December 17, 2020

Dear Dr. Arun Majumdar and DOE Transition Team Members:

The Energy Sciences Coalition (ESC) thanks you for your public service. As you prepare policy and funding recommendations for the incoming Biden Administration, ESC urges you to prioritize investments in the Department of Energy (DOE) Office of Science. The DOE Office of Science is critical to advancing the fundamental science and early-stage energy technologies necessary to achieve ambitious net-zero goals; developing Industries of the Future and emerging technologies; and maintaining the highly skilled science and technology workforce that is essential for the United States to compete globally.

Scientific breakthroughs and energy technology innovation are

accelerate the construction and upgrades of world-class scientific user facilities and maximize operations to support the more than 36,000 researchers from academia, industry and federal agencies that rely on these facilities for their science and engineering pursuits; advance new, strategic investments in innovative high-risk, high-reward research areas, such as quantum science and technology, genomics and engineering biology, microelectronics, next-generation communications, accelerator and laser systems, and artificial intelligence and scientific machine learning, and

maintain and grow multi-disciplinary centers focused on addressing scientific grand challenges, such as Energy Frontier Research Centers, Bioenergy Research Centers, Energy Innovation Hubs, and national quantum information science research centers as well as artificial intelligence codesign and microelectronics research centers.

To help guide these investments, ESC strongly recommends following the advice on research priorities and infrastructure investments of the six DOE Office of Science federal advisor

The United States must maintain its leadership in science, technology and innovation, and the DOE Office of Science plays a pivotal and leading role in addressing this country energy, national security, and environmental challenges. We look forward to working with you in advancing the critical missions of the DOE Office of Science.

Sincerely,

Christopher Carter Co-chair 610-216-5656 ccc317@lehigh.edu Leland Cogliani Co-chair 202-289-7475 Leland@lewis-burke.com

Enclosed:

Appendix I: Additional information on the unique DOE Office of Science role in fundamental research, energy technology development, and maintaining a highly skilled workforce. Appendix II: List of ESC members endorsing this statement.

APPENDIX I. DOE OFFICE OF SCIENCE CONTRIBUTIONS

Below is additional information on the important role of the DOE Office of Science:

Sponsor Vital Research: Office of Science is the largest government sponsor for basic research in the physical sciences. It 7()-9(CONT)9(RI)11(B)7(U)-17(T)7(I)9(ONS)]TJETQ0.00000912 0 612 792 reW*nBTFs0F2 11.04

Ensure National Security: Office of Science facilities offer researchers from the National Nuclear Security Administration (NNSA),09.6sNational

APPENDIX II. ESC MEMBERSHIP

American Association for the Advancement of Science

American Association of Physicists in Medicine

American Association of Physics Teachers

American Astronomical Society

American Chemical Society

American Crystallographic Association

American Geophysical Union

American Geosciences Institute

American Institute of Physics

American Mathematical Society

American Nuclear Society

American Physical Society

American Society for Engineering Education

American Society of Agronomy

Acoustical Society of America (ASA)

American Society of Mechanical Engineers

American Society for Microbiology

American Society of Plant Biologists

American Vacuum Society

Arizona State University

Association of American Universities

Association of Public and Land-grant Universities

AVS ó The Society for Science and Technology of

Materials, Interfaces, and Processing

Battelle

Binghamton University

Biophysical Society

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