

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

2. AMENDMENT/MODIFICATION NO. One (1) 3. EFFECTIVE DATE 12/8/89 4. REQUISITION/PURCHASE REQ. NO. RS-RES-90-051 5. PROJECT NO. (If applicable)

6. ISSUED BY U.S. Nuclear Regulatory Commission CODE 7. ADMINISTERED BY (If other than Item 6) CODE
Division of Contracts & Property Management
Washington, DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)
ARIZONA BOARD OF REGENTS
University of Arizona
ATTN: Mr. Peter F. Mather
Engineering Experiment Station
College of Engineering and Mines
Civil Engineering Building No. 72, Room 303
Tucson, AZ 85721

9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. X Letter Contract
NRC-04-90-051
 10B. DATED (SEE ITEM 13)

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 6 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. 061960010 FIN NO. L12820 Appro. No. 31X0200.600 OBLIGATED AMT.: \$250,000.00

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

(V) 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 date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(D).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)
X FAR Clause 52-216-25 Contract Definitization - Mutual Agreement

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.)
 This modification/supplemental agreement represents agreement of both parties on the terms and conditions of the definitized contract set forth herein and therefore definitizes Letter Contract No. NRC-04-90-051 into a cost reimbursement type contract which includes all clauses required by the Federal Acquisition Regulation (FAR) set forth under solicitation no. RFP RS-RES-90-051 and any other clauses, terms and conditions mutually agreed upon except those that by their nature apply only to a letter contract. Therefore, this contract is hereby definitized by making the following changes to the letter contract dated November 13, 1989:

(See Next 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)
James T. Wheeler, Assistant Vice President
University of Arizona, 2030 E. Speedway Blvd., #222
Tucson, Arizona 85719

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Elois J. Wiggins

15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED DEC 21 1989 16B. UNITED STATES OF AMERICA BY Elois J. Wiggins 16C. DATE SIGNED 12/7/89
 (Signature of person authorized to sign) (Signature of Contracting Officer)

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I. The following clauses are hereby deleted:

- (1) Execution and Commencement of Work (FAR 52.216.23)
- (2) Limitation of Government Liability (FAR 52.216-24)
- (3) Contract Definitization (FAR 52.216-25)
- (4) Payments of Allowable Costs Before Definitization (FAR 52.216-26).

II. The Contractor's technical proposal dated October 2, 1989, as amended October 20, 1989 and November 17, 1989, are hereby incorporated into this contract by this reference.

III. The following administrative changes are incorporated into this contract:

(see next page)

1. Section B.2 entitled, "Consideration and Obligation--Cost Reimbursement (JUNE 1988) Alternate 1," is hereby completed as follows:

"B.2 CONSIDERATION AND OBLIGATION--COST REIMBURSEMENT (JUNE 1988)
ALTERNATE I (JUNE 1988)

a. The total estimated cost to the Government for full performance under this contract is \$1,246,203.00.

b. The amount presently obligated by the Government with respect to this contract is \$250,000.00.

c. It is estimated that the amount currently allotted will cover performance of work/phases/tasks through November 12, 1990.

(End of Clause)"

2. Section F.4 entitled, "Place of Delivery--Reports (June 1988)," is hereby completed as follows:

" F.4 PLACE OF DELIVERY--REPORTS (JUNE 1988)

The items to be furnished hereunder shall be delivered, with all charges paid by the Contractor, to:

a. Project Officer (7) copies

U.S. Nuclear Regulatory Commission
Contract Number: NRC-04-90-051
Office of Nuclear Regulatory Research
Mail Stop NL/S 260
Washington, DC 20555

b. Contracting Officer (1) copy

U.S. Nuclear Regulatory Commission
Contract Number: NRC-04-90-051
Division of Contracts and Property Management
Contract Administration Branch
Mail Stop: P-902
Washington, D.C. 20555

(End of Clause)"

3. Section F.5 entitled, "Duration of Contract Period (Mar 1987) Alternate II (Mar 1987), is hereby completed as follows:

"F.5 DURATION OF CONTRACT PERIOD (MAR 1987) ALTERNATE I (MAR 1987)

This contract shall commence 11/13/89 and will expire on 11/12/92. The term of this contract may be extended at the option of the Government for an additional 24 months.

(End of Clause)"

4. Section G.1 entitled, Indirect Cost Rates (JUNE 1988), is hereby completed as follows:

"G.1 INDIRECT COST RATES (JUNE 1988) ALTERNATE 1 (JUNE 1988)

a. The Contractor shall be reimbursed for allowable indirect costs in accordance with the following predetermined (fixed) rates:

CATEGORY	RATE (%)	COST BASE	APPLICABLE PERIOD
Overhead	48.4%	MTDC*	07/01/89 - 06/30/90
		On-campus research	
	49.0%	MTDC*	07/01/91 - 06/30/91
		On-campus research	

b. Pending the establishment of final indirect rates which shall be negotiated based on audit of actual costs, the Contractor shall be reimbursed for allowable indirect costs as follows:

CATEGORY	RATE (%)	COST BASE	APPLICABLE PERIOD
Overhead	49.0%	MTDC*	07/01/89 - 11/12/92

c. The Contracting Officer may adjust the above rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the Contractor. It is the Contractor's responsibility to notify the Contracting Officer in accordance with 52.232-20 - Limitation of Cost or 52.232-22 - Limitation of Funds, as applicable, if such change(s) affect(s) performance of work within the established cost or funding limitations.

