

118TH CONGRESS  
1ST SESSION

# H. R. 4674

To establish a competitive grant program to fund feasibility studies for advanced nuclear reactors, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 17, 2023

Mr. DONALDS introduced the following bill; which was referred to the Committee on Energy and Commerce

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## A BILL

To establish a competitive grant program to fund feasibility studies for advanced nuclear reactors, 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 “Advanced Nuclear Fea-  
5 sibility Act”.

6 **SEC. 2. SENSE OF CONGRESS.**

7 It is the sense of Congress that Congress—

8 (1) recognizes the importance of developing, li-  
9 censing, and deploying innovative nuclear energy  
10 technology, such as advanced nuclear reactors;

1           (2) acknowledges the vast deployment potential  
2 of advanced nuclear technology over the next several  
3 decades;

4           (3) understands the immensely beneficial im-  
5 pact of building and deploying advanced nuclear re-  
6 actors; and

7           (4) seeks to provide Federal support in pro-  
8 moting the use of nuclear energy throughout the  
9 United States.

10 **SEC. 3. ADVANCED NUCLEAR REACTOR FEASIBILITY STUDY**

11 **GRANT PROGRAM.**

12           (a) **ESTABLISHMENT.**—The Secretary shall establish  
13 a program to award grants on a competitive basis to eligi-  
14 ble entities to conduct feasibility studies for the siting,  
15 construction, and operation of advanced nuclear reactors.

16           (b) **ELIGIBLE ENTITY.**—

17           (1) **ENTITIES.**—To be eligible to receive a grant  
18 under the program, an applicant shall be—

19           (A) an institution of higher education lo-  
20 cated in a State or territory described in para-  
21 graph (2);

22           (B) a private individual or company, in-  
23 cluding the owner or operator of an airport,  
24 port, or hospital, located in a State or territory  
25 described in paragraph (2); or

1           (C) a State or local government of a State  
2           or territory described in paragraph (2), includ-  
3           ing a State or local government that owns or  
4           operates an airport, port, or hospital.

5           (2) STATES AND TERRITORIES.—A State or ter-  
6           ritory described in this paragraph is a State, or ter-  
7           ritory of the United States, that has in effect a plan  
8           relating to advancing the deployment of advanced  
9           nuclear reactors, as the Secretary determines appro-  
10          priate.

11          (c) APPLICATION.—

12           (1) IN GENERAL.—To be eligible to receive a  
13           grant under the program, an eligible entity shall  
14           submit an application to the Secretary, not later  
15           than 180 days after the date of enactment of this  
16           Act, in such manner, and containing such informa-  
17           tion as the Secretary may require, including, at a  
18           minimum, information described in paragraph  
19           (2)(A).

20           (2) INFORMATION.—An application under para-  
21           graph (1)—

22                   (A) shall include a description of—

23                           (i) the background for the feasibility  
24                           study that is to be conducted for the

1 siting, construction, and operation of an  
2 advanced nuclear reactor; and

3 (ii) organizational responsibilities for  
4 conducting such feasibility study; and

5 (B) may include—

6 (i) a plan for conducting such feasi-  
7 bility study, including a plan—

8 (I) to conduct an analysis of—

9 (aa) the demand for elec-  
10 tricity in the region of the pro-  
11 posed site of the advanced nu-  
12 clear reactor and supporting fa-  
13 cilities;

14 (bb) the transmission capae-  
15 city and transmission facilities  
16 and systems in such region; and

17 (cc) the structure of the  
18 market for electricity in such re-  
19 gion;

20 (II) to conduct an analysis of  
21 how the construction and operation of  
22 the advanced nuclear reactor at such  
23 proposed site would impact—

24 (aa) the overall demand for  
25 electricity in such region;

1 (bb) the transmission capac-  
2 ity and transmission facilities  
3 and systems in such region; and

4 (cc) the market for elec-  
5 tricity in such region;

6 (III) to conduct an analysis re-  
7 garding the proposed site of the ad-  
8 vanced nuclear reactor and supporting  
9 facilities, including preliminary site  
10 layout and site preparation and poten-  
11 tial effects of the advanced nuclear re-  
12 actor and supporting facilities on the  
13 applicable region, including population  
14 distribution and the current uses of  
15 land and water;

