

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT D CODE		PAGE OF PAGES	
				1	6
2. AMENDMENT/MODIFICATION NO. M0006		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. RES-19-0245	
6. ISSUED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001		CODE NRCHQ		5. PROJECT NO. (If applicable)	
		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) NUMARK ASSOCIATES INC ATTN PAUL EDELSTEIN 1220 19TH ST NW STE 500 WASHINGTON DC 200362444		(x)		9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. NRC-HQ-25-14-E-0004 NRC-HQ-60-17-T-0003	
				10B. DATED (SEE ITEM 13) 09/28/2017	
CODE 788247377		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> 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. ACCOUNT NG AND APPROPRIATION DATA (If required) Net Increase: \$283,000.00 2019-X0200-FEEBASED-60-60D001-60B101-1032-11-6-154-252A-11-6-154-1032					
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 Changes-Cost Reimbursement				
	D. OTHER (Specify type of modification and authority)				
E. IMPORTANT Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Task Order Entitled, "Reactor Pressure Vessel Integrity and FAVOR Support," under Enterprise-Wide Contract NRC-HQ-25-14-E-0004. The purpose of this modification is to: (1) exercise Optional Task 2.3 and 3.3, thereby increasing the exercised ceiling by \$ [REDACTED]; (2) provide funding in the amount of \$283,000.00, thereby increasing the obligated amount from \$1,546,808.92 to \$1,829,808.92; and (3) Revise the Statement of Work, Section 4, Subtask 3.3, to describe the specific development effort required and Section 6 to identify the associated deliverables and estimated due dates. Specific changes to the task order are provided on the continuation pages. 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)		
			MONIQUE B. WILLIAMS		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA	
(Signature of person authorized to sign)				[REDACTED] (Signature of Contracting Officer)	
				16C. DATE SIGNED 06/07/2019	

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	NRC-HQ-25-14-E-0004/NRC-HQ-60-17-T-0003/M0006	2	6

NAME OF OFFEROR OR CONTRACTOR
 NUMARK ASSOCIATES INC

ITEM NO. (A)	SUPPL ES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Total Obligations to Date: \$1,829,808.92 (Changed) Base and Exercised Options: XXXXXXXXXX (Changed) Base and All Options: \$2,234,337.90 (Unchanged) Period of Performance: 09/29/2017 to 08/18/2020				

SECTION SF 30 BLOCK 14 CONTINUATION PAGES

The following changes are hereby made to the task order:

(1) **SECTION B.2 CONSIDERATION AND OBLIGATION-TASK ORDERS**, is deleted in its entirety and replaced as follows:

- (a) The ceiling of this order for services is \$2,234,337.90 [REDACTED], inclusive of Options, and \$ [REDACTED] inclusive of Base and Exercised Options.
- (b) This order is subject to the minimum and maximum ordering requirements set forth in the contract.
- (c) The amount presently obligated with respect to this order is \$1,829,808.92 [REDACTED]. The obligated amount shall, at no time, exceed the 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 order, in accordance with FAR Part 43 - Modifications. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's sole risk and may not be reimbursed by the Government.
- (d) Fixed-Fee Holdback Amount: [REDACTED]

(2) **DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK** is revised as follows:

SECTION 4. STATEMENT OF WORK TASKS, Subtask 3.3, is deleted in its entirety and replaced as follows:

OPTION Task - Subtask 3.3: REAP development

The contractor shall upgrade the data storage, retrieval, and analysis capabilities of REAP by performing source code modernization of the REAP application. The contractor shall choose a modern programming language for web-based applications and convert the REAP source code to a modern programming language using contemporary programming practices. Once completed, the contractor shall provide to the COR a list of the development steps performed as part of this task. As part of this process, the contractor shall implement a ticketing process to track code development tasks and problem reporting for REAP.

Subtask 3.3 Deliverables

1. Upgraded REAP web-application
2. List of development steps performed as part of subtask 3.3

SECTION 6. DELIVERABLES/MILESTONE SCHEDULE AND REPORTING REQUIREMENTS, is deleted in its entirety and replaced as follows:

The contractor shall provide the deliverables stated in the table below in electronic format unless otherwise directed by the COR. The electronic format shall be provided using a Microsoft-based product, (e.g., Outlook, Word, Excel, PowerPoint) unless the COR and the contractor specifically agree on another format, such as PDF for example. All deliverables, with the exception of the Monthly Letter Status Report (MLSR) shall be in the format of draft version, revision version with redline/strikeout with a change-control appendix, and a revised version which shall become the final version. The contractor shall maintain appropriate version control in an electronic format. The contractor shall explicitly state in its submittal(s) that the product provided is the deliverable for Task/Subtask XX, as further described below.

