

116TH CONGRESS
1ST SESSION

H. R. 4733

To amend the Energy Policy Act of 2005 to provide for a low-dose radiation
basic research program.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 18, 2019

Mr. POSEY (for himself, Mr. LIPINSKI, Mr. WEBER of Texas, and Mr. BABIN)
introduced the following bill; which was referred to the Committee on
Science, Space, and Technology

A BILL

To amend the Energy Policy Act of 2005 to provide for
a low-dose radiation basic research program.

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 “Low-Dose Radiation
5 Research Act of 2019”.

6 **SEC. 2. LOW-DOSE RADIATION RESEARCH PROGRAM.**

7 (a) IN GENERAL.—Subtitle G of title IX of the En-
8 ergy Policy Act of 2005 (42 U.S.C. 16311 et seq.) is
9 amended by inserting after section 977 (42 U.S.C. 16317)
10 the following new section:

1 **“SEC. 977A. LOW-DOSE RADIATION RESEARCH PROGRAM.**

2 “(a) IN GENERAL.—The Secretary shall carry out a
3 basic research program on low-dose and low dose-rate ra-
4 diation to—

5 “(1) enhance the scientific understanding of,
6 and reduce uncertainties associated with, the effects
7 of exposure to low-dose and low dose-rate radiation;
8 and

9 “(2) inform improved risk-assessment and risk-
10 management methods with respect to such radiation.

11 “(b) PROGRAM COMPONENTS.—In carrying out the
12 program required under subsection (a), the Secretary
13 shall—

14 “(1) formulate scientific goals for low-dose and
15 low dose-rate radiation basic research in the United
16 States;

17 “(2) identify ongoing scientific challenges for
18 understanding the long-term effects of ionizing radi-
19 ation on biological systems;

20 “(3) develop a long-term strategic and
21 prioritized basic research agenda to address such
22 scientific challenges in coordination with other re-
23 search efforts;

24 “(4) identify and, to the extent possible, quan-
25 tify, potential monetary and health-related benefits
26 to Federal agencies, the general public, industry, re-

1 search communities, and other users of information
2 produced by such research program;

3 “(5) leverage the collective body of knowledge
4 from existing low-dose and low dose-rate radiation
5 research; and

6 “(6) engage with other Federal agencies, re-
7 search communities, and potential users of informa-
8 tion produced under this section, including institu-
9 tions concerning radiation research, medical physics,
10 radiology, health physics, and emergency response.

11 “(c) COORDINATION.—In carrying out the program,
12 the Secretary, in coordination with the Physical Science
13 Subcommittee of the National Science and Technology
14 Council, shall—

15 “(1) support the directives under section 106 of
16 the American Innovation and Competitiveness Act
17 (42 U.S.C. 6601 note);

18 “(2) ensure that the Office of Science of the
19 Department of Energy consults and coordinates with
20 the National Aeronautics and Space Administration,
21 the National Institutes of Health, the Environmental
22 Protection Agency, the Department of Defense, the
23 Nuclear Regulatory Commission, and the Depart-
24 ment of Homeland Security;

1 “(3) advise and assist the National Science and
2 Technology Council on policies and initiatives in ra-
3 diation biology, including enhancing scientific knowl-
4 edge of the effects of low-dose and low dose-rate ra-
5 diation on biological systems to improve radiation
6 risk-assessment and risk-management methods; and

7 “(4) identify opportunities to stimulate inter-
8 national cooperation relating to low-dose and low
9 dose-rate radiation and leverage research and knowl-
10 edge from sources outside of the United States.

11 “(d) RESEARCH PLAN.—Not later than 180 days
12 after the date of enactment of this Act, the Secretary shall
13 transmit to the Committee on Science, Space, and Tech-
14 nology of the House of Representatives and the Committee
15 on Energy and Natural Resources of the Senate a 4-year
16 research plan that identifies and prioritizes basic research
17 needs relating to low-dose and low dose-rate radiation. In
18 developing such plan, the Secretary shall incorporate the
19 components described in subsection (b).

20 “(e) DEFINITIONS.—In this section:

21 “(1) LOW-DOSE RADIATION.—The term ‘low-
22 dose radiation’ means a radiation dose of less than
23 100 millisieverts.

1 “(2) LOW DOSE-RATE RADIATION.—The term
2 ‘low dose-rate radiation’ means a radiation dose rate
3 of less than 5 millisieverts per hour.

4 “(f) RULE OF CONSTRUCTION.—Nothing in this sec-
5 tion shall be construed to subject any research carried out
6 by the Secretary for the program under this section to
7 any limitations described in 977(e).

8 “(g) FUNDING.—For purposes of carrying out this
9 section, the Secretary is authorized to make available from
10 funds provided to the Biological and Environmental Re-
11 search Program—

12 “(1) \$20,000,000 for fiscal year 2020;

13 “(2) \$20,000,000 for fiscal year 2021;

14 “(3) \$30,000,000 for fiscal year 2022; and

15 “(4) \$30,000,000 for fiscal year 2023.”.

16 (b) CONFORMING AMENDMENT.—The table of con-
17 tents for subtitle G of title IX of the Energy Policy Act
18 of 2005 is amended by inserting after the item relating
19 to section 977 the following:

 “977A. Low-dose radiation research program.”.

20 **SEC. 3. SPENDING LIMITATION.**

21 No additional funds are authorized to be appro-
22 priated to carry out this Act and the amendments made
23 by this Act, and this Act and such amendments shall be

- 1 carried out using amounts otherwise available for such
- 2 purpose.

