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(Original Signature of Member)

118TH CONGRESS
1ST SESSION

H. R.

To facilitate the efficient licensing and deployment of advanced civilian nuclear technologies.

IN THE HOUSE OF REPRESENTATIVES

Mr. HUDSON introduced the following bill; which was referred to the
Committee on _____

A BILL

To facilitate the efficient licensing and deployment of
advanced civilian nuclear technologies.

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 “Advanced Nuclear De-
5 ployment Act”.

1 **SEC. 2. ENABLING PREPARATIONS FOR ADVANCED NU-**
2 **CLEAR REACTOR DEMONSTRATIONS ON FED-**
3 **ERAL SITES.**

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

8 “(iv) Costs for—

9 “(I) activities to review and ap-
10 prove or disapprove an application for
11 an early site permit (as defined in sec-
12 tion 52.1 of title 10, Code of Federal
13 Regulations (or any successor regula-
14 tion)) to demonstrate an advanced nu-
15 clear reactor on a Department of En-
16 ergy site or any site or installation
17 that is critical national security infra-
18 structure (as defined in section 327(d)
19 of the John S. McCain National De-
20 fense Authorization Act for Fiscal
21 Year 2019); and

22 “(II) pre-application activities re-
23 lating to an early site permit (as so
24 defined) to demonstrate an advanced
25 nuclear reactor on a Department of
26 Energy site or any site or installation

1 that is critical national security infra-
2 structure (as defined in section 327(d)
3 of the John S. McCain National De-
4 fense Authorization Act for Fiscal
5 Year 2019).”.

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

8 **SEC. 3. REGULATORY REQUIREMENTS FOR MICRO-REAC-**
9 **TORS.**

10 (a) MICRO-REACTOR LICENSING.—The Nuclear Reg-
11 ulatory Commission (in this section referred to as the
12 “Commission”) shall—

13 (1) not later than 18 months after the date of
14 enactment of this Act, develop risk-informed and
15 performance-based strategies and guidance to license
16 and regulate micro-reactors pursuant to section 103
17 of the Atomic Energy Act of 1954 (42 U.S.C.
18 2133), including strategies and guidance for—

19 (A) staffing and operations;

20 (B) oversight and inspections;

21 (C) safeguards and security;

22 (D) emergency preparedness;

23 (E) risk analysis methods, including alter-
24 natives to probabilistic risk assessments;

1 (F) decommissioning funding assurance
2 methods that permit the use of design- and site-
3 specific cost estimates;

4 (G) the transportation of fueled micro-re-
5 actors; and

6 (H) siting, including in relation to—

7 (i) the population density criterion
8 limit described in the policy issue paper on
9 population-related siting considerations for
10 advanced reactors dated May 8, 2020, and
11 numbered SECY–20–0045;

12 (ii) licensing mobile deployment; and

13 (iii) environmental reviews; and

14 (2) not later than 3 years after the date of en-
15 actment of this Act, implement, as appropriate, the
16 strategies and guidance developed under paragraph
17 (1)—

18 (A) within the existing regulatory frame-
19 work;

20 (B) through the technology-inclusive, regu-
21 latory framework to be established under sec-
22 tion 103(a)(4) of the Nuclear Energy Innova-
23 tion and Modernization Act (42 U.S.C. 2133
24 note; Public Law 115–439); or

25 (C) through a pending or new rulemaking.

1 (b) CONSIDERATIONS.—In developing and imple-
2 menting strategies and guidance under subsection (a), the
3 Commission shall consider—

4 (1) the unique characteristics of micro-reactors,
5 including characteristics relating to—

6 (A) physical size;

7 (B) design simplicity; and

8 (C) source term;

9 (2) opportunities to address redundancies and
10 inefficiencies;

11 (3) opportunities to consolidate review phases
12 and reduce transitions between review teams;

13 (4) opportunities to establish integrated review
14 teams to ensure continuity throughout the review
15 process; and

16 (5) other relevant considerations discussed in
17 the policy issue paper on policy and licensing consid-
18 erations related to micro-reactors dated October 6,
19 2020, and numbered SECY–20–0093.

