuclear reactors and advanced nuclear reac-  
10 tor fuel concepts to be proposed and funded, in  
11 whole or in part, by the private sector;

12 (B) operating a database to store and  
13 share data and knowledge relevant to nuclear  
14 science and engineering between Federal agen-  
15 cies and the private sector;

16 (C) leveraging expertise with respect to  
17 safety analysis and research relating to ad-  
18 vanced nuclear fuel; and

19 (D) enabling technical staff to actively ob-  
20 serve and learn about technologies, with an em-  
21 phasis on identification of additional informa-  
22 tion needed with respect to advanced nuclear  
23 fuel; and

24 (2) to ensure that—

1 (A) the Department of Energy has suffi-  
2 cient technical expertise to support the timely  
3 research, development, demonstration, and com-  
4 mercial application of advanced nuclear fuel;

5 (B) the Commission has sufficient tech-  
6 nical expertise to support the evaluation of ap-  
7 plications for licenses, permits, and design cer-  
8 tifications and other requests for regulatory ap-  
9 proval for advanced nuclear fuel;

10 (C)(i) the Department of Energy main-  
11 tains and develops the facilities necessary to en-  
12 able the timely research, development, dem-  
13 onstration, and commercial application by the  
14 civilian nuclear industry of advanced nuclear  
15 fuel; and

16 (ii) the Commission has access to the fa-  
17 cilities described in clause (i), as needed; and

18 (D) the Commission consults, as appro-  
19 priate, with the modeling and simulation ex-  
20 perts at the Office of Nuclear Energy of the  
21 Department of Energy, at the National Labora-  
22 tories, and within industry fuel vendor teams in  
23 cooperative agreements with the Department of  
24 Energy to leverage physics-based computer  
25 modeling and simulation capabilities.

1 (c) REPORT.—

2 (1) IN GENERAL.—Not later than 1 year after  
3 the date of enactment of this Act, the Commission  
4 shall submit to the appropriate committees of Con-  
5 gress a report describing the efforts of the Commis-  
6 sion under subsection (a), including—

7 (A) an assessment of the preparedness of  
8 the Commission to review and qualify for use—

9 (i) accident tolerant fuel;

10 (ii) ceramic cladding materials;

11 (iii) fuels containing silicon carbide;

12 (iv) high-assay, low-enriched uranium  
13 fuels;

14 (v) molten-salt based liquid fuels;

15 (vi) fuels derived from spent nuclear  
16 fuel or depleted uranium; and

17 (vii) other related fuel concepts, as de-  
18 termined by the Commission;

19 (B) activities planned or undertaken under  
20 the memorandum of understanding described in  
21 subsection (b);

22 (C) an accounting of the areas of research  
23 needed with respect to advanced nuclear fuel;  
24 and

1 (D) any other challenges or considerations  
2 identified by the Commission.

3 (2) CONSULTATION.—In developing the report  
4 under paragraph (1), the Commission shall seek  
5 input from—

6 (A) the Secretary of Energy;

7 (B) National Laboratories;

8 (C) the nuclear energy industry;

9 (D) technology developers;

10 (E) nongovernmental organizations; and

11 (F) other public stakeholders.

12 **TITLE V—IMPROVING**  
13 **COMMISSION EFFICIENCY**

14 **SEC. 501. COMMISSION WORKFORCE.**

15 (a) DEFINITION OF CHAIRMAN.—In this section, the  
16 term “Chairman” means the Chairman of the Commis-  
17 sion.

18 (b) HIRING BONUS AND APPOINTMENT AUTHOR-  
19 ITY.—

20 (1) IN GENERAL.—Notwithstanding section 161  
21 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
22 2201(d)), any provision of Reorganization Plan No.  
23 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and any  
24 provision of title 5, United States Code, governing  
25 appointments and General Schedule classification

1 and pay rates, the Chairman may, subject to the  
2 limitations described in paragraph (3), and without  
3 regard to the civil service laws—

4 (A) establish the positions described in  
5 paragraph (2); and

6 (B) appoint persons to the positions estab-  
7 lished under subparagraph (A).

8 (2) POSITIONS DESCRIBED.—The positions re-  
9 ferred to in paragraph (1)(A) are—

10 (A) permanent or term-limited positions  
11 with highly specialized scientific, engineering,  
12 and technical competencies to address a critical  
13 licensing or regulatory oversight need for the  
14 Commission, including—

15 (i) health physicist;

16 (ii) reactor operations engineer;

17 (iii) human factors analyst or engi-  
18 neer;

19 (iv) risk and reliability analyst or en-  
20 gineer;

21 (v) licensing project manager;

22 (vi) reactor engineer for severe acci-  
23 dents;

24 (vii) geotechnical engineer;

25 (viii) structural engineer;

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1 (ix) reactor systems engineer;

2 (x) reactor engineer;

3 (xi) radiation scientist; and

4 (xii) electronics engineer; or

5 (B) permanent or term-limited positions to  
6 be filled by exceptionally well-qualified individ-  
7 uals that the Chairman, subject to subsection  
8 (e), determines are necessary to fulfill the mis-  
9 sion of the Commission.

10 (3) LIMITATIONS.—

11 (A) IN GENERAL.—Appointments under  
12 paragraph (1)(B) may be made to not more  
13 than—

14 (i)(I) 15 permanent positions de-  
15 scribed in paragraph (2)(A) during fiscal  
16 year 2024; and

17 (II) 10 permanent positions described  
18 in paragraph (2)(A) during each fiscal  
19 year thereafter;

20 (ii)(I) 15 term-limited positions de-  
21 scribed in paragraph (2)(A) during fiscal  
22 year 2024; and

23 (II) 10 term-limited positions de-  
24 scribed in paragraph (2)(A) during each  
25 fiscal year thereafter;

1 (iii)(I) 15 permanent positions de-  
2 scribed in paragraph (2)(B) during fiscal  
3 year 2024; and

4 (II) 10 permanent positions described  
5 in paragraph (2)(B) during each fiscal  
6 year thereafter; and

7 (iv)(I) 15 term-limited positions de-  
8 scribed in paragraph (2)(B) during fiscal  
9 year 2024; and

10 (II) 10 term-limited positions de-  
11 scribed in paragraph (2)(B) during each  
12 fiscal year thereafter.

13 (B) TERM OF TERM-LIMITED APPOINT-  
14 MENT.—If a person is appointed to a term-lim-  
15 ited position described in subparagraph (A) or  
16 (B) of paragraph (2), the term of that appoint-  
17 ment shall not exceed 4 years.

18 (C) STAFF POSITIONS.—Subject to sub-  
19 section (e), appointments made to positions es-  
20 tablished under this subsection shall be to a  
21 range of staff positions that are of entry, mid,  
22 and senior levels, to the extent practicable.

23 (4) HIRING BONUS.—The Commission may pay  
24 a person appointed under paragraph (1) a 1-time

1 hiring bonus in an amount not to exceed the least  
2 of—

3 (A) \$25,000;

4 (B) the amount equal to 15 percent of the  
5 annual rate of basic pay of the employee; and

6 (C) the amount of the limitation that is  
7 applicable for a calendar year under section  
8 5307(a)(1) of title 5, United States Code.

9 (c) COMPENSATION AND APPOINTMENT AUTHOR-  
10 ITY.—

11 (1) IN GENERAL.—Notwithstanding section 161  
12 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
13 2201(d)), any provision of Reorganization Plan No.  
14 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and chap-  
15 ter 51, and subchapter III of chapter 53, of title 5,  
16 United States Code, the Chairman, subject to the  
17 limitations described in paragraph (3) and without  
18 regard to the civil service laws, may—

19 (A) establish and fix the rates of basic pay  
20 for the positions described in paragraph (2);  
21 and

22 (B) appoint persons to the positions estab-  
23 lished under subparagraph (A).

24 (2) POSITIONS DESCRIBED.—The positions re-  
25 ferred to in paragraph (1)(A) are—

1 (A) positions with highly specialized sci-  
2 entific, engineering, and technical competencies  
3 to address a critical need for the Commission,  
4 including—

- 5 (i) health physicist;  
6 (ii) reactor operations engineer;  
7 (iii) human factors analyst or engi-  
8 neer;  
9 (iv) risk and reliability analyst or en-  
10 gineer;  
11 (v) licensing project manager;  
12 (vi) reactor engineer for severe acci-  
13 dents;  
14 (vii) geotechnical engineer;  
15 (viii) structural engineer;  
16 (ix) reactor systems engineer;  
17 (x) reactor engineer;  
18 (xi) radiation scientist;  
19 (xii) seismic engineer; and  
20 (xiii) electronics engineer; or

21 (B) positions to be filled by exceptionally  
22 well-qualified persons that the Chairman, sub-  
23 ject to subsection (e), determines are necessary  
24 to fulfill the mission of the Commission.

25 (3) LIMITATIONS.—

1           (A) IN GENERAL.—The annual rate of  
2           basic pay for a position described in paragraph  
3           (2) may not exceed the per annum rate of sal-  
4           ary payable for level III of the Executive Sched-  
5           ule under section 5314 of title 5, United States  
6           Code.

7           (B) NUMBER OF POSITIONS.—Appoint-  
8           ments under paragraph (1)(B) may be made to  
9           not more than—

10           (i) 10 positions described in para-  
11           graph (2)(A) per fiscal year, not to exceed  
12           a total of 50 positions; and

13           (ii) 10 positions described in para-  
14           graph (2)(B) per fiscal year, not to exceed  
15           a total of 50 positions.

16           (4) PERFORMANCE BONUS.—

17           (A) IN GENERAL.—Subject to subpara-  
18           graphs (B) and (C), an employee may be paid  
19           a 1-time performance bonus in an amount not  
20           to exceed the least of—

21           (i) \$25,000;

22           (ii) the amount equal to 15 percent of  
23           the annual rate of basic pay of the person;  
24           and

1 (iii) 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) PERFORMANCE.—Any 1-time perform-  
6 ance bonus under subparagraph (A) shall be  
7 made to a person who demonstrated exceptional  
8 performance in the applicable fiscal year, in-  
9 cluding—

10 (i) leading a project team in a timely,  
11 efficient, and predictable licensing review  
12 to enable the safe use of nuclear tech-  
13 nology;

14 (ii) making significant contributions  
15 to a timely, efficient, and predictable li-  
16 censing review to enable the safe use of  
17 nuclear technology;

18 (iii) the resolution of novel or first-of-  
19 a-kind regulatory issues;

20 (iv) developing or implementing licens-  
21 ing or regulatory oversight processes to im-  
22 prove the effectiveness of the Commission;  
23 and

24 (v) other performance, as determined  
25 by the Chairman, subject to subsection (e).

1           (C) LIMITATIONS.—The Commission may  
2           pay a 1-time performance bonus under subpara-  
3           graph (A) for not more than 15 persons per fis-  
4           cal year, and a person who receives a 1-time  
5           performance bonus under that subparagraph  
6           may not receive another 1-time performance  
7           bonus under that subparagraph for a period of  
8           5 years thereafter.

9           (d) ANNUAL SOLICITATION FOR NUCLEAR REGU-  
10          LATOR APPRENTICESHIP NETWORK APPLICATIONS.—The  
11          Chairman, on an annual basis, shall solicit applications for  
12          the Nuclear Regulator Apprenticeship Network.

13          (e) APPLICATION OF MERIT SYSTEM PRINCIPLES.—  
14          To the maximum extent practicable, appointments under  
15          subsections (b)(1) and (c)(1) and any 1-time performance  
16          bonus under subsection (c)(4) shall be made in accordance  
17          with the merit system principles set forth in section 2301  
18          of title 5, United States Code.

19          (f) DELEGATION.—Pursuant to Reorganization Plan  
20          No. 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), the Chair-  
21          man shall delegate, subject to the direction and super-  
22          vision of the Chairman, the authority provided by sub-  
23          sections (b), (c), and (d) to the Executive Director for Op-  
24          erations of the Commission.

1 (g) ANNUAL REPORT.—The Commission shall in-  
2 clude in the annual budget justification of the Commis-  
3 sion—

4 (1) information that describes—

5 (A) the total number of and the positions  
6 of the persons appointed under the authority  
7 provided by subsection (b);

8 (B) the total number of and the positions  
9 of the persons paid at the rate determined  
10 under the authority provided by subsection  
11 (c)(1);

12 (C) the total number of and the positions  
13 of the persons paid a 1-time performance bonus  
14 under the authority provided by subsection  
15 (c)(4);

16 (D) how the authority provided by sub-  
17 sections (b) and (c) is being used, and has been  
18 used during the previous fiscal year, to address  
19 the hiring and retention needs of the Commis-  
20 sion with respect to the positions described in  
21 those subsections to which that authority is ap-  
22 plicable;

23 (E) if the authority provided by sub-  
24 sections (b) and (c) is not being used, or has

1 not been used, the reasons, including a jus-  
2 tification, for not using that authority; and

3 (F) the attrition levels with respect to the  
4 term-limited appointments made under sub-  
5 section (b), including, with respect to persons  
6 leaving a position before completion of the ap-  
7 plicable term of service, the average length of  
8 service as a percentage of the term of service;  
9 (2) an assessment of—

10 (A) the current critical workforce needs of  
11 the Commission, including any critical work-  
12 force needs that the Commission anticipates in  
13 the subsequent 5 fiscal years; and

14 (B) further skillsets that are or will be  
15 needed for the Commission to fulfill the licens-  
16 ing and oversight responsibilities of the Com-  
17 mission; and

18 (3) the plans of the Commission to assess, de-  
19 velop, and implement updated staff performance  
20 standards, training procedures, and schedules.

21 (h) REPORT ON ATTRITION AND EFFECTIVENESS.—  
22 Not later than September 30, 2032, the Commission shall  
23 submit to the Committees on Appropriations and Environ-  
24 ment and Public Works of the Senate and the Committees

1 on Appropriations and Energy and Commerce of the  
2 House of Representatives a report that—

3 (1) describes the attrition levels with respect to  
4 the term-limited appointments made under sub-  
5 section (b), including, with respect to persons leav-  
6 ing a position before completion of the applicable  
7 term of service, the average length of service as a  
8 percentage of the term of service;

9 (2) provides the views of the Commission on the  
10 effectiveness of the authorities provided by sub-  
11 sections (b) and (c) in helping the Commission fulfill  
12 the mission of the Commission; and

13 (3) makes recommendations with respect to  
14 whether the authorities provided by subsections (b)  
15 and (c) should be continued, modified, or discon-  
16 tinued.

17 **SEC. 502. COMMISSION CORPORATE SUPPORT FUNDING.**

18 (a) REPORT.—Not later than 3 years after the date  
19 of enactment of this Act, the Commission shall submit to  
20 the appropriate committees of Congress and make publicly  
21 available a report that describes—

22 (1) the progress on the implementation of sec-  
23 tion 102(a)(3) of the Nuclear Energy Innovation  
24 and Modernization Act (42 U.S.C. 2215(a)(3)); and



1                   “(ii) costs for salaries, travel, and  
2                   other support for the Office of the Com-  
3                   mission.”.

4 **SEC. 503. PERFORMANCE AND REPORTING UPDATE.**

5           Section 102(c) of the Nuclear Energy Innovation and  
6 Modernization Act (42 U.S.C. 2215(c)) is amended—

7           (1) in paragraph (3)—

8                   (A) in the paragraph heading, by striking  
9                   “180” and inserting “90”; and

10                   (B) by striking “180” and inserting “90”;  
11                   and

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

13                   “(4) PERIODIC UPDATES TO METRICS AND  
14                   SCHEDULES.—

15                           “(A) REVIEW AND ASSESSMENT.—Not less  
16                           frequently than once every 3 years, the Com-  
17                           mission shall review and assess, based on the li-  
18                           censing and regulatory activities of the Com-  
19                           mission, the performance metrics and milestone  
20                           schedules established under paragraph (1).

21                           “(B) REVISIONS.—After each review and  
22                           assessment under subparagraph (A), the Com-  
23                           mission shall revise and improve, as appro-  
24                           priate, the performance metrics and milestone  
25                           schedules described in that subparagraph to

1           provide the most efficient metrics and schedules  
2           reasonably achievable.”.

### 3           **TITLE VI—MISCELLANEOUS**

#### 4           **SEC. 601. NUCLEAR CLOSURE COMMUNITIES.**

5           (a) DEFINITIONS.—In this section:

6           (1) COMMUNITY ADVISORY BOARD.—The term  
7           “community advisory board” means a community  
8           committee or other advisory organization that aims  
9           to foster communication and information exchange  
10          between a licensee planning for and involved in de-  
11          commissioning activities and members of the com-  
12          munity that decommissioning activities may affect.

13          (2) DECOMMISSION.—The term “decommis-  
14          sion” has the meaning given the term in section  
15          50.2 of title 10, Code of Federal Regulations (or  
16          successor regulations).

17          (3) ELIGIBLE RECIPIENT.—The term “eligible  
18          recipient” has the meaning given the term in section  
19          3 of the Public Works and Economic Development  
20          Act of 1965 (42 U.S.C. 3122).

21          (4) LICENSEE.—The term “licensee” has the  
22          meaning given the term in section 50.2 of title 10,  
23          Code of Federal Regulations (or successor regula-  
24          tions).

1           (5) NUCLEAR CLOSURE COMMUNITY.—The  
2 term “nuclear closure community” means a unit of  
3 local government, including a county, city, town, vil-  
4 lage, school district, or special district, that has been  
5 impacted, or reasonably demonstrates to the satis-  
6 faction of the Secretary that it will be impacted, by  
7 a nuclear power plant licensed by the Commission  
8 that—

9           (A) is not co-located with an operating nu-  
10 clear power plant;

11           (B) is at a site with spent nuclear fuel;  
12 and

13           (C) as of the date of enactment of this  
14 Act—

15           (i) has ceased operations; or

16           (ii) has provided a written notification  
17 to the Commission that it will cease oper-  
18 ations.

19           (6) SECRETARY.—The term “Secretary” means  
20 the Secretary of Commerce, acting through the As-  
21 sistant Secretary of Commerce for Economic Devel-  
22 opment.

23           (b) ESTABLISHMENT.—Not later than 180 days after  
24 the date of enactment of this Act, the Secretary shall es-

1 establish a grant program to provide grants to eligible re-  
2 cipients—

3 (1) to assist with economic development in nu-  
4 clear closure communities; and

5 (2) to fund community advisory boards in nu-  
6 clear closure communities.

7 (c) REQUIREMENT.—In carrying out this section, to  
8 the maximum extent practicable, the Secretary shall im-  
9 plement the recommendations described in the report sub-  
10 mitted to Congress under section 108 of the Nuclear En-  
11 ergy Innovation and Modernization Act (Public Law 115-  
12 439; 132 Stat. 5577) entitled “Best Practices for Estab-  
13 lishment and Operation of Local Community Advisory  
14 Boards Associated with Decommissioning Activities at  
15 Nuclear Power Plants”.

16 (d) DISTRIBUTION OF FUNDS.—The Secretary shall  
17 establish a formula to ensure, to the maximum extent  
18 practicable, geographic diversity among grant recipients  
19 under this section.

20 (e) AUTHORIZATION OF APPROPRIATIONS.—

21 (1) IN GENERAL.—There are authorized to be  
22 appropriated to the Secretary—

23 (A) to carry out subsection (b)(1),  
24 \$35,000,000 for each of fiscal years 2023  
25 through 2028; and

1 (B) to carry out subsection (b)(2),  
2 \$5,000,000 for each of fiscal years 2023  
3 through 2025.

4 (2) AVAILABILITY.—Amounts made available  
5 under this section shall remain available for a period  
6 of 5 years beginning on the date on which the  
7 amounts are made available.

8 (3) NO OFFSET.—None of the funds made  
9 available under this section may be used to offset  
10 the funding for any other Federal program.

11 **SEC. 602. TECHNICAL CORRECTION.**

12 Section 104 c. of the Atomic Energy Act of 1954 (42  
13 U.S.C. 2134(c)) is amended—

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

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

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

1                   “(i) nonenergy services;  
 2                   “(ii) energy; or  
 3                   “(iii) a combination of nonenergy  
 4                   services and energy; and  
 5                   “(B) not more than 50 percent of the an-  
 6                   nual costs to the licensee of owning and oper-  
 7                   ating the facility are devoted to the sale of en-  
 8                   ergy.”;  
 9                   (2) in the second sentence, by striking “The  
 10                   Commission” and inserting the following:  
 11                   “(2) REGULATION.—The Commission”; and  
 12                   (3) by striking “c. The Commission” and in-  
 13                   serting the following:  
 14                   “c. RESEARCH AND DEVELOPMENT ACTIVITIES.—  
 15                   “(1) IN GENERAL.—Subject to paragraphs (2)  
 16                   and (3), the Commission”.

17 **SEC. 603. REPORT ON ENGAGEMENT WITH THE GOVERN-**  
 18 **MENT OF CANADA WITH RESPECT TO NU-**  
 19 **CLEAR WASTE ISSUES IN THE GREAT LAKES**  
 20 **BASIN.**

21                   Not later than 1 year after the date of enactment  
 22 of this Act, the Commission shall submit to Congress a  
 23 report describing any engagement between the Commis-  
 24 sion and the Government of Canada with respect to nu-  
 25 clear waste issues in the Great Lakes Basin.

Calendar No. \_\_\_\_\_

118TH CONGRESS  
1ST SESSION**S. 1111****[Report No. 118-\_\_\_\_\_]**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

MARCH 30, 2023

Mrs. CAPITO (for herself, Mr. WHITEHOUSE, Mr. BARRASSO, Mr. CARPER, Mr. CRAPO, Mr. BOOKER, Mr. GRAHAM, Mr. KELLY, Mr. RISCH, Mr. HEINRICH, Mr. CARDIN, Ms. SINEMA, Ms. LUMMIS, Mr. RICKETTS, Mr. COONS, Mr. WARNER, Mrs. GILLIBRAND, Mr. MANCHIN, Mr. CRAMER, and Mr. WICKER) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

\_\_\_\_\_ (legislative day, \_\_\_\_\_), \_\_\_\_\_

Reported by Mr. CARPER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

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**A BILL**

To enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle and supply chain, and improve the regulation of nuclear energy, 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 “Accelerating Deployment of Versatile, Advanced Nuclear  
 6 for Clean Energy Act of 2023” or the “ADVANCE Act  
 7 of 2023”.

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

Sec. 1: Short title; table of contents.

Sec. 2: Definitions.

**TITLE I—AMERICAN NUCLEAR LEADERSHIP**

Sec. 101: International nuclear reactor export and innovation activities.

Sec. 102: Denial of certain domestic licenses for national security purposes.

Sec. 103: Export license requirements.

Sec. 104: Coordinated international engagement.

**TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR  
 TECHNOLOGIES**

Sec. 201: Fees for advanced nuclear reactor application review.

Sec. 202: Advanced nuclear reactor prizes.

Sec. 203: Report on unique licensing considerations relating to the use of nu-  
 clear energy for nonelectric applications.

Sec. 204: Enabling preparations for the demonstration of advanced nuclear re-  
 actors on Department of Energy sites.

Sec. 205: Clarification on fusion regulation.

Sec. 206: Regulatory issues for nuclear facilities at brownfield sites.

Sec. 207: Appalachian Regional Commission nuclear energy development.

**TITLE III—PRESERVING EXISTING NUCLEAR ENERGY  
 GENERATION**

Sec. 301: Investment by allies.

Sec. 302: Extension of the Price-Anderson Act.

**TITLE IV—NUCLEAR FUEL CYCLE, SUPPLY CHAIN,  
 INFRASTRUCTURE, AND WORKFORCE**

Sec. 401: Report on advanced methods of manufacturing and construction for  
 nuclear energy applications.

Sec. 402: Nuclear energy traineeship.

## 3

Sec. 403. Report on Commission readiness and capacity to license additional conversion and enrichment capacity to reduce reliance on uranium from Russia.

Sec. 404. Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.

Sec. 405. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.

Sec. 406. Development, qualification, and licensing of advanced nuclear fuel concepts.

## TITLE V—IMPROVING COMMISSION EFFICIENCY

Sec. 501. Commission workforce.

Sec. 502. Commission corporate support funding.

Sec. 503. Performance and reporting update.

## TITLE VI—MISCELLANEOUS

Sec. 601. Nuclear closure communities.

Sec. 602. Technical correction.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **ACCIDENT TOLERANT FUEL.**—The term  
4 “accident tolerant fuel” has the meaning given the  
5 term in section 107(a) of the Nuclear Energy Inno-  
6 vation and Modernization Act (Public Law 115–439;  
7 132 Stat. 5577).

8 (2) **ADMINISTRATOR.**—The term “Adminis-  
9 trator” means the Administrator of the Environ-  
10 mental Protection Agency.

11 (3) **ADVANCED NUCLEAR FUEL.**—The term  
12 “advanced nuclear fuel” means—

13 (A) advanced nuclear reactor fuel; and

14 (B) accident tolerant fuel.

15 (4) **ADVANCED NUCLEAR REACTOR.**—The term  
16 “advanced nuclear reactor” has the meaning given

1 the term in section 3 of the Nuclear Energy Innova-  
2 tion and Modernization Act (42 U.S.C. 2215 note;  
3 Public Law 115-439).

4 (5) ~~ADVANCED NUCLEAR REACTOR FUEL.~~—The  
5 term “advanced nuclear reactor fuel” has the mean-  
6 ing given the term in section 3 of the Nuclear En-  
7 ergy Innovation and Modernization Act (42 U.S.C.  
8 2215 note; Public Law 115-439).

9 (6) ~~APPROPRIATE COMMITTEES OF~~  
10 ~~CONGRESS.~~—The term “appropriate committees of  
11 Congress” means—

12 (A) the Committee on Environment and  
13 Public Works of the Senate; and

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

16 (7) ~~COMMISSION.~~—The term “Commission”  
17 means the Nuclear Regulatory Commission.

18 (8) ~~INSTITUTION OF HIGHER EDUCATION.~~—The  
19 term “institution of higher education” has the  
20 meaning given the term in section 101(a) of the  
21 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

22 (9) ~~NATIONAL LABORATORY.~~—The term “Na-  
23 tional Laboratory” has the meaning given the term  
24 in section 2 of the Energy Policy Act of 2005 (42  
25 U.S.C. 15801).

