

119TH CONGRESS
2D SESSION

S. 4284

To encourage the development and deployment of nuclear energy, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 14, 2026

Mr. LEE (for himself and Mr. McCORMICK) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To encourage the development and deployment 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.**

4 This Act may be cited as the “Nuclear Energy Inno-
5 vation and Deployment Act of 2026”.

6 **SEC. 2. DEPARTMENT OF ENERGY AUTHORITIES FOR NU-**
7 **CLEAR FACILITIES.**

8 (a) AMENDMENTS.—

9 (1) ENERGY REORGANIZATION ACT OF 1974.—

1 (A) IN GENERAL.—Section 202 of the En-
2 ergy Reorganization Act of 1974 (42 U.S.C.
3 5842) is amended—

4 (i) by striking the section designation
5 and heading and all that follows through
6 “Notwithstanding” in the matter preceding
7 paragraph (1) and inserting the following:

8 **“SEC. 202. LICENSING AND RELATED REGULATORY FUNC-**
9 **TIONS RESPECTING SELECTED DEPARTMENT**
10 **OF ENERGY FACILITIES.**

11 “Notwithstanding”;

12 (ii) in the matter preceding paragraph
13 (1), by striking “Administration” and in-
14 serting “Department of Energy”;

15 (iii) by striking paragraphs (1) and
16 (2);

17 (iv) in paragraph (4), by striking
18 “Administration” and inserting “Depart-
19 ment of Energy”; and

20 (v) by redesignating paragraphs (3)
21 through (5) as paragraphs (1) through (3),
22 respectively.

23 (B) CONFORMING AMENDMENTS.—

24 (i) Section 3134 of division C of the
25 Strom Thurmond National Defense Au-

1 thorization Act for Fiscal Year 1999 is
2 amended—

3 (I) in subsection (b) (42 U.S.C.
4 5842 note; Public Law 105–261)—

5 (aa) by striking “(42 U.S.C.
6 7272)” and inserting “(50
7 U.S.C. 2513)”; and

8 (bb) by striking “section
9 202(5)” and all that follows
10 through the period at the end
11 and inserting “paragraph (3) of
12 section 202 of the Energy Reor-
13 ganization Act of 1974 (42
14 U.S.C. 5842).”; and

15 (II) in subsection (c) (42 U.S.C.
16 5842 note; Public Law 105–261), by
17 striking “section 202(5)” and all that
18 follows through “subsection (a),” and
19 inserting “paragraph (3) of section
20 202 of the Energy Reorganization Act
21 of 1974 (42 U.S.C. 5842)”.

22 (ii) Section 141(d) of the Nuclear
23 Waste Policy Act of 1982 (42 U.S.C.
24 10161(d)) is amended, in the first sen-
25 tence, by striking “section 202(3) of the

1 Energy Reorganization Act of 1974 (42
2 U.S.C. 5842(3))” and inserting “para-
3 graph (1) of section 202 of the Energy Re-
4 organization Act of 1974 (42 U.S.C.
5 5842)”.

6 (iii) Section 148(c) of the Nuclear
7 Waste Policy Act of 1982 (42 U.S.C.
8 10168(c)) is amended, in the first sen-
9 tence, by striking “section 202(3) of the
10 Energy Reorganization Act of 1974 (42
11 U.S.C. 5842(3))” and inserting “para-
12 graph (1) of section 202 of the Energy Re-
13 organization Act of 1974 (42 U.S.C.
14 5842)”.

15 (2) ATOMIC ENERGY ACT OF 1954.—Section 110
16 a. of the Atomic Energy Act of 1954 (42 U.S.C.
17 2140(a)) is amended—

18 (A) by striking “Commission; or (2) the
19 construction” and all that follows through “;
20 or” at the end of subsection a. and inserting
21 the following: “Nuclear Regulatory Commission
22 or the Department of Energy;

23 “(2) the construction or operation of facili-
24 ties, or the conduct of activities involving source
25 material, byproduct material, or special nuclear

1 material, under contract with and for the ac-
2 count of the Department of Energy at any loca-
3 tion, including such facilities or activities spon-
4 sored by a person; or”;

5 (B) by striking “a license for (1) the proc-
6 essing,” and inserting the following: “a license
7 for—

8 “(1) the processing;”; and

9 (C) by adding at the end the following:

10 “(3) the construction or operation of com-
11 mercial facilities and related activities, includ-
12 ing the construction and operation of nuclear
13 fuel cycle facilities, involving source material,
14 byproduct material, or special nuclear material
15 authorized and regulated by the Department of
16 Energy—

17 “(A) on Federal land; or

18 “(B) for Federal purposes, including
19 for the purpose of the generation, sale, or
20 delivery of electricity to a Federal power
21 marketing agency (as defined in section 3
22 of the Federal Power Act (16 U.S.C.
23 796)); or”.

