

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

BPA NO. NRC-HQ-11-A-04-0027 1. CONTRACT ID CODE PAGE 1 2

2. AMENDMENT/MODIFICATION NO. M007 3. EFFECTIVE DATE See Block 15c 4. REQUISITION/PURCHASE REQ. NO. RES-13-311 5. PROJECT NO. (if applicable)

6. ISSUED BY CODE 3100 7. ADMINISTERED BY (if other than item 6) CODE 3100
 U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Adelin Rodriguez, 301-287-0935 Mail Stop: 3WPN-05-C64M Washington, DC 20555
 U.S. Nuclear Regulatory Commission Div. of Contracts Mail Stop: 3WPN-05-C64M Washington, DC 20555

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) (X) 9A. AMENDMENT OF SOLICITATION NO.
 ENGINEERING MECHANICS CORPORATION OF COLUMBUS EMC2
 3518 RIVERSIDE DR STE 202 COLUMBUS OH 432211735
 CODE 014083161 FACILITY CODE X 9B DATED (SEE ITEM 11)
 10A. MODIFICATION OF CONTRACT/ORDER NO. NRC-HQ-11-C-04-0001
 10B DATED (SEE ITEM 13) X 09-30-2011

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: 2013-60-11-0-154 JCN: V6245 BOC: 252A
 APPN: 31X0200 FAIMIS: 132767 NAICS: 541330 PSC:R425
 DUNS: 014083161 OBLIGATE: \$80,000.00

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 data, 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) FAR 43.103(a) bilateral contract modification
 X

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
 The purpose of this modification is to (1) provide incremental funding in the amount of \$80,000.00, (2) modify the statement of work to reflect a reduction in scope of work, thereby (3) revising the price schedule and (4) reducing the overall task ceiling by \$75,685.
 See following pages for details.

Total Obligated Amount: \$610,000.00 (Changed)
 Task Order Ceiling: \$613,473 (Changed)
 Period of Performance: 09/30/2011 - 09/29/2014 (Unchanged)

All other terms and conditions remain unchanged.

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 HATIGLEY DIRECTOR OF OPERATIONS	15C. DATE SIGNED 5/9/13	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Adelin M Rodriguez Contracting Officer	16C. DATE SIGNED 9/9/13
15E. CONTRACTOR/OFFEROR <i>[Signature]</i>	(Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA BY <i>[Signature]</i> (Signature of Contracting Officer)	

The purpose of this modification is to increase the obligated amount by \$80,000 from \$530,000 to \$610,000 and to modify the statement of work to reflect a reduction in scope of work, thereby (3) revising the price schedule and (4) reducing the overall task ceiling by \$75,685. Accordingly, the task order is modified as follows:

- Section A. 4 of the task order entitled: "Price Schedule" is modified as follows:

A.4 PRICE SCHEDULE

PERIOD OF PERFORMANCE - 36 MONTHS						
CLIN	GS LABOR CATEGORY	LABOR RATE	ORIGINAL ESTIMATED HOURS	ORIGINAL ESTIMATED TOTAL	REVISED ESTIMATED HOURS	REVISED ESTIMATED TOTAL
0001b	Senior Program Manager	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Subtotal for clins 0001						\$83,565.31
0002a	Senior Research Leader	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0002b	President	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0002c	Research Leader	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Subtotal for clins 0002						\$391,418.77
0003a	Senior Regulatory Advisor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	\$0.00
0003b	Principle Engineer	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0003c	Research Engineer	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0003d	Engineer	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0003e	Master Technician	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
0003f	Administrative Assistant	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Subtotal for clins 0003						[REDACTED]
Subtotal Labor for TASK ORDER 1						[REDACTED]
10	Travel** (Cost Reimbursable) (NOT TO Exceed) The government will pay up to the rates specified in the Government Federal Travel Regulations (FTR) for travel destination. Hotel reservations will be made by the contractor and will be reimbursed for actual costs only, with receipts/back up documentation attached to the invoice. PAYMENTS WILL NOT BE MADE WITHOUT SUPPORTING DOCUMENTATION			[REDACTED]	[REDACTED]	[REDACTED]
TRAVEL SUBTOTAL		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
TASK ORDER 1 GRAND TOTAL				\$689,158.00		\$613,473.00

*Labor rates shall remain constant over the life of the contract, as stated in proposal.