1 **TITLE I—AMERICAN NUCLEAR**  
2 **LEADERSHIP**

3 **SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT**  
4 **AND INNOVATION ACTIVITIES.**

5 (a) **COORDINATION.—**

6 (1) **IN GENERAL.—**The Commission shall—

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

9 (i) nuclear reactor import and export  
10 licensing; and

11 (ii) international regulatory coopera-  
12 tion and assistance relating to nuclear re-  
13 actors, including with countries that are  
14 members of the Organisation for Economic  
15 Co-operation and Development; and

16 (B) support interagency and international  
17 coordination with respect to—

18 (i) the consideration of international  
19 technical standards to establish the licens-  
20 ing and regulatory basis to assist the de-  
21 sign, construction, and operation of nu-  
22 clear systems;

23 (ii) efforts to help build competent nu-  
24 clear regulatory organizations and legal

## 6

1 frameworks in countries seeking to develop  
2 nuclear power; and

3 (iii) exchange programs and training  
4 provided to other countries relating to nu-  
5 clear regulation and oversight to improve  
6 nuclear technology licensing; in accordance  
7 with paragraph (2).

8 ~~(2) EXCHANGE PROGRAMS AND TRAINING.—~~

9 With respect to the exchange programs and training  
10 described in paragraph (1)(B)(iii), the Commission  
11 shall coordinate, as applicable, with—

12 (A) the Secretary of Energy;

13 (B) National Laboratories;

14 (C) the private sector; and

15 (D) institutions of higher education.

16 ~~(b) AUTHORITY TO ESTABLISH BRANCH.—~~The Com-  
17 mission may establish within the Office of International  
18 Programs a branch, to be known as the “International  
19 Nuclear Reactor Export and Innovation Branch”, to carry  
20 out such international nuclear reactor export and innova-  
21 tion activities as the Commission determines to be appro-  
22 priate and within the mission of the Commission.

23 ~~(c) EXCLUSION OF INTERNATIONAL ACTIVITIES~~  
24 ~~FROM THE FEE BASE.—~~

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

4                     ~~(A) in subsection (a), by adding at the end~~  
5                     ~~the following:~~

6                     ~~“(4) INTERNATIONAL NUCLEAR REACTOR EX-~~  
7                     ~~PORT AND INNOVATION ACTIVITIES.—The Commis-~~  
8                     ~~sion shall identify in the annual budget justification~~  
9                     ~~international nuclear reactor export and innovation~~  
10                    ~~activities described in section 101(a) of the AD-~~  
11                    ~~VANCE Act of 2023.”; and~~

12                    ~~(B) in subsection (b)(1)(B), by adding at~~  
13                    ~~the end the following:~~

14                             ~~“(iv) Costs for international nuclear~~  
15                             ~~reactor export and innovation activities de-~~  
16                             ~~scribed in section 101(a) of the AD-~~  
17                             ~~VANCE Act of 2023.”.~~

18           ~~(2) EFFECTIVE DATE.—The amendments made~~  
19           ~~by paragraph (1) shall take effect on October 1,~~  
20           ~~2024.~~

21           ~~(d) SAVINGS CLAUSE.—Nothing in this section alters~~  
22           ~~the authority of the Commission to license and regulate~~  
23           ~~the civilian use of radioactive materials.~~

1 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**  
2 **NATIONAL SECURITY PURPOSES.**

3 (a) **DEFINITION OF COVERED FUEL.**—In this sec-  
4 tion, the term “covered fuel” means enriched uranium  
5 that is fabricated into fuel assemblies for nuclear reactors  
6 by an entity that—

7 (1) is owned or controlled by the Government of  
8 the Russian Federation or the Government of the  
9 People’s Republic of China; or

10 (2) is organized under the laws of, or otherwise  
11 subject to the jurisdiction of, the Russian Federation  
12 or the People’s Republic of China.

13 (b) **PROHIBITION ON UNLICENSED POSSESSION OR**  
14 **OWNERSHIP OF COVERED FUEL.**—Unless specifically au-  
15 thorized by the Commission in a license issued under sec-  
16 tion 53 of the Atomic Energy Act of 1954 (42 U.S.C.  
17 2073) and part 70 of title 10, Code of Federal Regulations  
18 (or successor regulations), no person subject to the juris-  
19 diction of the Commission may possess or own covered  
20 fuel.

21 (c) **LICENSE TO POSSESS OR OWN COVERED**  
22 **FUEL.**—

23 (1) **CONSULTATION REQUIRED PRIOR TO**  
24 **ISSUANCE.**—The Commission shall not issue a li-  
25 cense to possess or own covered fuel under section  
26 53 of the Atomic Energy Act of 1954 (42 U.S.C.

1 2073) and part 70 of title 10, Code of Federal Reg-  
2 ulations (or successor regulations), unless the Com-  
3 mission has first consulted with the Secretary of En-  
4 ergy and the Secretary of State before issuing the li-  
5 cense.

6 (2) PROHIBITION ON ISSUANCE OF LICENSE.—

7 (A) IN GENERAL.—Subject to subpara-  
8 graph (C), a license to possess or own covered  
9 fuel shall not be issued if the Secretary of En-  
10 ergy and the Secretary of State make the deter-  
11 mination described in subparagraph (B).

12 (B) DETERMINATION.—

13 (i) IN GENERAL.—The determination  
14 referred to in subparagraph (A) is a deter-  
15 mination that possession or ownership, as  
16 applicable, of covered fuel poses a threat to  
17 the national security of the United States  
18 that adversely impacts the physical and  
19 economic security of the United States.

20 (ii) JOINT DETERMINATION.—A deter-  
21 mination described in clause (i) shall be  
22 jointly made by the Secretary of Energy  
23 and the Secretary of State.

24 (iii) TIMELINE.—

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(I) NOTICE OF APPLICATION.—

Not later than 30 days after the date on which the Commission receives an application for a license to possess or own covered fuel, the Commission shall notify the Secretary of Energy and the Secretary of State of the application.

(II) DETERMINATION.—The Sec-

retary of Energy and the Secretary of State shall have a period of 180 days, beginning on the date on which the Commission notifies the Secretary of Energy and the Secretary of State under subclause (I) of an application for a license to possess or own covered fuel, in which to make the determination described in clause (i).

(III) COMMISSION NOTIFICA-

TION.—On making the determination described in clause (i), the Secretary of Energy and the Secretary of State shall immediately notify the Commission.

## 11

1           ~~(IV) CONGRESSIONAL NOTIFICA-~~  
2           ~~TION.—Not later than 30 days after~~  
3           ~~the date on which the Secretary of~~  
4           ~~Energy and the Secretary of State no-~~  
5           ~~tify the Commission under subclause~~  
6           ~~(III), the Commission shall notify the~~  
7           ~~appropriate committees of Congress of~~  
8           ~~the determination.~~

9           ~~(V) PUBLIC NOTICE.—Not later~~  
10          ~~than 15 days after the date on which~~  
11          ~~the Commission notifies Congress~~  
12          ~~under subclause (IV) of a determina-~~  
13          ~~tion made under clause (i), the Com-~~  
14          ~~mission shall make that determination~~  
15          ~~publicly available.~~

16          ~~(C) EFFECT OF NO DETERMINATION.—~~  
17          ~~The prohibition described in subparagraph (A)~~  
18          ~~shall not apply if the Secretary of Energy and~~  
19          ~~the Secretary of State do not make the deter-~~  
20          ~~mination described in subparagraph (B) by the~~  
21          ~~date described in clause (iii)(II) of that sub-~~  
22          ~~paragraph.~~

23          ~~(d) SAVINGS CLAUSE.—Nothing in this section alters~~  
24          ~~any treaty or international agreement in effect on the date~~  
25          ~~of enactment of this Act.~~

1 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

2 (a) **DEFINITION OF LOW-ENRICHED URANIUM.**—In  
3 this section, the term “low-enriched uranium” means ura-  
4 nium enriched to less than 20 percent of the uranium-  
5 <sup>235</sup> isotope.

6 (b) **REQUIREMENT.**—The Commission shall not issue  
7 an export license for the transfer of any item described  
8 in subsection (d) to a country described in subsection (c)  
9 unless the Commission makes a determination that such  
10 transfer will not be inimical to the common defense and  
11 security of the United States.

12 (c) **COUNTRIES DESCRIBED.**—A country referred to  
13 in subsection (b) is a country that—

14 (1) has not concluded and ratified an Addi-  
15 tional Protocol to its safeguards agreement with the  
16 International Atomic Energy Agency; or

17 (2) has not ratified or acceded to the amend-  
18 ment to the Convention on the Physical Protection  
19 of Nuclear Material, adopted at Vienna October 26,  
20 1979, and opened for signature at New York March  
21 3, 1980 (TIAS 11080), described in the information  
22 circular of the International Atomic Energy Agency  
23 numbered INFCIRC/274/Rev.1/Mod.1 and dated  
24 May 9, 2016 (TIAS 16-508).

25 (d) **ITEMS DESCRIBED.**—An item referred to in sub-  
26 section (b) includes—

1           ~~(1) unirradiated nuclear fuel containing special~~  
 2           ~~nuclear material (as defined in section 11 of the~~  
 3           ~~Atomic Energy Act of 1954 (42 U.S.C. 2014)), ex-~~  
 4           ~~cluding low-enriched uranium;~~

5           ~~(2) a nuclear reactor that uses nuclear fuel de-~~  
 6           ~~scribed in paragraph (1); and~~

7           ~~(3) any plant or component listed in Appendix~~  
 8           ~~I to part 110 of title 10, Code of Federal Regula-~~  
 9           ~~tions (or successor regulations), that is involved in—~~

10                   ~~(A) the reprocessing of irradiated nuclear~~  
 11                   ~~reactor fuel elements;~~

12                   ~~(B) the separation of plutonium; or~~

13                   ~~(C) the separation of the uranium-233 iso-~~  
 14                   ~~tope.~~

15           ~~(e) NOTIFICATION.—If the Commission makes a de-~~  
 16           ~~termination under subsection (b) that the transfer of any~~  
 17           ~~item described in subsection (d) to a country described in~~  
 18           ~~subsection (e) will not be inimical to the common defense~~  
 19           ~~and security of the United States, the Commission shall~~  
 20           ~~notify the appropriate committees of Congress.~~

21           ~~**SEC. 104. COORDINATED INTERNATIONAL ENGAGEMENT.**~~

22           ~~(a) DEFINITIONS.—In this section:~~

23                   ~~(1) EMBARKING CIVIL NUCLEAR ENERGY NA-~~  
 24                   ~~TION.—~~

## 14

1 (A) IN GENERAL.—The term “embarking  
2 civil nuclear energy nation” means a country  
3 that—

4 (i)(I) does not have a civil nuclear  
5 program;

6 (II) is in the process of developing or  
7 expanding a civil nuclear program, includ-  
8 ing safeguards and a legal and regulatory  
9 framework; or

10 (III) is in the process of selecting, de-  
11 veloping, constructing, or utilizing an ad-  
12 vanced nuclear reactor or advanced civil  
13 nuclear technologies; and

14 (ii) is eligible to receive development  
15 lending from the World Bank.

16 (B) EXCLUSIONS.—The term “embarking  
17 civil nuclear energy nation” does not include—

18 (i) the People’s Republic of China;

19 (ii) the Russian Federation;

20 (iii) the Republic of Belarus;

21 (iv) the Islamic Republic of Iran;

22 (v) the Democratic People’s Republic  
23 of Korea;

24 (vi) the Republic of Cuba;

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1           ~~(vii) the Bolivarian Republic of Ven-~~  
2           ~~ezuela;~~

3           ~~(viii) the Syrian Arab Republic; or~~  
4           ~~(ix) any other country—~~

5           ~~(I) the property or interests in~~  
6           ~~property of the government of which~~  
7           ~~are blocked pursuant to the Inter-~~  
8           ~~national Emergency Economic Powers~~  
9           ~~Act (50 U.S.C. 1701 et seq.); or~~

10           ~~(II) the government of which the~~  
11           ~~Secretary of State has determined has~~  
12           ~~repeatedly provided support for acts~~  
13           ~~of international terrorism for purposes~~  
14           ~~of—~~

15           ~~(aa) section 620A(a) of the~~  
16           ~~Foreign Assistance Act of 1961~~  
17           ~~(22 U.S.C. 2371(a));~~

18           ~~(bb) section 40(d) of the~~  
19           ~~Arms Export Control Act (22~~  
20           ~~U.S.C. 2780(d));~~

21           ~~(cc) section 1754(e)(1)(A)(i)~~  
22           ~~of the Export Control Reform~~  
23           ~~Act of 2018 (50 U.S.C.~~  
24           ~~4813(e)(1)(A)(i)); or~~

16

1                                   ~~(dd)~~ any other relevant pro-  
2                                   vision of law.

3           ~~(2)~~ SECRETARIES.—The term “Secretaries”  
4           means the Secretary of Commerce and the Secretary  
5           of Energy, acting—

6                           ~~(A)~~ in consultation with each other; and

7                           ~~(B)~~ in coordination with—

8                                   ~~(i)~~ the Secretary of State;

9                                   ~~(ii)~~ the Commission;

10                           ~~(iii)~~ the Secretary of the Treasury;

11                           ~~(iv)~~ the President of the Export-Im-  
12                           port Bank of the United States; and

13                           ~~(v)~~ officials of other Federal agencies;

14                           as the Secretary of Commerce determines  
15                           to be appropriate.

16           ~~(b)~~ INTERNATIONAL CIVIL NUCLEAR MODERNIZA-  
17           TION INITIATIVE.—

18                           ~~(1)~~ IN GENERAL.—The Secretaries shall estab-  
19                           lish and carry out, in accordance with applicable nu-  
20                           clear technology export laws (including regulations);  
21                           an international initiative to modernize civil nuclear  
22                           outreach to embarking civil nuclear energy nations.

23                           ~~(2)~~ ACTIVITIES.—In carrying out the initiative  
24                           described in paragraph ~~(1)~~—

25                           ~~(A)~~ the Secretary of Commerce shall—

## 17

1           (i) expand outreach by the executive  
2 branch to the private investment commu-  
3 nity to create public-private financing rela-  
4 tionships to assist in the export of civil nu-  
5 clear technology to embarking civil nuclear  
6 energy nations;

7           (ii) seek to coordinate, to the max-  
8 imum extent practicable, the work carried  
9 out by each of—

10                 (I) the Commission;  
11                 (II) the Department of Energy;  
12                 (III) the Department of State;  
13                 (IV) the Nuclear Energy Agency;  
14                 (V) the International Atomic En-  
15                 ergy Agency; and

16                 (VI) other agencies, as the Sec-  
17                 retary of Commerce determines to be  
18                 appropriate; and

19           (iii) improve the regulatory framework  
20 to allow for the efficient and expeditious  
21 exporting and importing of items under the  
22 jurisdiction of the Secretary of Commerce;  
23 and

24           (B) the Secretary of Energy shall—

18

1           (i) assist nongovernmental organiza-  
2           tions and appropriate offices, administra-  
3           tions, agencies, laboratories, and programs  
4           of the Federal Government in providing  
5           education and training to foreign govern-  
6           ments in nuclear safety, security, and safe-  
7           guards—

8                   (I) through engagement with the  
9                   International Atomic Energy Agency;  
10                  or

11                  (II) independently, if the applica-  
12                  ble nongovernmental organization, of-  
13                  fice, administration, agency, labora-  
14                  tory, or program determines that it  
15                  would be more advantageous under  
16                  the circumstances to provide the ap-  
17                  plicable education and training inde-  
18                  pendently; and

19                  (ii) assist the efforts of the Inter-  
20                  national Atomic Energy Agency to expand  
21                  the support provided by the International  
22                  Atomic Energy Agency to embarking civil  
23                  nuclear energy nations for nuclear safety,  
24                  security, and safeguards.

1       (e) ~~REPORT.~~—Not later than 2 years after the date  
 2 of enactment of this Act, the Secretary of Commerce, in  
 3 consultation with the Secretary of Energy, shall submit  
 4 to Congress a report describing the activities carried out  
 5 under this section.

6 **TITLE II—DEVELOPING AND DE-**  
 7 **PLOYING NEW NUCLEAR**  
 8 **TECHNOLOGIES**

9 **SEC. 201. FEES FOR ADVANCED NUCLEAR REACTOR APPLI-**  
 10 **CATION REVIEW.**

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

14             (1) by redesignating paragraphs (2) through  
 15             (15) as paragraphs (3), (5), (6), (7), (8), (9), (11),  
 16             (14), (15), (16), (17), (18), (19), and (20), respec-  
 17             tively;

18             (2) by inserting after paragraph (1) the fol-  
 19             lowing:

20             “(2) ~~ADVANCED NUCLEAR REACTOR APPLI-~~  
 21 ~~CANT.~~—The term ‘advanced nuclear reactor appli-  
 22 ~~cant’~~ means an entity that has submitted to the  
 23 Commission an application to receive a license for an  
 24 advanced nuclear reactor under the Atomic Energy  
 25 Act of 1954 (42 U.S.C. 2011 et seq.);”;

1           ~~(3)~~ by inserting after paragraph ~~(3)~~ (as so re-  
2 designated) the following:

3           “(4) AGENCY SUPPORT.—The term ‘agency  
4 support’ means the resources of the Commission  
5 that are located in executive, administrative, and  
6 other support offices of the Commission, as de-  
7 scribed in the document of the Commission entitled  
8 ‘FY 2022 Final Fee Rule Work Papers’ (or a suc-  
9 cessor document).”;

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

12          “(10) HOURLY RATE FOR MISSION-DIRECT PRO-  
13 GRAM SALARIES AND BENEFITS FOR THE NUCLEAR  
14 REACTOR SAFETY PROGRAM.—The term ‘hourly rate  
15 for mission-direct program salaries and benefits for  
16 the Nuclear Reactor Safety Program’ means the  
17 quotient obtained by dividing—

18               “(A) the full-time equivalent rate (within  
19 the meaning of the document of the Commis-  
20 sion entitled ‘FY 2022 Final Fee Rule Work  
21 Papers’ (or a successor document)) for mission-  
22 direct program salaries and benefits for the Nu-  
23 clear Reactor Safety Program (as determined  
24 by the Commission) for a fiscal year; by

## 21

1           ~~“(B) the productive hours assumption for~~  
2           ~~that fiscal year, determined in accordance with~~  
3           ~~the formula established in the document re-~~  
4           ~~ferred to in subparagraph (A) (or a successor~~  
5           ~~document).”;~~ and

6           ~~(5) by inserting after paragraph (11) (as so re-~~  
7           ~~designated) the following:~~

8           ~~“(12) MISSION-DIRECT PROGRAM SALARIES~~  
9           ~~AND BENEFITS FOR THE NUCLEAR REACTOR SAFETY~~  
10           ~~PROGRAM.—The term ‘mission-direct program sala-~~  
11           ~~ries and benefits for the Nuclear Reactor Safety~~  
12           ~~Program’ means the resources of the Commission~~  
13           ~~that are allocated to the Nuclear Reactor Safety~~  
14           ~~Program (as determined by the Commission) to per-~~  
15           ~~form core work activities committed to fulfilling the~~  
16           ~~mission of the Commission to protect public health~~  
17           ~~and safety, promote the common defense and secu-~~  
18           ~~rity, and protect the environment, as described in~~  
19           ~~the document of the Commission entitled ‘FY 2022~~  
20           ~~Final Fee Rule Work Papers’ (or a successor docu-~~  
21           ~~ment).~~

22           ~~“(13) MISSION-INDIRECT PROGRAM SUPPORT.—~~  
23           ~~The term ‘mission-indirect program support’ means~~  
24           ~~the resources of the Commission that support the~~  
25           ~~core mission-direct activities for the Nuclear Reactor~~

1 Safety Program of the Commission (as determined  
 2 by the Commission); as described in the document of  
 3 the Commission entitled ‘FY 2022 Final Fee Rule  
 4 Work Papers’ (or a successor document).”.

5 (b) EXCLUDED ACTIVITIES.—Section 102(b)(1)(B)  
 6 of the Nuclear Energy Innovation and Modernization Act  
 7 (42 U.S.C. 2215(b)(1)(B)) (as amended by section  
 8 101(e)(1)(B)) is amended by adding at the end the fol-  
 9 lowing:

10 “(v) The total costs of mission-indi-  
 11 rect program support and agency support  
 12 that, under paragraph (2)(B), may not be  
 13 included in the hourly rate charged for fees  
 14 assessed to advanced nuclear reactor appli-  
 15 cants.”.

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

20 “(2) FEES FOR SERVICE OR THING OF  
 21 VALUE.—

22 “(A) IN GENERAL.—In accordance with  
 23 section 9701 of title 31, United States Code,  
 24 the Commission shall assess and collect fees  
 25 from any person who receives a service or thing

1 of value from the Commission to cover the costs  
 2 to the Commission of providing the service or  
 3 thing of value.

4 ~~“(B) ADVANCED NUCLEAR REACTOR AP-~~  
 5 ~~PLICANTS.—The hourly rate charged for fees~~  
 6 ~~assessed to advanced nuclear reactor applicants~~  
 7 ~~under this paragraph relating to the review of~~  
 8 ~~a submitted application described in section~~  
 9 ~~3(1) shall not exceed the hourly rate for mis-~~  
 10 ~~sion-direct program salaries and benefits for the~~  
 11 ~~Nuclear Reactor Safety Program.”.~~

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

14 ~~SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.~~

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

18 ~~“(f) PRIZES FOR ADVANCED NUCLEAR REACTOR LI-~~  
 19 ~~CENSING.—~~

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

22 ~~“(A) a non-Federal entity; and~~

23 ~~“(B) the Tennessee Valley Authority.~~

24 ~~“(2) PRIZE FOR ADVANCED NUCLEAR REACTOR~~  
 25 ~~LICENSING.—~~

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

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

17                   “(ii) for which the Commission makes  
18                  a finding described in section 52.103(g) of  
19                  title 10, Code of Federal Regulations (or  
20                  successor regulations); with respect to a  
21                  combined license for an advanced nuclear  
22                  reactor—

23                   “(I) that is issued under subpart  
24                  C of part 52 of that title (or successor  
25                  regulations); and

25

1                   “(H) for which an application  
2                   has not been approved by the Com-  
3                   mission as of the date of enactment of  
4                   this subsection.

5                   “(B) AMOUNT OF AWARD.—An award  
6                   under subparagraph (A) shall be in an amount  
7                   equal to the total amount assessed by the Com-  
8                   mission and collected under section 102(b)(2)  
9                   from the eligible entity receiving the award for  
10                  costs relating to the issuance of the license de-  
11                  scribed in that subparagraph, including, as ap-  
12                  plicable, costs relating to the issuance of an as-  
13                  sociated construction permit described in sec-  
14                  tion 50.23 of title 10, Code of Federal Regula-  
15                  tions (or successor regulations); or early site  
16                  permit (as defined in section 52.1 of that title  
17                  (or successor regulations)).

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

20                         “(i) the first advanced nuclear reactor  
21                         for which the Commission—

22                                 “(I) issues a license in accord-  
23                                 ance with clause (i) of subparagraph  
24                                 (A); or

26

1           “(H) makes a finding in accord-  
2           ance with clause (ii) of that subpara-  
3           graph;

4           “(ii) an advanced nuclear reactor  
5           that—

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

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

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

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

21          “(iii) an advanced nuclear reactor  
22          that—

23               “(I) is a nuclear integrated en-  
24               ergy system—

27

1                   “(aa) that is composed of 2  
2                   or more co-located or jointly op-  
3                   erated subsystems of energy gen-  
4                   eration, energy storage, or other  
5                   technologies;

6                   “(bb) in which not fewer  
7                   than 1 subsystem described in  
8                   item (aa) is a nuclear energy sys-  
9                   tem; and

10                   “(cc) the purpose of which  
11                   is—

12                   “(AA) to reduce green-  
13                   house gas emissions in both  
14                   the power and nonpower sec-  
15                   tors; and

16                   “(BB) to maximize en-  
17                   ergy production and effi-  
18                   ciency; 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

28

1                   “(bb) makes a finding in ac-  
2                   cordance with clause (ii) of that  
3                   subparagraph;

4                   “(iv) an advanced reactor that—

5                   “(I) operates flexibly to generate  
6                   electricity or high temperature process  
7                   heat for nonelectric applications; and

8                   “(II) is the first advanced nu-  
9                   clear reactor described in subclause  
10                  (I) for which the Commission—

11                  “(aa) issues a license in ac-  
12                  cordance with clause (i) of sub-  
13                  paragraph (A); or

14                  “(bb) makes a finding in ac-  
15                  cordance with clause (ii) of that  
16                  subparagraph; and

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

22                  “(3) FEDERAL FUNDING LIMITATION.—An  
23                  award under this subsection shall not exceed the  
24                  total amount expended (excluding any expenditures  
25                  made with Federal funds received for the applicable

1 project and an amount equal to the minimum cost-  
 2 share required under section 988 of the Energy Pol-  
 3 icy Act of 2005 (42 U.S.C. 16352)) by the eligible  
 4 entity receiving the award for licensing costs relating  
 5 to the project for which the award is made.”.

6 **SEC. 203. REPORT ON UNIQUE LICENSING CONSIDER-**  
 7 **ATIONS RELATING TO THE USE OF NUCLEAR**  
 8 **ENERGY FOR NONELECTRIC APPLICATIONS.**

9 (a) **IN GENERAL.**—Not later than 270 days after the  
 10 date of enactment of this Act, the Commission shall sub-  
 11 mit to the appropriate committees of Congress a report  
 12 (referred to in this section as the “report”) addressing any  
 13 unique licensing issues or requirements relating to—

14 (1) the flexible operation of nuclear reactors,  
 15 such as ramping power output and switching be-  
 16 tween electricity generation and nonelectric applica-  
 17 tions;

18 (2) the use of advanced nuclear reactors exclu-  
 19 sively for nonelectric applications; and

20 (3) the colocation of nuclear reactors with in-  
 21 dustrial plants or other facilities.