16 (IV) to conduct an analysis of  
17 the environmental impacts of siting,  
18 construction, and operation of the ad-  
19 vanced nuclear reactor at the pro-  
20 posed site, including—

21 (aa) a comparison of the en-  
22 vironmental impacts of siting,  
23 constructing, and operating the  
24 advanced nuclear reactor at such  
25 proposed site to siting, con-

1                    structing, and operating the ad-  
2                    vanced nuclear reactor at other  
3                    sites with similar characteristics  
4                    in the applicable region;

5                    (bb) impacts on cooling  
6                    water demand; and

7                    (cc) an overview of the envi-  
8                    ronmental protection require-  
9                    ments in the applicable region;

10                  (V) for how to approach the li-  
11                  censing process and authorization re-  
12                  quirements for the siting, construc-  
13                  tion, and operation of the advanced  
14                  nuclear reactor;

15                  (VI) to conduct an analysis of  
16                  how the applicable project to site, con-  
17                  struct, and operate the advanced nu-  
18                  clear reactor would be implemented,  
19                  including analysis of potential con-  
20                  tractual approaches, procurement  
21                  plans, project schedules, project man-  
22                  agement, and risk management plans;

23                  (VII) to conduct an analysis of  
24                  organizational requirements and re-  
25                  sponsibilities for each phase of the ap-

1 applicable project to site, construct, and  
2 operate the advanced nuclear reactor,  
3 including requirements and respon-  
4 sibilities relating to human resources  
5 and training, including workforce lo-  
6 gistics and staffing requirements for  
7 construction, commissioning, oper-  
8 ation, and maintenance of the ad-  
9 vanced nuclear reactor, including edu-  
10 cation and other training require-  
11 ments;

12 (VIII) to conduct an analysis of  
13 the economic feasibility of the applica-  
14 ble project to site, construct, and op-  
15 erate the advanced nuclear reactor, in-  
16 cluding a cost-benefit analysis;

17 (IX) for developing plans for  
18 emergency preparedness and coordina-  
19 tion for the proposed site of the ad-  
20 vanced nuclear reactor and supporting  
21 facilities, including on-site emergency  
22 planning and coordination with off-  
23 site emergency response organizations;

24 (X) to conduct an analysis of co-  
25 generation opportunities on the pro-

1 posed site of the advanced nuclear re-  
2 actor and supporting facilities; and

3 (XI) to conduct a decommis-  
4 sioning analysis for the advanced nu-  
5 clear reactor, including the cost of de-  
6 commissioning the advanced nuclear  
7 reactor, decommissioning phases for  
8 the advanced nuclear reactor, and the  
9 environmental impact of decommis-  
10 sioning the advanced nuclear reactor;  
11 and

12 (ii) a description of the stakeholders  
13 that may be involved in the applicable  
14 project to site, construct, and operate the  
15 advanced nuclear reactor.

16 (d) DISTRIBUTION.—

17 (1) ANNOUNCEMENT.—Not later than 270 days  
18 after the date of enactment of this Act, the Sec-  
19 retary shall announce on the website of the Depart-  
20 ment of Energy each eligible entity selected to re-  
21 ceive a grant under the program.

22 (2) GEOGRAPHIC DISTRIBUTION.—In awarding  
23 grants under the program, the Secretary shall, to  
24 the extent practicable, award a grant to at least—



1 (A) one eligible entity in each State de-  
2 scribed in subsection (b)(2); and

3 (B) one eligible entity in a territory de-  
4 scribed in subsection (b)(2).

5 (3) CONSIDERATIONS AND PRIORITY.—In  
6 awarding grants under the program, the Secretary  
7 shall—

8 (A) take into consideration the totality and  
9 thoroughness of the information included in the  
10 application from an eligible entity, including in-  
11 formation described in subsection (c)(2)(B)(i)  
12 regarding a plan for conducting a feasibility  
13 study; and

14 (B) give priority to an eligible entity that  
15 certifies that the eligible entity will, after the  
16 competition of the feasibility study for which a  
17 grant is awarded, commence, if appropriate,  
18 other pre-licensing application activities for the  
19 applicable advanced nuclear reactor.

