

117TH CONGRESS  
1ST SESSION

# H. R. 1748

To assess and improve the competitiveness of American civilian nuclear commerce, to expedite Department of Energy review of certain nuclear technology exports, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 10, 2021

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

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## A BILL

To assess and improve the competitiveness of American civilian nuclear commerce, to expedite Department of Energy review of certain nuclear technology exports, 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.**

4 This Act may be cited as the “Strengthening Amer-  
5 ican Nuclear Competitiveness Act”.

1 **SEC. 2. COMPETITIVENESS OF NUCLEAR COMMERCE.**

2 (a) REPORT.—Not later than 180 days after the date  
3 of enactment of this Act, the Secretary of Energy shall  
4 develop and submit to Congress a report on United States  
5 civilian nuclear commerce.

6 (b) CONSULTATION.—In developing the report re-  
7 quired under subsection (a), the Secretary of Energy shall  
8 consult with—

9 (1) the Secretary of State;

10 (2) the Secretary of Commerce;

11 (3) the Administrator of the Environmental  
12 Protection Agency; and

13 (4) the Nuclear Regulatory Commission.

14 (c) CONTENTS.—The report required under sub-  
15 section (a) shall include—

16 (1) an assessment of—

17 (A) legal and regulatory requirements and  
18 policies of, and commercial practices in, the  
19 United States with respect to the civilian nu-  
20 clear industry of the United States;

21 (B) the effects of such practices on such  
22 civilian nuclear industry in domestic and for-  
23 eign commerce;

24 (C) the role of emerging United States nu-  
25 clear technologies and applications of such tech-

1           nologies, including nonelectric applications of  
2           those technologies; and

3           (D) the effects of advanced manufacturing  
4           and construction methods for nuclear tech-  
5           nologies on the costs of such technologies and  
6           the civilian nuclear industry of the United  
7           States;

8           (2) a comparison of the matters assessed in  
9           paragraph (1) with respect to the United States to  
10          an assessment of such matters as they apply with  
11          respect to foreign countries;

12          (3) recommendations to improve the competi-  
13          tiveness of United States civilian nuclear commerce;  
14          and

15          (4) recommendations relating to the application  
16          of section 170 of the Atomic Energy Act of 1954  
17          (42 U.S.C. 2210) with respect to advanced nuclear  
18          technologies.

19 **SEC. 3. EXPEDITING NUCLEAR TECHNOLOGY EXPORTS.**

20          (a) EXPEDITED PROCEDURES.—Section 57 of the  
21          Atomic Energy Act of 1954 (42 U.S.C. 2077) is amended  
22          by adding at the end the following new subsection:

23               “(f) EXPEDITED PROCEDURES.—

24                       “(1) ESTABLISHMENT.—In carrying out sub-  
25                       section b.(2), the Secretary of Energy shall establish

1 procedures for expedited consideration of requests  
2 for authorizations regarding the transfer of a tech-  
3 nology that involves a low-proliferation-risk reactor  
4 activity described in paragraph (2) of this subsection  
5 to a foreign country described in paragraph (3) of  
6 this subsection.

7 “(2) ACTIVITIES.—A low-proliferation-risk reac-  
8 tor activity described in this paragraph is an activity  
9 that meets each of following criteria:

10 “(A) The activity is listed in section  
11 810.2(b) of title 10, Code of Federal Regula-  
12 tions, as in effect on the date of enactment of  
13 this Act.

14 “(B) The activity is not an activity requir-  
15 ing a specific authorization pursuant to section  
16 810.7(c) of such title, as in effect on such date.

17 “(C) The Secretary determines that the  
18 transfer (or retransfer) of a technology that in-  
19 volves the activity will not result in a significant  
20 increase of the risk of proliferation beyond such  
21 risk that exists at the time that the authoriza-  
22 tion is requested.

23 “(3) FOREIGN COUNTRIES.—A foreign country  
24 described in this paragraph is a foreign country—

1           “(A) that is not a nuclear-weapon State, as  
2           defined by Article IX of the Treaty on the Non-  
3           Proliferation of Nuclear Weapons, signed at  
4           Washington, London, and Moscow on July 1,  
5           1968, other than the United Kingdom or  
6           France; and

7           “(B) with respect to which the Secretary  
8           determines under subsection b.(2) that a trans-  
9           fer to the country of a technology that involves  
10          a low-proliferation-risk reactor activity de-  
11          scribed in paragraph (2) of this subsection will  
12          not be inimical to the interest of the United  
13          States.

14          “(4) CONCURRENCE AND CONSULTATION.—The  
15          Secretary of Energy shall establish the procedures  
16          under paragraph (1) with the concurrence of the De-  
17          partment of State and after consultation with the  
18          Nuclear Regulatory Commission, the Department of  
19          Commerce, and the Department of Defense.

20          “(5) TIMING AND AVAILABILITY.—The proce-  
21          dures established under paragraph (1) shall—

22                 “(A) ensure that each request is approved  
23                 or denied by not later than 45 days after the  
24                 later of—

1 “(i) the date on which the foreign  
2 country transmits any required assurances  
3 to the Department of State; or

4 “(ii) the date on which the inter-  
5 agency review under subsection b. is com-  
6 pleted; and

7 “(B) be publicly available.”.

8 (b) ASSURANCES.—Section 57(b) of such Act (42  
9 U.S.C. 2077(b)) is amended by inserting after “mecha-  
10 nisms.” the following new sentence: “To the extent prac-  
11 ticable, the Secretary of Energy shall continue to process  
12 such requests during such interagency review in a manner  
13 that enables the Secretary to make such determination as  
14 soon as practicable after the receipt of assurances by a  
15 foreign country to the Department of State, if any such  
16 assurances are required.”.