22 (b) **STAKEHOLDER INPUT.**—In developing the report,  
 23 the Commission shall seek input from—

24 (1) the Secretary of Energy;

25 (2) the nuclear energy industry;

- 1           ~~(3) technology developers;~~  
 2           ~~(4) the industrial, chemical, and medical sec-~~  
 3           ~~tors;~~  
 4           ~~(5) nongovernmental organizations; and~~  
 5           ~~(6) other public stakeholders.~~
- 6           ~~(e) CONTENTS.—~~
- 7           ~~(1) IN GENERAL.—The report shall describe—~~  
 8                 ~~(A) any unique licensing issues or require-~~  
 9                 ~~ments relating to the matters described in para-~~  
 10                ~~graphs (1) through (3) of subsection (a), in-~~  
 11                ~~cluding, with respect to the nonelectric applica-~~  
 12                ~~tions referred to in paragraphs (1) and (2) of~~  
 13                ~~that subsection, any licensing issues or require-~~  
 14                ~~ments relating to the use of nuclear energy in—~~
- 15                     ~~(i) hydrogen or other liquid and gas-~~  
 16                     ~~eous fuel or chemical production;~~
- 17                     ~~(ii) water desalination and wastewater~~  
 18                     ~~treatment;~~
- 19                     ~~(iii) heat for industrial processes;~~  
 20                     ~~(iv) district heating;~~  
 21                     ~~(v) energy storage;~~  
 22                     ~~(vi) industrial or medical isotope pro-~~  
 23                     ~~duction; and~~
- 24                     ~~(vii) other applications, as identified~~  
 25                     ~~by the Commission;~~

## 31

1           ~~(B) options for addressing those issues or~~  
2           ~~requirements—~~

3                   ~~(i) within the existing regulatory~~  
4                   ~~framework of the Commission;~~

5                   ~~(ii) as part of the technology-inclusive~~  
6                   ~~regulatory framework required under sub-~~  
7                   ~~section (a)(4) of section 103 of the Nuclear~~  
8                   ~~Energy Innovation and Modernization Act~~  
9                   ~~(42 U.S.C. 2133 note; Public Law 115-~~  
10                   ~~439) or described in the report required~~  
11                   ~~under subsection (c) of that section (Public~~  
12                   ~~Law 115-439; 132 Stat. 5575); or~~

13                   ~~(iii) through a new rulemaking; and~~

14           ~~(C) the extent to which Commission action~~  
15           ~~is needed to implement any matter described in~~  
16           ~~the report.~~

17           ~~(2) COST ESTIMATES, BUDGETS, AND TIME-~~  
18           ~~FRAMES.—The report shall include cost estimates,~~  
19           ~~proposed budgets, and proposed timeframes for im-~~  
20           ~~plementing risk-informed and performance-based~~  
21           ~~regulatory guidance in the licensing of nuclear reac-~~  
22           ~~tors for nonelectric applications.~~

1 ~~SEC. 204. ENABLING PREPARATIONS FOR THE DEMONSTRATION OF ADVANCED NUCLEAR REACTORS ON DEPARTMENT OF ENERGY SITES.~~

2  
3  
4 (a) ~~IN GENERAL.~~—Section 102(b)(1)(B) of the Nuclear Energy Innovation and Modernization Act (42 U.S.C. 2215(b)(1)(B)) (as amended by section 201(b)) is amended by adding at the end the following:

5  
6  
7  
8 “(vi) Costs for—  
9 “(I) activities to review and approve or disapprove an application for an early site permit (as defined in section 52.1 of title 10, Code of Federal Regulations (or a successor regulation)) to demonstrate an advanced nuclear reactor on a Department of Energy site; and

10  
11  
12  
13  
14  
15  
16  
17 “(II) pre-application activities relating to an early site permit (as so defined) to demonstrate an advanced nuclear reactor on a Department of Energy site.”

18  
19  
20  
21  
22 (b) ~~EFFECTIVE DATE.~~—The amendment made by  
23 subsection (a) shall take effect on October 1, 2024.

1 **SEC. 205. CLARIFICATION ON FUSION REGULATION.**

2 Section 103(a)(4) of the Nuclear Energy Innovation  
3 and Modernization Act (42 U.S.C. 2133 note; Public Law  
4 115-439) is amended—

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

7 “(A) IN GENERAL.—Not later”; and

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

9 “(B) EXCLUSION OF FUSION REACTORS.—

10 For purposes of subparagraph (A), the term  
11 ‘advanced reactor applicant’ does not include an  
12 applicant seeking a license for a fusion reac-  
13 tor.”.

14 **SEC. 206. REGULATORY ISSUES FOR NUCLEAR FACILITIES**

15 **AT BROWNFIELD SITES.**

16 (a) DEFINITIONS.—

17 (1) BROWNFIELD SITE.—The term “brownfield  
18 site” has the meaning given the term in section 101  
19 of the Comprehensive Environmental Response,  
20 Compensation, and Liability Act of 1980 (42 U.S.C.  
21 9601).

22 (2) PRODUCTION FACILITY.—The term “pro-  
23 duction facility” has the meaning given the term in  
24 section 11 of the Atomic Energy Act of 1954 (42  
25 U.S.C. 2014).

1           ~~(3) RETIRED FOSSIL FUEL SITE.—~~The term  
2 “retired fossil fuel site” means the site of 1 or more  
3 fossil fuel electric generation facilities that are re-  
4 tired or scheduled to retire, including multi-unit fa-  
5 cilities that are partially shut down.

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

10       ~~(b) IDENTIFICATION OF REGULATORY ISSUES.—~~

11           ~~(1) IN GENERAL.—~~Not later than 1 year after  
12 the date of enactment of this Act, the Commission  
13 shall evaluate the extent to which modification of  
14 regulations, guidance, or policy is needed to enable  
15 timely licensing reviews for, and to support the over-  
16 sight of, production facilities or utilization facilities  
17 at brownfield sites.

18           ~~(2) REQUIREMENT.—~~In carrying out paragraph  
19 ~~(1)~~, the Commission shall consider how licensing re-  
20 views for production facilities or utilization facilities  
21 at brownfield sites may be expedited by considering  
22 matters relating to siting and operating a production  
23 facility or a utilization facility at or near a retired  
24 fossil fuel site to support the reuse of existing site  
25 infrastructure, including—

1           (A) electric switchyard components and  
2           transmission infrastructure;

3           (B) heat-sink components;

4           (C) steam cycle components;

5           (D) roads;

6           (E) railroad access; and

7           (F) water availability.

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

13           (e) LICENSING.—

14           (1) IN GENERAL.—Not later than 2 years after  
15           the date of enactment of this Act, the Commission  
16           shall—

17           (A) develop and implement strategies to  
18           enable timely licensing reviews for, and to sup-  
19           port the oversight of, production facilities or  
20           utilization facilities at brownfield sites, includ-  
21           ing retired fossil fuel sites; or

22           (B) initiate a rulemaking to enable timely  
23           licensing reviews for, and to support the over-  
24           sight of, of production facilities or utilization

1 facilities at brownfield sites, including retired  
2 fossil fuel sites.

3 ~~(2)~~ REQUIREMENTS.—In carrying out para-  
4 graph ~~(1)~~, consistent with the role of the Commis-  
5 sion in protecting public health and safety and the  
6 common defense and security, the Commission shall  
7 consider matters relating to—

8 (A) the use of existing site infrastructure;

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

11 (C) the availability of historical site-spe-  
12 cific environmental data;

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

16 (E) activities associated with the potential  
17 decommissioning of facilities or decontamina-  
18 tion and remediation at brownfield sites; and

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

21 ~~(d)~~ REPORT.—Not later than 3 years after the date  
22 of enactment of this Act, the Commission shall submit to  
23 the appropriate committees of Congress a report describ-  
24 ing the actions taken by the Commission under subsection  
25 ~~(e)~~.

1 **SEC. 207. APPALACHIAN REGIONAL COMMISSION NUCLEAR**  
 2 **ENERGY DEVELOPMENT.**

3 (a) **IN GENERAL.**—Subchapter I of chapter 145 of  
 4 subtitle IV of title 40, United States Code, is amended  
 5 by adding at the end the following:

6 **“§ 14512. Appalachian Regional Commission nuclear**  
 7 **energy development**

8 **“(a) DEFINITIONS.**—In this section:

9 **“(1) BROWNFIELD SITE.**—The term ‘brownfield  
 10 site’ has the meaning given the term in section 101  
 11 of the Comprehensive Environmental Response,  
 12 Compensation, and Liability Act of 1980 (42 U.S.C.  
 13 9601).

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

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

23 **“(4) UTILIZATION FACILITY.**—The term ‘utili-  
 24 zation facility’ has the meaning given the term in  
 25 section 11 of the Atomic Energy Act of 1954 (42  
 26 U.S.C. 2014).

1       ~~“(b) AUTHORITY.—The Appalachian Regional Com-~~  
2 ~~mission may provide technical assistance to, make grants~~  
3 ~~to, enter into contracts with, or otherwise provide amounts~~  
4 ~~to individuals or entities in the Appalachian region for~~  
5 ~~projects and activities—~~

6           ~~“(1) to conduct research and analysis regarding~~  
7 ~~the economic impact of siting, constructing, and op-~~  
8 ~~erating a production facility or a utilization facility~~  
9 ~~at a brownfield site, including a retired fossil fuel~~  
10 ~~site;~~

11           ~~“(2) to assist with workforce training or re-~~  
12 ~~training to perform activities relating to the siting~~  
13 ~~and operation of a production facility or a utilization~~  
14 ~~facility at a brownfield site, including a retired fossil~~  
15 ~~fuel site; and~~

16           ~~“(3) to engage with the Nuclear Regulatory~~  
17 ~~Commission, the Department of Energy, and other~~  
18 ~~Federal agencies with expertise in civil nuclear en-~~  
19 ~~ergy.~~

20       ~~“(c) LIMITATION ON AVAILABLE AMOUNTS.—Of the~~  
21 ~~cost of any project or activity eligible for a grant under~~  
22 ~~this section—~~

23           ~~“(1) except as provided in paragraphs (2) and~~  
24 ~~(3), not more than 50 percent may be provided from~~  
25 ~~amounts made available to carry out this section;~~

1           ~~“(2) in the case of a project or activity to be~~  
 2           ~~carried out in a county for which a distressed county~~  
 3           ~~designation is in effect under section 14526, not~~  
 4           ~~more than 80 percent may be provided from~~  
 5           ~~amounts made available to carry out this section;~~  
 6           ~~and~~

7           ~~“(3) in the case of a project or activity to be~~  
 8           ~~carried out in a county for which an at-risk county~~  
 9           ~~designation is in effect under section 14526, not~~  
 10          ~~more than 70 percent may be provided from~~  
 11          ~~amounts made available to carry out this section.~~

12          ~~“(d) SOURCES OF ASSISTANCE.—Subject to sub-~~  
 13          ~~section (c), a grant provided under this section may be~~  
 14          ~~provided from amounts made available to carry out this~~  
 15          ~~section; in combination with amounts made available—~~

16                 ~~“(1) under any other Federal program; or~~

17                 ~~“(2) from any other source.~~

18          ~~“(e) FEDERAL SHARE.—Notwithstanding any provi-~~  
 19          ~~sion of law limiting the Federal share under any other~~  
 20          ~~Federal program, amounts made available to carry out~~  
 21          ~~this section may be used to increase that Federal share,~~  
 22          ~~as the Appalachian Regional Commission determines to be~~  
 23          ~~appropriate.”.~~

24          ~~(b) AUTHORIZATION OF APPROPRIATIONS.—Section~~  
 25          ~~14703 of title 40, United States Code, is amended—~~

40

1           (1) by redesignating subsections (e) and (f) as  
2 subsections (f) and (g), respectively; and

3           (2) by inserting after subsection (d) the fol-  
4 lowing:

5           “(e) APPALACHIAN REGIONAL COMMISSION NU-  
6 CLEAR ENERGY DEVELOPMENT.—Of the amounts made  
7 available under subsection (a), \$5,000,000 may be used  
8 to carry out section 14512 for each of fiscal years 2023  
9 through 2026.”.

10          (c) CLERICAL AMENDMENT.—The analysis for sub-  
11 chapter I of chapter 145 of subtitle IV of title 40, United  
12 States Code, is amended by striking the item relating to  
13 section 14511 and inserting the following:

“14511. Appalachian regional energy hub initiative.

“14512. Appalachian Regional Commission nuclear energy development.”.

14 **TITLE III—PRESERVING EXIST-**  
15 **ING NUCLEAR ENERGY GEN-**  
16 **ERATION**

17 **SEC. 301. INVESTMENT BY ALLIES.**

18          (a) IN GENERAL.—The prohibitions against issuing  
19 certain licenses for utilization facilities to certain corpora-  
20 tions and other entities described in the second sentence  
21 of section 103 d. of the Atomic Energy Act of 1954 (42  
22 U.S.C. 2133(d)) and the second sentence of section 104  
23 d. of that Act (42 U.S.C. 2134(d)) shall not apply to an  
24 entity described in subsection (b) if the Commission deter-

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1 mines that issuance of the applicable license to that entity  
2 is not inimical to—

3           (1) the common defense and security; or

4           (2) the health and safety of the public.

5       (b) ENTITIES DESCRIBED.—An entity referred to in  
6 subsection (a) is a corporation or other entity that is  
7 owned, controlled, or dominated by—

8           (1) the government of—

9               (A) a country that is a member of the  
10           Group of Seven as of November 25, 2020,  
11           which includes the United Kingdom, Germany,  
12           Canada, Japan, France, and Italy; or

13               (B) the Republic of Korea;

14           (2) a corporation that is incorporated in a  
15           country described in subparagraph (A) or (B) of  
16           paragraph (1); or

17           (3) an alien who is a national of a country de-  
18           scribed in subparagraph (A) or (B) of paragraph  
19           (1).

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

1 (d) SAVINGS CLAUSE.—Nothing in this section af-  
 2 fects the requirements of section 721 of the Defense Pro-  
 3 duction Act of 1950 (50 U.S.C. 4565).

4 **SEC. 302. EXTENSION OF THE PRICE-ANDERSON ACT.**

5 (a) EXTENSION.—Section 170 of the Atomic Energy  
 6 Act of 1954 (42 U.S.C. 2210) (commonly known as the  
 7 “Price-Anderson Act”) is amended by striking “December  
 8 31, 2025” each place it appears and inserting “December  
 9 31, 2045”.

10 (b) REPORT.—Section 170 p. of the Atomic Energy  
 11 Act of 1954 (42 U.S.C. 2210(p)) is amended by striking  
 12 “December 31, 2021” and inserting “December 31,  
 13 2041”.

14 **TITLE IV—NUCLEAR FUEL**  
 15 **CYCLE, SUPPLY CHAIN, IN-**  
 16 **FRASTRUCTURE, AND WORK-**  
 17 **FORCE**

18 **SEC. 401. REPORT ON ADVANCED METHODS OF MANUFAC-**  
 19 **TURING AND CONSTRUCTION FOR NUCLEAR**  
 20 **ENERGY APPLICATIONS.**

21 (a) IN GENERAL.—Not later than 180 days after the  
 22 date of enactment of this Act, the Commission shall sub-  
 23 mit to the appropriate committees of Congress a report  
 24 (referred to in this section as the “report”) on manufac-  
 25 turing and construction for nuclear energy applications.

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

3           ~~(1) the Secretary of Energy;~~  
4           ~~(2) the nuclear energy industry;~~  
5           ~~(3) National Laboratories;~~  
6           ~~(4) institutions of higher education;~~  
7           ~~(5) nuclear and manufacturing technology de-~~  
8 ~~velopers;~~

9           ~~(6) the manufacturing and construction indus-~~  
10 ~~tries, including manufacturing and construction~~  
11 ~~companies with operating facilities in the United~~  
12 ~~States;~~

13           ~~(7) standards development organizations;~~  
14           ~~(8) labor unions;~~  
15           ~~(9) nongovernmental organizations; and~~  
16           ~~(10) other public stakeholders.~~

17       ~~(c) CONTENTS.—~~

18           ~~(1) IN GENERAL.—The report shall—~~

19               ~~(A) examine any unique licensing issues or~~  
20 ~~requirements relating to the use of innovative—~~

21                   ~~(i) advanced manufacturing processes;~~

22                   ~~(ii) advanced construction techniques;~~

23                   ~~and~~

24                   ~~(iii) rapid improvement or iterative in-~~  
25 ~~novation processes;~~

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- 1           ~~(B) examine—~~
- 2                 (i) the requirements for nuclear-grade
- 3                 components in manufacturing and con-
- 4                 struction for nuclear energy applications;
- 5                 (ii) opportunities to use standard ma-
- 6                 terials, parts, or components in manufac-
- 7                 turing and construction for nuclear energy
- 8                 applications;
- 9                 (iii) opportunities to use standard ma-
- 10                terials that are in compliance with existing
- 11                codes to provide acceptable approaches to
- 12                support or encapsulate new materials that
- 13                do not yet have applicable codes; and
- 14                (iv) requirements relating to the
- 15                transport of a fueled advanced nuclear re-
- 16                actor core from a manufacturing licensee
- 17                to a licensee that holds a license to con-
- 18                struct and operate a facility at a particular
- 19                site;
- 20                (C) identify any safety aspects of innova-
- 21                tive advanced manufacturing processes and ad-
- 22                vanced construction techniques that are not ad-
- 23                dressed by existing codes and standards, so that
- 24                generic guidance may be updated or created, as
- 25                necessary;

45

1           ~~(D) identify options for addressing the~~  
 2           ~~issues, requirements, and opportunities exam-~~  
 3           ~~ined under subparagraphs (A) and (B)—~~

4           ~~(i) within the existing regulatory~~  
 5           ~~framework; or~~

6           ~~(ii) through a new rulemaking;~~

7           ~~(E) identify how addressing the issues, re-~~  
 8           ~~quirements, and opportunities examined under~~  
 9           ~~subparagraphs (A) and (B) will impact oppor-~~  
 10          ~~tunities for domestic nuclear manufacturing~~  
 11          ~~and construction developers; and~~

12          ~~(F) describe the extent to which Commis-~~  
 13          ~~sion action is needed to implement any matter~~  
 14          ~~described in the report.~~

15          ~~(2) COST ESTIMATES, BUDGETS, AND TIME-~~  
 16          ~~FRAMES.—The report shall include cost estimates,~~  
 17          ~~proposed budgets, and proposed timeframes for im-~~  
 18          ~~plementing risk-informed and performance-based~~  
 19          ~~regulatory guidance for manufacturing and construc-~~  
 20          ~~tion for nuclear energy applications.~~

21 **SEC. 402. NUCLEAR ENERGY TRAINEESHIP.**

22          ~~Section 313 of division C of the Omnibus Appropria-~~  
 23          ~~tions Act, 2009 (42 U.S.C. 16274a), is amended—~~

24                 ~~(1) in subsection (a), by striking “Nuclear Reg-~~  
 25                 ~~ulatory”;~~

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1           ~~(2)~~ in subsection (b)(1), in the matter pre-  
2           ceding subparagraph (A), by inserting “and sub-  
3           section (e)” after “paragraph (2)”;

4           ~~(3)~~ in subsection (e)—

5                 (A) by redesignating paragraph (2) as  
6                 paragraph (5); and

7                 (B) by striking paragraph (1) and insert-  
8                 ing the following:

9                 “(1) **ADVANCED NUCLEAR REACTOR.**—The  
10                 term ‘advanced nuclear reactor’ has the meaning  
11                 given the term in section 951(b) of the Energy Pol-  
12                 icy Act of 2005 (42 U.S.C. 16271(b)).

13                 “(2) **COMMISSION.**—The term ‘Commission’  
14                 means the Nuclear Regulatory Commission.

15                 “(3) **INSTITUTION OF HIGHER EDUCATION.**—  
16                 The term ‘institution of higher education’ has the  
17                 meaning given the term in section 2 of the Energy  
18                 Policy Act of 2005 (42 U.S.C. 15801).

19                 “(4) **NATIONAL LABORATORY.**—The term ‘Na-  
20                 tional Laboratory’ has the meaning given the term  
21                 in section 951(b) of the Energy Policy Act of 2005  
22                 (42 U.S.C. 16271(b)).”;

23                 (4) in subsection (d)(2), by striking “Nuclear  
24                 Regulatory”;

1           (5) by redesignating subsections (c) and (d) as  
2           subsections (d) and (e), respectively; and

3           (6) by inserting after subsection (b) the fol-  
4           lowing:

5           “(c) NUCLEAR ENERGY TRAINEESHIP SUBPRO-  
6           GRAM.—

7           “(1) IN GENERAL.—The Commission shall es-  
8           tablish, as a subprogram of the Program, a nuclear  
9           energy traineeship subprogram under which the  
10          Commission, in coordination with institutions of  
11          higher education and trade schools, shall competi-  
12          tively award traineeships that provide focused train-  
13          ing to meet critical mission needs of the Commission  
14          and nuclear workforce needs, including needs relat-  
15          ing to—

16                   “(A) nuclear criticality safety; and

17                   “(B) the nuclear tradecraft workforce.

18          “(2) REQUIREMENTS.—In carrying out the nu-  
19          clear energy traineeship subprogram described in  
20          paragraph (1), the Commission shall—

21                   “(A) coordinate with the Secretary of En-  
22                   ergy to prioritize the funding of traineeships  
23                   that focus on—

24                   “(i) nuclear workforce needs; and

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1           “(ii) critical mission needs of the  
2           Commission;

3           “(B) encourage appropriate partnerships  
4           among—

5           “(i) National Laboratories;

6           “(ii) institutions of higher education;

7           “(iii) trade schools;

8           “(iv) the nuclear energy industry; and

9           “(v) other entities, as the Commission  
10           determines to be appropriate; and

11           “(C) on an annual basis, evaluate nuclear  
12           workforce needs for the purpose of imple-  
13           menting traineeships in focused topical areas  
14           that—

15           “(i) address the workforce needs of  
16           the nuclear energy community; and

17           “(ii) support critical mission needs of  
18           the Commission.”.

19 **SEC. 403. REPORT ON COMMISSION READINESS AND CA-**  
20 **PACITY TO LICENSE ADDITIONAL CONVER-**  
21 **SION AND ENRICHMENT CAPACITY TO RE-**  
22 **DUCE RELIANCE ON URANIUM FROM RUSSIA.**

23           Not later than 180 days after the date of enactment  
24 of this Act, the Commission shall submit to the appro-  
25 priate committees of Congress a report on the readiness

1 and capacity of the Commission to license additional con-  
 2 version and enrichment capacity at existing and new fuel  
 3 cycle facilities to reduce reliance on nuclear fuel that is  
 4 recovered, converted, enriched, or fabricated by an entity  
 5 that—

6 (1) is owned or controlled by the Government of  
 7 the Russian Federation; or

8 (2) is organized under the laws of, or otherwise  
 9 subject to the jurisdiction of, the Russian Federa-  
 10 tion.

11 **SEC. 404. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**  
 12 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**  
 13 **VENTORY IN THE UNITED STATES.**

14 (a) **DEFINITIONS.**—In this section:

15 (1) **HIGH-LEVEL RADIOACTIVE WASTE.**—The  
 16 term “high-level radioactive waste” has the meaning  
 17 given the term in section 2 of the Nuclear Waste  
 18 Policy Act of 1982 (42 U.S.C. 10101).

19 (2) **SPENT NUCLEAR FUEL.**—The term “spent  
 20 nuclear fuel” has the meaning given the term in sec-  
 21 tion 2 of the Nuclear Waste Policy Act of 1982 (42  
 22 U.S.C. 10101).

23 (3) **STANDARD CONTRACT.**—The term “stand-  
 24 ard contract” has the meaning given the term “con-

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1       tract<sup>22</sup> in section 961.3 of title 10, Code of Federal  
2       Regulations (or a successor regulation).

3       (b) REPORT.—Not later than January 1, 2025, and  
4       annually thereafter, the Secretary of Energy shall submit  
5       to Congress a report that describes—

6           (1) the annual and cumulative amount of pay-  
7       ments made by the United States to the holder of  
8       a standard contract due to a partial breach of con-  
9       tract under the Nuclear Waste Policy Act of 1982  
10      (42 U.S.C. 10101 et seq.) resulting in financial  
11      damages to the holder;

12          (2) the cumulative amount spent by the Depart-  
13      ment of Energy since fiscal year 2008 to reduce fu-  
14      ture payments projected to be made by the United  
15      States to any holder of a standard contract due to  
16      a partial breach of contract under the Nuclear  
17      Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.);

18          (3) the cumulative amount spent by the Depart-  
19      ment of Energy to store, manage, and dispose of  
20      spent nuclear fuel and high-level radioactive waste in  
21      the United States as of the date of the report;

22          (4) the projected lifecycle costs to store, man-  
23      age, transport, and dispose of the projected inven-  
24      tory of spent nuclear fuel and high-level radioactive  
25      waste in the United States, including spent nuclear

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1 fuel and high-level radioactive waste expected to be  
 2 generated from existing reactors through 2050;

3 ~~(5)~~ any mechanisms for better accounting of li-  
 4 abilities for the lifecycle costs of the spent nuclear  
 5 fuel and high-level radioactive waste inventory in the  
 6 United States; and

7 ~~(6)~~ any recommendations for improving the  
 8 methods used by the Department of Energy for the  
 9 accounting of spent nuclear fuel and high-level ra-  
 10 dioactive waste costs and liabilities.

11 **SEC. 405. AUTHORIZATION OF APPROPRIATIONS FOR**  
 12 **SUPERFUND ACTIONS AT ABANDONED MIN-**  
 13 **ING SITES ON TRIBAL LAND.**

14 (a) **DEFINITIONS.**—In this section:

15 (1) **ELIGIBLE NON-NPL SITE.**—The term “eligi-  
 16 ble non-NPL site” means a site—

17 (A) that is not on the National Priorities  
 18 List; but

19 (B) with respect to which the Adminis-  
 20 trator determines that—

21 (i) the site would be eligible for listing  
 22 on the National Priorities List based on  
 23 the presence of hazards from contamina-  
 24 tion at the site, applying the hazard rank-  
 25 ing system described in section 105(e) of

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1 the Comprehensive Environmental Re-  
2 sponse, Compensation, and Liability Act of  
3 1980 (42 U.S.C. 9605(e)); and

4 (ii) for removal site evaluations; engi-  
5 neering evaluations/cost analyses; remedial  
6 planning activities; remedial investigations  
7 and feasibility studies; and other actions  
8 taken pursuant to section 104(b) of that  
9 Act (42 U.S.C. 9604), the site—

10 (I) has undergone a pre-  
11 CERCLA screening; and

12 (II) is included in the Superfund  
13 Enterprise Management System.

14 (2) INDIAN TRIBE.—The term “Indian Tribe”  
15 has the meaning given the term “Indian tribe” in  
16 section 101 of the Comprehensive Environmental  
17 Response, Compensation, and Liability Act of 1980  
18 (42 U.S.C. 9601).

19 (3) NATIONAL PRIORITIES LIST.—The term  
20 “National Priorities List” means the National Prior-  
21 ities List developed by the President in accordance  
22 with section 105(a)(8)(B) of the Comprehensive En-  
23 vironmental Response, Compensation, and Liability  
24 Act of 1980 (42 U.S.C. 9605(a)(8)(B)).

1           ~~(4) REMEDIAL ACTION; REMOVAL; RESPONSE.—~~

2           The terms “remedial action”, “removal”, and “re-  
3           sponse” have the meanings given those terms in sec-  
4           tion 101 of the Comprehensive Environmental Re-  
5           sponse, Compensation, and Liability Act of 1980 (42  
6           U.S.C. 9601).

