

AMENDMENT TO RULES COMMITTEE PRINT 117-

31

OFFERED BY MR. FOSTER OF ILLINOIS

Page 641, after line 22, insert the following:

1 **Subtitle G—National Nuclear Uni-**
2 **versity Research Infrastructure**
3 **Reinvestment**

4 **SEC. 10671. SHORT TITLE.**

5 This subtitle may be cited as the “National Nuclear
6 University Research Infrastructure Reinvestment Act of
7 2021”.

8 **SEC. 10672. PURPOSES.**

9 The purposes of this subtitle are—

10 (1) to upgrade the nuclear research capabilities
11 of universities in the United States to meet the re-
12 search requirements of advanced nuclear energy sys-
13 tems;

14 (2) to ensure the continued operation of univer-
15 sity research reactors;

16 (3) to coordinate available resources to enable
17 the establishment, including the start and efficient
18 completion of construction, of new nuclear science
19 and engineering facilities; and

1 (4) to support—

2 (A) workforce development critical to
3 maintaining United States leadership in nuclear
4 science and engineering and related disciplines;
5 and

6 (B) the establishment or enhancement of
7 nuclear science and engineering capabilities and
8 other, related capabilities at historically Black
9 colleges and universities, Tribal colleges or uni-
10 versities, minority-serving institutions, EPSCoR
11 universities, junior or community colleges, and
12 associate-degree-granting colleges

13 **SEC. 10673. UNIVERSITY INFRASTRUCTURE COLLABORA-**
14 **TION.**

15 Section 954(a) of the Energy Policy Act of 2005 (42
16 U.S.C. 16274(a)) is amended—

17 (1) in paragraph (2) by amending subpara-
18 graph (D) to read as follows:

19 “(D) promote collaborations, partnerships,
20 and knowledge sharing between institutions of
21 higher education, National Laboratories, other
22 Federal agencies, industry, and associated labor
23 unions; and”.

24 (2) by amending paragraph (4) to read as fol-
25 low:

1 “(4) STRENGTHENING UNIVERSITY RESEARCH
2 AND TRAINING REACTORS AND ASSOCIATED INFRA-
3 STRUCTURE.—

4 “(A) IN GENERAL.—In carrying out the
5 program under this subsection, the Secretary
6 may support—

7 “(i) converting research reactors from
8 high-enrichment fuels to low-enrichment
9 fuels and upgrading operational instrumen-
10 tation;

11 “(ii) revitalizing and upgrading exist-
12 ing nuclear science and engineering infra-
13 structure that support the development of
14 advanced nuclear technologies and applica-
15 tions;

16 “(iii) regional or subregional univer-
17 sity-led consortia to—

18 “(I) broaden access to university
19 research reactors;

20 “(II) enhance existing university-
21 based nuclear science and engineering
22 infrastructure; and

23 “(III) provide project manage-
24 ment, technical support, quality engi-
25 neering and inspections, manufac-

1 turing, and nuclear material sup-
2 port.”;

3 “(iv) student training programs, in
4 collaboration with the United States nu-
5 clear industry, in relicensing and upgrad-
6 ing reactors, including through the provi-
7 sion of technical assistance; and

8 “(v) reactor improvements that em-
9 phasize research, training, and education,
10 including through the Innovations in Nu-
11 clear Infrastructure and Education Pro-
12 gram or any similar program.

13 “(B) Of any amounts appropriated to
14 carry out the program under this subsection,
15 there is authorized to be appropriated to the
16 Secretary to carry out clauses (ii) and (iii) of
17 subparagraph (A) \$55,000,000 for each of fis-
18 cal years 2022 through 2026.”.

19 **SEC. 10674. ADVANCED NUCLEAR RESEARCH INFRASTRUC-**
20 **TURE ENHANCEMENT SUBPROGRAM.**

21 Section 954(a) of the Energy Policy Act of 2005 (42
22 U.S.C. 16274(a)), as amended by section 3, is further
23 amended—

24 (1) by redesignating paragraphs (5) through
25 (8) as paragraphs (6) through (9), respectively;

1 (2) by inserting after paragraph (4) the fol-
2 lowing:

3 “(5) ADVANCED NUCLEAR RESEARCH INFRA-
4 STRUCTURE ENHANCEMENT.—

5 “(A) IN GENERAL.—The Secretary shall
6 carry out a subprogram to be known as the Ad-
7 vanced Nuclear Research Infrastructure En-
8 hancement Subprogram in order to—

9 “(i) demonstrate various advanced nu-
10 clear reactor and nuclear microreactor con-
11 cepts;

12 “(ii) establish medical isotope produc-
13 tion reactors or other specialized applica-
14 tions; and

15 “(iii) advance other research infra-
16 structure that, in the determination of the
17 Secretary, is consistent with the mission of
18 the Department.

19 “(B) NEW NUCLEAR SCIENCE AND ENGI-
20 NEERING FACILITIES.—In carrying out the sub-
21 program, the Secretary shall establish—

22 “(i) not more than 4 new research re-
23 actors; and

24 “(ii) new nuclear science and engi-
25 neering facilities, as required to address re-

1 search demand and identified infrastruc-
2 ture gaps.