20 **SEC. 4. FEASIBILITY STUDY REPORT.**

21 Not later than 60 days after the selection of the eligi-  
22 ble entities to be awarded grants under the program, the  
23 Secretary shall submit to the appropriate congressional  
24 committees a report that describes—

25 (1) the eligible entities that were selected;

1           (2) the reasoning for selection of such eligible  
2 entities;

3           (3) a summary of each feasibility study to be  
4 conducted using a grant awarded under the pro-  
5 gram, including the amount requested for the feasi-  
6 bility study;

7           (4) an anticipated timeline for each resulting  
8 feasibility study; and

9           (5) any other information the Secretary deter-  
10 mines necessary.

11 **SEC. 5. USE OF EXISTING FEASIBILITY STUDIES.**

12       The Secretary and the Nuclear Regulatory Commis-  
13 sion shall jointly establish a process under which a feasi-  
14 bility study conducted pursuant to the program may, in  
15 whole or in part, be utilized for purposes of a feasibility  
16 study for the siting, construction, and operation of an ad-  
17 vanced nuclear reactor at a different site, with similar  
18 characteristics, in the applicable region.

19 **SEC. 6. COST SHARE.**

20       (a) IN GENERAL.—The non-Federal cost share of  
21 feasibility study conducted pursuant to this Act shall be  
22 60 percent.

23       (b) REDUCTION OF NON-FEDERAL SHARE.—The  
24 Secretary may reduce the non-Federal share required  
25 under paragraph (1), if the Secretary determines the re-

1 duction to be necessary and appropriate, taking into con-  
2 sideration—

3 (1) whether the proposed site of the advanced  
4 nuclear reactor and supporting facilities is at the  
5 site of a fossil fuel-fired electric generating facility  
6 that is retired or planned to be retired within the  
7 next year;

8 (2) whether the applicable eligible entity has  
9 participated in community engagement with the ap-  
10 plicable communities to discuss the potential siting  
11 of an advanced nuclear reactor and supporting facili-  
12 ties; and

13 (3) the socioeconomic impacts that the siting,  
14 construction, and operation of the advanced nuclear  
15 reactor at the proposed site would have on the sur-  
16 rounding communities.

17 **SEC. 7. FUNDING.**

18 Notwithstanding section 134 of the Clean Air Act (42  
19 U.S.C. 7434), unobligated balances of amounts made  
20 available under such section 134 may be used to carry out  
21 this Act, to remain available until September 30, 2025.

22 **SEC. 8. DEFINITIONS.**

23 In this Act:

24 (1) **ADVANCED NUCLEAR REACTOR.**—The term  
25 “advanced nuclear reactor” has the meaning given

1 such term in section 3 of the Nuclear Energy Inno-  
2 vation and Modernization Act (42 U.S.C. 2215  
3 note).

4 (2) APPROPRIATE CONGRESSIONAL COMMIT-  
5 TEES.—The term “appropriate congressional com-  
6 mittees” means—

7 (A) the Committee on Energy and Com-  
8 merce, and the Committee on Science, Space,  
9 and Technology, of the House of Representa-  
10 tives; and

11 (B) the Committee on Energy and Natural  
12 Resources, and the Committee on Environment  
13 and Public Works, of the Senate.

14 (3) ELIGIBLE ENTITY.—The term “eligible enti-  
15 ty” means an individual or entity described in sec-  
16 tion 3(b)(1).

17 (4) INSTITUTION OF HIGHER EDUCATION.—The  
18 term “institution of higher education” has the  
19 meaning given such term in section 2 of the Energy  
20 Policy Act of 2005 (42 U.S.C. 15801).

21 (5) PROGRAM.—The term “program” means  
22 the program established under section 3(a).

23 (6) SECRETARY.—The term “Secretary” means  
24 the Secretary of Energy.

1           (7) STATE.—The term “State” means each of  
2           the 50 States and the District of Columbia.

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