7           ~~(5) TRIBAL LAND.—~~The term “Tribal land”  
8           has the meaning given the term “Indian country” in  
9           section 1151 of title 18, United States Code.

10          ~~(b) AUTHORIZATION OF APPROPRIATIONS.—~~There  
11          are authorized to be appropriated for each of fiscal years  
12          2023 through 2032, to remain available until expended—

13                 ~~(1) \$97,000,000 to the Administrator to carry~~  
14                 ~~out this section (except for subsection (d)); and~~

15                 ~~(2) \$3,000,000 to the Administrator of the~~  
16                 ~~Agency for Toxic Substances and Disease Registry~~  
17                 ~~to carry out subsection (d).~~

18          ~~(c) USES OF AMOUNTS.—~~Amounts appropriated  
19          under subsection (b)(1) shall be used by the Adminis-  
20          trator—

21                 ~~(1) to carry out removal actions on abandoned~~  
22                 ~~mine land located on Tribal land;~~

23                 ~~(2) to carry out response actions, including re-~~  
24                 ~~moval and remedial planning activities, removal and~~  
25                 ~~remedial studies, remedial actions, and other actions~~

1 taken pursuant to section 104(b) of the Comprehen-  
2 sive Environmental Response, Compensation, and  
3 Liability Act of 1980 (42 U.S.C. 9604(b)) on aban-  
4 doned mine land located on Tribal land at—

5 (A) eligible non-NPL sites; and

6 (B) sites listed on the National Priorities  
7 List; and

8 (3) to make grants under subsection (c).

9 (d) HEALTH ASSESSMENTS.—Subject to the avail-  
10 ability of appropriations, the Agency for Toxic Substances  
11 and Disease Registry, in coordination with Tribal health  
12 authorities, shall perform 1 or more health assessments  
13 at each eligible non-NPL site that is located on Tribal  
14 land, in accordance with section 104(i)(6) of the Com-  
15 prehensive Environmental Response, Compensation, and  
16 Liability Act of 1980 (42 U.S.C. 9604(i)(6)).

17 (e) TRIBAL GRANTS.—

18 (1) IN GENERAL.—The Administrator may use  
19 amounts appropriated under subsection (b)(1) to  
20 make grants to eligible entities described in para-  
21 graph (2) for the purposes described in paragraph  
22 (3).

23 (2) ELIGIBLE ENTITIES DESCRIBED.—An eligi-  
24 ble entity referred to in paragraph (1) is—

1           ~~(A) the governing body of an Indian Tribe;~~

2           ~~or~~

3           ~~(B) a legally established organization of~~

4           ~~Indians that—~~

5                     ~~(i) is controlled, sanctioned, or char-~~

6                     ~~tered by the governing bodies of 2 or more~~

7                     ~~Indian Tribes to be served; or that is~~

8                     ~~democratically elected by the adult mem-~~

9                     ~~bers of the Indian community to be served;~~

10                    ~~by that organization; and~~

11                    ~~(ii) includes the maximum participa-~~

12                    ~~tion of Indians in all phases of the activi-~~

13                    ~~ties of that organization.~~

14           ~~(3) USE OF GRANT FUNDS.—A grant under this~~

15           ~~subsection shall be used—~~

16                    ~~(A) in accordance with the second sentence~~

17                    ~~of section 117(c)(1) of the Comprehensive Envi-~~

18                    ~~ronmental Response, Compensation, and Liabil-~~

19                    ~~ity Act of 1980 (42 U.S.C. 9617(c)(1));~~

20                    ~~(B) for obtaining technical assistance in~~

21                    ~~carrying out response actions under subpara-~~

22                    ~~graph (C); or~~

23                    ~~(C) for carrying out response actions; if~~

24                    ~~the Administrator determines that the Indian~~

25                    ~~Tribe has the capability to carry out any or all~~

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1 of those response actions in accordance with the  
2 criteria and priorities established pursuant to  
3 section 105(a)(8) of the Comprehensive Envi-  
4 ronmental Response, Compensation, and Liabil-  
5 ity Act of 1980 (42 U.S.C. 9605(a)(8)).

6 (4) APPLICATIONS.—An eligible entity desiring  
7 a grant under this subsection shall submit to the  
8 Administrator an application at such time, in such  
9 manner, and containing such information as the Ad-  
10 ministrator may require.

11 (5) LIMITATIONS.—A grant under this sub-  
12 section shall be governed by the rules, procedures,  
13 and limitations described in section 117(e)(2) of the  
14 Comprehensive Environmental Response, Compensa-  
15 tion, and Liability Act of 1980 (42 U.S.C.  
16 9617(e)(2)), except that—

17 (A) “Administrator of the Environmental  
18 Protection Agency” shall be substituted for  
19 “President” each place it appears in that sec-  
20 tion; and

21 (B) in the first sentence of that section,  
22 “under section 405 of the ADVANCE Act of  
23 2023” shall be substituted for “under this sub-  
24 section”.

1        ~~(f) STATUTE OF LIMITATIONS.—If a remedial action~~  
 2 ~~described in subsection (e)(2) is scheduled at an eligible~~  
 3 ~~non-NPL site, no action may be commenced for damages~~  
 4 ~~(as defined in section 101 of the Comprehensive Environ-~~  
 5 ~~mental Response, Compensation, and Liability Act of~~  
 6 ~~1980 (42 U.S.C. 9601)) with respect to that eligible non-~~  
 7 ~~NPL site unless the action is commenced within the time-~~  
 8 ~~frame provided for such actions with respect to facilities~~  
 9 ~~on the National Priorities List in the first sentence of the~~  
 10 ~~matter following subparagraph (B) of section 113(g)(1)~~  
 11 ~~of that Act (42 U.S.C. 9613(g)(1)).~~

12        ~~(g) COORDINATION.—The Administrator shall coordi-~~  
 13 ~~nate with the Indian Tribe on whose land the applicable~~  
 14 ~~site is located in—~~

15            ~~(1) selecting and prioritizing sites for response~~  
 16 ~~actions under paragraphs (1) and (2) of subsection~~  
 17 ~~(e); and~~

18            ~~(2) carrying out those response actions.~~

19 **SEC. 406. DEVELOPMENT, QUALIFICATION, AND LICENSING**  
 20 **OF ADVANCED NUCLEAR FUEL CONCEPTS.**

21        ~~(a) IN GENERAL.—The Commission shall establish~~  
 22 ~~an initiative to enhance preparedness and coordination~~  
 23 ~~with respect to the qualification and licensing of advanced~~  
 24 ~~nuclear fuel.~~

1 (b) AGENCY COORDINATION.—Not later than 180  
2 days after the date of enactment of this Act, the Commis-  
3 sion and the Secretary of Energy shall enter into a memo-  
4 randum of understanding—

5 (1) to share technical expertise and knowledge  
6 through—

7 (A) enabling the testing and demonstration  
8 of accident tolerant fuels for existing commer-  
9 cial nuclear reactors and advanced nuclear reac-  
10 tor fuel concepts to be proposed and funded, in  
11 whole or in part, by the private sector;

12 (B) operating a database to store and  
13 share data and knowledge relevant to nuclear  
14 science and engineering between Federal agen-  
15 cies and the private sector;

16 (C) leveraging expertise with respect to  
17 safety analysis and research relating to ad-  
18 vanced nuclear fuel; and

19 (D) enabling technical staff to actively ob-  
20 serve and learn about technologies, with an em-  
21 phasis on identification of additional informa-  
22 tion needed with respect to advanced nuclear  
23 fuel; and

24 (2) to ensure that—

1           (A) the Department of Energy has suffi-  
2           cient technical expertise to support the timely  
3           research, development, demonstration, and com-  
4           mercial application of advanced nuclear fuel;

5           (B) the Commission has sufficient tech-  
6           nical expertise to support the evaluation of ap-  
7           plications for licenses, permits, and design cer-  
8           tifications and other requests for regulatory ap-  
9           proval for advanced nuclear fuel;

10          (C)(i) the Department of Energy main-  
11          tains and develops the facilities necessary to en-  
12          able the timely research, development, dem-  
13          onstration, and commercial application by the  
14          civilian nuclear industry of advanced nuclear  
15          fuel; and

16          (ii) the Commission has access to the fa-  
17          cilities described in clause (i), as needed; and

18          (D) the Commission consults, as appro-  
19          priate, with the modeling and simulation ex-  
20          perts at the Office of Nuclear Energy of the  
21          Department of Energy, at the National Labora-  
22          tories, and within industry fuel vendor teams in  
23          cooperative agreements with the Department of  
24          Energy to leverage physics-based computer  
25          modeling and simulation capabilities.

1       ~~(c) REPORT.—~~

2           ~~(1) IN GENERAL.—Not later than 1 year after~~  
3       ~~the date of enactment of this Act, the Commission~~  
4       ~~shall submit to the appropriate committees of Con-~~  
5       ~~gress a report describing the efforts of the Commis-~~  
6       ~~sion under subsection (a), including—~~

7           ~~(A) an assessment of the preparedness of~~  
8       ~~the Commission to review and qualify for use—~~

9           ~~(i) accident tolerant fuel;~~  
10          ~~(ii) ceramic cladding materials;~~  
11          ~~(iii) fuels containing silicon carbide;~~  
12          ~~(iv) high-assay, low-enriched uranium~~  
13       ~~fuels;~~

14          ~~(v) molten-salt based liquid fuels;~~  
15          ~~(vi) fuels derived from spent nuclear~~  
16       ~~fuel or depleted uranium; and~~

17          ~~(vii) other related fuel concepts, as de-~~  
18       ~~termined by the Commission;~~

19          ~~(B) activities planned or undertaken under~~  
20       ~~the memorandum of understanding described in~~  
21       ~~subsection (b);~~

22          ~~(C) an accounting of the areas of research~~  
23       ~~needed with respect to advanced nuclear fuel;~~  
24       ~~and~~

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1           ~~(D) any other challenges or considerations~~  
 2           ~~identified by the Commission.~~

3           ~~(2) CONSULTATION.—In developing the report~~  
 4           ~~under paragraph (1), the Commission shall seek~~  
 5           ~~input from—~~

6           ~~(A) the Secretary of Energy;~~

7           ~~(B) National Laboratories;~~

8           ~~(C) the nuclear energy industry;~~

9           ~~(D) technology developers;~~

10          ~~(E) nongovernmental organizations; and~~

11          ~~(F) other public stakeholders.~~

12                           **TITLE V—IMPROVING**  
 13                           **COMMISSION EFFICIENCY**

14   **SEC. 501. COMMISSION WORKFORCE.**

15          ~~(a) DEFINITION OF CHAIRMAN.—In this section, the~~  
 16          ~~term “Chairman” means the Chairman of the Commis-~~  
 17          ~~sion.~~

18          ~~(b) APPOINTMENT AUTHORITY.—~~

19               ~~(1) IN GENERAL.—Notwithstanding section 161~~  
 20               ~~d. of the Atomic Energy Act of 1954 (42 U.S.C.~~  
 21               ~~2201(d)), any provision of Reorganization Plan No.~~  
 22               ~~1 of 1980 (94 Stat. 3585; 5 U.S.C. app.) governing~~  
 23               ~~appointments, and any provision of title 5, United~~  
 24               ~~States Code, governing appointments and General~~  
 25               ~~Schedule classification and pay rates, the Chairman~~

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1       may appoint persons to the positions described in  
2       paragraph (2); subject to the limitation described in  
3       paragraph (3); without regard to the civil service  
4       laws.

5       (2) POSITIONS DESCRIBED.—The positions re-  
6       ferred to in paragraph (1) are—

7               (A) positions with highly specialized sci-  
8               entific, engineering, and technical competencies  
9               to address a critical need for the Commission,  
10              including—

- 11                       (i) health physicist;
- 12                       (ii) reactor operations engineer;
- 13                       (iii) human factors analyst or engi-  
14                       neer;
- 15                       (iv) risk and reliability analyst or en-  
16                       gineer;
- 17                       (v) licensing project manager;
- 18                       (vi) reactor engineer for severe acci-  
19                       dents;
- 20                       (vii) geotechnical engineer;
- 21                       (viii) structural engineer;
- 22                       (ix) reactor systems engineer;
- 23                       (x) reactor engineer;
- 24                       (xi) radiation scientist; and
- 25                       (xii) electronics engineer; or

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1           ~~(B)~~ positions to be filled by exceptionally  
2 well-qualified individuals that the Commission  
3 determines are necessary to fulfill the mission  
4 of the Commission.

5           ~~(3)~~ LIMITATION.—The Chairman may appoint  
6 persons to not more than—

7           ~~(A)~~ 90 positions described in paragraph  
8 ~~(2)(A)~~; and

9           ~~(B)~~ 90 positions described in paragraph  
10 ~~(2)(B)~~.

11           ~~(4)~~ HIRING BONUS.—The Commission may pay  
12 any employee appointed under paragraph ~~(1)~~ a 1-  
13 time hiring bonus in an amount not to exceed the  
14 least of—

15           ~~(A)~~ \$25,000;

16           ~~(B)~~ the amount equal to 15 percent of the  
17 annual rate of basic pay of the employee; and

18           ~~(C)~~ the amount of the limitation that is  
19 applicable for a calendar year under section  
20 5307(a)(1) of title 5, United States Code.

21           ~~(5)~~ APPLICATION OF MERIT SYSTEM PRIN-  
22 CIPLES.—To the maximum extent practicable, the  
23 Chairman shall appoint persons under paragraph ~~(1)~~  
24 to the positions described in paragraph ~~(2)~~ in ac-

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1 accordance with the merit system principles set forth  
2 in section 2301 of title 5, United States Code.

3 (e) COMPENSATION AUTHORITY.—

4 (1) IN GENERAL.—Notwithstanding section 161  
5 d. of the Atomic Energy Act of 1954 (42 U.S.C.  
6 2201(d)) and chapter 51, and subchapter III of  
7 chapter 53, of title 5, United States Code, the  
8 Chairman may fix the rate of basic pay for the posi-  
9 tions of individuals described in paragraph (2), sub-  
10 ject to the limitation described in paragraph (3), in  
11 accordance with this subsection.

12 (2) INDIVIDUALS DESCRIBED.—The individuals  
13 referred to in paragraph (1) are—

14 (A) individuals with highly specialized sci-  
15 entific, engineering, and technical competencies  
16 to address a critical need for the Commission,  
17 including individuals with expertise in—

18 (i) health physics;

19 (ii) reactor operations engineering;

20 (iii) human factors analysis or engi-  
21 neering;

22 (iv) risk and reliability analysis or en-  
23 gineering;

24 (v) licensing project management;

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1                   ~~(vi) reactor engineering for severe ac-~~  
2                   ~~idents;~~

3                   ~~(vii) geotechnical engineering;~~

4                   ~~(viii) structural engineering;~~

5                   ~~(ix) reactor systems engineering;~~

6                   ~~(x) reactor engineering;~~

7                   ~~(xi) radiation science; and~~

8                   ~~(xii) electronics engineering; or~~

9                   ~~(B) exceptionally well-qualified individuals~~  
10                  ~~that the Commission determines are necessary~~  
11                  ~~to fulfill the mission of the Commission.~~

12                  ~~(3) LIMITATION.—~~

13                  ~~(A) IN GENERAL.—~~Except as provided in  
14                  ~~subparagraph (B), the annual rate of basic pay~~  
15                  ~~for an individual described in paragraph (2)~~  
16                  ~~may not exceed the per annum rate of salary~~  
17                  ~~payable for level III of the Executive Schedule~~  
18                  ~~under section 5314 of title 5, United States~~  
19                  ~~Code, without regard to the civil service laws.~~

20                  ~~(B) CERTAIN POSITIONS.—~~The Chairman  
21                  ~~may set the annual rate of basic pay for an in-~~  
22                  ~~dividual described in paragraph (2) for not~~  
23                  ~~more than—~~

24                   ~~(i) 90 persons appointed to positions~~  
25                   ~~described in paragraph (2)(A); and~~

66

1                   (ii) ~~90~~ persons appointed to positions  
2                   described in paragraph ~~(2)~~(B).

3           (d) ~~NO DELEGATION.~~—The Chairman may not dele-  
4 gate the authority provided by subsection (b) or (c).

5           (e) ~~ANNUAL SOLICITATION FOR NUCLEAR REGU-~~  
6 ~~LATOR APPRENTICESHIP NETWORK APPLICATIONS.~~—The  
7 Chairman, on an annual basis, shall solicit applications for  
8 the Nuclear Regulator Apprenticeship Network.

9           (f) ~~REPORT.~~—The Chairman shall include in the an-  
10 nual budget justification of the Commission information  
11 that describes—

12                   (1) the total number of and the positions of the  
13 persons appointed under the authority provided by  
14 subsection (b);

15                   (2) the total number of and the positions of the  
16 persons paid at the rate determined under the au-  
17 thority provided by subsection (c);

18                   (3) how the authority provided by subsections  
19 (b) and (c) is being used, and has been used during  
20 the previous fiscal year, to address the hiring and  
21 retention needs of the Commission with respect to  
22 the positions described in those subsections to which  
23 that authority is applicable; and

24                   (4) if the authority provided by subsections (b)  
25 and (c) is not being used, or has not been used, the

1 reasons, including a justification, for not using that  
2 authority.

3 **SEC. 502. COMMISSION CORPORATE SUPPORT FUNDING.**

4 (a) **REPORT.**—Not later than 180 days after the date  
5 of enactment of this Act, the Commission shall submit to  
6 the appropriate committees of Congress and make publicly  
7 available a report that describes—

8 (1) the progress on the implementation of sec-  
9 tion 102(a)(3) of the Nuclear Energy Innovation  
10 and Modernization Act (42 U.S.C. 2215(a)(3)); and

11 (2) whether the Commission is meeting and is  
12 expected to meet the total budget authority caps re-  
13 quired for corporate support under that section.

14 (b) **LIMITATION ON CORPORATE SUPPORT COSTS.**—  
15 Section 102(a)(3) of the Nuclear Energy Innovation and  
16 Modernization Act (42 U.S.C. 2215(a)(3)) is amended by  
17 striking subparagraphs (B) and (C) and inserting the fol-  
18 lowing:

19 “(B) 30 percent for fiscal year 2024 and  
20 each fiscal year thereafter.”

21 (c) **CORPORATE SUPPORT COSTS CLARIFICATION.**—  
22 Paragraph (9) of section 3 of the Nuclear Energy Innova-  
23 tion and Modernization Act (42 U.S.C. 2215 note; Public  
24 Law 115–439) (as redesignated by section 201(a)(1)) is  
25 amended—

1           (1) by striking “The term” and inserting the  
2 following:

3                   “(A) IN GENERAL.—The term”; and

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

5                   “(B) EXCLUSIONS.—The term ‘corporate  
6 support costs’ does not include—

7                           “(i) costs for rent and utilities relat-  
8 ing to any and all space in the Three  
9 White Flint North building that is not oc-  
10 cupied by the Commission; or

11                           “(ii) costs for salaries; travel; and  
12 other support for the Office of the Com-  
13 mission.”.

14 **SEC. 503. PERFORMANCE AND REPORTING UPDATE.**

15           Section 102(c) of the Nuclear Energy Innovation and  
16 Modernization Act (42 U.S.C. 2215(c)) is amended—

17           (1) in paragraph (3)—

18                   (A) in the paragraph heading, by striking  
19 “180” and inserting “90”; and

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

21           and

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

23                   “(4) PERIODIC UPDATES TO METRICS AND  
24 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 established under paragraph (1).~~

7           ~~“(B) REVISIONS.—After each review and~~  
 8           ~~assessment under subparagraph (A), the Com-~~  
 9           ~~mission shall revise and improve, as appro-~~  
 10          ~~priate, the performance metrics and milestone~~  
 11          ~~schedules described in that subparagraph to~~  
 12          ~~provide the most efficient metrics and schedules~~  
 13          ~~reasonably achievable.”.~~

## 14           **TITLE VI—MISCELLANEOUS**

### 15           **SEC. 601. NUCLEAR CLOSURE COMMUNITIES.**

16           ~~(a) DEFINITIONS.—In this section:~~

17           ~~(1) COMMUNITY ADVISORY BOARD.—The term~~  
 18           ~~“community advisory board” means a community~~  
 19           ~~committee or other advisory organization that aims~~  
 20           ~~to foster communication and information exchange~~  
 21           ~~between a licensee planning for and involved in de-~~  
 22           ~~commissioning activities and members of the com-~~  
 23           ~~munity that decommissioning activities may affect.~~

24           ~~(2) DECOMMISSION.—The term “decommis-~~  
 25           ~~sion” has the meaning given the term in section~~

1 ~~50.2 of title 10, Code of Federal Regulations (or~~  
2 ~~successor regulations).~~

3 ~~(3) ELIGIBLE RECIPIENT.—The term “eligible~~  
4 ~~recipient” has the meaning given the term in section~~  
5 ~~3 of the Public Works and Economic Development~~  
6 ~~Act of 1965 (42 U.S.C. 3122).~~

7 ~~(4) LICENSEE.—The term “licensee” has the~~  
8 ~~meaning given the term in section 50.2 of title 10,~~  
9 ~~Code of Federal Regulations (or successor regula-~~  
10 ~~tions).~~

11 ~~(5) NUCLEAR CLOSURE COMMUNITY.—The~~  
12 ~~term “nuclear closure community” means a unit of~~  
13 ~~local government, including a county, city, town, vil-~~  
14 ~~lage, school district, or special district, that has been~~  
15 ~~impacted, or reasonably demonstrates to the satis-~~  
16 ~~faction of the Secretary that it will be impacted, by~~  
17 ~~a nuclear power plant licensed by the Commission~~  
18 ~~that—~~

19 ~~(A) is not co-located with an operating nu-~~  
20 ~~clear power plant;~~

21 ~~(B) is at a site with spent nuclear fuel;~~  
22 ~~and~~

23 ~~(C) as of the date of enactment of this~~  
24 ~~Act—~~

25 ~~(i) has ceased operations; or~~

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1                   (ii) has provided a written notification  
2                   to the Commission that it will cease oper-  
3                   ations:

4           (6) SECRETARY.—The term “Secretary” means  
5           the Secretary of Commerce, acting through the As-  
6           sistant Secretary of Commerce for Economic Devel-  
7           opment.

8           (b) ESTABLISHMENT.—Not later than 180 days after  
9           the date of enactment of this Act, the Secretary shall es-  
10          tablish a grant program to provide grants to eligible re-  
11          cipients—

12           (1) to assist with economic development in nu-  
13          clear closure communities; and

14           (2) to fund community advisory boards in nu-  
15          clear closure communities.

16          (c) REQUIREMENT.—In carrying out this section, to  
17          the maximum extent practicable, the Secretary shall im-  
18          plement the recommendations described in the report sub-  
19          mitted to Congress under section 108 of the Nuclear En-  
20          ergy Innovation and Modernization Act (Public Law 115-  
21          439, 132 Stat. 5577) entitled “Best Practices for Estab-  
22          lishment and Operation of Local Community Advisory  
23          Boards Associated with Decommissioning Activities at  
24          Nuclear Power Plants”.

1       ~~(d) DISTRIBUTION OF FUNDS.—The Secretary shall~~  
 2       ~~establish a formula to ensure, to the maximum extent~~  
 3       ~~practicable, geographic diversity among grant recipients~~  
 4       ~~under this section.~~

5       ~~(c) AUTHORIZATION OF APPROPRIATIONS.—~~

6             ~~(1) IN GENERAL.—There are authorized to be~~  
 7       ~~appropriated to the Secretary—~~

8             ~~(A) to carry out subsection (b)(1),~~  
 9             ~~\$35,000,000 for each of fiscal years 2023~~  
 10            ~~through 2028; and~~

11            ~~(B) to carry out subsection (b)(2),~~  
 12            ~~\$5,000,000 for each of fiscal years 2023~~  
 13            ~~through 2025.~~

14            ~~(2) AVAILABILITY.—Amounts made available~~  
 15       ~~under this section shall remain available for a period~~  
 16       ~~of 5 years beginning on the date on which the~~  
 17       ~~amounts are made available.~~

18            ~~(3) NO OFFSET.—None of the funds made~~  
 19       ~~available under this section may be used to offset~~  
 20       ~~the funding for any other Federal program.~~

21       **SEC. 602. TECHNICAL CORRECTION.**

22       ~~Section 104 e. of the Atomic Energy Act of 1954 (42~~  
 23       ~~U.S.C. 2134(e)) is amended—~~

24            ~~(1) by striking the third sentence and inserting~~  
 25       ~~the following:~~

1           ~~“(3) LIMITATION ON UTILIZATION FACILI-~~  
 2           ~~TIES.—The Commission may issue a license under~~  
 3           ~~this section for a utilization facility useful in the~~  
 4           ~~conduct of research and development activities of the~~  
 5           ~~types specified in section 31 if—~~

6                   ~~“(A) not more than 75 percent of the an-~~  
 7                   ~~nual costs to the licensee of owning and oper-~~  
 8                   ~~ating the facility are devoted to the sale, other~~  
 9                   ~~than for research and development or education~~  
 10                  ~~and training, of—~~

11                           ~~“(i) nonenergy services;~~

12                           ~~“(ii) energy; or~~

13                           ~~“(iii) a combination of nonenergy~~  
 14                   ~~services and energy; and~~

15                   ~~“(B) not more than 50 percent of the an-~~  
 16                   ~~nual costs to the licensee of owning and oper-~~  
 17                   ~~ating the facility are devoted to the sale of en-~~  
 18                   ~~ergy.”;~~

19           ~~(2) in the second sentence, by striking “The~~  
 20           ~~Commission” and inserting the following:~~

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

22           ~~(3) by striking “e. The Commission” and in-~~  
 23           ~~serting the following:~~

24           ~~“e. RESEARCH AND DEVELOPMENT ACTIVITIES.—~~

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

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

4           (a) *SHORT TITLE.*—*This Act may be cited as the “Ac-*  
 5 *celerating Deployment of Versatile, Advanced Nuclear for*  
 6 *Clean Energy Act of 2023” or the “ADVANCE Act of*  
 7 *2023”.*

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

*Sec. 1. Short title; table of contents.*

*Sec. 2. Definitions.*

**TITLE I—AMERICAN NUCLEAR LEADERSHIP**

*Sec. 101. International nuclear reactor export and innovation activities.*

*Sec. 102. Denial of certain domestic licenses for national security purposes.*

*Sec. 103. Export license requirements.*

*Sec. 104. Coordinated international engagement.*

**TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR  
TECHNOLOGIES**

*Sec. 201. Fees for advanced nuclear reactor application review.*

*Sec. 202. Advanced nuclear reactor prizes.*

*Sec. 203. Report on unique licensing considerations relating to the use of nuclear  
energy for nonelectric applications.*

*Sec. 204. Enabling preparations for the demonstration of advanced nuclear reac-  
tors on Department of Energy sites or critical national security  
infrastructure sites.*

*Sec. 205. Clarification on fusion regulation.*

*Sec. 206. Regulatory issues for nuclear facilities at brownfield sites.*

*Sec. 207. Appalachian Regional Commission nuclear energy development.*

**TITLE III—PRESERVING EXISTING NUCLEAR ENERGY GENERATION**

*Sec. 301. Investment by allies.*

*Sec. 302. Extension of the Price-Anderson Act.*

**TITLE IV—NUCLEAR FUEL CYCLE, SUPPLY CHAIN,  
INFRASTRUCTURE, AND WORKFORCE**

*Sec. 401. Report on advanced methods of manufacturing and construction for nu-  
clear energy applications.*

*Sec. 402. Nuclear energy traineeship.*

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*Sec. 403. Report on Commission readiness and capacity to license additional conversion and enrichment capacity to reduce reliance on uranium from Russia.*

*Sec. 404. Annual report on the spent nuclear fuel and high-level radioactive waste inventory in the United States.*

*Sec. 405. Authorization of appropriations for superfund actions at abandoned mining sites on Tribal land.*

*Sec. 406. Development, qualification, and licensing of advanced nuclear fuel concepts.*

## TITLE V—IMPROVING COMMISSION EFFICIENCY

*Sec. 501. Commission workforce.*

*Sec. 502. Commission corporate support funding.*

*Sec. 503. Performance and reporting update.*

## TITLE VI—MISCELLANEOUS

*Sec. 601. Nuclear closure communities.*

*Sec. 602. Technical correction.*

*Sec. 603. Report on engagement with the Government of Canada with respect to nuclear waste issues in the Great Lakes Basin.*

1 **SEC. 2. DEFINITIONS.**

2 *In this Act:*

3 (1) *ACCIDENT TOLERANT FUEL.*—The term “ac-  
4 cident tolerant fuel” has the meaning given the term  
5 in section 107(a) of the Nuclear Energy Innovation  
6 and Modernization Act (Public Law 115–439; 132  
7 Stat. 5577).