3 “(C) LOCATIONS.—New research reactors
4 and facilities established under subparagraph
5 (B) shall be established in a manner that—

6 “(i) supports the regional or sub-
7 regional consortia described in paragraph
8 (4)(C); and

9 “(ii) encourages the participation of—

10 “(I) historically Black colleges
11 and universities;

12 “(II) Tribal colleges or univer-
13 sities;

14 “(III) minority-serving institu-
15 tions;

16 “(IV) EPSCoR universities;

17 “(V) junior or community col-
18 leges; and

19 “(VI) associate-degree-granting
20 colleges.

21 “(D) FUEL REQUIREMENTS.—New re-
22 search reactors established under subparagraph
23 (B) shall not use high-enriched uranium, as de-
24 fined in section 2001 of division Z of the
25 Consoli5 dated Appropriations Act of 2021.

1 “(E) AUTHORIZATION OF APPROPRIA-
2 TIONS.—Of any amounts appropriated to carry
3 out the program under this section, there are
4 authorized to be appropriated to the Secretary
5 to carry out the subprogram under this para-
6 graph—

7 “(i) \$10,000,000 for fiscal year 2022;

8 “(ii) \$45,000,000 for fiscal year 2023;

9 “(iii) \$60,000,000 for fiscal year
10 2024;

11 “(iv) \$65,000,000 for fiscal year
12 2025;

13 “(v) \$80,000,000 for fiscal year 2026;

14 “(vi) \$140,000,000 for fiscal year
15 2027;

16 “(vii) \$120,000,000 for fiscal year
17 2028; and

18 “(viii) \$80,000,000 for fiscal year
19 2029.”; and

20 (3) by amending paragraph (9), as redesignated
21 by paragraph (1) of this section, to read as follows:

22 “(9) DEFINITIONS.—In this subsection:

23 “(A) ASSOCIATE-DEGREE-GRANTING COL-
24 LEGE.—The term ‘associate-degree- granting
25 college’ means an institution of higher edu-

1 cation (as determined under section 101 of the
2 Higher Education Act of 1965 20 U.S.C. 1001)
3 that—

4 “(i) is a nonprofit institution that of-
5 fers a 2-year associate-degree program or a
6 2-year certificate program; or

7 “(ii) is a proprietary institution that
8 offers a 2-year associate degree program;

9 “(B) JUNIOR FACULTY.—The term ‘junior
10 faculty’ means a faculty member who was
11 awarded a doctorate less than 10 years before
12 receipt of an award from the grant program de-
13 scribed in paragraph (2)(B);

14 “(C) JUNIOR OR COMMUNITY COLLEGE.—
15 The term “junior or community college: has the
16 meaning given the term in section 312 of the
17 Higher Education Act of 1965 (20 U.S.C.
18 1058);

19 “(D) EPSCOR UNIVERSITY.—The term
20 ‘EPSCoR university’ means an institution of
21 higher education located in a State eligible to
22 participate in the program defined in section
23 502 of the America COMPETES Reauthoriza-
24 tion Act of 2010 (42 U.S.C. 1862p note);

1 “(E) HISTORICALLY BLACK COLLEGE OR
2 UNIVERSITY.—The term ‘historically Black col-
3 lege or university’ has the meaning given the
4 term ‘part B institution’ in section 322 of the
5 Higher Education Act of 1965 (20 U.S.C.
6 1061);

7 “(F) MINORITY-SERVING INSTITUTION.—
8 The term ‘minority-serving institution’ means a
9 Hispanic-serving institution, an Alaska Native-
10 serving institution, a Native Hawaiian-serving
11 institutions, a Predominantly Black Institution,
12 an Asian American and Native American Pa-
13 cific Islander-serving institution, or a Native
14 American-serving nontribal institution as de-
15 scribed in section 371 of the Higher Education
16 Act of 1965 (20 U.S.C. 1067q(a)); and

17 “(G) TRIBAL COLLEGE OR UNIVERSITY.—
18 The term ‘Tribal College or University’ has the
19 meaning given such term in section 316 of the
20 Higher Education Act of 1965 (20 U.S.C.
21 1059c).”.

1 **SEC. 10675. SCIENCE EDUCATION AND HUMAN RESOURCES**
2 **SCHOLARSHIPS, FELLOWSHIPS, AND RE-**
3 **SEARCH AND DEVELOPMENT PROJECTS.**

4 (a) IN GENERAL.—The purpose of this section is to
5 support a diverse workforce for the complex landscape as-
6 sociated with effective and equitable development of ad-
7 vanced nuclear energy technologies, including interdiscipli-
8 nary research to enable positive impacts and avoid poten-
9 tial negative impacts across the lifespan of nuclear energy
10 technologies.

11 (b) NONTECHNICAL NUCLEAR RESEARCH.—Section
12 313 of the Omnibus Appropriations Act, 2009 (Public
13 Law 111–8; 42 U.S.C. 16274a) is amended:

14 (1) in subsection (b)(2), after “engineering”, by
15 inserting “, which may include nontechnical nuclear
16 research.”;

17 (2) in subsection (c), by inserting after para-
18 graph (2) the following:

19 “(3) NONTECHNICAL NUCLEAR RESEARCH.—
20 The term ‘nontechnical nuclear research’ means re-
21 search with specializations such as social sciences or
22 law that can support an increase in community en-
23 gagement, participation, and confidence in nuclear
24 energy systems, including the navigation of the li-
25 censing required for advanced reactor deployment,
26 aligned with the objectives in section 951(a)(2) of

1 the Energy Policy Act of 2005 (42 U.S.C.
2 16271(a)(2)).”; and
3 (3) in subsection (d)(1), by striking
4 “\$30,000,000” and inserting “\$45,000,000”.

