

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 5		
2. AMENDMENT/MODIFICATION NO M0007		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO RES-14-0207		5. PROJECT NO. (If applicable)	
6. ISSUED BY U.S. NRC - HQ Acquisition Management Division Mail Stop: 3WFN-05-C64MP Attn: Rob Robinson, 301-287-0905 Washington DC 20555-0001		CODE NRCHQ		7. ADMINISTERED BY (If other than Item 6) U.S. NRC - HQ Acquisition Management Division Mail Stop: 3WFN-05-C64MP Washington DC 20555-0001		CODE NRCHQ	
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) EMC2 3518 RIVERSIDE DR STE 202 COLUMBUS OH 43221735				(x) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x 10A. MODIFICATION OF CONTRACT/ORDER NO. NRC-HQ-11-A-04-0014 NRC-HQ-11-O-04-0002			
				10B. DATED (SEE ITEM 13) 09/24/2012			
CODE 014083161		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 ACKNOWLEDGEMENT 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) Net Increase: \$153,391.99
2014-X0200-FEEBASED-60-60D001-11-6-213-V6200-252A

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

CHECK ONE	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 52-243-2
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

GSA Contract #: GS10F0145T

The purpose of this modification is to A) modify the price schedule and statement of work to incorporate a within scope change for additional tasks; B) increase the total Task Order ceiling in the amount of \$153,391.99, from \$316,974.69 to \$470,366.68; and C) provide incremental funding in the amount of \$153,391.99, increasing the total obligated amount from \$316,974.69 to \$470,366.68.

Task Order period of Performance: 9/24/2012 - 9/30/2014 (unchanged)

Total Task Order Ceiling: \$470,366.68 (changed)

Total Exercised Ceiling: \$470,366.68 (changed)

Total Obligated Amount: \$470,366.68 (changed)

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) STEPHEN M. POOL	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16C. DATE SIGNED 03/21/2014	
(Signature of person authorized to sign)			

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

MAR 31 2014

ADM002

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

NRC-HQ-11-A-04-0014/NRC-HQ-11-O-04-0002/M0007

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OF

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NAME OF OFFEROR OR CONTRACTOR

EMC2

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	See additional pages for specific details regarding this contract modification. All other terms and conditions remain unchanged. Delivery Location Code: NRCHQ U.S. NRC - HQ Division of Contracts				

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	NRC-HQ-11-A-04-0014/NRC-HQ-11-O-04-0002/M0007	2	5

NAME OF OFFEROR OR CONTRACTOR
EMC2

ITEM NO (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>See additional pages for specific details regarding this contract modification.</p> <p>All other terms and conditions remain unchanged.</p> <p>Delivery Location Code: NRCHQ</p> <p>U.S. NRC - HQ</p> <p>Division of Contracts</p> <p><i>GA 3/2/14</i></p>				

Specific Changes are as Follows:

1. Delete Section (a) and the first line of Section (b) from A.1 – CONSIDERATION AND OBLIGATION in their entirety and replace with the following:

"(a) The total estimated cost to the Government for full performance under this contract is \$470,366.68.

(b) The amount presently obligated with respect to this Task Order is \$470,366.68."

2. Delete SECTION A.3 – PRICE COST SCHEDULE in its entirety and replace with the following:

"A.3 Price/Cost Schedule

CLIN	LABOR CATEGORY	QTY	UNIT	UNIT PRICE	TOTAL CEILING
0001	President		HRS		
0002	Vice President		HRS		
0003	Senior Research Leader		HRS		
0003a	Senior Research Leader		HRS		
0004	Research Leader		HRS		
0005	Principal Engineer		HRS		
0005a	Principal Engineer		HRS		
0006	Research Engineer		HRS		
0006a	Research Engineer		HRS		
0007	Engineer		HRS		
0008	Senior Program Manager		HRS		
0008a	Senior Program Manager		HRS		
0009	Senior Regulatory Advisor	0	HRS		
0010	Electronics Specialist	0	HRS		
0011	Master Technician	0	HRS		
0012	Administrative Assistant		HRS		
TOTAL ESTIMATED TASK ORDER CEILING					\$470,366.68"

3. Incorporate the following language into the Task Order Statement of Work where appropriate:

Objective

The objective of this project is to obtain expert technical assistance services from the contractor to assist and support the development of the NRC-supported extremely low probability of rupture (xLPR) computer code, and to provide flexible technical analyses to RES to develop

and/or confirm the technical bases for future regulatory decisions related to the primary system reactor coolant pressure boundary (RCPB) and LBB system integrity and associated primary water stress corrosion cracking (PWSCC) mitigation assessments.

Scope of Work

The work performed under this contract shall be in accordance with the xLPR Software Quality Assurance Plan (SQAP) (Reference 1) to fulfill selected criteria of ASME NQA-1-2008 (including Addenda 2009). The xLPR SQAP fulfills the software work practice requirements of ASME NQA-1-2008 (including Addenda 2009) Quality Assurance Requirements for Nuclear Facility Applications, Part I Requirement 3, Paragraph 800; Requirement 11, Paragraphs 100, 200, 400, 500, and 600; and Part II, Subpart 2.7. Use of the contents of this document in Nuclear Safety or Nuclear Quality applications requires additional actions by the user pursuant to their internal procedures. The quality of the computational analyses performed under this contract shall be equivalent to the NRC technical assessments presented in References 2, 3 and 4.

Task 2.f xLPR Modules and Framework Testing

Task Requirements:	Work under this task shall include comprehensive testing of the modules and framework as dictated by the xLPR NRC Program Manager. The module and framework testing shall consist of unit tests as required by the individual Software Test Plans. The results of these tests are to be recorded in the Software Test Logs and summarized in the Software Test Report as required by xLPR Software Quality Assurance (QA) Procedures.
Deliverable:	1. The tests authorized under this task are to be conducted via the Software Test plans, recorded in the Software Test Log, and summarized in the Software Test Report.
Standard:	1. The letter report shall meet all specified requirements in this task; and it shall be delivered by May 31, 2014 .
Acceptable Quality Level (AQL):	The letter report shall have acceptable scientific adequacy shown thru vetting and consensus of the xLPR team members which include the project's COR and technical monitor, and xLPR NRC Program manager.
Surveillance Method:	Inspection and review by the project COR and tech monitor.

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3/21/14

List of References

1. xLPR Software Quality Assurance Plan (SQAP), presently Version 2.0, Dated 09/11/2012, (available through the project COR).
2. Kerr, M., Rathbun, H., "Summary of Finite Element (FE) Sensitivity Studies Conducted in Support of the NRC/EPRI Residual Stress Program," Proceedings of the ASME 2012 Pressure Vessels & Piping Conference.

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3. Rathbun, H.J., Fredette, L.F., Scott, P.M., Csontos, A.A., Rudland, D.L., "NRC Welding Residual Stress Validation Program International Round Robin Program and Findings," Proceedings of the 2011 ASME Pressure Vessels and Piping Conference.
4. Fredette, L.F., Kerr, M., Rathbun, H.J., Broussard, J.E., "NRC/EPRI Welding Residual Stress Validation Program - Phase III Details and Findings," Proceedings of the 2011 ASME Pressure Vessels and Piping Conference.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

[END of M0007]

GPA
3/21/14