20 (c) CONSULTATION.—In carrying out subsection (a),
21 the Commission shall consult with—

22 (1) the Secretary of Energy;

23 (2) the heads of other Federal agencies, as ap-
24 propriate;

25 (3) micro-reactor technology developers; and

1 (4) other stakeholders.

2 **SEC. 4. EXPEDITED SUBSEQUENT COMBINED LICENSES.**

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

9 (b) **QUALIFICATIONS.**—To qualify for the expedited
10 procedure under subsection (a), an applicant—

11 (1) shall submit a combined license application
12 for a new nuclear reactor based off a previously li-
13 censed design;

14 (2) shall propose to construct the new nuclear
15 reactor on or adjacent to a site on which a nuclear
16 reactor already operates or previously operated; and

17 (3) may not be subject to an order of the Com-
18 mission to suspend or revoke a license under section
19 2.202 of title 10, Code of Federal Regulations (or
20 any successor regulation).

21 (c) **EXPEDITED PROCEDURE.**—With respect to a
22 combined license for which the applicant has satisfied the
23 requirements described in subsection (b), the Commission
24 shall, to the maximum extent practicable—

1 (1) not later than 1 year after the application
2 is accepted for docketing, issue a draft environ-
3 mental impact statement;

4 (2) not later than 18 months after the applica-
5 tion is accepted for docketing—

6 (A) complete the technical review process;

7 and

8 (B) issue a safety evaluation report and
9 final environmental impact statement;

10 (3) not later than 2 years after the application
11 is accepted for docketing, complete any necessary
12 public licensing hearings and related processes; and

13 (4) not later than 25 months after the applica-
14 tion is accepted for docketing, make a final decision
15 on whether to issue the combined license.

16 (d) PERFORMANCE AND REPORTING.—

17 (1) DELAYS IN ISSUANCE.—Not later than 30
18 days after the applicable deadline, the Executive Di-
19 rector for Operations of the Commission shall inform
20 the Commission of any failure to meet a deadline
21 under subsection (c).

22 (2) DELAYS IN ISSUANCE EXCEEDING 90
23 DAYS.—If any deadline under subsection (c) is not
24 met by the date that is 90 days after the applicable
25 date required under such subsection, the Commis-

1 sion shall submit to the Committee on Environment
2 and Public Works of the Senate and the Committee
3 on Energy and Commerce of the House of Rep-
4 resentatives a report describing the delay, including
5 a detailed explanation accounting for the delay and
6 a plan for completion of the applicable action.

7 **SEC. 5. PILOT PROGRAM FOR NUCLEAR POWER PURCHASE**
8 **AGREEMENTS.**

9 (a) IN GENERAL.—Subtitle B of title VI of the En-
10 ergy Policy Act of 2005 (Public Law 109–58; 119 Stat.
11 782) is amended by adding at the end the following:

12 **“SEC. 639A. LONG-TERM NUCLEAR POWER PURCHASE**
13 **AGREEMENT PILOT PROGRAM.**

14 “(a) ESTABLISHMENT.—The Secretary shall estab-
15 lish a pilot program under which the Secretary shall enter
16 into at least one long-term power purchase agreement for
17 power generated by a commercial nuclear reactor with re-
18 spect to which an operating license is issued by the Nu-
19 clear Regulatory Commission after January 1, 2024.

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

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

1 “(2) not later than December 31, 2028, enter
2 into at least one long-term agreement to purchase
3 power from a commercial nuclear reactor described
4 in subsection (a).

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

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

15 “(1) to high-value assets for national security
16 purposes; or

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

22 “(e) RATES.—A long-term power purchase agreement
23 entered into under this section may not be at a rate that
24 is higher than the average market rate, unless the agree-

1 ment is for power generated by a commercial nuclear reac-
2 tor described in subsection (d).”.

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

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