- Section A.5 of the task order entitled: " Consideration and Obligation – Labor hour contract" is modified to read as follows:

A.5 CONSIDERATION AND OBLIGATION – LABOR HOUR CONTRACT

- The total estimated cost to the Government for full performance under this Task Order is \$613,473.00.
- The amount obligated by the Government with respect to this Task Order is \$610,000. This obligated amount may be unilaterally increased by the Contracting Officer by a written modification to the contract. The obligated amount shall, at no time, exceed the Task Order ceiling as specified in paragraph (a) above.

When and if the amount(s) paid and payable to the Contractor hereunder shall equal the obligated amount, the Contractor shall not be obligated to continue performance of the work unless and until the Contracting Officer shall increase the amount obligated with respect to this contract. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's sole risk.

3. The following sections of section 4.0 entitled: "Specific Tasks" are modified as follows:

Background

Due to recent budget cuts and the reprioritization of research activities being conducted by RES, the scope of confirmatory research related to HDPE piping integrity has been reduced. Several tasks in the project will be put on hold until further direction is given by the NRC Program Manager.

Statement of Work Modifications

Modifications to the statement of work are outlined below. Details regarding sample preparation and schedule will be determined through discussions with the NRC Project Manager. The modified deliverable schedule is provided in Table 1.

Task 2 – Critical Flaw Size – Fusion Joints:

Fusion specimens from HDPE Piping shall be prepared as follows:

- a) At least two HDPE Pipe fusions for 12-inch diameter DR 11 piping will be made and supplied to PNNL for NDE investigations. Unless otherwise requested by PNNL, each of these fusions shall be made per CC N755 (PPI TR33). At least one of the fusion joints will contain intentionally added flaws in the fusion joint.
- b) At least four 4-inch diameter, DR 11 piping from PE 4710 Cell Class 445574C with a minimum PENT of 2000 hours. All fusions will be made to specifications per CC N-755. Circumferential surface flaws (exact length and depth to be determined after discussion with NRC staff) shall be machined on the OD of the joint section for two of these fusions. These specimens will be tested under tensile stress of ~500 psi and 95 °C to assess integrity of joints with flaws. The other two specimens will be tested under identical conditions but will have no flaws introduced in their joints for comparison.

Task 3 – Computational Evaluation of Butt Fusion:

This task will be on hold for the balance of FY 13 and FY14. Work on this task has been formed. Therefore, the deliverable has not been eliminated. The TLR shall report on the work that has been completed to date.

Task 4 – Critical Flaw Size - Parent Material:

Existing hydrostatic tests on HDPE pipe with axial surface flaws on the OD under internal pressure and at 95 °C will continue. The contractor shall complete the testing that already began under this task. The contractor shall also complete the report on the tests that were initiated. However, none of the additional testing previously planned will be performed.

Task 5 – Fusion Microstructure:

This task will be on hold for the balance of FY 13 and FY14. Since no work has been performed on this task and the task is on hold through FY14, the deliverable will be eliminated.

Task 6 – Technical Assistance: Any technical assistance needed by NRC staff with regard to ASME BPV Code activities will continue as directed by the NRC Project Manager.

Table 1 Modified Deliverable Schedule

Task #	Deliverables (<i>months</i> after project start)		Additional Comments (if any)
	Original Date	Revised Date	
2	36	36	TLR for parent pipe SCG tests
3	24	36	TLR for pipe fusion SCG tests
4	24	36	TLR for fusion modeling

All other terms and conditions remain unchanged.