

## 2024 Current Fiscal Year Report: Advanced Scientific Computing Advisory Committee

Report Run Date: 04/18/2024 07:23:09 PM

### 1. Department or Agency

Department of Energy

### 2. Fiscal Year

2024

### 3. Committee or Subcommittee

Advanced Scientific Computing Advisory  
Committee

### 3b. GSA

### Committee No.

5298

### 4. Is this New During Fiscal Year?

No

### 5. Current Charter

06/28/2023 06/28/2025

### 6. Expected Renewal Date

### 7. Expected Term Date

### 8a. Was Terminated During Fiscal Year?

No

### 8b. Specific Termination Authority

### 8c. Actual Term Date

### 9. Agency Recommendation for Next Fiscal Year

Continue

### 10a. Legislation Req to Terminate?

No

### 10b. Legislation Pending?

Not Applicable

### 11. Establishment Authority

Agency Authority

### 12. Specific Establishment Authority

Agency Authority

### 13. Effective Date

08/12/1999

### 14. Committee Type

Continuing

### 14c. Presidential?

No

### 15. Description of Committee

Scientific Technical Program  
Advisory Board

### 16a. Total Number of Reports

No Reports for  
this Fiscal Year

### 17a. Open

0

### 17b. Closed

0

### 17c. Partially Closed

0

### Other Activities

0

### 17d. Total

0

### Meetings and Dates

No Meetings

Current Next  
FY FY

|   |               |
|---|---------------|
| <b>18a(1). Personnel Pmts to<br/>Non-Federal Members</b>                  | \$0.00 \$0.00 |
| <b>18a(2). Personnel Pmts to<br/>Federal Members</b>                      | \$0.00 \$0.00 |
| <b>18a(3). Personnel Pmts to<br/>Federal Staff</b>                        | \$0.00 \$0.00 |
| <b>18a(4). Personnel Pmts to<br/>Non-Member Consultants</b>               | \$0.00 \$0.00 |
| <b>18b(1). Travel and Per Diem to<br/>Non-Federal Members</b>             | \$0.00 \$0.00 |
| <b>18b(2). Travel and Per Diem to<br/>Federal Members</b>                 | \$0.00 \$0.00 |
| <b>18b(3). Travel and Per Diem to<br/>Federal Staff</b>                   | \$0.00 \$0.00 |
| <b>18b(4). Travel and Per Diem to<br/>Non-member Consultants</b>          | \$0.00 \$0.00 |
| <b>18c. Other(rents,user charges,<br/>graphics, printing, mail, etc.)</b> | \$0.00 \$0.00 |
| <b>18d. Total</b>   | \$0.00 \$0.00 |
| <b>19. Federal Staff Support Years<br/>(FTE)</b>                          | 0.00 0.00     |

**20a. How does the Committee accomplish its purpose?**

ASCAC is charged by the Director for Science (SC), to: periodically review elements of the Advanced Scientific Computing Research program and provide recommendations based thereon; provide advice on long range plans, priorities, and strategies to address more effectively the scientific aspects of advanced scientific computing including the relationship to other scientific disciplines; provide advice on appropriate levels of funding to develop those plans, priorities, and strategies; and provide advice on national policy and scientific issues related to advanced scientific computing that are of concern to the Department of Energy as requested by the Secretary or the Under Secretary for Science. The committee responds to

charges, at the direction of the Director of the Office of Science, that are then discussed at public meetings.

**20b. How does the Committee balance its membership?**

Committee members are chosen to ensure an appropriately balanced representation of various points of view and functions of interested stakeholders and professionals as required by the Federal Advisory Committee Act, as amended, and implementing regulations. Particular attention is given to obtaining diversity including interests, experiences, points of view, and geography as required by the Federal Advisory Committee Act (Public Law 92-463), and implementing regulations.

**20c. How frequent and relevant are the Committee Meetings?**

The ASCAC meets, on average, three times a year and reports on a continuing basis to the Under Secretary for Science. The ASCAC also responds to direct charges from the Director of the Office of Science in the form of formal reports.

**20d. Why can't the advice or information this committee provides be obtained elsewhere?**

The advice and recommendations provided by ASCAC on computational science and advanced computing and network facilities in support of all departmental programs is essential to national research needs and priorities. The requisite knowledge and experience is not available within the DOE or its existing committees, and cannot be provided by a single contractor.

**20e. Why is it necessary to close and/or partially closed committee meetings?**

ASCAC meetings are always open to the general public.