*Modified Total Direct Costs - excludes: equipment in excess of \$500 and subgrants and subcontracts in excess of \$25,000, patient care, stipends, tuition payment and space rental costs.

(End of Clause)"

5. Section G.2, Paragraph a., entitled, "Project Officer Authority," is hereby completed as follows:

"PROJECT OFFICER AUTHORITY (JUNE 1988)

a. The Contracting Officer's authorized representative hereinafter referred to as the Project Officer for this contract is:

Name: Tom Nicholson
 Address: U.S. Nuclear Regulatory Commission
 Mail Stop NL/S 260
 Washington, DC 20555
 Telephone Number 301/492-3856"

6. Section G.3 entitled, paragraph a, "Travel Reimbursement (Mar 1987)," is hereby completed as follows:

"G.3 TRAVEL REIMBURSEMENT

a. Total expenditure for domestic travel shall not exceed \$25,300.00 without the prior approval of the Contracting Officer."

7. Section G.4 entitled , "Remittance Address," is hereby deleted in its entirety.
8. Section G.5 entitled, "Employee Related Expenses," is hereby added and completed as follows:

"G.5 EMPLOYEE RELATED EXPENSES

The Contractor shall be reimbursed for allowable Employee-Related Expenses in accordance with the following fixed rates:

RATE (%)	COST BASE	APPLICABLE PERIOD
18.3%	Faculty Based Labor	07/01/89 - 06/30/90
23.2%	Staff Direct Labor	07/01/89 - 06/30/90
1.2%	Student Direct Labor	07/01/89 - 06/30/90

a. Pending the establishment of final employee benefit rates, the Contractor shall be reimbursed for allowable employee benefit rates in accordance with the following provisional rates:

RATE (%)	COST BASE	APPLICABLE PERIOD
18.3%	Faculty Based Labor	07/01/90 - 11/12/92
23.2%	Staff Direct Labor	07/01/90 - 11/12/92
1.2%	Student Direct Labor	07/01/90 - 11/12/92

b. The Contracting Officer may adjust the above rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the Contractor. It is the Contractor's responsibility to notify the Contracting Officer in accordance with 52.232-20 - Limitation of Cost or 52.232-22 - Limitation of Funds, as applicable, if such change(s) affect(s) performance of work within the established cost or funding limitations.

(End of Clause)"

9. Section H.1, Paragraph a., entitled, "Key Personnel (Mar 1987)," is hereby completed as follows:

"H.1 KEY PERSONNEL (MAR 1987)

- a. The following individuals are considered to be essential to the successful performance of work hereunder.

Dr. Daniel E. Evans, Principal Investigator
 Dr. Todd C. Rasmussen, Co-Investigator
 Dr. Michael Sulley, Co-Investigator "

10. Section H.6 entitled, "Capital Equipment," is deleted in its entirety and the following clause is substituted in lieu thereof:

"H.6 NOTIFICATION TO NRC OF EQUIPMENT PURCHASES

Any equipment procurements by the contractor require prior approval of the NRC Project Officer and Contracting Officer. (See OMB Circular A-21.) Any necessary purchases for equipment/supplies directly associated with this effort made by the contractor shall be in accordance with FAR 52.244-2 which is incorporated herein by reference. In such event, the contractor shall submit copies of the paid invoice/receipt to the NRC Contracting Officer listed under Section F.4 herein and to the U.S. Nuclear Regulatory Commission, Division of Contracts and Property Management, Attn: Art Correia, Property Officer, Property and Procurement Branch, Mail Stop P-841, Washington, DC 20555.

Within thirty days prior to expiration of this contract, the contractor shall submit a definitive listing of all equipment purchased under this contract. The addresses for such submittal is the same as in the above paragraph. Any contaminated equipment on the listing must be identified.

(End of Clause)"

11. Section H.8 entitled, "Disposal of Equipment," is added and reads as follows:

"H.8 DISPOSAL OF EQUIPMENT

The disposition of equipment shall be by the NRC in accordance with Chapter 101-43 of the Federal Property Management Regulations.

(End of Clause)"

12. Section H.9 entitled, "Allowable Cost and Payment," is hereby added:

"H.9 52.216-7 APR 1984 ALLOWABLE COST AND PAYMENT

Notwithstanding paragraph a of the clause, 52.216-7, allowability of costs will be determined in accordance with subpart 31.3.

(End of Clause)"

13. Section I entitled, Contract Clauses, is revised to add the following clauses:

"I.11 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (52.209-6)(MAY 1989)

(a) The Government suspends or debar Contractors to protect the Government's interests. Contractors shall not enter into any subcontract equal to or in excess of \$25,000 with a Contractor that has been debarred, suspended, or proposed for debarment unless there is a compelling reason to do so. If a Contractor intends to subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the list of Parties Excluded from Procurement Programs), a corporate officer or designee of the Contractor shall notify the Contracting Officer, in writing, before entering into such subcontract. The notice must include the following:

(1) The name of the subcontractor;

(2) The Contractor's knowledge of the reasons for the subcontractor being on the list of Parties Excluded from Procurement Programs;

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the list of Parties Excluded from Procurement Programs; and

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(b) The Contractor's compliance with the requirements of 52.209-6 will be reviewed during Contractor Purchasing System Reviews (see FAR Subpart 44.3).

(End of clause)"

13. All other terms and conditions of this contract remain unchanged.