8 (2) *ADMINISTRATOR.*—The term “Adminis-  
9 trator” means the Administrator of the Environ-  
10 mental Protection Agency.

11 (3) *ADVANCED NUCLEAR FUEL.*—The term “ad-  
12 vanced nuclear fuel” means—

13 (A) *advanced nuclear reactor fuel; and*

14 (B) *accident tolerant fuel.*

1           (4) *ADVANCED NUCLEAR REACTOR.*—*The term*  
2           *“advanced nuclear reactor” has the meaning given the*  
3           *term in section 3 of the Nuclear Energy Innovation*  
4           *and Modernization Act (42 U.S.C. 2215 note; Public*  
5           *Law 115–439).*

6           (5) *ADVANCED NUCLEAR REACTOR FUEL.*—*The*  
7           *term “advanced nuclear reactor fuel” has the meaning*  
8           *given the term in section 3 of the Nuclear Energy In-*  
9           *novation and Modernization Act (42 U.S.C. 2215*  
10           *note; Public Law 115–439).*

11           (6) *APPROPRIATE COMMITTEES OF CONGRESS.*—  
12           *The term “appropriate committees of Congress”*  
13           *means—*

14                     (A) *the Committee on Environment and*  
15                     *Public Works of the Senate; and*

16                     (B) *the Committee on Energy and Com-*  
17                     *merce of the House of Representatives.*

18           (7) *COMMISSION.*—*The term “Commission”*  
19           *means the Nuclear Regulatory Commission.*

20           (8) *INSTITUTION OF HIGHER EDUCATION.*—*The*  
21           *term “institution of higher education” has the mean-*  
22           *ing given the term in section 101(a) of the Higher*  
23           *Education Act of 1965 (20 U.S.C. 1001(a)).*

24           (9) *NATIONAL LABORATORY.*—*The term “Na-*  
25           *tional Laboratory” has the meaning given the term in*

1       *section 2 of the Energy Policy Act of 2005 (42 U.S.C.*  
2       *15801).*

3       ***TITLE I—AMERICAN NUCLEAR***  
4       ***LEADERSHIP***

5       ***SEC. 101. INTERNATIONAL NUCLEAR REACTOR EXPORT***  
6       ***AND INNOVATION ACTIVITIES.***

7       *(a) COORDINATION.—*

8             *(1) IN GENERAL.—The Commission shall—*

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

11                             *(i) nuclear reactor import and export*  
12                            *licensing; and*

13                            *(ii) international regulatory coopera-*  
14                            *tion and assistance relating to nuclear reac-*  
15                            *tors, including with countries that are*  
16                            *members of—*

17                                     *(I) the Organisation for Economic*  
18                                    *Co-operation and Development; or*

19                                    *(II) the Nuclear Energy Agency;*  
20                                    *and*

21                            *(B) support interagency and international*  
22                            *coordination with respect to—*

23                                     *(i) the consideration of international*  
24                                    *technical standards to establish the licensing*  
25                                    *and regulatory basis to assist the design,*

1 *construction, and operation of nuclear sys-*  
2 *tems;*

3 *(ii) efforts to help build competent nu-*  
4 *clear regulatory organizations and legal*  
5 *frameworks in countries seeking to develop*  
6 *nuclear power; and*

7 *(iii) exchange programs and training*  
8 *provided to other countries relating to nu-*  
9 *clear regulation and oversight to improve*  
10 *nuclear technology licensing, in accordance*  
11 *with paragraph (2).*

12 *(2) EXCHANGE PROGRAMS AND TRAINING.—With*  
13 *respect to the exchange programs and training de-*  
14 *scribed in paragraph (1)(B)(iii), the Commission*  
15 *shall coordinate, as applicable, with—*

16 *(A) the Secretary of Energy;*

17 *(B) National Laboratories;*

18 *(C) the private sector; and*

19 *(D) institutions of higher education.*

20 *(b) AUTHORITY TO ESTABLISH BRANCH.—The Com-*  
21 *mission may establish within the Office of International*  
22 *Programs a branch, to be known as the “International Nu-*  
23 *clear Reactor Export and Innovation Branch”, to carry out*  
24 *such international nuclear reactor export and innovation*

1 *activities as the Commission determines to be appropriate*  
2 *and within the mission of the Commission.*

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

5 (1) *IN GENERAL.—Section 102 of the Nuclear*  
6 *Energy Innovation and Modernization Act (42 U.S.C.*  
7 *2215) is amended—*

8 (A) *in subsection (a), by adding at the end*  
9 *the following:*

10 “(4) *INTERNATIONAL NUCLEAR REACTOR EXPORT*  
11 *AND INNOVATION ACTIVITIES.—The Commission shall*  
12 *identify in the annual budget justification inter-*  
13 *national nuclear reactor export and innovation ac-*  
14 *tivities described in section 101(a) of the ADVANCE*  
15 *Act of 2023.”; and*

16 (B) *in subsection (b)(1)(B), by adding at*  
17 *the end the following:*

18 “(iv) *Costs for international nuclear*  
19 *reactor export and innovation activities de-*  
20 *scribed in section 101(a) of the ADVANCE*  
21 *Act of 2023.”.*

22 (2) *EFFECTIVE DATE.—The amendments made*  
23 *by paragraph (1) shall take effect on October 1, 2024.*

1       (d) *SAVINGS CLAUSE.—Nothing in this section alters*  
2 *the authority of the Commission to license and regulate the*  
3 *civilian use of radioactive materials.*

4 **SEC. 102. DENIAL OF CERTAIN DOMESTIC LICENSES FOR**  
5 **NATIONAL SECURITY PURPOSES.**

6       (a) *DEFINITION OF COVERED FUEL.—In this section,*  
7 *the term “covered fuel” means enriched uranium that is*  
8 *fabricated into fuel assemblies for nuclear reactors by an*  
9 *entity that—*

10           (1) *is owned or controlled by the Government of*  
11 *the Russian Federation or the Government of the Peo-*  
12 *ple’s Republic of China; or*

13           (2) *is organized under the laws of, or otherwise*  
14 *subject to the jurisdiction of, the Russian Federation*  
15 *or the People’s Republic of China.*

16       (b) *PROHIBITION ON UNLICENSED POSSESSION OR*  
17 *OWNERSHIP OF COVERED FUEL.—Unless specifically au-*  
18 *thorized by the Commission in a license issued under sec-*  
19 *tion 53 of the Atomic Energy Act of 1954 (42 U.S.C. 2073)*  
20 *and part 70 of title 10, Code of Federal Regulations (or*  
21 *successor regulations), no person subject to the jurisdiction*  
22 *of the Commission may possess or own covered fuel.*

23       (c) *LICENSE TO POSSESS OR OWN COVERED FUEL.—*

24           (1) *CONSULTATION REQUIRED PRIOR TO*  
25 *ISSUANCE.—The Commission shall not issue a license*

1       to possess or own covered fuel under section 53 of the  
2       Atomic Energy Act of 1954 (42 U.S.C. 2073) and  
3       part 70 of title 10, Code of Federal Regulations (or  
4       successor regulations), unless the Commission has first  
5       consulted with the Secretary of Energy and the Sec-  
6       retary of State before issuing the license.

7               (2) PROHIBITION ON ISSUANCE OF LICENSE.—

8                       (A) IN GENERAL.—Subject to subparagraph  
9                       (C), a license to possess or own covered fuel shall  
10                      not be issued if the Secretary of Energy and the  
11                      Secretary of State make the determination de-  
12                      scribed in subparagraph (B).

13                     (B) DETERMINATION.—

14                               (i) IN GENERAL.—The determination  
15                               referred to in subparagraph (A) is a deter-  
16                               mination that possession or ownership, as  
17                               applicable, of covered fuel poses a threat to  
18                               the national security of the United States  
19                               that adversely impacts the physical and eco-  
20                               nomic security of the United States.

21                               (ii) JOINT DETERMINATION.—A deter-  
22                               mination described in clause (i) shall be  
23                               jointly made by the Secretary of Energy  
24                               and the Secretary of State.

25                               (iii) TIMELINE.—

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1                   (I) *NOTICE OF APPLICATION.*—*Not*  
2                   *later than 30 days after the date on*  
3                   *which the Commission receives an ap-*  
4                   *plication for a license to possess or*  
5                   *own covered fuel, the Commission shall*  
6                   *notify the Secretary of Energy and the*  
7                   *Secretary of State of the application.*

8                   (II) *DETERMINATION.*—*The Sec-*  
9                   *retary of Energy and the Secretary of*  
10                  *State shall have a period of 180 days,*  
11                  *beginning on the date on which the*  
12                  *Commission notifies the Secretary of*  
13                  *Energy and the Secretary of State*  
14                  *under subclause (I) of an application*  
15                  *for a license to possess or own covered*  
16                  *fuel, in which to make the determina-*  
17                  *tion described in clause (i).*

18                  (III) *COMMISSION NOTIFICA-*  
19                  *TION.*—*On making the determination*  
20                  *described in clause (i), the Secretary of*  
21                  *Energy and the Secretary of State*  
22                  *shall immediately notify the Commis-*  
23                  *sion.*

24                  (IV) *CONGRESSIONAL NOTIFICA-*  
25                  *TION.*—*Not later than 30 days after*

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1           *the date on which the Secretary of En-*  
2           *ergy and the Secretary of State notify*  
3           *the Commission under subclause (III),*  
4           *the Commission shall notify the appro-*  
5           *priate committees of Congress of the*  
6           *determination.*

7                   (V) *PUBLIC NOTICE.*—*Not later*  
8           *than 15 days after the date on which*  
9           *the Commission notifies Congress*  
10          *under subclause (IV) of a determina-*  
11          *tion made under clause (i), the Com-*  
12          *mission shall make that determination*  
13          *publicly available.*

14                   (C) *EFFECT OF NO DETERMINATION.*—*The*  
15          *prohibition described in subparagraph (A) shall*  
16          *not apply if the Secretary of Energy and the*  
17          *Secretary of State do not make the determina-*  
18          *tion described in subparagraph (B) by the date*  
19          *described in clause (iii)(II) of that subpara-*  
20          *graph.*

21                   (d) *SAVINGS CLAUSE.*—*Nothing in this section alters*  
22          *any treaty or international agreement in effect on the date*  
23          *of enactment of this Act.*

1 **SEC. 103. EXPORT LICENSE REQUIREMENTS.**

2 (a) *DEFINITION OF LOW-ENRICHED URANIUM.*—In  
3 this section, the term “low-enriched uranium” means ura-  
4 nium enriched to less than 20 percent of the uranium-235  
5 isotope.

6 (b) *REQUIREMENT.*—The Commission shall not issue  
7 an export license for the transfer of any item described in  
8 subsection (d) to a country described in subsection (c) unless  
9 the Commission makes a determination that such transfer  
10 will not be inimical to the common defense and security  
11 of the United States.

12 (c) *COUNTRIES DESCRIBED.*—A country referred to in  
13 subsection (b) is a country that—

14 (1) has not concluded and ratified an Additional  
15 Protocol to its safeguards agreement with the Inter-  
16 national Atomic Energy Agency; or

17 (2) has not ratified or acceded to the amendment  
18 to the Convention on the Physical Protection of Nu-  
19 clear Material, adopted at Vienna October 26, 1979,  
20 and opened for signature at New York March 3, 1980  
21 (TIAS 11080), described in the information circular  
22 of the International Atomic Energy Agency numbered  
23 INFCIRC/274/Rev.1/Mod.1 and dated May 9, 2016  
24 (TIAS 16–508).

25 (d) *ITEMS DESCRIBED.*—An item referred to in sub-  
26 section (b) includes—

1           (1) *unirradiated nuclear fuel containing special*  
2           *nuclear material (as defined in section 11 of the*  
3           *Atomic Energy Act of 1954 (42 U.S.C. 2014)), exclud-*  
4           *ing low-enriched uranium;*

5           (2) *a nuclear reactor that uses nuclear fuel de-*  
6           *scribed in paragraph (1); and*

7           (3) *any plant or component listed in Appendix*  
8           *I to part 110 of title 10, Code of Federal Regulations*  
9           *(or successor regulations), that is involved in—*

10           (A) *the reprocessing of irradiated nuclear*  
11           *reactor fuel elements;*

12           (B) *the separation of plutonium; or*

13           (C) *the separation of the uranium-233 iso-*  
14           *tope.*

15           (e) *NOTIFICATION.—If the Commission makes a deter-*  
16           *mination under subsection (b) that the transfer of any item*  
17           *described in subsection (d) to a country described in sub-*  
18           *section (c) will not be inimical to the common defense and*  
19           *security of the United States, the Commission shall notify*  
20           *the appropriate committees of Congress.*

21 **SEC. 104. COORDINATED INTERNATIONAL ENGAGEMENT.**

22           (a) *DEFINITIONS.—In this section:*

23           (1) *EMBARKING CIVIL NUCLEAR NATION.—*

24           (A) *IN GENERAL.—The term “embarking*  
25           *civil nuclear nation” means a country that—*

1                   (i) does not have a civil nuclear pro-  
2                   gram;

3                   (ii) is in the process of developing or  
4                   expanding a civil nuclear program, includ-  
5                   ing safeguards and a legal and regulatory  
6                   framework; or

7                   (iii) is in the process of selecting, de-  
8                   veloping, constructing, or utilizing an ad-  
9                   vanced nuclear reactor or advanced civil  
10                  nuclear technologies.

11                  (B) *EXCLUSIONS.*—The term “embarking  
12                  civil nuclear nation” does not include—

13                   (i) the People’s Republic of China;

14                   (ii) the Russian Federation;

15                   (iii) the Republic of Belarus;

16                   (iv) the Islamic Republic of Iran;

17                   (v) the Democratic People’s Republic of  
18                  Korea;

19                   (vi) the Republic of Cuba;

20                   (vii) the Bolivarian Republic of Ven-  
21                  ezuela;

22                   (viii) the Syrian Arab Republic;

23                   (ix) Burma; or

24                   (x) any other country—

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1           (I) *the property or interests in*  
2           *property of the government of which*  
3           *are blocked pursuant to the Inter-*  
4           *national Emergency Economic Powers*  
5           *Act (50 U.S.C. 1701 et seq.); or*

6           (II) *the government of which the*  
7           *Secretary of State has determined has*  
8           *repeatedly provided support for acts of*  
9           *international terrorism for purposes*  
10          *of—*

11                   (aa) *section 620A(a) of the*  
12                   *Foreign Assistance Act of 1961*  
13                   *(22 U.S.C. 2371(a));*

14                   (bb) *section 40(d) of the*  
15                   *Arms Export Control Act (22*  
16                   *U.S.C. 2780(d));*

17                   (cc) *section 1754(c)(1)(A)(i)*  
18                   *of the Export Control Reform Act*  
19                   *of 2018 (50 U.S.C.*  
20                   *4813(c)(1)(A)(i)); or*

21                   (dd) *any other relevant pro-*  
22                   *vision of law.*

23           (2) *SECRETARIES.—The term “Secretaries”*  
24           *means the Secretary of Commerce and the Secretary*  
25           *of Energy, acting—*

1           (A) *in consultation with each other; and*  
2           (B) *in coordination with—*  
3                 (i) *the Secretary of State;*  
4                 (ii) *the Commission;*  
5                 (iii) *the Secretary of the Treasury;*  
6                 (iv) *the President of the Export-Import*  
7                 *Bank of the United States; and*  
8                 (v) *officials of other Federal agencies,*  
9                 *as the Secretary of Commerce determines to*  
10                 *be appropriate.*

11           (3) *U.S. NUCLEAR ENERGY COMPANY.—The term*  
12           *“U.S. nuclear energy company” means a company*  
13           *that—*

14                 (A) *is organized under the laws of, or other-*  
15                 *wise subject to the jurisdiction of, the United*  
16                 *States; and*

17                 (B) *is involved in the nuclear energy indus-*  
18                 *try.*

19           (b) *INTERNATIONAL CIVIL NUCLEAR MODERNIZATION*  
20           *INITIATIVE.—*

21                 (1) *IN GENERAL.—The Secretaries shall establish*  
22                 *and carry out, in accordance with applicable nuclear*  
23                 *technology export laws (including regulations), an*  
24                 *international initiative to modernize civil nuclear*  
25                 *outreach to embarking civil nuclear nations.*

1           (2) *ACTIVITIES.*—*In carrying out the initiative*  
2           *described in paragraph (1)—*

3                   (A) *the Secretary of Commerce shall—*

4                           (i) *expand outreach by the Executive*  
5                           *Branch to the private investment commu-*  
6                           *nity to create public-private financing rela-*  
7                           *tionships to assist in the export of civil nu-*  
8                           *clear technology to embarking civil nuclear*  
9                           *nations;*

10                          (ii) *seek to coordinate, to the max-*  
11                          *imum extent practicable, the work carried*  
12                          *out by each of—*

13                                   (I) *the Commission;*

14                                   (II) *the Department of Energy;*

15                                   (III) *the Department of State;*

16                                   (IV) *the Nuclear Energy Agency;*

17                                   (V) *the International Atomic En-*  
18                                   *ergy Agency; and*

19                                   (VI) *other agencies, as the Sec-*  
20                                   *retary of Commerce determines to be*  
21                                   *appropriate; and*

22                                   (iii) *improve the regulatory framework*  
23                                   *to allow for the efficient and expeditious ex-*  
24                                   *porting and importing of items under the*

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1 *jurisdiction of the Secretary of Commerce;*  
2 *and*

3 *(B) the Secretary of Energy shall—*

4 *(i) assist nongovernmental organiza-*  
5 *tions and appropriate offices, administra-*  
6 *tions, agencies, laboratories, and programs*  
7 *of the Federal Government in providing*  
8 *education and training to foreign govern-*  
9 *ments in nuclear safety, security, and safe-*  
10 *guards—*

11 *(I) through engagement with the*  
12 *International Atomic Energy Agency;*  
13 *or*

14 *(II) independently, if the applica-*  
15 *ble nongovernmental organization, of-*  
16 *fice, administration, agency, labora-*  
17 *tory, or program determines that it*  
18 *would be more advantageous under the*  
19 *circumstances to provide the applicable*  
20 *education and training independently;*

21 *(ii) assist the efforts of the Inter-*  
22 *national Atomic Energy Agency to expand*  
23 *the support provided by the International*  
24 *Atomic Energy Agency to embarking civil*

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1           *nuclear nations for nuclear safety, security,*  
2           *and safeguards; and*

3                     *(iii) assist U.S. nuclear energy compa-*  
4           *nies to integrate security and safeguards by*  
5           *design in international outreach carried out*  
6           *by those U.S. nuclear energy companies.*

7           (c) *REPORT.*—*Not later than 2 years after the date of*  
8           *enactment of this Act, the Secretary of Commerce, in con-*  
9           *sultation with the Secretary of Energy, shall submit to Con-*  
10          *gress a report describing the activities carried out under*  
11          *this section.*

12       ***TITLE II—DEVELOPING AND DE-***  
13       ***PLOYING NEW NUCLEAR***  
14       ***TECHNOLOGIES***

15       ***SEC. 201. FEES FOR ADVANCED NUCLEAR REACTOR APPLI-***  
16       ***CATION REVIEW.***

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

20                     (1) *by redesignating paragraphs (2) through (15)*  
21           *as paragraphs (3), (6), (7), (8), (9), (10), (12), (15),*  
22           *(16), (17), (18), (19), (20), and (21), respectively;*

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

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

7           (3) *by inserting after paragraph (3) (as so red-*  
8           *esignated) the following:*

9           “(4) *ADVANCED NUCLEAR REACTOR PRE-APPLI-*  
10           *CANT.—The term ‘advanced nuclear reactor pre-appli-*  
11           *cant’ means an entity that has submitted to the Com-*  
12           *mission a licensing project plan for the purposes of*  
13           *submitting a future application to receive a license*  
14           *for an advanced nuclear reactor under the Atomic*  
15           *Energy Act of 1954 (42 U.S.C. 2011 et seq.).*

16           “(5) *AGENCY SUPPORT.—The term ‘agency sup-*  
17           *port’ means the resources of the Commission that are*  
18           *located in executive, administrative, and other sup-*  
19           *port offices of the Commission, as described in the*  
20           *document of the Commission entitled ‘FY 2022 Final*  
21           *Fee Rule Work Papers’ (or a successor document).”;*

22           (4) *by inserting after paragraph (10) (as so re-*  
23           *designated) the following:*

24           “(11) *HOURLY RATE FOR MISSION-DIRECT PRO-*  
25           *GRAM SALARIES AND BENEFITS FOR THE NUCLEAR*

1     *REACTOR SAFETY PROGRAM.—The term ‘hourly rate*  
 2     *for mission-direct program salaries and benefits for*  
 3     *the Nuclear Reactor Safety Program’ means the*  
 4     *quotient obtained by dividing—*

5             *“(A) the full-time equivalent rate (within*  
 6             *the meaning of the document of the Commission*  
 7             *entitled ‘FY 2022 Final Fee Rule Work Papers’*  
 8             *(or a successor document)) for mission-direct*  
 9             *program salaries and benefits for the Nuclear*  
 10            *Reactor Safety Program (as determined by the*  
 11            *Commission) for a fiscal year; by*

12            *“(B) the productive hours assumption for*  
 13            *that fiscal year, determined in accordance with*  
 14            *the formula established in the document referred*  
 15            *to in subparagraph (A) (or a successor docu-*  
 16            *ment).”;* and

17            *(5) by inserting after paragraph (12) (as so re-*  
 18            *designated) the following:*

19            *“(13) MISSION-DIRECT PROGRAM SALARIES AND*  
 20            *BENEFITS FOR THE NUCLEAR REACTOR SAFETY PRO-*  
 21            *GRAM.—The term ‘mission-direct program salaries*  
 22            *and benefits for the Nuclear Reactor Safety Program’*  
 23            *means the resources of the Commission that are allo-*  
 24            *cated to the Nuclear Reactor Safety Program (as de-*  
 25            *termined by the Commission) to perform core work*

1     *activities committed to fulfilling the mission of the*  
2     *Commission, as described in the document of the*  
3     *Commission entitled ‘FY 2022 Final Fee Rule Work*  
4     *Papers’ (or a successor document).*

5             “(14) *MISSION-INDIRECT PROGRAM SUPPORT.*—  
6     *The term ‘mission-indirect program support’ means*  
7     *the resources of the Commission that support the core*  
8     *mission-direct activities for the Nuclear Reactor Safe-*  
9     *ty Program of the Commission (as determined by the*  
10     *Commission), as described in the document of the*  
11     *Commission entitled ‘FY 2022 Final Fee Rule Work*  
12     *Papers’ (or a successor document).”.*

13     (b) *EXCLUDED ACTIVITIES.*—*Section 102(b)(1)(B) of*  
14     *the Nuclear Energy Innovation and Modernization Act (42*  
15     *U.S.C. 2215(b)(1)(B)) (as amended by section 101(c)(1)(B))*  
16     *is amended by adding at the end the following:*

17             “(v) *The total costs of mission-indirect*  
18             *program support and agency support that,*  
19             *under paragraph (2)(B), may not be in-*  
20             *cluded in the hourly rate charged for fees*  
21             *assessed to advanced nuclear reactor appli-*  
22             *cants.*

23             “(vi) *The total costs of mission-indirect*  
24             *program support and agency support that,*  
25             *under paragraph (2)(C), may not be in-*

1           *cluded in the hourly rate charged for fees*  
2           *assessed to advanced nuclear reactor pre-ap-*  
3           *plicants.”.*

4           *(c) FEES FOR SERVICE OR THING OF VALUE.—Section*  
5           *102(b) of the Nuclear Energy Innovation and Moderniza-*  
6           *tion Act (42 U.S.C. 2215(b)) is amended by striking para-*  
7           *graph (2) and inserting the following:*

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

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

16           “(B) *ADVANCED NUCLEAR REACTOR APPLI-*  
17           *CANTS.—The hourly rate charged for fees assessed*  
18           *to advanced nuclear reactor applicants under*  
19           *this paragraph relating to the review of a sub-*  
20           *mitted application described in section 3(1) shall*  
21           *not exceed the hourly rate for mission-direct pro-*  
22           *gram salaries and benefits for the Nuclear Reac-*  
23           *tor Safety Program.*

24           “(C) *ADVANCED NUCLEAR REACTOR PRE-AP-*  
25           *PLICANTS.—The hourly rate charged for fees as-*

1           *essed to advanced nuclear reactor pre-applicants*  
 2           *under this paragraph relating to the review of*  
 3           *submitted materials as described in the licensing*  
 4           *project plan of an advanced nuclear reactor pre-*  
 5           *applicant shall not exceed the hourly rate for*  
 6           *mission-direct program salaries and benefits for*  
 7           *the Nuclear Reactor Safety Program.”.*

8           (d) *SUNSET.—Section 102 of the Nuclear Energy In-*  
 9           *novation and Modernization Act (42 U.S.C. 2215) is*  
 10          *amended by adding at the end the following:*

11          “(g) *CESSATION OF EFFECTIVENESS.—Paragraphs*  
 12          *(1)(B)(vi) and (2)(C) of subsection (b) shall cease to be effec-*  
 13          *tive on September 30, 2029.”.*

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

16          **SEC. 202. ADVANCED NUCLEAR REACTOR PRIZES.**

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

20          “(f) *PRIZES FOR ADVANCED NUCLEAR REACTOR LI-*  
 21          *CENSING.—*

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

24                          “(A) *a non-Federal entity; and*

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

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

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

11           “(i) *to which the Commission issues an*  
12           *operating license for an advanced nuclear*  
13           *reactor under part 50 of title 10, Code of*  
14           *Federal Regulations (or successor regula-*  
15           *tions), for which an application has not*  
16           *been approved by the Commission as of the*  
17           *date of enactment of this subsection; or*

18           “(ii) *for which the Commission makes*  
19           *a finding described in section 52.103(g) of*  
20           *title 10, Code of Federal Regulations (or*  
21           *successor regulations), with respect to a*  
22           *combined license for an advanced nuclear*  
23           *reactor—*

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

4                   “(II) for which an application  
5                   has not been approved by the Commis-  
6                   sion as of the date of enactment of this  
7                   subsection.

