

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE PAGE 1 OF PAGES 3

2. AMENDMENT/MODIFICATION NO. 013
 3. EFFECTIVE DATE See Block 15C.
 4. REQUISITION/PURCHASE REQ. NO. RFPA No. NRR-96-022 dtd 6/29/00 &
 5. PROJECT NO. (If applicable)
 6. ISSUED BY CODE
 7. ADMINISTERED BY (If other than Item 6) 8/2/00 CODE

U.S. Nuclear Regulatory Commission
 Division of Contracts and Property Mgt.
 Attn: T-7-I-2
 Contract Management Branch No. 1
 Washington DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)
 Battelle Memorial Institute
 ATTN: Mr. William Charters
 4000 N.E. 41st Street
 Seattle WA 98105
 CODE FACILITY CODE
 9A. AMENDMENT OF SOLICITATION NO.
 9B. DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. Con# NRC-03-96-022
 10B. DATED (SEE ITEM 13) 07-08-1996

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 of 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)
 APPN No.: 31X0200.020 B&R No.: 020-15-101-130
 Job Code: J2393 BOC: 252A OBLIGATE: \$49,889.00

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

(X) 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(b).
 X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR Clause 52.243-2, CHANGES - COST REIMBURSEMENT ALTERNATE I (APR 1984)
 D. OTHER (Specify type of modification and authority) Mutual agreement of the parties

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.)

SEE ATTACHED PAGE FOR MOD DETAILS

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) C.P. NUNN CONTRACTING OFFICER
 15B. CONTRACTOR/OFFICER (Signature of person authorized to sign)
 15C. DATE SIGNED 1 SEP 00
 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mary Mace Contracting Officer
 16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)
 16C. DATE SIGNED 8-16-00

The purpose of this modification is to: (1) modify Section C to incorporate a within scope task, Task G. All work shall be performed in accordance with the attached Statement of Work; (2) modify subsection G.3 to incorporate the contractor's FY 1997 and FY 2000 provisional indirect cost billing rates; and (3) increase the obligated and total estimated amounts of the contract by \$49,889.00. Accordingly, the contract is hereby modified as follows:

1. Under Section B, subsection B.3 entitled "CONSIDERATION AND OBLIGATION-COST PLUS FIXED FEE (JUN 1988) ALTERNATE 1 (JUN 1991)," the obligated amount is increased from \$959,950.00 to \$1,009,839.00, and the total estimated amount is increased from \$1,358,168.00 to \$1,408,057.00. Therefore, paragraphs (a) and (c) are revised to read as follows:

"(a) The total estimated cost to the Government for full performance of this contract is \$1,408,057.00, of which the sum of \$1,315,941.00 represents the estimated reimbursable costs and of which \$92,116.00 represents the fixed fee."

"(c) The amount currently obligated by the Government with respect to this contract is \$1,009,839.00, of which the sum of \$939,150.00 represents the estimated reimbursable costs, and of which \$70,689.00 represents the fixed fee."

2. Under Section C, "Statement of Work," Subsection C.4, incorporate Task G entitled "FATIGUE MANAGEMENT." The contractor will provide NRR with technical assistance in developing a regulatory option on fatigue management and responding to public comments on the rulemaking petition related to personnel fatigue at commercial nuclear power plants. The Statement of Work for Task G is an attachment to this modification and is hereby made apart of this contract.

3. Under G, subsection G.3 entitled, "Indirect Cost Rates," incorporate FY 1997 and FY 2000 provisional billing rates, per DCAA audits. Therefore, paragraph (a) under this subsection is DELETED in its entirety and the following is SUBSTITUTED in lieu thereof:

"(a) Pending the establishment of final indirect cost rates which must be negotiated Based on audit of actual costs, the contractor shall be reimbursed for allowable indirect cost as follows:

<u>Category</u>	<u>Cost Rate</u>	<u>Applicable Period</u>
Fringe Benefits (salaried)	[REDACTED]	07/08/96 - 01/23/97
	[REDACTED]	01/24/97 - 11/27/97
	[REDACTED]	11/28/97 - 08/26/99
	[REDACTED]	08/27/99 - 09/30/00

<u>Category</u>	<u>Cost Rate</u>	<u>Applicable Period</u>
Overhead (onsite)	[REDACTED]	07/08/96 - 01/23/97
	[REDACTED]	01/24/97 - 11/27/97
	[REDACTED]	11/29/97 - 08/26/99
	[REDACTED]	08/27/00 - 09/30/00
General and Administrative	[REDACTED]	07/08/96 - 01/23/97
	[REDACTED]	01/24/97 - 09/30/00

All other terms and conditions of the contract remain unchanged.