24 (3) ENERGY POLICY ACT OF 2005.—Section
25 958(g) of the Energy Policy Act of 2005 (42 U.S.C.

1 16278(g)) is amended by striking the subsection
2 designation and heading and all that follows through
3 “Any activity” in paragraph (2) and inserting the
4 following:

5 “(g) FINANCIAL PROTECTION.—Any activity”.

6 (b) REGULATORY REVISION REQUIRED.—Not later
7 than 1 year after the date of enactment of this Act, the
8 Nuclear Regulatory Commission shall revise sections
9 30.12, 40.11, 50.11, and 70.11 of title 10, Code of Fed-
10 eral Regulations, and such other applicable regulations as
11 may be identified by the Commission, to remove limita-
12 tions on the statutory authority of the Secretary of Energy
13 with respect to activities performed off of Federal Govern-
14 ment-owned or Federal Government-controlled sites.

15 (c) FINANCIAL PROTECTION.—Any activity carried
16 out pursuant to this section or an amendment made by
17 this section that is authorized and regulated by the De-
18 partment of Energy and involves the risk of public liability
19 shall be subject to the financial protection or indemnifica-
20 tion requirements of section 170 d. of the Atomic Energy
21 Act of 1954 (42 U.S.C. 2210(d)) (commonly known as the
22 “Price-Anderson Act”).

23 **SEC. 3. NUCLEAR ENERGY LAUNCH PAD.**

24 Section 958 of the Energy Policy Act of 2005 (42
25 U.S.C. 16278) is amended—

1 (1) by redesignating subsection (g) (as amended
2 by section 2(a)(3)) as subsection (h); and

3 (2) by inserting after subsection (f) the fol-
4 lowing:

5 “(g) NUCLEAR ENERGY LAUNCH PAD.—

6 “(1) DEFINITIONS.—In this subsection:

7 “(A) ADVANCED NUCLEAR TECH-
8 NOLOGY.—The term ‘advanced nuclear tech-
9 nology’ includes—

10 “(i) an advanced nuclear reactor; and

11 “(ii) a nuclear fuel cycle facility.

12 “(B) ASSISTANT SECRETARY.—The term
13 ‘Assistant Secretary’ means the Assistant Sec-
14 retary for Nuclear Energy.

15 “(C) ELIGIBLE PRIVATE ENTITY.—The
16 term ‘eligible private entity’ means a private en-
17 tity that the Assistant Secretary determines has
18 an adequately mature design for, sufficient fi-
19 nancial resources and expertise in, and a high
20 chance of success in testing or demonstrating
21 the commercial feasibility of advanced nuclear
22 technologies.

23 “(D) LAUNCH PAD.—The term ‘Launch
24 Pad’ means the Nuclear Energy Launch Pad
25 established by paragraph (2).

1 “(E) NUCLEAR ENERGY LAUNCH PAD
2 ZONE.—The term ‘Nuclear Energy Launch Pad
3 Zone’ means a Nuclear Energy Launch Pad
4 Zone designated by the Assistant Secretary
5 under paragraph (3).

6 “(2) ESTABLISHMENT.—There is established
7 within the Office of Nuclear Energy a program, to
8 be known as the ‘Nuclear Energy Launch Pad’, as
9 a component of the program under subsection (a).

10 “(3) NUCLEAR ENERGY LAUNCH PAD ZONES.—

11 “(A) IN GENERAL.—In carrying out the
12 Launch Pad, the Assistant Secretary shall iden-
13 tify and designate secure, authorized areas of
14 Federal land, including land owned or con-
15 trolled by the Department and National Lab-
16 oratory sites as Nuclear Energy Launch Pad
17 Zones for the purpose of testing and dem-
18 onstrating the commercial feasibility of ad-
19 vanced nuclear technologies by eligible private
20 entities under authorities of the Department,
21 including nuclear fuel cycle facilities necessary
22 to support the testing and demonstration of
23 other advanced nuclear technologies, to enable
24 access to streamlined licensing opportunities
25 and facilitate transition to commercial operation

1 under Nuclear Regulatory Commission authori-
2 ties after testing and demonstration activities
3 are complete.