## 21. Remarks

The committee costs for the ASCAC were lower than would be expected over the last few years due to COVID related shift to virtual or hybrid meetings.

## Designated Federal Officer

Christine Chalk Designated Federal Officer

| Committee Members   | Start      | End        | Occupation                       | Member Designation                       |
|---------------------|------------|------------|----------------------------------|--|
| Bergman, Keren      | 12/09/2015 | 09/30/2024 | Columbia University              | Special Government Employee (SGE) Member |
| Brower-Thomas, Tina | 07/20/2022 | 09/30/2024 | Howard University                | Special Government Employee (SGE) Member |
| Chen, Jacqueline    | 10/28/2008 | 09/30/2024 | Sandia National Laboratory       | Special Government Employee (SGE) Member |
| Dean, Mark          | 07/20/2022 | 09/30/2024 | University of Tennessee          | Special Government Employee (SGE) Member |
| Dongarra, Jack      | 03/30/2010 | 09/30/2026 | University of Tennessee, retired | Special Government Employee (SGE) Member |
| Germann, Timothy    | 12/20/2016 | 09/30/2026 | Los Alamos National Laboratory   | Special Government Employee (SGE) Member |
| Gregurick, Susan    | 09/30/2015 | 09/30/2024 | National Institutes of Health    | Regular Government Employee (RGE) Member |
| Herrera, Gilbert    | 07/20/2022 | 09/30/2024 | Department of Defense            | Regular Government Employee (RGE) Member |

|                        |            |            |  |  |
|------------------------|------------|------------|--|--|
| Landsberg, Alexandra   | 10/09/2019 | 09/30/2026 | Department of Defense                            | Regular Government Employee (RGE) Member |
| Leung, Mary Ann        | 07/20/2022 | 09/30/2024 | Sustainable Horizons Institute                   | Special Government Employee (SGE) Member |
| Lopez-Marrero, Vanessa | 09/07/2023 | 09/30/2026 | Brookhaven National Laboratory                   | Special Government Employee (SGE) Member |
| Matsuoka, Satoshi      | 11/02/2016 | 09/30/2026 | Director, RIKEN Center for Computational Science | Representative Member                    |
| Negele, John           | 10/28/2008 | 09/30/2026 | Professor, Massachusetts Institute of Technology | Special Government Employee (SGE) Member |
| Sarkar, Vivek          | 08/11/2009 | 09/30/2026 | Professor, Georgia Institute of Technology       | Special Government Employee (SGE) Member |
| Seidel, Edward         | 07/20/2022 | 09/30/2024 | University of Wyoming                            | Special Government Employee (SGE) Member |
| Shende, Sameer         | 09/07/2023 | 09/30/2026 | President, ParaTools, Inc.                       | Special Government Employee (SGE) Member |
| Svore, Krysta          | 04/18/2017 | 09/30/2026 | Microsoft Research                               | Special Government Employee (SGE) Member |
| Taylor, Valerie        | 07/20/2022 | 09/30/2024 | Argonne National Laboratory                      | Special Government Employee (SGE) Member |
| Thomas, Cristina       | 09/07/2023 | 09/30/2026 | 3M Corporation, Retired                          | Special Government Employee (SGE) Member |
| Torres, Juan           | 09/07/2023 | 09/30/2026 | National Renewable Energy Laboratory             | Special Government Employee (SGE) Member |
| Windus, Theresa        | 09/07/2023 | 09/30/2026 | Professor, Iowa State University                 | Special Government Employee (SGE) Member |

## Number of Committee Members Listed: 21

### Narrative Description

ASCAC provides valuable, independent advice to DOE on a variety of complex scientific and technical issues related to its Advanced Scientific Computing Research Program. Recommendations include advice on long-range plans, priorities and strategies to address more effectively the scientific aspects of advanced scientific computing including the relationship to other scientific disciplines.

