



(Original Signature of Member)

116TH CONGRESS
2D SESSION

H. R. _____

To establish and support the Quantum User Expansion for Science and Technology Program at the Department of Energy and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

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

A BILL

To establish and support the Quantum User Expansion for Science and Technology Program at the Department of 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 “QUEST Act of 2020”.

1 **SEC. 2. DEPARTMENT OF ENERGY QUANTUM USER EXPAN-**
2 **SION FOR SCIENCE AND TECHNOLOGY PRO-**
3 **GRAM.**

4 Title IV of the National Quantum Initiative Act (15
5 U.S.C. 8851 et seq.) is amended by adding at the end
6 the following:

7 **“SEC. 403. DEPARTMENT OF ENERGY QUANTUM USER EX-**
8 **PANSION FOR SCIENCE AND TECHNOLOGY**
9 **PROGRAM.**

10 “(a) IN GENERAL.—Not later than 90 days of the
11 date of the enactment of the QUEST Act of 2020, the
12 Secretary of Energy (referred to in this section as the
13 ‘Secretary’) shall, establish and carry out a program (to
14 be known as the ‘Quantum User Expansion for Science
15 and Technology program’ or ‘QUEST program’) to en-
16 courage and facilitate access to United States quantum
17 computing hardware and quantum computing clouds for
18 research purposes in order to—

19 “(1) enhance the United States quantum re-
20 search enterprise;

21 “(2) educate the future quantum computing
22 workforce; and

23 “(3) accelerate the advancement of United
24 States quantum computing capabilities.

25 “(b) PROGRAM.—In carrying out this section, the
26 Secretary shall—

1 “(1) coordinate with—

2 “(A) the Director of the National Science
3 Foundation;

4 “(B) the Director of the National Institute
5 of Standards and Technology;

6 “(C) the Chair of the Quantum Informa-
7 tion Science of the National Science and Tech-
8 nology Council established under section
9 103(a); and

10 “(D) the Chair of the subcommittee on the
11 Economic and Security Implications of Quan-
12 tum Science;

13 “(2) provide researchers based within the
14 United States with access to, and use of, United
15 States quantum computing resources through a com-
16 petitive, merit-reviewed process;

17 “(3) consider applications from the National
18 Laboratories, multi-institutional collaborations, insti-
19 tutions of higher education, industry stakeholders,
20 and any other entities that the Secretary determines
21 are appropriate to provide national leadership on
22 quantum computing related issues; and

23 “(4) consult and coordinate with private sector
24 stakeholders, the user community, and interagency

1 partners on program development and best manage-
2 ment practices.

3 “(c) LEVERAGING.—In carrying out this section, the
4 Secretary shall leverage resources and expertise across the
5 Department of Energy and from—

6 “(1) the National Institute of Standards and
7 Technology;

8 “(2) the National Science Foundation;

9 “(3) the National Aeronautics and Space Ad-
10 ministration;

11 “(4) other relevant Federal agencies;

12 “(5) the National Laboratories;

13 “(6) industry stakeholders;

14 “(7) institutions of higher education; and

15 “(8) the National Quantum Information
16 Science Research Centers.

17 “(d) SECURITY.—In carrying out the activities au-
18 thorized by this section, the Secretary, in consultation
19 with the Director of the National Science Foundation and
20 the Director of the National Institute of Standards and
21 Technology, shall ensure proper security controls are in
22 place to protect sensitive information, as appropriate.

23 “(e) REPORT.—Not later than 180 days after the
24 date of the enactment of the QUEST Act of 2020, the
25 Secretary shall submit to the Committee on Science,

1 Space, and Technology of the House of Representatives
2 and the Committee on Energy and Natural Resources of
3 the Senate, a report on the results of the QUEST program
4 activities and any other information the Secretary deter-
5 mines appropriate.

6 “(f) FUNDING.—Funds authorized to be appro-
7 priated for the Department of Energy’s Office of Science,
8 there shall be made available to the Secretary to carry out
9 the activities under this section,

10 “(1) \$30,000,000 for fiscal year 2021;

11 “(2) \$50,000,000 for fiscal year 2022;

12 “(3) \$70,000,000 for fiscal year 2023;

13 “(4) \$90,000,000 for fiscal year 2024; and

14 “(5) \$100,000,000 for fiscal year 2025.”.