

PDR

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

CONTRACT ID CODE PAGE OF PAGES
1 | 4

2. AMENDMENT/MODIFICATION NO. **Nine (9)**
 3. EFFECTIVE DATE **1/3/94**
 4. REQUISITION/PURCHASE REQ. NO. **RES-92-063, dtd. 11/22/93**
 5. PROJECT NO. (If applicable)
 6. ISSUED BY CODE
 7. ADMINISTERED BY (If other than Item 6) CODE

U.S. Nuclear Regulatory Commission
Division of Contracts & Property Management
Washington, DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)
Science Applications International Corporation
ATTN: Betty J. Muzio
1710 Goodridge Drive, P.O. Box 1303
McLean, Virginia 22102

9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. **X NRC-04-92-063**
 10B. DATED (SEE ITEM 11) **March 6, 1992**

Principal Investigator/Technical
 Contact: **William E. Vesely**
 Telephone No. (614) **793-7600**

CODE FACILITY CODE

11. THIS ITEM ONLY 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 ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE 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 this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
 B&R No.: **46019201200** Job Code: **L2388** APPN NO.: **31X0200.460 BOC - 255A** AMOUNT OBLIGATED: **\$54,896.00**

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

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 THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation acct, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(h).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 D. OTHER (Specify type of modification and authority)
X FAR 52.143-2 CHANGES-COST REIMBURSEMENT AUG 1987 - Alternate I (APR 1984)

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.)

RRS Document I.D. No.: RES-C94-315

SEE ATTACHED

9403010131 940103
 PDR CONTR
 NRC-04-92-063 PDR

15A. NAME AND TITLE OF SIGNER (Type or print)
Betty J. Muzio
 Senior Contract Representative

15B. CONTRACTOR/OFFEROR
Betty J. Muzio
 (Signature of person authorized to sign)

15C. DATE SIGNED
1/3/94

15A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Joyce A. Fields, Contracting Officer

15B. UNITED STATES OF AMERICA
 BY *Joyce A. Fields*
 (Signature of Contracting Officer)

15C. DATE SIGNED
DEC 23 1993

The purpose of this modification is to: 1.) increase the contract ceiling by \$54,896.00 from \$222,772.00 to \$277,668.00, 2.) incorporate changes to the Statement of Work and 3.) extend the period of performance through March 31, 1994. Accordingly, the contract is hereby modified as follows:

1. Section B.3 CONSIDERATION AND OBLIGATION—COST PLUS FIXED FEE (JUN 1988) is revised as follows:

a. The total estimated cost the Government for full performance of this contract is \$277,668.00, of which the sum of \$255,927.00 represents the estimated reimbursable costs, and of which \$21,741.00 represents the fixed fee.

b. The amount obligated by the Government with respect to this contract is \$277,668.00.

2. Section F.6 is deleted in its entirety and replaced with the following:

The contract period shall commence on March 6, 1992 and shall expire on March 31, 1994.

3. Section C.1.3. SCOPE OF WORK is hereby revised to include Tasks 10 through 13 below:

Task 10. Documentation of Methods for Prioritizing Motor-Operated Valves

The application of the PRA-aging methodology, developed in previous work, to prioritizing motor-operated valves must be completed and documented. The application will demonstrate the approach for using the analytical capability for a PWR plant. In addition to the demonstration, the documentation will also include the assumptions used in the prioritization analysis, and the sensitivity exercises that would be beneficial in arriving at a finalized list of MOVs. The exercises to be included are the interactions of multiple MOVs and the resulting impact of MOV failure on the operability of other important equipment.

A draft NUREG/CR containing the above information shall be submitted for NRC staff review by November 30, 1993. Following review of the document, comments shall be resolved and the final draft resubmitted for publication within one month following receipt of the NRC staff comments.

Task 11. Evaluation of Other Documentation Related to MOV Prioritization

The prioritization of MOVs is being performed by licensees and others outside the NRC. The methods employed in these analyses will vary and need to be evaluated to assess the accuracies of these methods. It is necessary that the NRC regulatory staff has a technical basis for determining whether these other methods have glaring weaknesses that could result in excluding important MOVs from the respective prioritization lists.

