

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE PAGE OF PAGES  
 1 2

2. AMENDMENT/MODIFICATION NO. **A533** 3. EFFECTIVE DATE (M/D/Y) **See Block 16C** 4. REQUISITION/PURCHASE REQ. NO. **09SC006432** 5. PROJECT NO. (If applicable)

6. ISSUED BY CODE U.S. Department of Energy  
 Pacific Northwest Site Office  
 Post Office Box 350  
 Richland, WA 99352

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) **Battelle Memorial Institute  
 Pacific Northwest Division  
 Richland, Benton County, WA 99352  
 DUNS # 032987476**

9A. AMENDMENT OF SOLICITATION NO.  
 9B. DATED (SEE ITEM 11)  
 10A. MODIFICATION OF CONTRACT/ ORDER NO. **DE-AC05-76RL01830**  
 10B. DATED (SEE ITEM 13) **December 30, 1964**

CODE FACILITY CODE

**11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.  
 Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE DATE AND HOUR SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and amendment and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH IN ITEM 14.**

CHECK ONE  
 A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  
 B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43.103(b).  
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF:  
 D. OTHER (Specify type of modification and authority)  
 In accordance with Section I, Clause I-106 DEAR 970.5232-4, "Obligation of Funds" and P.L. 111-5

**E. IMPORTANT: Contractor  is not,  is required to sign this document and return 2 copies to the issuing office.**

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
**Obligation Notice 575**

The purpose of this contract modification is to deobligate funds from the American Recovery and Reinvestment Act of 2009 to the Office of Advanced Scientific Computing Research – Computational Partnerships SciDAC-e Program (Project Code 2005060). (See Continuation Page)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) **Karen L. Hoewing, General Counsel** 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) **Ryan M. Kilbury Contracting Officer**

15B. CONTRACTOR/OFFEROR **Karen L. Hoewing** 15C. DATE SIGNED **8-28-09** 16B. UNITED STATES OF AMERICA BY **Ryan M. Kilbury** 16C. DATE SIGNED **8-28-09**  
 (Signature of person authorized to sign) (Signature of Contracting Officer)

**Block 14 "DESCRIPTION OF AMENDMENT/MODIFICATION," continued.**

- A. Advanced Scientific Computing Research (ASCR).** This modification is issued to deobligate American Recovery and Reinvestment Act (ARRA) of 2009 funds. This research focuses on the development of advanced Kalman filtering techniques and the formulation of dynamic state estimation, which will fundamentally change the paradigm of real-time operations and control for complex systems. The proposed research may have a revolutionary impact on how complex systems are operated and ultimately lead to better decision making and control of complex systems.

The Recovery Act Project title is Advanced Scientific Computing Research – Computational Partnerships SciDAC-e Program (Project Code 2005060). The project code that should be used to track this Recovery Act funding in the Project section of the Accounting Flex Field in STARS/IDW is 2005060.

- B.** Accordingly, pursuant to Section I, Contract Clause, "Obligations of Funds" and Section B, Contract Clause, B-2, "Obligated Funds", funds in the amount of **\$7,000.00** are hereby deobligated in support of Recovery Act activities. The total amount of funds obligated under this contract since the inception is increased from **\$11,747,544,759.83 to \$11,747,537,759.83**.
- C.** The specific work funded by this modification is described in Work Authorization Number KJ/OR48/9/ARRA-1, titled "Advanced Scientific Computing Research – Computational Partnerships SciDAC-e Program" (Project Code 2005060).
- D.** The work described in this modification shall be performed using funds obligated under this contract, which have been appropriated under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that were incorporated into the contract at Modification No. A508. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.
- E.** The contractor shall complete all Recovery Act Work funded by this modification in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.
- F.** All other terms and conditions remain unchanged. **[A533]**

**(End of Contract Modification A533)**