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4 April 2013

William Brinkman Director, Office of Science U.S. Department of Energy 1000 Independence Ave. S.W. Washington, DC 20585

Dear Dr. Brinkman,

Attached is a report by the Advanced Scientific Computing Advisory Committee (ASCAC) responding to your charge of July 25, 2012 to examine the potential synergies between the challenges of data-intensive science and exascale computing.

An expert ASCAC Subcommittee led by Dr. Vivek Sarkar of Rice University prepared the report. After reviewing this report, the ASCAC submits it to you with its unanimous endorsement.

On behalf of ASCAC, sincerest thanks to Vivek Sarkar, Jaqueline Chen, Alok Choudhary, Stuart Feldman, Bruce Hendrickson. Chris Johnson. Richard Mount, Victoria White, and Dean Williams for this comprehensive and thorough analysis.

Best wishes,

Roscoe C. Giles Chair, ASCAC

Koive C. Miles

CC:

Patricia Dehmer. Christine Chalk Barbara Helland