8                   “(B) AMOUNT OF AWARD.—An award under  
9                   subparagraph (A) shall be in an amount equal  
10                  to the total amount assessed by the Commission  
11                  and collected under section 102(b)(2) from the el-  
12                  igible entity receiving the award for costs relat-  
13                  ing to the issuance of the license described in  
14                  that subparagraph, including, as applicable,  
15                  costs relating to the issuance of an associated  
16                  construction permit described in section 50.23 of  
17                  title 10, Code of Federal Regulations (or suc-  
18                  cessor regulations), or early site permit (as de-  
19                  fined in section 52.1 of that title (or successor  
20                  regulations)).

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

23                         “(i) the first advanced nuclear reactor  
24                         for which the Commission—

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

3                   “(II) makes a finding in accord-  
4                   ance with clause (ii) of that subpara-  
5                   graph;

6                   “(ii) an advanced nuclear reactor  
7                   that—

8                   “(I) uses isotopes derived from  
9                   spent nuclear fuel (as defined in sec-  
10                  tion 2 of the Nuclear Waste Policy Act  
11                  of 1982 (42 U.S.C. 10101)) or depleted  
12                  uranium as fuel for the advanced nu-  
13                  clear reactor; and

14                  “(II) is the first advanced nuclear  
15                  reactor described in subclause (I) for  
16                  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;

23                  “(iii) an advanced nuclear reactor  
24                  that—

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1                   “(I) is a nuclear integrated en-  
2                   ergy system—

3                   “(aa) that is composed of 2  
4                   or more co-located or jointly oper-  
5                   ated subsystems of energy genera-  
6                   tion, energy storage, or other tech-  
7                   nologies;

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

12                  “(cc) the purpose of which  
13                  is—

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

18                  “(BB) to maximize en-  
19                  ergy production and effi-  
20                  ciency; and

21                  “(II) is the first advanced nuclear  
22                  reactor described in subclause (I) for  
23                  which the Commission—

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

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

7                   “(iv) an advanced reactor that—

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

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

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

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

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

25                   “(3) FEDERAL FUNDING LIMITATIONS.—

## 102

1           “(A) *EXCLUSION OF TVA FUNDS.*—*In this*  
2           *paragraph, the term ‘Federal funds’ does not in-*  
3           *clude funds received under the power program of*  
4           *the Tennessee Valley Authority.*

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

15           “(C) *REPAYMENT AND DIVIDENDS NOT RE-*  
16           *QUIRED.*—*Notwithstanding section 9104(a)(4) of*  
17           *title 31, United States Code, or any other provi-*  
18           *sion of law, an eligible entity that receives an*  
19           *award under this subsection shall not be re-*  
20           *quired—*

21                   “(i) *to repay that award or any part*  
22                   *of that award; or*

23                   “(ii) *to pay a dividend, interest, or*  
24                   *other similar payment based on the sum of*  
25                   *that award.”.*

1 **SEC. 203. REPORT ON UNIQUE LICENSING CONSIDER-**  
2 **ATIONS RELATING TO THE USE OF NUCLEAR**  
3 **ENERGY FOR NONELECTRIC APPLICATIONS.**

4 (a) *IN GENERAL.*—Not later than 270 days after the  
5 date of enactment of this Act, the Commission shall submit  
6 to the appropriate committees of Congress a report (referred  
7 to in this section as the “report”) addressing any unique  
8 licensing issues or requirements relating to—

9 (1) *the flexible operation of nuclear reactors,*  
10 *such as ramping power output and switching between*  
11 *electricity generation and nonelectric applications;*

12 (2) *the use of advanced nuclear reactors exclu-*  
13 *sively for nonelectric applications; and*

14 (3) *the colocation of nuclear reactors with indus-*  
15 *trial plants or other facilities.*

16 (b) *STAKEHOLDER INPUT.*—In developing the report,  
17 the Commission shall seek input from—

18 (1) *the Secretary of Energy;*

19 (2) *the nuclear energy industry;*

20 (3) *technology developers;*

21 (4) *the industrial, chemical, and medical sectors;*

22 (5) *nongovernmental organizations; and*

23 (6) *other public stakeholders.*

24 (c) *CONTENTS.*—

25 (1) *IN GENERAL.*—The report shall describe—

1           (A) any unique licensing issues or require-  
2           ments relating to the matters described in para-  
3           graphs (1) through (3) of subsection (a), includ-  
4           ing, with respect to the nonelectric applications  
5           referred to in paragraphs (1) and (2) of that  
6           subsection, any licensing issues or requirements  
7           relating to the use of nuclear energy in—

8                   (i) hydrogen or other liquid and gas-  
9                   eous fuel or chemical production;

10                   (ii) water desalination and wastewater  
11                   treatment;

12                   (iii) heat for industrial processes;

13                   (iv) district heating;

14                   (v) energy storage;

15                   (vi) industrial or medical isotope pro-  
16                   duction; and

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

19           (B) options for addressing those issues or  
20           requirements—

21                   (i) within the existing regulatory  
22                   framework of the Commission;

23                   (ii) as part of the technology-inclusive  
24                   regulatory framework required under sub-  
25                   section (a)(4) of section 103 of the Nuclear

1           *Energy Innovation and Modernization Act*  
 2           *(42 U.S.C. 2133 note; Public Law 115–439)*  
 3           *or described in the report required under*  
 4           *subsection (e) of that section (Public Law*  
 5           *115–439; 132 Stat. 5575); or*

6                     *(iii) through a new rulemaking; and*  
 7                     *(C) the extent to which Commission action*  
 8           *is needed to implement any matter described in*  
 9           *the report.*

10           (2) *COST ESTIMATES, BUDGETS, AND TIME-*  
 11           *FRAMES.—The report shall include cost estimates,*  
 12           *proposed budgets, and proposed timeframes for imple-*  
 13           *menting risk-informed and performance-based regu-*  
 14           *latory guidance in the licensing of nuclear reactors*  
 15           *for nonelectric applications.*

16 **SEC. 204. ENABLING PREPARATIONS FOR THE DEMONSTRATION**  
 17                     **OF ADVANCED NUCLEAR REACTORS ON**  
 18                     **DEPARTMENT OF ENERGY SITES OR CRITICAL**  
 19                     **NATIONAL SECURITY INFRASTRUCTURE**  
 20                     **SITES.**

21           (a) *IN GENERAL.—Section 102(b)(1)(B) of the Nuclear*  
 22           *Energy Innovation and Modernization Act (42 U.S.C.*  
 23           *2215(b)(1)(B)) (as amended by section 201(b)) is amended*  
 24           *by adding at the end the following:*

25                     “(vi) Costs for—

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1           “(I) activities to review and ap-  
2           prove or disapprove an application for  
3           an early site permit (as defined in sec-  
4           tion 52.1 of title 10, Code of Federal  
5           Regulations (or a successor regula-  
6           tion)) to demonstrate an advanced nu-  
7           clear reactor on a Department of En-  
8           ergy site or critical national security  
9           infrastructure (as defined in section  
10          327(d) of the John S. McCain National  
11          Defense Authorization Act for Fiscal  
12          Year 2019 (Public Law 115–232; 132  
13          Stat. 1722)) site; and

14          “(II) pre-application activities re-  
15          lating to an early site permit (as de-  
16          fined in section 52.1 of title 10, Code  
17          of Federal Regulations (or a successor  
18          regulation)) to demonstrate an ad-  
19          vanced nuclear reactor on a Depart-  
20          ment of Energy site or critical na-  
21          tional security infrastructure (as de-  
22          fined in section 327(d) of the John S.  
23          McCain National Defense Authoriza-  
24          tion Act for Fiscal Year 2019 (Public  
25          Law 115–232; 132 Stat. 1722)) site.”.

1           (b) *EFFECTIVE DATE.*—*The amendment made by sub-*  
 2 *section (a) shall take effect on October 1, 2024.*

3 **SEC. 205. CLARIFICATION ON FUSION REGULATION.**

4           *Section 103(a)(4) of the Nuclear Energy Innovation*  
 5 *and Modernization Act (42 U.S.C. 2133 note; Public Law*  
 6 *115–439) is amended—*

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

9                   “(A) *IN GENERAL.*—*Not later”;* and

10           (2) *by adding at the end the following:*

11                   “(B) *EXCLUSION OF FUSION REACTORS.*—  
 12 *For purposes of subparagraph (A), the term ‘ad-*  
 13 *vanced reactor applicant’ does not include an*  
 14 *applicant seeking a license for a fusion reactor.”.*

15 **SEC. 206. REGULATORY ISSUES FOR NUCLEAR FACILITIES**  
 16 **AT BROWNFIELD SITES.**

17           (a) *DEFINITIONS.*—

18           (1) *BROWNFIELD SITE.*—*The term “brownfield*  
 19 *site” has the meaning given the term in section 101*  
 20 *of the Comprehensive Environmental Response, Com-*  
 21 *ensation, and Liability Act of 1980 (42 U.S.C.*  
 22 *9601).*

23           (2) *PRODUCTION FACILITY.*—*The term “produc-*  
 24 *tion facility” has the meaning given the term in sec-*

1        *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
2        *2014).*

3            (3) *RETIRED FOSSIL FUEL SITE.*—*The term “re-*  
4        *tired fossil fuel site” means the site of 1 or more fossil*  
5        *fuel electric generation facilities that are retired or*  
6        *scheduled to retire, including multi-unit facilities that*  
7        *are partially shut down.*

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

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

13            (1) *IN GENERAL.*—*Not later than 1 year after*  
14        *the date of enactment of this Act, the Commission*  
15        *shall evaluate the extent to which modification of reg-*  
16        *ulations, guidance, or policy is needed to enable time-*  
17        *ly licensing reviews for, and to support the oversight*  
18        *of, production facilities or utilization facilities at*  
19        *brownfield sites.*

20            (2) *REQUIREMENT.*—*In carrying out paragraph*  
21        *(1), the Commission shall consider how licensing re-*  
22        *views for production facilities or utilization facilities*  
23        *at brownfield sites may be expedited by considering*  
24        *matters relating to siting and operating a production*

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1 *facility or a utilization facility at or near a retired*  
2 *fossil fuel site to support—*

3 *(A) the reuse of existing site infrastructure,*  
4 *including—*

5 *(i) electric switchyard components and*  
6 *transmission infrastructure;*

7 *(ii) heat-sink components;*

8 *(iii) steam cycle components;*

9 *(iv) roads;*

10 *(v) railroad access; and*

11 *(vi) water availability;*

12 *(B) the use of early site permits;*

13 *(C) the utilization of plant parameter enve-*  
14 *lopes or similar standardized site parameters on*  
15 *a portion of a larger site; and*

16 *(D) the use of a standardized application*  
17 *for similar sites.*

18 *(3) REPORT.—Not later than 14 months after the*  
19 *date of enactment of this Act, the Commission shall*  
20 *submit to the appropriate committees of Congress a*  
21 *report describing any regulations, guidance, and poli-*  
22 *cies identified under paragraph (1).*

23 *(c) LICENSING.—*

1           (1) *IN GENERAL.*—*Not later than 2 years after*  
2 *the date of enactment of this Act, the Commission*  
3 *shall—*

4                   (A) *develop and implement strategies to en-*  
5 *able timely licensing reviews for, and to support*  
6 *the oversight of, production facilities or utiliza-*  
7 *tion facilities at brownfield sites, including re-*  
8 *tired fossil fuel sites; or*

9                   (B) *initiate a rulemaking to enable timely*  
10 *licensing reviews for, and to support the over-*  
11 *sight of, of production facilities or utilization fa-*  
12 *cilities at brownfield sites, including retired fos-*  
13 *sil fuel sites.*

14           (2) *REQUIREMENTS.*—*In carrying out para-*  
15 *graph (1), consistent with the mission of the Commis-*  
16 *sion, the Commission shall consider matters relating*  
17 *to—*

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

19                   (B) *existing emergency preparedness orga-*  
20 *nizations and planning;*

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

23                   (D) *previously approved environmental re-*  
24 *views required by the National Environmental*  
25 *Policy Act of 1969 (42 U.S.C. 4321 et seq.);*

1                   (E) activities associated with the potential  
 2                   decommissioning of facilities or decontamination  
 3                   and remediation at brownfield sites; and  
 4                   (F) community engagement and historical  
 5                   experience with energy production.

6           (d) REPORT.—Not later than 3 years after the date  
 7 of enactment of this Act, the Commission shall submit to  
 8 the appropriate committees of Congress a report describing  
 9 the actions taken by the Commission under subsection (c).

10 **SEC. 207. APPALACHIAN REGIONAL COMMISSION NUCLEAR**  
 11 **ENERGY DEVELOPMENT.**

12           (a) IN GENERAL.—Subchapter I of chapter 145 of sub-  
 13 title IV of title 40, United States Code, is amended by add-  
 14 ing at the end the following:

15 **“§ 14512. Appalachian Regional Commission nuclear**  
 16 **energy development**

17           “(a) DEFINITIONS.—In this section:

18                   “(1) BROWNFIELD SITE.—The term ‘brownfield  
 19 site’ has the meaning given the term in section 101  
 20 of the Comprehensive Environmental Response, Com-  
 21 pensation, and Liability Act of 1980 (42 U.S.C.  
 22 9601).

23                   “(2) PRODUCTION FACILITY.—The term ‘produc-  
 24 tion facility’ has the meaning given the term in sec-

1        *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
2        *2014).*

3                *“(3) RETIRED FOSSIL FUEL SITE.—The term ‘re-*  
4        *tired fossil fuel site’ means the site of 1 or more fossil*  
5        *fuel electric generation facilities that are retired or*  
6        *scheduled to retire, including multi-unit facilities that*  
7        *are partially shut down.*

8                *“(4) UTILIZATION FACILITY.—The term ‘utiliza-*  
9        *tion facility’ has the meaning given the term in sec-*  
10        *tion 11 of the Atomic Energy Act of 1954 (42 U.S.C.*  
11        *2014).*

12                *“(b) AUTHORITY.—The Appalachian Regional Com-*  
13        *mission may provide technical assistance to, make grants*  
14        *to, enter into contracts with, or otherwise provide amounts*  
15        *to individuals or entities in the Appalachian region for*  
16        *projects and activities—*

17                *“(1) to conduct research and analysis regarding*  
18        *the economic impact of siting, constructing, and oper-*  
19        *ating a production facility or a utilization facility at*  
20        *a brownfield site, including a retired fossil fuel site;*

21                *“(2) to assist with workforce training or retrain-*  
22        *ing to perform activities relating to the siting and op-*  
23        *eration of a production facility or a utilization facil-*  
24        *ity at a brownfield site, including a retired fossil fuel*  
25        *site; and*

1           “(3) to engage with the Nuclear Regulatory Com-  
2           mission, the Department of Energy, and other Federal  
3           agencies with expertise in civil nuclear energy.

4           “(c) *LIMITATION ON AVAILABLE AMOUNTS.*—Of the  
5           cost of any project or activity eligible for a grant under  
6           this section—

7           “(1) except as provided in paragraphs (2) and  
8           (3), not more than 50 percent may be provided from  
9           amounts made available to carry out this section;

10          “(2) in the case of a project or activity to be car-  
11          ried out in a county for which a distressed county  
12          designation is in effect under section 14526, not more  
13          than 80 percent may be provided from amounts made  
14          available to carry out this section; and

15          “(3) in the case of a project or activity to be car-  
16          ried out in a county for which an at-risk county des-  
17          ignation is in effect under section 14526, not more  
18          than 70 percent may be provided from amounts made  
19          available to carry out this section.

20          “(d) *SOURCES OF ASSISTANCE.*—Subject to subsection  
21          (c), a grant provided under this section may be provided  
22          from amounts made available to carry out this section, in  
23          combination with amounts made available—

24                 “(1) under any other Federal program; or

25                 “(2) from any other source.

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1       “(e) *FEDERAL SHARE*.—Notwithstanding any provi-  
2       sion of law limiting the Federal share under any other Fed-  
3       eral program, amounts made available to carry out this sec-  
4       tion may be used to increase that Federal share, as the Ap-  
5       palachian Regional Commission determines to be appro-  
6       priate.”.

7       (b) *AUTHORIZATION OF APPROPRIATIONS*.—Section  
8       14703 of title 40, United States Code, is amended—

9               (1) by redesignating subsections (e) and (f) as  
10              subsections (f) and (g), respectively; and

11              (2) by inserting after subsection (d) the fol-  
12              lowing:

13       “(e) *APPALACHIAN REGIONAL COMMISSION NUCLEAR*  
14       *ENERGY DEVELOPMENT*.—Of the amounts made available  
15       under subsection (a), \$5,000,000 may be used to carry out  
16       section 14512 for each of fiscal years 2023 through 2026.”.

17       (c) *CLERICAL AMENDMENT*.—The analysis for sub-  
18       chapter I of chapter 145 of subtitle IV of title 40, United  
19       States Code, is amended by striking the item relating to  
20       section 14511 and inserting the following:

“14511. *Appalachian regional energy hub initiative.*

“14512. *Appalachian Regional Commission nuclear energy development.*”.

1 **TITLE III—PRESERVING EXIST-**  
 2 **ING NUCLEAR ENERGY GEN-**  
 3 **ERATION**

4 **SEC. 301. INVESTMENT BY ALLIES.**

5 (a) *IN GENERAL.*—*The prohibitions against issuing*  
 6 *certain licenses for utilization facilities to certain corpora-*  
 7 *tions and other entities described in the second sentence of*  
 8 *section 103 d. of the Atomic Energy Act of 1954 (42 U.S.C.*  
 9 *2133(d)) and the second sentence of section 104 d. of that*  
 10 *Act (42 U.S.C. 2134(d)) shall not apply to an entity de-*  
 11 *scribed in subsection (b) if the Commission determines that*  
 12 *issuance of the applicable license to that entity is not inim-*  
 13 *ical to—*

14 (1) *the common defense and security; or*

15 (2) *the health and safety of the public.*

16 (b) *ENTITIES DESCRIBED.*—

17 (1) *IN GENERAL.*—*An entity referred to in sub-*  
 18 *section (a) is a corporation or other entity that is*  
 19 *owned, controlled, or dominated by—*

20 (A) *the government of—*

21 (i) *a country that is a member of the*  
 22 *Organisation for Economic Co-operation*  
 23 *and Development on the date of enactment*  
 24 *of this Act, subject to paragraph (2); or*

25 (ii) *the Republic of India;*

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1           (B) a corporation that is incorporated in a  
2           country described in clause (i) or (ii) of sub-  
3           paragraph (A); or

4           (C) an alien who is a national of a country  
5           described in clause (i) or (ii) of subparagraph  
6           (A).

7           (2) *EXCLUSION.*—An entity described in para-  
8           graph (1)(A)(i) is not an entity referred to in sub-  
9           section (a), and subsection (a) shall not apply to that  
10          entity, if, on the date of enactment of this Act—

11           (A) the entity (or any department, agency,  
12           or instrumentality of the entity) is a person sub-  
13           ject to sanctions under section 231 of the Coun-  
14           tering America’s Adversaries Through Sanctions  
15           Act (22 U.S.C. 9525); or

16           (B) any citizen of the entity, or any entity  
17           organized under the laws of, or otherwise subject  
18           to the jurisdiction of, the entity, is a person sub-  
19           ject to sanctions under that section.

20          (c) *TECHNICAL AMENDMENT.*—Section 103 d. of the  
21          Atomic Energy Act of 1954 (42 U.S.C. 2133(d)) is amend-  
22          ed, in the second sentence, by striking “any any” and in-  
23          serting “any”.

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

4 **SEC. 302. EXTENSION OF THE PRICE-ANDERSON ACT.**

5       (a) *EXTENSION.*—*Section 170 of the Atomic Energy*  
6 *Act of 1954 (42 U.S.C. 2210) (commonly known as the*  
7 *“Price-Anderson Act”) is amended by striking “December*  
8 *31, 2025” each place it appears and inserting “December*  
9 *31, 2045”.*

10       (b) *REPORT.*—*Section 170 p. of the Atomic Energy Act*  
11 *of 1954 (42 U.S.C. 2210(p)) (commonly known as the*  
12 *“Price-Anderson Act”) is amended by striking “December*  
13 *31, 2021” and inserting “December 31, 2041”.*

14 **TITLE IV—NUCLEAR FUEL**  
15 **CYCLE, SUPPLY CHAIN, IN-**  
16 **FRASTRUCTURE, AND WORK-**  
17 **FORCE**

18 **SEC. 401. REPORT ON ADVANCED METHODS OF MANUFAC-**  
19 **TURING AND CONSTRUCTION FOR NUCLEAR**  
20 **ENERGY APPLICATIONS.**

21       (a) *IN GENERAL.*—*Not later than 180 days after the*  
22 *date of enactment of this Act, the Commission shall submit*  
23 *to the appropriate committees of Congress a report (referred*  
24 *to in this section as the “report”) on manufacturing and*  
25 *construction for nuclear energy applications.*

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

3           (1) *the Secretary of Energy;*  
4           (2) *the nuclear energy industry;*  
5           (3) *National Laboratories;*  
6           (4) *institutions of higher education;*  
7           (5) *nuclear and manufacturing technology devel-*  
8 *opers;*

9           (6) *the manufacturing and construction indus-*  
10 *tries, including manufacturing and construction com-*  
11 *panies with operating facilities in the United States;*

12           (7) *standards development organizations;*

13           (8) *labor unions;*

14           (9) *nongovernmental organizations; and*

15           (10) *other public stakeholders.*

16       (c) *CONTENTS.*—

17           (1) *IN GENERAL.*—*The report shall—*

18               (A) *examine any unique licensing issues or*  
19 *requirements relating to the use of innovative—*

20                   (i) *advanced manufacturing processes;*

21                   (ii) *advanced construction techniques;*

22                   *and*

23                   (iii) *rapid improvement or iterative*  
24 *innovation processes;*

25               (B) *examine—*

1                   (i) *the requirements for nuclear-grade*  
2                   *components in manufacturing and construc-*  
3                   *tion for nuclear energy applications;*

4                   (ii) *opportunities to use standard ma-*  
5                   *terials, parts, or components in manufac-*  
6                   *turing and construction for nuclear energy*  
7                   *applications;*

8                   (iii) *opportunities to use standard ma-*  
9                   *terials that are in compliance with existing*  
10                  *codes to provide acceptable approaches to*  
11                  *support or encapsulate new materials that*  
12                  *do not yet have applicable codes; and*

13                  (iv) *requirements relating to the trans-*  
14                  *port of a fueled advanced nuclear reactor*  
15                  *core from a manufacturing licensee to a li-*  
16                  *censee that holds a license to construct and*  
17                  *operate a facility at a particular site;*

18                  (C) *identify any safety aspects of innovative*  
19                  *advanced manufacturing processes and advanced*  
20                  *construction techniques that are not addressed by*  
21                  *existing codes and standards, so that generic*  
22                  *guidance may be updated or created, as nec-*  
23                  *essary;*

1           (D) identify options for addressing the  
2           issues, requirements, and opportunities examined  
3           under subparagraphs (A) and (B)—

4                 (i) within the existing regulatory  
5                 framework; or

6                 (ii) through a new rulemaking;

7           (E) identify how addressing the issues, re-  
8           quirements, and opportunities examined under  
9           subparagraphs (A) and (B) will impact opportu-  
10          nities for domestic nuclear manufacturing and  
11          construction developers; and

12          (F) describe the extent to which Commission  
13          action is needed to implement any matter de-  
14          scribed in the report.

15          (2) *COST ESTIMATES, BUDGETS, AND TIME-*  
16          *FRAMES.*—The report shall include cost estimates,  
17          proposed budgets, and proposed timeframes for imple-  
18          menting risk-informed and performance-based regu-  
19          latory guidance for manufacturing and construction  
20          for nuclear energy applications.

21 **SEC. 402. NUCLEAR ENERGY TRAINEESHIP.**

22          Section 313 of division C of the Omnibus Appropria-  
23          tions Act, 2009 (42 U.S.C. 16274a), is amended—

24                 (1) in subsection (a), by striking “Nuclear Regu-  
25                 latory”;

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1           (2) in subsection (b)(1), in the matter preceding  
2           subparagraph (A), by inserting “and subsection (c)”  
3           after “paragraph (2)”;

4           (3) in subsection (c)—

5                 (A) by redesignating paragraph (2) as  
6                 paragraph (5); and

7                 (B) by striking paragraph (1) and inserting  
8                 the following:

9                 “(1) *ADVANCED NUCLEAR REACTOR.*—The term  
10                 ‘advanced nuclear reactor’ has the meaning given the  
11                 term in section 951(b) of the Energy Policy Act of  
12                 2005 (42 U.S.C. 16271(b)).