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

Total FY96 Obligations: \$ 170,000.00
Total FY97 Obligations: \$ 317,750.00
Total FY98 Obligations: \$ 302,200.00
Total FY99 Obligations: \$ 85,000.00
Total FY00 Obligations: \$ 134,889.00

Cumulative Obligations: \$1,009,839.00

This modification obligated FY00 funds in the amount of \$49,889.00.

TASK G - FATIGUE MANAGEMENT

BACKGROUND

NRR is responding to a rulemaking petition that requests specific amendments to 10CFR Parts 26 and 55 for the purpose of ensuring nuclear power plant personnel are not impaired by fatigue. The petition was docketed by the NRC on October 7, 1999 and has been assigned Docket No. PRM-26-2. One of the requests of the petitioner is to add enforceable working hour limits to 10CFR Part 26.

The NRC also responded to a request from Congressmen Markey, Dingell, and Klink, for information concerning staffing and the use of overtime at US nuclear power plants. As a result of preliminary findings, the Office of Nuclear Reactor Regulation (NRR) is completing an assessment of the Commission's "Policy on Factors Causing Fatigue of Operating Personnel at Nuclear Reactors" (GL-82-12).

OBJECTIVE

The objective of this additional task is to provide technical assistance to the NRR staff in assessing the policy statement and responding to the rulemaking petition. Staff efforts requiring technical assistance include: (1) develop a preliminary description of a regulatory option on fatigue management, (2) obtain review and recommendations from subject matter experts, (3) develop a final description of a regulatory option on fatigue management, and (4) prepare proposed final responses to public comments on the petition for rulemaking related to fatigue.

REQUIREMENTS/SCOPE OF WORK

Sub-task 1: Develop a Preliminary Description of a Regulatory Option for Addressing Personnel Fatigue at Commercial Nuclear Power Plants

Using materials provided by NRC on (1) results of survey of current best industry practices literature on fatigue management and (2) results of survey of working hour limits in other industries and agencies, the contractor shall develop a preliminary description of a regulatory option on fatigue. The preliminary description shall provide (1) program elements of a fatigue management program, (2) a description of how the elements would work together as a program, (3) strengths and limitations of the option, and (4) special considerations for implementing the program in the context of existing Part 26 fitness-for-duty requirements. The preliminary description of the option should be detailed enough to provide subject matter experts a framework from which they can make comments and recommendations on the regulatory option.

Sub-task 2: Obtain Individual Review and Recommendations from Subject Matter Experts on Fatigue

The contractor shall select approximately two subject matter experts (SMEs) in the fatigue field. These SMEs are to provide individual views on the preliminary description on fatigue management developed in sub-task 1. The experts will not meet or deliberate among themselves. The purpose of this review is to obtain feedback on sub-task 1 and to make recommendations on the content of sub-task 3.

The contractor shall develop review questions for the purpose of collecting comments and recommendations from the SMEs in a consistent manner. Finally, the contractor shall prepare a summary report of the review including the names of the SME participants, the list of questions posed to the SMEs, and a summary of the major comments and recommendations.

Sub-task 3: Develop a Final Description of a Regulatory Option for Addressing Personnel Fatigue at Commercial Nuclear Power Plants

Using results of the SME review and current NRC input, the contractor shall develop a final description of the regulatory option. The contractor shall furnish the results of this sub-task in a format to be used as direct input to the NRC rulemaking plan on fatigue.

Sub-task 4: Prepare proposed final responses to public comments

Using draft responses provided by the NRC staff to each of the comments, the contractor shall prepare a proposed final set of responses. The draft responses will be organized by "comment area" (i.e., similar, individual comments will be grouped together and a single response will be provided). The final set of responses will reflect additional technical information and changes supplied by the contractor needed to provide more complete and accurate responses to the public comments. The final set of responses will be prepared in a format determined by the staff. There are approximately 50 comment areas that have been identified as requiring responses.

Estimated schedule: 1 month after receipt of draft responses*

*approximately 2 weeks after receipt of the staff's draft responses, additional information may be provided to the contractor that reflects NRC management review of the staff's draft responses. The contractor will integrate this information, as appropriate, into their final set of responses.

DELIVERABLES/SCHEDULES

Preliminary Description	2 weeks after receipt of materials from NRC on results of current best industry practices literature on fatigue management and results of survey of working hour limits in other industries and agencies
SME materials	1 week after receipt of NRC comments on sub-task 1
SME Review Summary Report	1 week after completion of SME review
Detailed Description	2 weeks after completion of SME review
Responses to Public Comments	1 month after receipt of public comment materials from NRC

NRC-FURNISHED MATERIAL

The NRC will furnish the contractor the necessary materials related to the task to allow completion of the task.

MEETINGS AND TRAVEL

Several telephone conference calls are expected for all above sub-tasks. No meetings requiring travel are anticipated. Meetings will be authorized by NRC if necessary.