SAIC shall review prioritization approaches in documents from licensees. Weaknesses and inaccuracies shall be identified and the effects on plant risk assessed. Although some analytical effort may be necessary to check out these other methods, it is expected that this will not require reassembling cutsets in the PRA models and performing full scale analyses.

The NRC project manager will decide which reports will be reviewed by SAIC. These reports will be forwarded by the NRC project manager to SAIC on an as needed basis. SAIC shall prepare a draft letter report after reviewing each document and submit to the NRC project manager within one month after receipt of the document. The reports shall identify weaknesses and inaccuracies with the methods. The NRC will evaluate the SAIC draft reports and comments will be documented. SAIC will resolve the NRC comments and resubmit each final letter report within 2 weeks following receipt of the NRC comments. No more than four reports will be submitted for SAIC review.

Task 12. Technical Assistance on PRA Related Topics

Activities on the use of PRAs to determine the impacts of NRC MOV concerns are being performed by the ASME and by other DOE laboratories. Specifically, the ASME is performing a value-impact evaluation to determine whether NRC comments on the current ASME inservice testing provisions in the ASME Code should be addressed or whether incorporating new requirements into the code create unacceptable burdens to the licensees. Since the NRC believes changes to the code are necessary for continued plant safety, the resulting outcome of the ASME sponsored assessment may indicate otherwise. The SAIC will evaluate the ASME results and a letter report on the review will be submitted to the NRC project manager within one month after receipt of the document from the NRC project manager. Subsequent NRC comments will be resolved and the final letter report transmitted to the NRC project manager within two weeks after receipt of the NRC comments. Presentations of the findings to the appropriate ASME bodies may be necessary.

Other value-impact PRA evaluations on mispositioning of MOVs in PWRs and BWRs are being performed at a DOE national laboratory. The outcomes of these evaluations will provide the basis whether this important issue should be considered as part of the Generic Letter 89-10 requirements. An earlier analysis indicated that this issue would not be a concern on BWR plants; however, the NRC regulatory staff now believes that the initial evaluation should receive peer review.

SAIC shall review the PRA work going on at the DOE laboratory. The NRC project manager shall initially interact with the laboratory to establish the interface and identify the exact scope of the effort. It is expected that draft reports of the results will be available for review. SAIC will review the approaches in both documents and prepare draft letter reports identifying strengths, weaknesses, and inaccuracies. The reports will be due to the NRC project manager within one month following review of the documents. NRC comments will be resolved and the final letter reports transmitted to the NRC project manager within two weeks following receipt of the NRC comments.

Task 13. Publish Final NUREG/CR-6067 on Aging Data

A draft of NUREG/CR-6067 was transmitted for NRC review in January 1993 to fulfill a commitment of a previous task identified under this project. NRC comments on this NUREG/CR have been transmitted to SAIC and must be incorporated into the document.

SAIC shall resolve all comments on the NUREG/CR transmitted by the NRC project manager. The final draft report shall be resubmitted for NRR review by November 30, 1993. Following NRR review, any additional comments shall be resolved and the final NUREG/CR shall be transmitted to the NRC for publication within two months following receipt of the final comments.

LEVEL OF EFFORT AND PERIOD OF PERFORMANCE

It is estimated that performing these tasks will require approximately 3.0 man-months of effort. The period of performance for this contract shall be extended through March 31, 1994.

TRAVEL

Two trips for 1 day each from Columbus, Ohio to NRC headquarters, to discuss status and accomplishments. The dates for these trips will be established later. One trip from Columbus, Ohio to Baltimore to discuss review of the ASME O&M standard value-impact evaluation (Task 12 above) will be made when meeting date is identified.

A summary of obligations for this contract, from award date through the date of this action is given below:

Total FY92 Obligation Amount \$204,087.00
Total FY93 Obligation Amount \$ 18,685.00
Total FY94 Obligation Amount \$ 54,896.00

Cumulative total of NRC obligations \$277,668.00

This modification obligates \$54,896.00 in FY94 funds.

All other terms and conditions remain the same.