13                 “(2) *COMMISSION.*—The term ‘Commission’  
14                 means the Nuclear Regulatory Commission.

15                 “(3) *INSTITUTION OF HIGHER EDUCATION.*—The  
16                 term ‘institution of higher education’ has the meaning  
17                 given the term in section 2 of the Energy Policy Act  
18                 of 2005 (42 U.S.C. 15801).

19                 “(4) *NATIONAL LABORATORY.*—The term ‘Na-  
20                 tional Laboratory’ has the meaning given the term in  
21                 section 951(b) of the Energy Policy Act of 2005 (42  
22                 U.S.C. 16271(b)).”;

23                 (4) in subsection (d)(2), by striking “Nuclear  
24                 Regulatory”;

1           (5) by redesignating subsections (c) and (d) as  
2           subsections (d) and (e), respectively; and

3           (6) by inserting after subsection (b) the fol-  
4           lowing:

5           “(c) *NUCLEAR ENERGY TRAINEESHIP SUBPRO-*  
6 *GRAM.—*

7           “(1) *IN GENERAL.—The Commission shall estab-*  
8 *lish, as a subprogram of the Program, a nuclear en-*  
9 *ergy traineeship subprogram under which the Com-*  
10 *mission, in coordination with institutions of higher*  
11 *education and trade schools, shall competitively*  
12 *award traineeships that provide focused training to*  
13 *meet critical mission needs of the Commission and*  
14 *nuclear workforce needs, including needs relating to*  
15 *the nuclear tradecraft workforce.*

16           “(2) *REQUIREMENTS.—In carrying out the nu-*  
17 *clear energy traineeship subprogram described in*  
18 *paragraph (1), the Commission shall—*

19           “(A) *coordinate with the Secretary of En-*  
20 *ergy to prioritize the funding of traineeships that*  
21 *focus on—*

22                   “(i) *nuclear workforce needs; and*

23                   “(ii) *critical mission needs of the Com-*  
24 *mission;*

1           “(B) encourage appropriate partnerships  
2 among—

3           “(i) National Laboratories;

4           “(ii) institutions of higher education;

5           “(iii) trade schools;

6           “(iv) the nuclear energy industry; and

7           “(v) other entities, as the Commission  
8 determines to be appropriate; and

9           “(C) on an annual basis, evaluate nuclear  
10 workforce needs for the purpose of implementing  
11 traineeships in focused topical areas that—

12           “(i) address the workforce needs of the  
13 nuclear energy community; and

14           “(ii) support critical mission needs of  
15 the Commission.”.

16 **SEC. 403. REPORT ON COMMISSION READINESS AND CAPAC-**  
17 **ITY TO LICENSE ADDITIONAL CONVERSION**  
18 **AND ENRICHMENT CAPACITY TO REDUCE RE-**  
19 **LIANCE ON URANIUM FROM RUSSIA.**

20       (a) *IN GENERAL.*—Not later than 180 days after the  
21 date of enactment of this Act, the Commission shall submit  
22 to the appropriate committees of Congress a report on the  
23 readiness and capacity of the Commission to license addi-  
24 tional conversion and enrichment capacity at existing and  
25 new fuel cycle facilities to reduce reliance on nuclear fuel

1 *that is recovered, converted, enriched, or fabricated by an*  
2 *entity that—*

3 *(1) is owned or controlled by the Government of*  
4 *the Russian Federation; or*

5 *(2) is organized under the laws of, or otherwise*  
6 *subject to the jurisdiction of, the Russian Federation.*

7 *(b) CONTENTS.—The report required under subsection*  
8 *(a) shall analyze how the capacity of the Commission to*  
9 *license additional conversion and enrichment capacity at*  
10 *existing and new fuel cycle facilities may conflict with or*  
11 *restrict the readiness of the Commission to review advanced*  
12 *nuclear reactor applications.*

13 **SEC. 404. ANNUAL REPORT ON THE SPENT NUCLEAR FUEL**  
14 **AND HIGH-LEVEL RADIOACTIVE WASTE IN-**  
15 **VENTORY IN THE UNITED STATES.**

16 *(a) DEFINITIONS.—In this section:*

17 *(1) HIGH-LEVEL RADIOACTIVE WASTE.—The*  
18 *term “high-level radioactive waste” has the meaning*  
19 *given the term in section 2 of the Nuclear Waste Pol-*  
20 *icy Act of 1982 (42 U.S.C. 10101).*

21 *(2) SPENT NUCLEAR FUEL.—The term “spent*  
22 *nuclear fuel” has the meaning given the term in sec-*  
23 *tion 2 of the Nuclear Waste Policy Act of 1982 (42*  
24 *U.S.C. 10101).*

1           (3) *STANDARD CONTRACT.*—*The term “standard*  
2           *contract” has the meaning given the term “contract”*  
3           *in section 961.3 of title 10, Code of Federal Regula-*  
4           *tions (or a successor regulation).*

5           (b) *REPORT.*—*Not later than January 1, 2025, and*  
6           *annually thereafter, the Secretary of Energy shall submit*  
7           *to Congress a report that describes—*

8           (1) *the annual and cumulative amount of pay-*  
9           *ments made by the United States to the holder of a*  
10           *standard contract due to a partial breach of contract*  
11           *under the Nuclear Waste Policy Act of 1982 (42*  
12           *U.S.C. 10101 et seq.) resulting in financial damages*  
13           *to the holder;*

14           (2) *the cumulative amount spent by the Depart-*  
15           *ment of Energy since fiscal year 2008 to reduce fu-*  
16           *ture payments projected to be made by the United*  
17           *States to any holder of a standard contract due to a*  
18           *partial breach of contract under the Nuclear Waste*  
19           *Policy Act of 1982 (42 U.S.C. 10101 et seq.);*

20           (3) *the cumulative amount spent by the Depart-*  
21           *ment of Energy to store, manage, and dispose of spent*  
22           *nuclear fuel and high-level radioactive waste in the*  
23           *United States as of the date of the report;*

24           (4) *the projected lifecycle costs to store, manage,*  
25           *transport, and dispose of the projected inventory of*

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1       *spent nuclear fuel and high-level radioactive waste in*  
2       *the United States, including spent nuclear fuel and*  
3       *high-level radioactive waste expected to be generated*  
4       *from existing reactors through 2050;*

5             (5) *any mechanisms for better accounting of li-*  
6       *abilities for the lifecycle costs of the spent nuclear fuel*  
7       *and high-level radioactive waste inventory in the*  
8       *United States;*

9             (6) *any recommendations for improving the*  
10       *methods used by the Department of Energy for the ac-*  
11       *counting of spent nuclear fuel and high-level radio-*  
12       *active waste costs and liabilities;*

13            (7) *any actions taken in the previous fiscal year*  
14       *by the Department of Energy with respect to interim*  
15       *storage; and*

16            (8) *any activities taken in the previous fiscal*  
17       *year by the Department of Energy to develop and de-*  
18       *ploy nuclear technologies and fuels that enhance the*  
19       *safe transportation or storage of spent nuclear fuel or*  
20       *high-level radioactive waste, including technologies to*  
21       *protect against seismic, flooding, and other extreme*  
22       *weather events.*

1 **SEC. 405. AUTHORIZATION OF APPROPRIATIONS FOR**  
2 **SUPERFUND ACTIONS AT ABANDONED MIN-**  
3 **ING SITES ON TRIBAL LAND.**

4 (a) *DEFINITIONS.—In this section:*

5 (1) *ELIGIBLE NON-NPL SITE.—The term “eligi-*  
6 *ble non-NPL site” means a site—*

7 (A) *that is not on the National Priorities*  
8 *List; but*

9 (B) *with respect to which the Administrator*  
10 *determines that—*

11 (i) *the site would be eligible for listing*  
12 *on the National Priorities List based on the*  
13 *presence of hazards from contamination at*  
14 *the site, applying the hazard ranking sys-*  
15 *tem described in section 105(c) of the Com-*  
16 *prehensive Environmental Response, Com-*  
17 *ensation, and Liability Act of 1980 (42*  
18 *U.S.C. 9605(c)); and*

19 (ii) *for removal site evaluations, engi-*  
20 *neering evaluations/cost analyses, remedial*  
21 *planning activities, remedial investigations*  
22 *and feasibility studies, and other actions*  
23 *taken pursuant to section 104(b) of that Act*  
24 *(42 U.S.C. 9604), the site—*

25 (I) *has undergone a pre-CERCLA*  
26 *screening; and*

1 (II) is included in the Superfund  
2 Enterprise Management System.

3 (2) INDIAN TRIBE.—The term “Indian Tribe”  
4 has the meaning given the term in section 4 of the In-  
5 dian Self-Determination and Education Assistance  
6 Act (25 U.S.C. 5304).

7 (3) NATIONAL PRIORITIES LIST.—The term “Na-  
8 tional Priorities List” means the National Priorities  
9 List developed by the President in accordance with  
10 section 105(a)(8)(B) of the Comprehensive Environ-  
11 mental Response, Compensation, and Liability Act of  
12 1980 (42 U.S.C. 9605(a)(8)(B)).

13 (4) REMEDIAL ACTION; REMOVAL; RESPONSE.—  
14 The terms “remedial action”, “removal”, and “re-  
15 sponse” have the meanings given those terms in sec-  
16 tion 101 of the Comprehensive Environmental Re-  
17 sponse, Compensation, and Liability Act of 1980 (42  
18 U.S.C. 9601).

19 (5) TRIBAL LAND.—The term “Tribal land” has  
20 the meaning given the term “Indian country” in sec-  
21 tion 1151 of title 18, United States Code.

22 (b) AUTHORIZATION OF APPROPRIATIONS.—There are  
23 authorized to be appropriated for each of fiscal years 2023  
24 through 2032, to remain available until expended—

1           (1) \$97,000,000 to the Administrator to carry  
2           out this section (except for subsection (d)); and

3           (2) \$3,000,000 to the Administrator of the Agen-  
4           cy for Toxic Substances and Disease Registry to carry  
5           out subsection (d).

6           (c) *USES OF AMOUNTS.*—Amounts appropriated under  
7           subsection (b)(1) shall be used by the Administrator—

8           (1) to carry out removal actions on abandoned  
9           mine land located on Tribal land;

10          (2) to carry out response actions, including re-  
11          moval and remedial planning activities, removal and  
12          remedial studies, remedial actions, and other actions  
13          taken pursuant to section 104(b) of the Comprehensive  
14          Environmental Response, Compensation, and Liabil-  
15          ity Act of 1980 (42 U.S.C. 9604(b)) on abandoned  
16          mine land located on Tribal land at—

17                 (A) eligible non-NPL sites; and

18                 (B) sites listed on the National Priorities  
19                 List; and

20          (3) to make grants under subsection (e).

21          (d) *HEALTH ASSESSMENTS.*—Subject to the avail-  
22          ability of appropriations, the Agency for Toxic Substances  
23          and Disease Registry, in coordination with Tribal health  
24          authorities, shall perform 1 or more health assessments at  
25          each eligible non-NPL site that is located on Tribal land,

1 *in accordance with section 104(i)(6) of the Comprehensive*  
2 *Environmental Response, Compensation, and Liability Act*  
3 *of 1980 (42 U.S.C. 9604(i)(6)).*

4 *(e) TRIBAL GRANTS.—*

5 *(1) IN GENERAL.—The Administrator may use*  
6 *amounts appropriated under subsection (b)(1) to*  
7 *make grants to eligible entities described in para-*  
8 *graph (2) for the purposes described in paragraph*  
9 *(3).*

10 *(2) ELIGIBLE ENTITIES DESCRIBED.—An eligible*  
11 *entity referred to in paragraph (1) is—*

12 *(A) the governing body of an Indian Tribe;*

13 *or*

14 *(B) a legally established organization of In-*  
15 *dians that—*

16 *(i) is controlled, sanctioned, or char-*  
17 *tered by the governing bodies of 2 or more*  
18 *Indian Tribes to be served, or that is demo-*  
19 *cratically elected by the adult members of*  
20 *the Indian community to be served, by that*  
21 *organization; and*

22 *(ii) includes the maximum participa-*  
23 *tion of Indians in all phases of the activi-*  
24 *ties of that organization.*

1           (3) *USE OF GRANT FUNDS.*—*A grant under this*  
2           *subsection shall be used—*

3                   (A) *in accordance with the second sentence*  
4                   *of section 117(e)(1) of the Comprehensive Envi-*  
5                   *ronmental Response, Compensation, and Liabil-*  
6                   *ity Act of 1980 (42 U.S.C. 9617(e)(1));*

7                   (B) *for obtaining technical assistance in*  
8                   *carrying out response actions under subpara-*  
9                   *graph (C); or*

10                   (C) *for carrying out response actions, if the*  
11                   *Administrator determines that the Indian Tribe*  
12                   *has the capability to carry out any or all of*  
13                   *those response actions in accordance with the cri-*  
14                   *teria and priorities established pursuant to sec-*  
15                   *tion 105(a)(8) of the Comprehensive Environ-*  
16                   *mental Response, Compensation, and Liability*  
17                   *Act of 1980 (42 U.S.C. 9605(a)(8)).*

18           (4) *APPLICATIONS.*—*An eligible entity desiring a*  
19           *grant under this subsection shall submit to the Ad-*  
20           *ministrator an application at such time, in such*  
21           *manner, and containing such information as the Ad-*  
22           *ministrator may require.*

23           (5) *LIMITATIONS.*—*A grant under this subsection*  
24           *shall be governed by the rules, procedures, and limita-*  
25           *tions described in section 117(e)(2) of the Comprehen-*

1       *sive Environmental Response, Compensation, and Li-*  
2       *ability Act of 1980 (42 U.S.C. 9617(e)(2)), except*  
3       *that—*

4               (A) *“Administrator of the Environmental*  
5               *Protection Agency” shall be substituted for*  
6               *“President” each place it appears in that sec-*  
7               *tion; and*

8               (B) *in the first sentence of that section,*  
9               *“under section 405 of the ADVANCE Act of*  
10              *2023” shall be substituted for “under this sub-*  
11              *section”.*

12       (f) *STATUTE OF LIMITATIONS.—If a remedial action*  
13       *described in subsection (c)(2) is scheduled at an eligible*  
14       *non-NPL site, no action may be commenced for damages*  
15       *(as defined in section 101 of the Comprehensive Environ-*  
16       *mental Response, Compensation, and Liability Act of 1980*  
17       *(42 U.S.C. 9601)) with respect to that eligible non-NPL site*  
18       *unless the action is commenced within the timeframe pro-*  
19       *vided for such actions with respect to facilities on the Na-*  
20       *tional Priorities List in the first sentence of the matter fol-*  
21       *lowing subparagraph (B) of section 113(g)(1) of that Act*  
22       *(42 U.S.C. 9613(g)(1)).*

23       (g) *COORDINATION.—The Administrator shall coordi-*  
24       *nate with the Indian Tribe on whose land the applicable*  
25       *site is located in—*

1           (1) *selecting and prioritizing sites for response*  
2           *actions under paragraphs (1) and (2) of subsection*  
3           *(c); and*  
4           (2) *carrying out those response actions.*

5 **SEC. 406. DEVELOPMENT, QUALIFICATION, AND LICENSING**  
6           **OF ADVANCED NUCLEAR FUEL CONCEPTS.**

7           (a) *IN GENERAL.—The Commission shall establish an*  
8           *initiative to enhance preparedness and coordination with*  
9           *respect to the qualification and licensing of advanced nu-*  
10          *clear fuel.*

11          (b) *AGENCY COORDINATION.—Not later than 180 days*  
12          *after the date of enactment of this Act, the Commission and*  
13          *the Secretary of Energy shall enter into a memorandum*  
14          *of understanding—*

15                 (1) *to share technical expertise and knowledge*  
16                 *through—*

17                         (A) *enabling the testing and demonstration*  
18                         *of accident tolerant fuels for existing commercial*  
19                         *nuclear reactors and advanced nuclear reactor*  
20                         *fuel concepts to be proposed and funded, in whole*  
21                         *or in part, by the private sector;*

22                         (B) *operating a database to store and share*  
23                         *data and knowledge relevant to nuclear science*  
24                         *and engineering between Federal agencies and*  
25                         *the private sector;*

1           (C) leveraging expertise with respect to safe-  
2           ty analysis and research relating to advanced  
3           nuclear fuel; and

4           (D) enabling technical staff to actively ob-  
5           serve and learn about technologies, with an em-  
6           phasis on identification of additional informa-  
7           tion needed with respect to advanced nuclear  
8           fuel; and

9           (2) to ensure that—

10           (A) the Department of Energy has sufficient  
11           technical expertise to support the timely re-  
12           search, development, demonstration, and com-  
13           mercial application of advanced nuclear fuel;

14           (B) the Commission has sufficient technical  
15           expertise to support the evaluation of applica-  
16           tions for licenses, permits, and design certifi-  
17           cations and other requests for regulatory ap-  
18           proval for advanced nuclear fuel;

19           (C)(i) the Department of Energy maintains  
20           and develops the facilities necessary to enable the  
21           timely research, development, demonstration,  
22           and commercial application by the civilian nu-  
23           clear industry of advanced nuclear fuel; and

24           (ii) the Commission has access to the facili-  
25           ties described in clause (i), as needed; and

1           (D) the Commission consults, as appro-  
2           priate, with the modeling and simulation experts  
3           at the Office of Nuclear Energy of the Depart-  
4           ment of Energy, at the National Laboratories,  
5           and within industry fuel vendor teams in coop-  
6           erative agreements with the Department of En-  
7           ergy to leverage physics-based computer modeling  
8           and simulation capabilities.

9           (c) REPORT.—

10           (1) IN GENERAL.—Not later than 1 year after  
11           the date of enactment of this Act, the Commission  
12           shall submit to the appropriate committees of Con-  
13           gress a report describing the efforts of the Commission  
14           under subsection (a), including—

15                   (A) an assessment of the preparedness of the  
16           Commission to review and qualify for use—

17                           (i) accident tolerant fuel;

18                           (ii) ceramic cladding materials;

19                           (iii) fuels containing silicon carbide;

20                           (iv) high-assay, low-enriched uranium  
21                   fuels;

22                           (v) molten-salt based liquid fuels;

23                           (vi) fuels derived from spent nuclear  
24                   fuel or depleted uranium; and

1                   (vii) *other related fuel concepts, as de-*  
2                   *termined by the Commission;*

3                   (B) *activities planned or undertaken under*  
4                   *the memorandum of understanding described in*  
5                   *subsection (b);*

6                   (C) *an accounting of the areas of research*  
7                   *needed with respect to advanced nuclear fuel;*  
8                   *and*

9                   (D) *any other challenges or considerations*  
10                  *identified by the Commission.*

11                 (2) *CONSULTATION.—In developing the report*  
12                 *under paragraph (1), the Commission shall seek input*  
13                 *from—*

14                   (A) *the Secretary of Energy;*

15                   (B) *National Laboratories;*

16                   (C) *the nuclear energy industry;*

17                   (D) *technology developers;*

18                   (E) *nongovernmental organizations; and*

19                   (F) *other public stakeholders.*

20                   **TITLE V—IMPROVING**  
21                   **COMMISSION EFFICIENCY**

22                   **SEC. 501. COMMISSION WORKFORCE.**

23                   (a) *DEFINITION OF CHAIRMAN.—In this section, the*  
24                   *term “Chairman” means the Chairman of the Commission.*

25                   (b) *HIRING BONUS AND APPOINTMENT AUTHORITY.—*

1           (1) *IN GENERAL.*—*Notwithstanding section 161*  
2           *d. of the Atomic Energy Act of 1954 (42 U.S.C.*  
3           *2201(d)), any provision of Reorganization Plan No.*  
4           *1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and any*  
5           *provision of title 5, United States Code, governing ap-*  
6           *pointments and General Schedule classification and*  
7           *pay rates, the Chairman may, subject to the limita-*  
8           *tions described in paragraph (3), and without regard*  
9           *to the civil service laws—*

10                   (A) *establish the positions described in*  
11                   *paragraph (2); and*

12                   (B) *appoint persons to the positions estab-*  
13                   *lished under subparagraph (A).*

14           (2) *POSITIONS DESCRIBED.*—*The positions re-*  
15           *ferred to in paragraph (1)(A) are—*

16                   (A) *permanent or term-limited positions*  
17                   *with highly specialized scientific, engineering,*  
18                   *and technical competencies to address a critical*  
19                   *licensing or regulatory oversight need for the*  
20                   *Commission, including—*

21                           (i) *health physicist;*

22                           (ii) *reactor operations engineer;*

23                           (iii) *human factors analyst or engi-*  
24                           *neer;*

1                   (iv) *risk and reliability analyst or en-*  
 2                   *gineer;*

3                   (v) *licensing project manager;*

4                   (vi) *reactor engineer for severe acci-*  
 5                   *dents;*

6                   (vii) *geotechnical engineer;*

7                   (viii) *structural engineer;*

8                   (ix) *reactor systems engineer;*

9                   (x) *reactor engineer;*

10                  (xi) *radiation scientist;*

11                  (xii) *seismic engineer; and*

12                  (xiii) *electronics engineer; or*

13                  (B) *permanent or term-limited positions to*  
 14                  *be filled by exceptionally well-qualified individ-*  
 15                  *uals that the Chairman, subject to subsection (e),*  
 16                  *determines are necessary to fulfill the mission of*  
 17                  *the Commission.*

18                  (3) *LIMITATIONS.—*

19                   (A) *IN GENERAL.—Appointments under*  
 20                   *paragraph (1)(B) may be made to not more*  
 21                   *than—*

22                   (i) *(I) 15 permanent positions described*  
 23                   *in paragraph (2)(A) during fiscal year*  
 24                   *2024; and*

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1                   (ii) 10 permanent positions described  
2                   in paragraph (2)(A) during each fiscal year  
3                   thereafter;

4                   (i)(I) 15 term-limited positions de-  
5                   scribed in paragraph (2)(A) during fiscal  
6                   year 2024; and

7                   (ii) 10 term-limited positions described  
8                   in paragraph (2)(A) during each fiscal year  
9                   thereafter;

10                  (iii)(I) 15 permanent positions de-  
11                  scribed in paragraph (2)(B) during fiscal  
12                  year 2024; and

13                  (ii) 10 permanent positions described  
14                  in paragraph (2)(B) during each fiscal year  
15                  thereafter; and

16                  (iv)(I) 15 term-limited positions de-  
17                  scribed in paragraph (2)(B) during fiscal  
18                  year 2024; and

19                  (ii) 10 term-limited positions described  
20                  in paragraph (2)(B) during each fiscal year  
21                  thereafter.

22                  (B) TERM OF TERM-LIMITED APPOINT-  
23                  MENT.—If a person is appointed to a term-lim-  
24                  ited position described in subparagraph (A) or

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1           (B) of paragraph (2), the term of that appoint-  
2           ment shall not exceed 4 years.

3           (C) *STAFF POSITIONS.*—Subject to sub-  
4           section (e), appointments made to positions es-  
5           tablished under this subsection shall be to a  
6           range of staff positions that are of entry, mid,  
7           and senior levels, to the extent practicable.

8           (4) *HIRING BONUS.*—The Commission may pay  
9           a person appointed under paragraph (1) a 1-time  
10          hiring bonus in an amount not to exceed the least  
11          of—

12           (A) \$25,000;

13           (B) the amount equal to 15 percent of the  
14          annual rate of basic pay of the employee; and

15           (C) the amount of the limitation that is ap-  
16          plicable for a calendar year under section  
17          5307(a)(1) of title 5, United States Code.

18          (c) *COMPENSATION AND APPOINTMENT AUTHORITY.*—

19           (1) *IN GENERAL.*—Notwithstanding section 161  
20          d. of the Atomic Energy Act of 1954 (42 U.S.C.  
21          2201(d)), any provision of Reorganization Plan No.  
22          1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), and chapter  
23          51, and subchapter III of chapter 53, of title 5,  
24          United States Code, the Chairman, subject to the lim-

1        *itations described in paragraph (3) and without re-*  
2        *gard to the civil service laws, may—*

3                *(A) establish and fix the rates of basic pay*  
4                *for the positions described in paragraph (2); and*

5                *(B) appoint persons to the positions estab-*  
6                *lished under subparagraph (A).*

7                *(2) POSITIONS DESCRIBED.—The positions re-*  
8                *ferred to in paragraph (1)(A) are—*

9                *(A) positions with highly specialized sci-*  
10                *entific, engineering, and technical competencies*  
11                *to address a critical need for the Commission,*  
12                *including—*

13                *(i) health physicist;*

14                *(ii) reactor operations engineer;*

15                *(iii) human factors analyst or engi-*  
16                *neer;*

17                *(iv) risk and reliability analyst or en-*  
18                *gineer;*

19                *(v) licensing project manager;*

20                *(vi) reactor engineer for severe acci-*  
21                *dents;*

22                *(vii) geotechnical engineer;*

23                *(viii) structural engineer;*

24                *(ix) reactor systems engineer;*

25                *(x) reactor engineer;*

- 1                   (xi) radiation scientist;  
 2                   (xii) seismic engineer; and  
 3                   (xiii) electronics engineer; or

4                   (B) positions to be filled by exceptionally  
 5 well-qualified persons that the Chairman, subject  
 6 to subsection (e), determines are necessary to ful-  
 7 fill the mission of the Commission.

8                   (3) LIMITATIONS.—

9                   (A) IN GENERAL.—The annual rate of basic  
 10 pay for a position described in paragraph (2)  
 11 may not exceed the per annum rate of salary  
 12 payable for level III of the Executive Schedule  
 13 under section 5314 of title 5, United States Code.

14                   (B) NUMBER OF POSITIONS.—Appointments  
 15 under paragraph (1)(B) may be made to not  
 16 more than—

17                   (i) 10 positions described in paragraph  
 18 (2)(A) per fiscal year, not to exceed a total  
 19 of 50 positions; and

20                   (ii) 10 positions described in para-  
 21 graph (2)(B) per fiscal year, not to exceed  
 22 a total of 50 positions.

