

Department of Energy

Office of Science Washington, DC 20585

December 30, 2024

Professor Martin Berzins
Chair, Advanced Scientific Computing Advisory Committee
Professor of Computer of Science
Scientific Computing and Imaging Institute
72 S Central Campus Drive, Room 3750
Salt Lake City, UT 84112

Dear Professor Berzins:

Thank you for the hard work undertaken by the Advanced Scientific Computing Advisory Committee (ASCAC), including on the most recent charge on the Department of Energy (DOE) Computational Sciences Graduate Fellowship. I look forward to the upcoming report which will help guide the long-term vision of the Fellowship.

This letter requests that ASCAC continue its valuable advice on the Advanced Scientific Computing Research (ASCR) program and establish a Community of Visitors (COV). The COV should provide an assessment of the management processes within the ASCR Computational Science Research and Partnerships and Advanced Computing Technology Divisions' portfolios. The panel should assess the operations of the Divisions' program elements during fiscal years 2020, 2021, 2022, and 2023. The COV may examine any files from this period for both DOE laboratory projects and university projects. The COV will be provided with electronic access to files and background material on the programs prior to the meeting.

Specifically, I am requesting that the COV focus on two major program elements:

- 1. Assess the efficacy and quality of the processes used during the fiscal years under review to:
 - a. solicit, review, recommend, and document application and proposal actions.
 - b. monitor active awards, projects, and programs, and
 - c. consider:
 - i. what resources or technologies would help the Program staff assess and manage their research portfolios as high-performance computing continues to rapidly change?
 - ii. what metrics would be useful for the Program to monitor, e.g., risk level of project ideas, maturity of topics, turnover of the funded researchers, or distinctiveness of portfolio?

- 2. Within the boundaries defined by the DOE mission and available funding, comment on how the award process has affected:
 - a. the breadth and depth of portfolio elements,
 - b. the overall scientific and technical quality of the portfolio elements, and
 - c. consider:
 - i. given the different types of organizations in the research enterprise (e.g. academia, national laboratories, industry), how do the investments across organization types affect the research produced?

A report is being requested for the Fall 2025 ASCAC meeting. If you or the COV chair have any questions, please contact Ceren Susut, Designated Federal Official for ASCAC, by email at Ceren.Susut-Bennett@science.doe.gov.

Thank you, and I appreciate ASCAC's willingness to undertake this activity.

Sincerely,

Harriet Kung

Deputy Director for Science Programs

Office of Science

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