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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “QUEST Act of 2020”.

(Original Signature of Member)
SEC. 2. DEPARTMENT OF ENERGY QUANTUM USER EXPANSION FOR SCIENCE AND TECHNOLOGY PROGRAM.

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

“SEC. 403. DEPARTMENT OF ENERGY QUANTUM USER EXPANSION FOR SCIENCE AND TECHNOLOGY PROGRAM.

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

“(1) enhance the United States quantum research enterprise;

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

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

“(b) PROGRAM.—In carrying out this section, the Secretary shall—
“(1) coordinate with—

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

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

“(C) the Chair of the Quantum Information Science of the National Science and Technology Council established under section 103(a); and

“(D) the Chair of the subcommittee on the Economic and Security Implications of Quantum Science;

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

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

“(4) consult and coordinate with private sector stakeholders, the user community, and interagency
partners on program development and best management practices.

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

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

“(2) the National Science Foundation;

“(3) the National Aeronautics and Space Administration;

“(4) other relevant Federal agencies;

“(5) the National Laboratories;

“(6) industry stakeholders;

“(7) institutions of higher education; and

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

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

“(e) REPORT.—Not later than 180 days after the date of the enactment of the QUEST Act of 2020, the Secretary shall submit to the Committee on Science,
Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a report on the results of the QUEST program activities and any other information the Secretary determines appropriate.

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

“(1) $30,000,000 for fiscal year 2021;
“(2) $50,000,000 for fiscal year 2022;
“(3) $70,000,000 for fiscal year 2023;
“(4) $90,000,000 for fiscal year 2024; and
“(5) $100,000,000 for fiscal year 2025.”.