23                   (4) PERFORMANCE BONUS.—

24                   (A) IN GENERAL.—Subject to subpara-  
 25 graphs (B) and (C), an employee may be paid

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1           *a 1-time performance bonus in an amount not to*  
2           *exceed the least of—*

3                     *(i) \$25,000;*

4                     *(ii) the amount equal to 15 percent of*  
5                     *the annual rate of basic pay of the person;*  
6                     *and*

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

11            *(B) PERFORMANCE.—Any 1-time perform-*  
12            *ance bonus under subparagraph (A) shall be*  
13            *made to a person who demonstrated exceptional*  
14            *performance in the applicable fiscal year, includ-*  
15            *ing—*

16                     *(i) leading a project team in a timely,*  
17                     *efficient, and predictable licensing review to*  
18                     *enable the safe use of nuclear technology;*

19                     *(ii) making significant contributions*  
20                     *to a timely, efficient, and predictable licens-*  
21                     *ing review to enable the safe use of nuclear*  
22                     *technology;*

23                     *(iii) the resolution of novel or first-of-*  
24                     *a-kind regulatory issues;*

1                   (iv) *developing or implementing licens-*  
2                   *ing or regulatory oversight processes to im-*  
3                   *prove the effectiveness of the Commission;*  
4                   *and*

5                   (v) *other performance, as determined*  
6                   *by the Chairman, subject to subsection (e).*

7                   (C) *LIMITATIONS.—The Commission may*  
8                   *pay a 1-time performance bonus under subpara-*  
9                   *graph (A) for not more than 15 persons per fis-*  
10                   *cal year, and a person who receives a 1-time per-*  
11                   *formance bonus under that subparagraph may*  
12                   *not receive another 1-time performance bonus*  
13                   *under that subparagraph for a period of 5 years*  
14                   *thereafter.*

15                   (d) *ANNUAL SOLICITATION FOR NUCLEAR REGULATOR*  
16                   *APPRENTICESHIP NETWORK APPLICATIONS.—The Chair-*  
17                   *man, on an annual basis, shall solicit applications for the*  
18                   *Nuclear Regulator Apprenticeship Network.*

19                   (e) *APPLICATION OF MERIT SYSTEM PRINCIPLES.—To*  
20                   *the maximum extent practicable, appointments under sub-*  
21                   *sections (b)(1) and (c)(1) and any 1-time performance*  
22                   *bonus under subsection (c)(4) shall be made in accordance*  
23                   *with the merit system principles set forth in section 2301*  
24                   *of title 5, United States Code.*

1       (f) *DELEGATION.*—Pursuant to Reorganization Plan  
2 No. 1 of 1980 (94 Stat. 3585; 5 U.S.C. app.), the Chairman  
3 shall delegate, subject to the direction and supervision of  
4 the Chairman, the authority provided by subsections (b),  
5 (c), and (d) to the Executive Director for Operations of the  
6 Commission.

7       (g) *ANNUAL REPORT.*—The Commission shall include  
8 in the annual budget justification of the Commission—

9           (1) information that describes—

10               (A) the total number of and the positions of  
11 the persons appointed under the authority pro-  
12 vided by subsection (b);

13               (B) the total number of and the positions of  
14 the persons paid at the rate determined under  
15 the authority provided by subsection (c)(1);

16               (C) the total number of and the positions of  
17 the persons paid a 1-time performance bonus  
18 under the authority provided by subsection  
19 (c)(4);

20               (D) how the authority provided by sub-  
21 sections (b) and (c) is being used, and has been  
22 used during the previous fiscal year, to address  
23 the hiring and retention needs of the Commission  
24 with respect to the positions described in those  
25 subsections to which that authority is applicable;

1           (E) if the authority provided by subsections  
2           (b) and (c) is not being used, or has not been  
3           used, the reasons, including a justification, for  
4           not using that authority; and

5           (F) the attrition levels with respect to the  
6           term-limited appointments made under sub-  
7           section (b), including, with respect to persons  
8           leaving a position before completion of the appli-  
9           cable term of service, the average length of service  
10          as a percentage of the term of service;

11          (2) an assessment of—

12           (A) the current critical workforce needs of  
13           the Commission, including any critical workforce  
14           needs that the Commission anticipates in the  
15           subsequent 5 fiscal years; and

16           (B) further skillsets that are or will be need-  
17           ed for the Commission to fulfill the licensing and  
18           oversight responsibilities of the Commission; and

19          (3) the plans of the Commission to assess, de-  
20          velop, and implement updated staff performance  
21          standards, training procedures, and schedules.

22          (h) *REPORT ON ATTRITION AND EFFECTIVENESS.*—

23          Not later than September 30, 2032, the Commission shall  
24          submit to the Committees on Appropriations and Environ-  
25          ment and Public Works of the Senate and the Committees

1 *on Appropriations and Energy and Commerce of the House*  
2 *of Representatives a report that—*

3           (1) *describes the attrition levels with respect to*  
4 *the term-limited appointments made under subsection*  
5 *(b), including, with respect to persons leaving a posi-*  
6 *tion before completion of the applicable term of serv-*  
7 *ice, the average length of service as a percentage of the*  
8 *term of service;*

9           (2) *provides the views of the Commission on the*  
10 *effectiveness of the authorities provided by subsections*  
11 *(b) and (c) in helping the Commission fulfill the mis-*  
12 *sion of the Commission; and*

13           (3) *makes recommendations with respect to*  
14 *whether the authorities provided by subsections (b)*  
15 *and (c) should be continued, modified, or discon-*  
16 *tinued.*

17 **SEC. 502. COMMISSION CORPORATE SUPPORT FUNDING.**

18           (a) *REPORT.—Not later than 3 years after the date*  
19 *of enactment of this Act, the Commission shall submit to*  
20 *the appropriate committees of Congress and make publicly*  
21 *available a report that describes—*

22           (1) *the progress on the implementation of section*  
23 *102(a)(3) of the Nuclear Energy Innovation and Mod-*  
24 *ernization Act (42 U.S.C. 2215(a)(3)); and*



1                   “(ii) costs for salaries, travel, and  
2                   other support for the Office of the Commis-  
3                   sion.”.

4 **SEC. 503. PERFORMANCE AND REPORTING UPDATE.**

5           Section 102(c) of the Nuclear Energy Innovation and  
6 Modernization Act (42 U.S.C. 2215(c)) is amended—

7           (1) in paragraph (3)—

8                   (A) in the paragraph heading, by striking  
9                   “180” and inserting “90”; and

10                   (B) by striking “180” and inserting “90”;  
11                   and

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

13                   “(4) *PERIODIC UPDATES TO METRICS AND*  
14                   *SCHEDULES.—*

15                           “(A) *REVIEW AND ASSESSMENT.—Not less*  
16                           *frequently than once every 3 years, the Commis-*  
17                           *sion shall review and assess, based on the licens-*  
18                           *ing and regulatory activities of the Commission,*  
19                           *the performance metrics and milestone schedules*  
20                           *established under paragraph (1).*

21                           “(B) *REVISIONS.—After each review and*  
22                           *assessment under subparagraph (A), the Com-*  
23                           *mission shall revise and improve, as appro-*  
24                           *priate, the performance metrics and milestone*  
25                           *schedules described in that subparagraph to pro-*

1           *vide the most efficient metrics and schedules rea-*  
 2           *sonably achievable.”.*

3           ***TITLE VI—MISCELLANEOUS***

4           ***SEC. 601. NUCLEAR CLOSURE COMMUNITIES.***

5           *(a) DEFINITIONS.—In this section:*

6           *(1) COMMUNITY ADVISORY BOARD.—The term*  
 7           *“community advisory board” means a community*  
 8           *committee or other advisory organization that aims to*  
 9           *foster communication and information exchange be-*  
 10           *tween a licensee planning for and involved in decom-*  
 11           *missioning activities and members of the community*  
 12           *that decommissioning activities may affect.*

13           *(2) DECOMMISSION.—The term “decommission”*  
 14           *has the meaning given the term in section 50.2 of title*  
 15           *10, Code of Federal Regulations (or successor regula-*  
 16           *tions).*

17           *(3) ELIGIBLE RECIPIENT.—The term “eligible re-*  
 18           *ipient” has the meaning given the term in section 3*  
 19           *of the Public Works and Economic Development Act*  
 20           *of 1965 (42 U.S.C. 3122).*

21           *(4) LICENSEE.—The term “licensee” has the*  
 22           *meaning given the term in section 50.2 of title 10,*  
 23           *Code of Federal Regulations (or successor regula-*  
 24           *tions).*

1           (5) *NUCLEAR CLOSURE COMMUNITY*.—*The term*  
2           *“nuclear closure community” means a unit of local*  
3           *government, including a county, city, town, village,*  
4           *school district, or special district, that has been im-*  
5           *acted, or reasonably demonstrates to the satisfaction*  
6           *of the Secretary that it will be impacted, by a nuclear*  
7           *power plant licensed by the Commission that—*

8                   (A) *is not co-located with an operating nu-*  
9                   *clear power plant;*

10                   (B) *is at a site with spent nuclear fuel; and*

11                   (C) *as of the date of enactment of this Act—*

12                           (i) *has ceased operations; or*

13                           (ii) *has provided a written notification*  
14                   *to the Commission that it will cease oper-*  
15                   *ations.*

16           (6) *SECRETARY*.—*The term “Secretary” means*  
17           *the Secretary of Commerce, acting through the Assist-*  
18           *ant Secretary of Commerce for Economic Develop-*  
19           *ment.*

20           (b) *ESTABLISHMENT*.—*Not later than 180 days after*  
21           *the date of enactment of this Act, the Secretary shall estab-*  
22           *lish a grant program to provide grants to eligible recipi-*  
23           *ents—*

24                   (1) *to assist with economic development in nu-*  
25                   *clear closure communities; and*

1           (2) *to fund community advisory boards in nu-*  
2           *clear closure communities.*

3           (c) *REQUIREMENT.—In carrying out this section, to*  
4           *the maximum extent practicable, the Secretary shall imple-*  
5           *ment the recommendations described in the report sub-*  
6           *mitted to Congress under section 108 of the Nuclear Energy*  
7           *Innovation and Modernization Act (Public Law 115–439;*  
8           *132 Stat. 5577) entitled “Best Practices for Establishment*  
9           *and Operation of Local Community Advisory Boards Asso-*  
10           *ciated with Decommissioning Activities at Nuclear Power*  
11           *Plants”.*

12           (d) *DISTRIBUTION OF FUNDS.—The Secretary shall es-*  
13           *tablish a formula to ensure, to the maximum extent prac-*  
14           *ticable, geographic diversity among grant recipients under*  
15           *this section.*

16           (e) *AUTHORIZATION OF APPROPRIATIONS.—*

17           (1) *IN GENERAL.—There are authorized to be ap-*  
18           *propriated to the Secretary—*

19                   (A) *to carry out subsection (b)(1),*  
20                   *\$35,000,000 for each of fiscal years 2023 through*  
21                   *2028; and*

22                   (B) *to carry out subsection (b)(2),*  
23                   *\$5,000,000 for each of fiscal years 2023 through*  
24                   *2025.*

1           (2) *AVAILABILITY*.—Amounts made available  
2           under this section shall remain available for a period  
3           of 5 years beginning on the date on which the  
4           amounts are made available.

5           (3) *NO OFFSET*.—None of the funds made avail-  
6           able under this section may be used to offset the fund-  
7           ing for any other Federal program.

8   **SEC. 602. TECHNICAL CORRECTION.**

9           Section 104 c. of the Atomic Energy Act of 1954 (42  
10   U.S.C. 2134(c)) is amended—

11           (1) by striking the third sentence and inserting  
12           the following:

13           “(3) *LIMITATION ON UTILIZATION FACILITIES*.—  
14           The Commission may issue a license under this sec-  
15           tion for a utilization facility useful in the conduct of  
16           research and development activities of the types speci-  
17           fied in section 31 if—

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

23                           “(i) nonenergy services;

24                           “(ii) energy; or

1                   “(iii) a combination of nonenergy serv-  
2                   ices and energy; and

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

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

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

10                  (3) by striking “c. The Commission” and insert-  
11                  ing the following:

12                  “c. *RESEARCH AND DEVELOPMENT ACTIVITIES.—*

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

15 **SEC. 603. REPORT ON ENGAGEMENT WITH THE GOVERN-**  
16                   **MENT OF CANADA WITH RESPECT TO NU-**  
17                   **CLEAR WASTE ISSUES IN THE GREAT LAKES**  
18                   **BASIN.**

19                  *Not later than 1 year after the date of enactment of*  
20                  *this Act, the Commission shall submit to Congress a report*  
21                  *describing any engagement between the Commission and the*  
22                  *Government of Canada with respect to nuclear waste issues*  
23                  *in the Great Lakes Basin.*

Senator CARPER. Does any Senator wish to offer an amendment to this legislation?

Senator LUMMIS. Mr. Chairman?

Senator CARPER. Yes, please.

Senator LUMMIS. I would like to call up Lummis Amendment No. 1. This amendment is simple. It clarifies that two Federal agencies should not be doing the exact same environmental analysis on a project. This is a classic example of government waste and duplicity.

In my home State of Wyoming, we are having this TerraPower project that is planned to build a new advanced reactor called Sodium at a retired coal-fired power plant in Kemmerer, Wyoming. The Nuclear Regulatory Commission is already licensing this site and doing the NEPA analysis.

Unfortunately, a totally new office at the Department of Energy, the Office of Clean Energy Development, established under the recent Bipartisan Infrastructure Law, stepped in and asserted that they needed to do their own environmental analysis of the project, rather than deferring to the NRC. This is duplicative. It is wasteful, and an unnecessary delay of a project that I believe both sides support.

I will not be requesting a vote on this amendment, but I do hope to highlight exactly why permitting reform is necessary. I am proud to support the underlying bill as a cosponsor. I appreciate Ranking Member Capito and her staff as well as you, Mr. Chairman, for your work on this legislation.

I withdraw my amendment.

Senator CARPER. Thank you so much.

Other amendments, please? Hearing none, the Clerk will call the roll on the ADVANCE Act, please.

THE CLERK. Mr. Boozman?

Senator BOOZMAN. Yes.

THE CLERK. Ms. Capito?

Senator CAPITO. Yes.

THE CLERK. Mr. Cardin?

Senator CARDIN. Aye.

THE CLERK. Mr. Cramer?

Senator CRAMER. Aye.

THE CLERK. Mr. Fetterman?

Senator CARPER. Aye by proxy.

THE CLERK. Mr. Graham?

Senator CAPITO. Aye by proxy.

THE CLERK. Mr. Kelly?

Senator KELLY. Aye.

THE CLERK. Ms. Lummis?

Senator LUMMIS. Aye.

THE CLERK. Mr. Markey?

Senator MARKEY. No.

THE CLERK. Mr. Merkley?

Senator MERKLEY. No.

THE CLERK. Mr. Mullin?

Senator MULLIN. Yes.

THE CLERK. Mr. Padilla?

Senator PADILLA. Yes.

THE CLERK. Mr. Ricketts?

Senator RICKETTS. Aye.

THE CLERK. Mr. Sanders?

Senator CARPER. No, by proxy.

THE CLERK. Ms. Stabenow?

Senator STABENOW. Aye.

THE CLERK. Mr. Sullivan?

Senator CAPITO. Aye by proxy.

THE CLERK. Mr. Whitehouse?

Senator WHITEHOUSE. Aye.

THE CLERK. Mr. Wicker?

Senator WICKER. Yes.

THE CLERK. Mr. Chairman?

Senator CARPER. Aye.

THE CLERK will report.

THE CLERK. Mr. Chairman, the yeas are 16, the nays are 3.

Senator CARPER. The legislation has been favorably reported. I am grateful to everyone who came and stayed. We still have some work ahead of us on the Nuclear Regulatory Commission nominee. Maybe we can take care of that off the floor today. We will see if that can be worked out. That would be good.

I think we can probably let people go now. For anyone who wants to stay and make statements for the record, you are more than welcome. Anybody who wants to stay and share remarks, that will be fine. Senator Markey, I understand you may have something you would like to say. You are more than welcome to do that.

Senator MARKEY. Thank you, Mr. Chairman, very much. I understand, Mr. Chairman, that this legislation is important to many members of the committee. We should not give a boost to the nuclear industry without commensurately confronting the long-standing issues of how to deal with nuclear waste and nuclear decommissioning.

Senator CARPER. The hearing will be in order, please.

Senator MARKEY. If we support new plants with reactors without addressing the needs of operating reactors and affected communities, we will be adding radioactive fuel to a fire and making our existing problems worse.

The ADVANCE Act takes unprecedented steps to have the Nuclear Regulatory Commission promote nuclear exports, not simply nuclear safety, which is its core mission, all to prop up the ailing U.S. nuclear industry at home and abroad. I remain deeply concerned about this extension of the Nuclear Regulatory Commission's mission. It is supposed to be a regulator.

Other agencies are supposed to be promoting American commerce. That is not the job of the Nuclear Regulatory Commission. Its job is to promote safety, it is to ensure these plants are safe.

That is what happened back in 1974, we broke the Nuclear Regulatory Commission off from the Atomic Energy Commission, so there would be separate missions, separate goals, separate responsibilities. Now to turn the Nuclear Regulatory Commission into an agency that is promoting a technology it is supposed to be regulating begins to blur this role, especially as we are talking about exports overseas.

I am also concerned that in Section 103 of this legislation it could allow the NRC to skirt the critical non-proliferation safeguards in this bill, and unilaterally approve an export license for foreign countries to receive nuclear materials. That could present a significant non-proliferation risk and put a domestic nuclear safety agency in charge of important national security decisions.

With all due respect to the Nuclear Regulatory Commission, the Commission was never meant to be in the business of deciding if Saudi Arabia gets nuclear materials. We are blurring the historic role that this agency plays. This legislation is not wise. We have to keep these lines strong.

Moreover, I am concerned that Section 104 has an overly expansive definition of embarking civil nuclear nations. We need to be much more cautious when exporting such risky and dangerous technologies. While some of the bill's supporters argue we need new nuclear technologies to combat the climate crisis, I have an arched eyebrow as to why this bill focuses solely on nuclear energy and not on other zero-emissions technologies, such as wind and solar and geothermal, which is what our Country should be promoting around the rest of the world.

It is also shortsighted to me to make such a Herculean effort to promote new nuclear technologies when we are yet to solve the longstanding problems resulting from our existing nuclear fleet. To this day, the Navajo Nation is dealing with a legacy of uranium contamination, including more than 500 abandoned uranium mines, and homes and water sources polluted with elevated levels of radiation.

While Section 405 of the ADVANCE Act acknowledges this ongoing concern, the funding authorized in this legislation will not address the full legacy of radioactive pollution. Providing a capped level of authorized funding for communities dealing with this radioactive legacy contrasts greatly with Section 202 of the bill, which allows for nuclear companies to receive an uncapped award for licensing costs.

It is deeply disappointing to me that we are capping costs for cleanup, but not capping prizes for technologies that will likely rely on uranium, which caused this pollution in the first place.

Additionally, while this bill provides some funding to assist communities impacted by the closure of impending nuclear power plants, it does not include legislative proposals that would fully address the concerns of communities struggling to overcome the social and economic burden of indefinitely hosting stranded nuclear waste, when there is no long-term storage solution in sight.

Our communities have become de facto nuclear storage facilities, endangering them, their families, and the environment. These communities, including those in Massachusetts around the Pilgrim Nuclear Power Station, deserve more funding, a meaningful say in the decommissioning process, and a real pathway to consent-based, long-term storage for our Nation's spent nuclear fuel.

That is why I have supported and introduced legislation in the past like the Nuclear Waste Task Force Act and the Dry Storage Act and Senator Sanders' Nuclear Plant Decommissioning Act.

Chairman Carper, I want to work with you as we move forward between here the floor. I think that there are many problems with

this legislation. There are real nuclear non-proliferation issues here. We know that there are countries around the world, including Saudi Arabia, that have potential instability and we do not want to wind up in a situation where nuclear power plants have been sold to North Korea, which then turn into nuclear bomb factories, or nuclear power plants that have been sold to Iraq, which then turn into nuclear bomb factories.

Or in the instance of Iran, we were going to sell six nuclear plants to Iran in the late 1970's, and had already finished that deal before the Shah of Iran fell. Can you imagine if they had six nuclear power plants that had already been constructed with U.S. aid in the 1970's before the Shah fell? That is what we are talking about here.

I just want to make sure we understand that as we are going to become nuclear Johnny Appleseeds and encouraging the Nuclear Regulatory Commission to be promoting this nuclear technology around the world, with lower safeguards in terms of what the protections are, then yes, in the short term, the nuclear industry will reap the financial benefits of it. Inevitably, inexorably, the world will reap the whirlwind, and the next ayatollah or equivalent somewhere in the world would then have access to the nuclear materials that could hold the whole world hostage.

From my perspective, I just think a lot more thought has to go into this legislation. Safeguards have to be included. I just want to have an opportunity to be able to work with you, Mr. Chairman, and the Ranking Member, to build in those safeguards.

Senator CARPER. Thank you, Senator Markey.

Let me say, while I do not fully agree with your characterization of the legislation, I hear your concerns. Your staff has shared those with us as well, and shared those concerns with Senator Capito's staff. We look forward to finding, if we can, ways to address our Nation's growing nuclear spent fuel and ways to ensure that we have an effective and efficient decommissioning process that helps us safely when needed to close a nuclear site. I commit to working with you on those issues.

Senator Merkley.

Senator MERKLEY. Thank you, Mr. Chairman. I think my colleague from Massachusetts has laid out and summarized more eloquently than I can concerns that I do have. I do want to emphasize that blurring the distinction between export promotion and nuclear safety is a huge mistake.

We have nations that very much want nuclear technology, and my colleagues has mentioned Saudi Arabia. Saudi Arabia does not want the gold standard, they do not want international supervision. We have to remember that there is a Shi'ite force, major force, in the Islamic world, and there is a Sunni force. Those two countries, Iran and Saudi Arabia, are in competition with each other.

Here we are, putting extraordinary restrictions on Iran, which I have supported, although I would have liked to have seen the deal that really dismantled their operations sustained, a massive mistake that increased risks in the world, for the Trump Administration to exit that agreement.

We seem to feel like there is some massive difference with Saudi Arabia. We should remember that there is no way Iran is not going to pursue a weapon if Saudi Arabia is pursuing a weapon. Saudi Arabia is much more on that track than Iran is, ironically. They are also developing the missiles to deliver it.

We should be very careful about taking a safety organization that has integrity, that has responsibility, that has clarity on safety and say that they should promote the export of nuclear technology. There are far more complicated issues in the world. We should not blur that distinction.

Saudi Arabia is not on the banned list here, and there is no condition about the gold standard that we have previously promoted if we were to export, so that we would not end up essentially putting them on the track that we are saying that Iran, that we do not want Iran to go down.

I have supported the development of small nuclear reactors, knowing that we have solved neither the nuclear weapon nor the dirty bomb problem, simply because I felt like the research on an ultimate safe reactor was extremely important in a world in which we are facing climate change. How and when these are deployed, when they could create risks in international affairs that include dirty bomb risks and nuclear bomb risks, should never be confused with the issue of safety done by the nuclear agency, the Nuclear Regulatory Commission.

I share a lot of my colleague's concerns.

Senator CARPER. I thank you both for your thoughtful comments. I yield to the author of the legislation, Senator Capito.

Senator CAPITO. Thank you, Mr. Chairman. I take the gentleman's concerns into consideration. We had a very overwhelming vote in committee, 16 to 3. I think that shows the desire of the members of the committee to move forward on this technology and to move forward on the development of the technologies. I mentioned in my statement that we will be hopefully working this bill further, as hopefully we can get to the floor, and we will have conversations with your staffs.

I would say the mission of the Nuclear Regulatory Commission is safety. That is No. 1. Any time they are before our committee, any time we have talked with them, that is their No. 1 mission. They espouse it, not just espouse it, practice it, and verbalize that every single time they are in front of our committee. I am sure with the ADVANCE Act that would be front and center as well.

I do think that if we as a country can become the chief technologist, the chief developer, the chief innovator of these smaller, modular reactors, we can lead the world. We can put safeguards in, if that is what the desire of the committee would be.

I appreciate your concern. I know the waste is a concern. I do think, and remember where I am from, I am from a State that generates a lot of natural gas and coal and has for 100 years at least. Every day I hear how everything needs to be cleaner and greener. This technology would lead us to that, and provide us with a base-load energy source and could recommission areas in my State and other States, thereby helping us with job loss and other things that are connected with it as we are moving forward.

Let's just keep working on it together. I appreciate your staying later and giving us your thoughts. Thank you.

Senator CARPER. Senator Markey.

Senator MARKEY. The problem is this. There is a dual identity to nuclear energy. In the hands of some, it has this incredible ability to generate electricity. It has this unfortunate side product of uranium and plutonium.

In the eyes of others, it has this incredible ability to give access to plutonium and uranium, but it has a wonderful side benefit of electricity as well. That is what those countries, those individuals, will be trying to focus on.

We have to be very careful, because of its dual identity. We have not solved the nuclear waste problem in our own country. We do not want uranium and plutonium in other countries in the world without full scope safeguards. If we are going to be exporting and we are going to be promoting these technologies, then we have to promote the gold standard. We have to promote full scope safeguards.

That is where we need the leadership. We are not going to be the leader on the technology, but we can be the leader on the values that we attach to the technology, the standards that we attach to the technologies, the goals that we have for our planet and our society for these technologies. That is what is missing here.

I just want to make sure that as we are going forward that we have a full discussion about that. We have to be speaking with a loud, clear voice about what our expectations are, not just for ourselves but for the rest of the world as they compete with us. We can not have them continually lowering their standard, and we are going to lower ours as well in terms of those safeguards, because then we just become nuclear merchants out on the road hawking our wares.

Ultimately, at some point, maybe not 5 years from now or 10 or 15 or 20, there will be unfortunately a compromise of this technology. Then that generation will have to deal with the fact that we didn't build in the safeguards up front.

I am looking forward to working with you.

Senator CARPER. Both Senator Capito and I and our staffs are looking forward to working with you. I want to thank both you and Senator Merkley for your thoughtful comments.

In closing, I would say achieving our economy-wide decarbonization goals requires a diverse set of solutions, as we know. Nuclear energy has an important role to play in that regard.

The ADVANCE Act builds on the actions we have taken through the Bipartisan Infrastructure Law and the Inflation Reduction Act to preserve and expand our Nation's use of nuclear energy. This bill is, I believe, an exciting step forward. I thank Senator Capito and her team very much for their leadership and collaboration on this important piece with Senator Whitehouse, my staff, and myself. I look forward to working with our Senate colleagues to pass this legislation, make it better if we can, and send it to the President's desk.

Finally, I would like to ask unanimous consent to submit additional materials relating to the morning's votes into the record, including letters of support for the ADVANCE Act of 2023.

[The referenced material was not submitted in time for print.]  
Senator CARPER. I also ask unanimous consent that the staff has the authority to make the technical and conforming changes to each of the matters approved today.  
Is there objection? Hearing none, with that, this business meeting is adjourned. Thank you all.  
[Whereupon, at 10:20 a.m., the business meeting was adjourned.]