### What are the most significant program outcomes associated with this committee?

|   | Checked if Applies                  |
|---|-------------------------------------|
| Improvements to health or safety                  | <input type="checkbox"/>            |
| Trust in government                               | <input checked="" type="checkbox"/> |
| Major policy changes                              | <input type="checkbox"/>            |
| Advance in scientific research                    | <input checked="" type="checkbox"/> |
| Effective grant making                            | <input type="checkbox"/>            |
| Improved service delivery                         | <input type="checkbox"/>            |
| Increased customer satisfaction                   | <input type="checkbox"/>            |
| Implementation of laws or regulatory requirements | <input type="checkbox"/>            |
| Other   | <input type="checkbox"/>            |

### Outcome Comments

Trust in Government: Trust in government is advanced by the completely open, public nature of all proceedings, committee meetings and reports; through provision for public comment following all committee meetings; and through a comprehensive and informative website. Advance in scientific research: Advance in scientific research is facilitated and supported by actions stated in the committee's mission statement. ASCAC is influential in the community. ASCAC reports highlight state-of-the-art research in related fields and encourages further contributions and progress.

### What are the cost savings associated with this committee?

Checked if Applies

|                            |                                     |
|----------------------------|-------------------------------------|
| None                       | <input type="checkbox"/>            |
| Unable to Determine        | <input checked="" type="checkbox"/> |
| Under \$100,000            | <input type="checkbox"/>            |
| \$100,000 - \$500,000      | <input type="checkbox"/>            |
| \$500,001 - \$1,000,000    | <input type="checkbox"/>            |
| \$1,000,001 - \$5,000,000  | <input type="checkbox"/>            |
| \$5,000,001 - \$10,000,000 | <input type="checkbox"/>            |
| Over \$10,000,000          | <input type="checkbox"/>            |
| Cost Savings Other         | <input type="checkbox"/>            |

### **Cost Savings Comments**

NA

**What is the approximate Number of recommendations produced by this committee for the life of the committee?**

124

### **Number of Recommendations Comments**

Since the formation of ASCAC, in 1999 to FY 2023, the committee has issued 45 reports and made over 190 recommendations, with 124 actionable recommendations. In FY 2023, the ASCAC accepted two reports with 4 recommendations for ASCR and 16 project specific recommendations from their review of the collaboration with the National Cancer Institute (NCI). There is one open charge: the on-going charge to review the collaboration with the NCI annually.

**What is the approximate Percentage of these recommendations that have been or will be Fully implemented by the agency?**

65%

### **% of Recommendations Fully Implemented Comments**

Implementation of recent recommendations is an on-going process. However, the program has implemented many of the older recommendations including the establishment of leadership computing facilities, establishment of exascale research effort as a DOE project, new efforts in quantum, AI and integrated data infrastructure, changes within OSTI and numerous program management recommendations from COV subcommittees.

**What is the approximate Percentage of these recommendations that have been or will be Partially implemented by the agency?**

88%

### **% of Recommendations Partially Implemented Comments**

The nature of many recommendations require that implemented be seen as a partial response but on-going. For example, the recent International Competitiveness report recommendations will be considered on-going for many years. Some historical recommendations have been overtaken by events before they could be fully implemented and some recommendations are pending congressional action.

### **Does the agency provide the committee with feedback regarding actions taken to implement recommendations or advice offered?**

Yes ☒ No ☐ Not Applicable ☐

### **Agency Feedback Comments**

Agency feedback is provided through presentations at open public meetings, which are available to the public on line at <https://science.osti.gov/ascr/ascac/Meetings>

### **What other actions has the agency taken as a result of the committee's advice or recommendation?**

Checked if Applies

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Reorganized Priorities            | <input checked="" type="checkbox"/> |
| Reallocated resources             | <input type="checkbox"/>            |
| Issued new regulation             | <input type="checkbox"/>            |
| Proposed legislation              | <input type="checkbox"/>            |
| Approved grants or other payments | <input type="checkbox"/>            |
| Other                             | <input checked="" type="checkbox"/> |

### **Action Comments**

In FY 2023, the ASCAC made specific recommendations with regard to research management, oversight, and program priorities that are currently being folded into Office of Science and Department decisions. Many recommendations from past reports and COVs are also in the process of being implemented.

### **Is the Committee engaged in the review of applications for grants?**

No

### **Grant Review Comments**



The Committee (ASCAC) does not review or award grants.

**How is access provided to the information for the Committee's documentation?**

Checked if Applies

|                           |                                     |
|---------------------------|-------------------------------------|
| Contact DFO               | <input checked="" type="checkbox"/> |
| Online Agency Web Site    | <input checked="" type="checkbox"/> |
| Online Committee Web Site | <input checked="" type="checkbox"/> |
| Online GSA FACA Web Site  | <input checked="" type="checkbox"/> |
| Publications              | <input checked="" type="checkbox"/> |
| Other                     | <input type="checkbox"/>            |

**Access Comments**

N/A