4 “(B) ADDITIONAL PATHWAYS.—In addi-
5 tion to Nuclear Energy Launch Pad Zones des-
6 ignated under subparagraph (A), the Assistant
7 Secretary shall, in carrying out the Launch
8 Pad, provide a pathway for testing and dem-
9 onstrating the commercial feasibility of ad-
10 vanced nuclear technologies by eligible private
11 entities under the authorities of the Depart-
12 ment at non-Federal sites, which, on completion
13 of the pathway, shall also be designated as Nu-
14 clear Energy Launch Pad Zones.

15 “(4) RESPONSIBILITIES AND DEVELOPMENT
16 ACTIVITIES.—The Assistant Secretary shall ensure
17 the success and acceleration of testing and dem-
18 onstration projects within Nuclear Energy Launch
19 Pad Zones by carrying out each of the following ac-
20 tivities in Nuclear Energy Launch Pad Zones lo-
21 cated on land owned or controlled by the Depart-
22 ment and National Laboratory sites:

23 “(A) BASIC INFRASTRUCTURE.—Providing
24 to the extent practicable, basic access infra-
25 structure to eligible private entities selected

1 under paragraph (5)(A), including roads, elec-
2 tric power, water, and fiber optic communica-
3 tion connectivity.

4 “(B) LAND CHARACTERIZATION.—Car-
5 rying out land characterization and assessment
6 activities through the program under subsection
7 (a), as appropriate, necessary to facilitate accel-
8 erated deployment, including biological, cul-
9 tural, and other environmental surveys required
10 for the testing and demonstration of advanced
11 nuclear technologies.

12 “(5) PRIVATE ENTITY SOLICITATION AND SE-
13 LECTION.—

14 “(A) COMPETITIVE PROCESS.—

15 “(i) IN GENERAL.—The Assistant
16 Secretary, acting through the program
17 under subsection (a), shall solicit and se-
18 lect eligible private entities for participa-
19 tion in the Launch Pad through an adver-
20 tised, competitive process designed to se-
21 lect the most promising advanced nuclear
22 technologies.

23 “(ii) INITIAL SOLICITATIONS.—Not
24 later than 180 days after the date of en-
25 actment of the Nuclear Energy Innovation

1 and Deployment Act of 2026, the Assist-
2 ant Secretary shall—

3 “(I) finalize the competitive proc-
4 ess required under clause (i); and

5 “(II) begin soliciting eligible pri-
6 vate entities pursuant to that clause.

7 “(B) AGREEMENTS.—

8 “(i) IN GENERAL.—The Assistant
9 Secretary shall seek to enter into flexible
10 agreements with eligible private entities se-
11 lected under subparagraph (A) to grant
12 rights of use, occupancy, and operation
13 within Nuclear Energy Launch Pad Zones.

14 “(ii) INCLUSIONS.—An agreement
15 under clause (i) may take the form of—

16 “(I) an enhanced use lease;

17 “(II) a transaction authorized
18 under section 646(g) of the Depart-
19 ment of Energy Organization Act (42
20 U.S.C. 7256(g));

21 “(III) a Strategic Partnership
22 Project agreement with the Depart-
23 ment’s management and operations
24 contractor for a National Laboratory;
25 or

1 “(IV) any other contractual in-
2 strument that the Assistant Secretary
3 determines appropriate for a given
4 project.

5 “(6) STREAMLINED LICENSING PATHWAYS.—
6 The Assistant Secretary shall seek to leverage the
7 existing Department authorities for advanced nu-
8 clear technologies and the existing framework for co-
9 ordination with the Nuclear Regulatory Commission,
10 including the memorandum of understanding be-
11 tween the Department and the Nuclear Regulatory
12 Commission relating to nuclear energy innovation
13 and effective on October 7, 2019 (including subse-
14 quent addenda to that memorandum), or, if nec-
15 essary, may enter into a new memorandum of under-
16 standing to provide for expedited licensing pathways
17 for advanced nuclear technologies that are tested or
18 demonstrated under the Launch Pad.

19 “(7) DOE AUTHORITIES.—A facility con-
20 structed and operated under the Launch Pad for
21 testing and demonstration purposes shall be consid-
22 ered to be under contract with and for the account
23 of the Department for purposes of section 110 a. of
24 the Atomic Energy Act of 1954 (42 U.S.C.
25 2140(a)).

