

## AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF 1

2. AMENDMENT/MODIFICATION NO.

18

3. EFFECTIVE DATE

APR 04 2000

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (If applicable)

6. ISSUED BY

CODE

U.S. Nuclear Regulatory Commission  
Division of Contracts and Property Mgt.  
Attn: T-7-I-2  
Contract Management Branch 1  
Washington DC 20555

7. ADMINISTERED BY (If other than Item 6)

CODE

3. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

Risk Engineering, Inc.  
ATTN: Robin McGuire, Prin. Investigator  
4155 Darley Avenue, Suite A  
Boulder, CO 80393  
Telephone No.: (303) 499-3000

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO  
Con# NRC-04-96-037

10B. DATED (SEE ITEM 13)

CODE

FACILITY CODE

X

04-04-1996

## 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)

31X0200.060 W6248 252A \*RES-C00-393 06015110120/Amount  
Obligated: \$28,536 / \*RES-C00-394 Amount Obligated: \$19,722

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).

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

D. OTHER (Specify type of modification and authority) Changes - Cost Reimbursement - Alternate V (Apr. 1984)

X

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 page 2)

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)

ROBIN K MCGUIRE

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

Mary Mace, Contracting Officer

15B. CONTRACTOR/OFFEROR

Robin K McGuire  
(Signature of person authorized to sign)

15C. DATE SIGNED

4-4-00

16B. UNITED STATES OF AMERICA

BY Mary Mace  
(Signature of Contracting Officer)

16C. DATE SIGNED

3-29-00

STANDARD FORM 30 (REV 10-83)

Template = ADM001

ADM02

The purpose of this modification is to (1) provide incremental funds of \$28,536 for the contractor's revised indirect rates for Fiscal Year 1998 under the subject contract in accordance with DCAA as referenced in Modification No. 17, (2) incorporate the within-scope work to the contract as referenced in the Statement of Work (ATTACHMENT 1), the contractor's proposal dated 3/9/00, and the contractor's response dated 3/14/00 to NRC's questions, (3) increase the contract ceiling amount by \$19,722 for the within-scope work and \$28,536 for the 1998 indirect rate variances (totalling \$48,258) from \$1,251,298 to \$1,299,556, (4) increase the obligated amount by \$48,258 from \$1,251,298 to \$1,299,556, and (5) extend the period of performance of the contract through 12/31/2000. Accordingly, the contract is hereby modified as follows:

1. Section B.3, CONSIDERATION AND OBLIGATION--COST PLUS FIXED FEE (JUNE 1988) ALTERNATE I (JUNE 1991), paragraphs a, b, and c are deleted in their entirety and the following paragraphs are substituted in lieu thereof:
  - "a. The total estimated cost to the Government for full performance of this contract is \$1,299,556, of which the sum of \$1,293,269 represents the estimated reimbursable costs, and of which \$6,287 represents the fixed fee.
  - b. The amount currently obligated by the Government with respect to this contract is \$1,299,556.
  - c. It is estimated that the amount currently allotted will cover performance through 12/31/2000."
2. Section F.6, DURATION OF CONTRACT PERIOD, is deleted in its entirety and the following paragraph is substituted in lieu thereof:

"This contract shall commence on 4/4/96 and will expire on 12/31/2000."

All other terms and conditions under this contract remain unchanged.

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

|                                  |               |
|----------------------------------|---------------|
| Total FY 96 Obligation Amount:   | \$ 275,000.00 |
| Total FY 97 Obligation Amount:   | \$ 260,000.00 |
| Total FY 98 Obligation Amount:   | \$ 250,000.00 |
| Total FY 99 Obligation Amount:   | \$ 274,056.00 |
| Total FY 2000 Obligation Amount: | \$ 240,500.00 |

Cumulative Total of NRC Obligations: \$1,299,556.00

This modification obligates NRC FY 2000 funds in the amount of \$48,258.

## SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

### 1 BACKGROUND

A meeting of the technical team (Risk Engineering, Inc., et al) with the NRC staff was held on February 8, 2000, to discuss the draft final report. During the meeting there was a discussion about data available from the September 21, 1999, Taiwan, and the August 17 and November 12, 1999, Turkey earthquakes, and the influence these data might have on the spectral shapes developed by the technical team for the Western United States (WUS) sites.

The NRC staff has concluded that an evaluation of the Taiwan and Turkey data on WUS spectral shapes can be accommodated within the scope characterized by the first and second project objectives: (1) collect an earthquake strong motion time history database for use in developing response spectra and analyses, and (2) develop recommendations for seismic design response spectra to be used for nuclear power plants considering engineering characteristics and different site and geographical conditions.

### 2 CONTRACT OBJECTIVES

The goal of this procurement is to: (1) collect an earthquake strong motion time history database for use in developing response spectra and analyses, (2) develop recommendations for seismic design response spectra to be used for nuclear power plants considering engineering characteristics and different site and geographical conditions, and (3) develop recommendations for minimum power spectral density (or equivalent) requirements for the proposed spectral shapes. These results will be included as technical input by the NRC staff in its revision of Regulatory Guide 1.60, "Design Response Spectra for Seismic Design of Nuclear Power Plants."

### 3 SCOPE OF WORK

#### 3.1 Evaluate September 21, 1999, Taiwan, and the August 17 and November 12, 1999, Turkey Earthquakes Data

Because the site conditions in the Western United States (WUS) are similar to those in Taiwan and Turkey, include suitable time-history records from the September 21, 1999, Taiwan, and the August 17 and November 12, 1999, Turkey earthquakes in the project recommendations of spectral shapes for Western United States (WUS) sites.

### 4 PERIOD OF PERFORMANCE

The period of performance will be from the start of the modification through September 30, 2000. The contract period of performance is extended to December 31, 2000. The period from September 30, 2000, to December 31, 2000 (the contract period of performance), is to allow time to address issues pertaining to the publication of the final reports.

**Responses to NRC questions, NRC-04-96-037**

1. Yes, the comparison of Taiwan and Turkey data can be an appendix to the Project Report instead of the Implementation Report.
2. Schedules for the two final reports are as follows:

Project Report:

July 20, 2000: Populate EUS bins and present to PRP (Peer Review Panel)

July 20, 2000: Make comparison of Taiwan and Turkey data to recommended spectra.

July 20, 2000: Present above two results to PRP.

August 20, 2000: Document EUS bins and send to PRP for review.

August 20, 2000: Document Taiwan and Turkey comparison (appendix) and send to PRP for review.

August 20, 2000: Document Taiwan and Turkey records in WUS bins, send to PRP for review.

Sept. 7, 2000: Obtain comments from PRP on above 3 items, and revise report.

Sept. 30, 2000: Submit final Project Report to NRC.

Implementation Report:

July 1, 2000: Send draft report with generic sections + WUS implementation to PRP.

July 20, 2000: Meet with PRP, present report + EUS results, obtain comments from PRP.

August 20, 2000: Send total draft report (WUS+EUS+changes from review comments) to PRP.

Sept. 7, 2000: Obtain comments from PRP on total draft report.

Sept. 30, 2000: Send 2<sup>nd</sup> draft to PRP for review.

Oct. 15, 2000: Obtain comments from PRP on 2<sup>nd</sup> draft.

Oct. 30, 2000: Submit final Implementation Report to NRC.