17 **SEC. 4. LICENSING DOMESTIC NUCLEAR PROJECTS IN**  
18 **WHICH UNITED STATES ALLIES INVEST.**

19 (a) IN GENERAL.—The prohibitions against issuing  
20 certain licenses for utilization facilities to certain corpora-  
21 tions and other entities described in the second sentence  
22 of section 103 d. of the Atomic Energy Act of 1954 (42.  
23 U.S.C. 2133(d)) and the second sentence of section 104  
24 d. of that Act (42 U.S.C. 2134(d)) shall not apply to an  
25 entity described in subsection (b) of this section if the Nu-

1 clear Regulatory Commission determines that issuance of  
2 the applicable license to that entity 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 described in  
6 this subsection 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 paragraph (1); or

16 (3) an alien who is a national of a country de-  
17 scribed in paragraph (1).

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

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

1 **SEC. 5. LICENSING CONSIDERATIONS RELATING TO USE OF**  
2 **NUCLEAR ENERGY FOR NONELECTRIC APPLI-**  
3 **CATIONS.**

4 (a) IN GENERAL.—Not later than 1 year after the  
5 date of enactment of this Act, the Nuclear Regulatory  
6 Commission (in this section referred to as the “Commis-  
7 sion”) shall submit to the Committee on Energy and Com-  
8 merce of the House of Representatives and the Committee  
9 on Environment and Public Works of the Senate a report  
10 addressing any unique licensing issues or requirements re-  
11 lating to—

12 (1) the flexible operation of advanced nuclear  
13 reactors, such as ramping power output and switch-  
14 ing between electricity generation and nonelectric  
15 applications;

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

18 (3) the collocation of advanced nuclear reactors  
19 with industrial 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;

25 (4) the industrial, chemical, and medical sec-  
26 tors;

1 (5) nongovernmental organizations; and

2 (6) other public stakeholders.

3 (c) CONTENTS.—

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

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

12 (i) for hydrogen or other liquid and  
13 gaseous fuel or chemical production;

14 (ii) for water desalination and waste-  
15 water treatment;

16 (iii) for heat used in industrial proc-  
17 esses;

18 (iv) for district heating;

19 (v) in relation to energy storage;

20 (vi) for industrial or medical isotope  
21 production; and

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

24 (B) options for addressing those issues or  
25 requirements—

1 (i) within the existing regulatory  
2 framework;

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

9 (iii) through a new rulemaking;

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

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

18 **SEC. 6. REPORT ON ADVANCED METHODS OF MANUFAC-**  
19 **TURING AND CONSTRUCTION FOR NUCLEAR**  
20 **ENERGY PROJECTS.**

21 (a) IN GENERAL.—Not later than 180 days after the  
22 date of enactment of this Act, the Nuclear Regulatory  
23 Commission (in this section referred to as the “Commis-  
24 sion”) shall submit to the Committee on Energy and Com-  
25 merce of the House of Representatives and the Committee

1 on Environment and Public Works of the Senate a report  
2 on manufacturing and construction for nuclear energy  
3 projects.

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

- 6 (1) the Secretary of Energy;
- 7 (2) the nuclear energy industry;
- 8 (3) the National Laboratories;
- 9 (4) institutions of higher education;
- 10 (5) nuclear and manufacturing technology de-  
11 velopers;
- 12 (6) the manufacturing and construction indus-  
13 tries;
- 14 (7) standards development organizations;
- 15 (8) labor unions;
- 16 (9) nongovernmental organizations; and
- 17 (10) other public stakeholders.

18 (c) CONTENTS.—

19 (1) IN GENERAL.—The report shall—

20 (A) examine any unique licensing issues or  
21 requirements relating to the use of—

22 (i) advanced manufacturing tech-  
23 niques; and

24 (ii) advanced construction techniques;

25 (B) examine—

1 (i) the requirements for nuclear-grade  
2 components in manufacturing and con-  
3 struction for nuclear energy projects;

4 (ii) opportunities to use standard ma-  
5 terials, parts, or components in manufac-  
6 turing and construction for nuclear energy  
7 applications; and

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;

13 (C) identify safety aspects of advanced  
14 manufacturing processes and advanced con-  
15 struction techniques that are not addressed by  
16 existing codes and standards, so that generic  
17 guidance may be updated or created as nec-  
18 essary by the Commission;

19 (D) identify options for addressing the  
20 issues, requirements, and opportunities exam-  
21 ined under subparagraphs (A) and (B)—

22 (i) within the existing regulatory  
23 framework; or

24 (ii) through a new rulemaking; and

1 (E) 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 advanced manufacturing and  
9 construction of nuclear energy projects.

10 **SEC. 7. RISK POOLING PROGRAM ASSESSMENT.**

11 (a) REPORT.—Not later than 1 year after the date  
12 of enactment of this Act, the Comptroller General shall  
13 carry out a review of, and submit to the Committee on  
14 Energy and Commerce of the House of Representatives  
15 and the Committee on Environment and Public Works of  
16 the Senate a report on, the Secretary of Energy's actions  
17 with respect to the program described in section 934(e)  
18 of the Energy Independence and Security Act of 2007 (42  
19 U.S.C. 17373(e)).

20 (b) CONTENTS.—The report described in subsection  
21 (a) shall include—

22 (1) an evaluation of the Secretary of Energy's  
23 actions to determine the risk-informed assessment  
24 formula under section 934(e)(2)(C) of the Energy

1 Independence and Security Act of 2007 (42 U.S.C.  
2 17373(e)(2)(C)); and  
3 (2) a review of the Secretary of Energy's meth-  
4 odology to collect information to determine and im-  
5 plement the formula.

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