1 “(8) NON-FEDERAL COST RESPONSIBILITY.—
2 Eligible private entities selected to participate in the
3 Launch Pad under paragraph (5)(A) shall bear the
4 full costs of design, construction, operation, and de-
5 commissioning of advanced nuclear technologies au-
6 thorized under the Launch Pad.

7 “(9) FINANCIAL ASSURANCE.—

8 “(A) IN GENERAL.—The Assistant Sec-
9 retary may require, as a condition of an agree-
10 ment under paragraph (5)(B)(i), that an eligi-
11 ble private entity provide financial assurance in
12 such form, amount, and duration as the Assist-
13 ant Secretary determines appropriate to ensure
14 the fulfillment of obligations to the Department
15 in the event of abandonment, default, or other
16 failure to perform.

17 “(B) TYPES OF ASSURANCE; PHASED
18 BASIS.—Financial assurance under this para-
19 graph—

20 “(i) may include surety bonds, letters
21 of credit, insurance, parent company guar-
22 antees, or other financial instruments ac-
23 ceptable to the Assistant Secretary; and

24 “(ii) may be established on a phased
25 basis in accordance with project develop-

1 ment milestones, including to cover decom-
2 missioning, site restoration, and related
3 costs.

4 “(10) SAVINGS PROVISION.—Nothing in this
5 subsection limits or otherwise diminishes the statu-
6 tory authority of the Secretary under the Atomic
7 Energy Act of 1954 (42 U.S.C. 2011 et seq.) or any
8 other provision of law, including with respect to ac-
9 tivities performed off of Federal Government-owned
10 or Federal Government-controlled sites.”.

11 **SEC. 4. ROLE OF FEDERAL POWER MARKETING ADMINIS-**
12 **TRATIONS WITH RESPECT TO NUCLEAR**
13 **POWER.**

14 (a) IN GENERAL.—Section 302(a) of the Department
15 of Energy Organization Act (42 U.S.C. 7152) is amend-
16 ed—

17 (1) in paragraph (2)—

18 (A) in the first sentence, by striking “Ad-
19 ministration, shall” and inserting “Administra-
20 tion shall”; and

21 (B) in the second sentence, by striking “in
22 paragraphs (1) (A), (1) (B), (1) (C), and (1)
23 (D)” and inserting “subparagraphs (A) through
24 (C) of paragraph (1)”;

25 (2) in paragraph (3)—

1 (A) in the first sentence, by striking “in
2 paragraphs (1) (E) and (1) (F)” and inserting
3 “by subparagraphs (D) and (E) of paragraph
4 (1)”; and

5 (B) in the second sentence by striking “(1)
6 (E)” and inserting “(1)(D)”; and
7 (3) by adding at the end the following:

8 “(4)(A) The Secretary may utilize the Federal
9 power marketing administrations (including the
10 Southeastern Power Administration, the South-
11 western Power Administration, the Bonneville Power
12 Administration, and the Western Area Power Ad-
13 ministration) to purchase, transmit, or enter into
14 contracts to market electric power generated by nu-
15 clear facilities.

16 “(B) The authority provided under this para-
17 graph shall be exercised in accordance with, and
18 subject to, the authorities, limitations, and proce-
19 dural requirements otherwise applicable to a Federal
20 power marketing administration with respect to the
21 acquisition of electric power resources under other-
22 wise applicable law.”.

23 (b) FEDERAL POWER.—

24 (1) IN GENERAL.—Unless expressly provided
25 otherwise, any reference in any provision of Federal

1 law (including regulations) to Federal power or elec-
2 tric energy generated at a Federal project shall be
3 deemed to include electric energy generated by a nu-
4 clear facility to the extent that such electric energy
5 is purchased, transmitted, or marketed by a Federal
6 power marketing agency (as defined in section 3 of
7 the Federal Power Act (16 U.S.C. 796)).

8 (2) RULE OF CONSTRUCTION.—Nothing in this
9 subsection alters or supersedes the authorities, limi-
10 tations, or procedural requirements applicable to a
11 Federal power marketing administration with re-
12 spect to the acquisition of electric power resources
13 under otherwise applicable law.

14 **SEC. 5. ADVANCED REACTOR DEMONSTRATION PROGRAM.**

15 Section 959A of the Energy Policy Act of 2005 is
16 amended—

17 (1) by redesignating subsection (f) as sub-
18 section (g); and

19 (2) by inserting after subsection (e) the fol-
20 lowing:

21 “(f) OFFICE OF NUCLEAR ENERGY.—

22 “(1) IN GENERAL.—The program established
23 under subsection (b) shall be administered by the
24 Office of Nuclear Energy of the Department.

1 (1) IN GENERAL.—In carrying out the Pro-
2 gram, the Assistant Secretary, in collaboration with
3 the Under Secretary for Nuclear Security and the
4 Assistant Secretary for Environmental Management,
5 shall—

6 (A) utilize solicitations, requests for appli-
7 cations, expressions of interest, or other selec-
8 tion processes issued before, on, or after the
9 date of enactment of this Act to identify, qual-
10 ify, and select United States commercial nu-
11 clear fuel fabricators and other entities that
12 have been deemed qualified by the Assistant
13 Secretary, including having contracted fuel
14 offtake (in this section referred to as “partici-
15 pants”), to receive and utilize surplus pluto-
16 nium for fabrication into fuel for advanced nu-
17 clear reactors;

18 (B) enter into agreements with partici-
19 pants under the authority provided by section
20 646(g) of the Department of Energy Organiza-
21 tion Act (42 U.S.C. 7256(g)); and

22 (C) distribute such plutonium to partici-
23 pants for processing and fabrication through a
24 milestone-based program that requires partici-
25 pants to meet particular technical, security, and

1 safeguards milestones, as agreed to by the As-
2 sistant Secretary and the Under Secretary for
3 Nuclear Security, before a participant is award-
4 ed portions of material by the Department.

5 (2) **TIMELINE.**—The Assistant Secretary shall
6 continue and, as necessary, complete activities under
7 paragraph (1) as follows:

8 (A) Not later than 180 days after the date
9 of enactment of this Act, the Assistant Sec-
10 retary shall complete the execution of initial
11 agreements under paragraph (1)(B).

12 (B) Not later than January 1, 2028, the
13 Assistant Secretary shall commence distribution
14 of material under paragraph (1)(C), subject to
15 participants meeting the milestones required
16 under the Program.

17 (C) Not later than January 1, 2035, the
18 Assistant Secretary shall complete distribution
19 of material under paragraph (1)(C), subject to
20 participants meeting the milestones required
21 under the Program.

22 (c) **TERMINATION OF SURPLUS PLUTONIUM DILUTE**
23 **AND DISPOSE PROGRAM.**—Not later than 180 days after
24 the date of enactment of this Act, the Secretary of Energy
25 shall—

1 (1) terminate the Surplus Plutonium Dilute
2 and Dispose Program, except to the extent needed to
3 dispose of material that presents a safety concern or
4 is not of use to the Office of Nuclear Energy; and

5 (2) resume operations of HB Line at the Sa-
6 vannah River Site, South Carolina.

7 (d) TRANSFER.—

8 (1) IN GENERAL.—Upon termination of the
9 Surplus Plutonium Dilute and Dispose Program
10 pursuant to subsection (c), any unobligated amounts
11 previously appropriated or otherwise made available
12 to the Department of Energy for the Surplus Pluto-
13 nium Dilute and Dispose Program shall be trans-
14 ferred to the Office of Nuclear Energy, except to the
15 extent such amounts are needed to complete proc-
16 essing and transfer of final disposition of previously
17 downblended material.

18 (2) USE OF FUNDS.—The Assistant Secretary
19 shall use the funds transferred pursuant to para-
20 graph (1) carry out this section.

21 (e) ANNUAL BRIEFING.—Not later than 1 year after
22 the date of enactment of this Act, and annually thereafter
23 until such time the Program is completed, the Assistant
24 Secretary, in coordination with the Under Secretary for
25 Nuclear Security and the Assistant Secretary for Environ-

1 mental Management, shall provide to the Committee on
2 Energy and Natural Resources of the Senate, the Com-
3 mittee on Armed Services of the Senate, the Committee
4 on Energy and Commerce of the House of Representa-
5 tives, and the Committee on Armed Services of the House
6 of Representatives a briefing on the progress of the Pro-
7 gram.

8 (f) RULE OF CONSTRUCTION.—Nothing in this sec-
9 tion shall be construed to modify or otherwise affect the
10 legal obligations of the Department of Energy to the State
11 of South Carolina.

○