The deliverables below shall be submitted to the task order COR. The COR will review all draft deliverables (and coordinate any internal NRC staff review, if needed) and provide comments back to the contractor. The contractor shall revise the draft deliverable based on the comments provided by the COR and then deliver a revised version of the deliverable, which will then be considered the Final Version. When mutually-agreed upon between the contractor and the COR, the contractor may submit preliminary or partial drafts to help gauge the contractor's understanding of the particular work requirement. More than one round of drafts may be needed if the contractor does not successfully incorporate the COR's comments on the previous draft.

The contractor shall develop (as necessary), maintain, and control data, files, information, and deliverables pursuant to this task order.

Subtask	Deliverable	Estimated Due Date
1.1	ZIP file containing all previous SQA documentation collected for this task	5 months after start of project
1.1	A tabulated list of all SQA documents contained in the ZIP file	5 months after start of project
1.2	Draft TLR on Previous SQA and V&V Assessment	10 months after start of project
1.2	Final TLR on Previous SQA and V&V Assessment	2 weeks after receiving comments from COR
1.3	FAVOR User KM Workshop Outline	6 months after start of project
1.3	Outline for the FAVOR KM User Manual	6 months after start of project
1.3	FAVOR User KM Workshop supporting materials (slides, other visual aids, and hands-on exercises)	15 months after start of project
1.3	Draft FAVOR KM User Manual	15 months after start of project
1.3	Final FAVOR KM User Manual	1 month after receiving comments from COR
1.4	Materials developed for Developer KM Workshop, including slides, other visual supports, and any hands-on activities	1 week before knowledge transfer session, and no later than 24 months from the start of the project
1.5	Written responses to NRC staff questions about FAVOR and related to the development of the SRD for FAVOR	1 week after receipt of a question from COR
1.5	References used to develop the responses to NRC staff questions	1 week after receipt of

Subtask	Deliverable	Estimated Due Date
		a question from COR
1.5	Reviews of the draft SRD, using tracked changes in MSWord	1 month after receipt of draft SRD
1.5	Draft written sections of the SRD as directed by the COR	1 month after writing assignment by COR
1.5	Revised draft sections of the SRD	2 weeks after receipt comments from COR
1.6 (OPTION)	Review of the IV&V plan, with tracked changes and comments in MSWord	1 month after receipt of the IV&V plan
1.6 (OPTION)	Written answers to written inquiries generated by the FAVOR IV&V Group, relating to the IV&V effort	1 week after receipt of inquiry from the COR
2.1	Draft analysis matrix with loading conditions, WPS models, and all other conditions pertinent to the analysis	12 months after start of project
2.1	Final analysis matrix with loading conditions, WPS models, and all other conditions pertinent to the analysis	2 weeks after receiving comments from COR
2.1	Draft subtask 2.1 TLR	18 months after start of project
2.1	Final subtask 2.1 TLR	1 month after receiving comments from COR
2.1	Modified FAVOR code that allow for WPS modeling (source and executables)	18 months after start of project
2.1	Updated FAVOR Theory and Users' Manuals, as applicable	18 months after start of project
2.1	Input decks and FAVOR outputs for all subtask 2.1 analyses	18 months after start of project
2.2	Draft analysis matrix with loading conditions, clad residual stress models, and all other conditions pertinent to the analysis	18 months after start of project
2.2	Final analysis matrix with loading conditions, clad residual stress models, and all other conditions pertinent to the analysis	2 weeks after receiving comments from COR
2.2	Draft subtask 2.2 TLR	24 months after start of project
2.2	Final subtask 2.2 TLR	1 month after receiving comments from COR
2.2	Modified FAVOR code that allow for clad residual stress modeling (source and executables)	24 months after start of project
2.2	Updated FAVOR Theory and Users' Manuals, as applicable	24 months after start of project
2.2	Input decks and FAVOR outputs for all subtask 2.2 analyses	24 months after start of project
2.3 (OPTION)	Draft analysis matrix with all conditions pertinent to the analysis	24 months after start of project
2.3 (OPTION)	Final analysis matrix with all conditions pertinent to the analysis	2 weeks after receiving comments from COR
2.3 (OPTION)	Draft subtask 2.3 TLR	24 months after start of project
2.3 (OPTION)	Final subtask 2.3 TLR	1 month after receiving comments from COR
2.3 (OPTION)	Input decks and FAVOR outputs for all subtask 2.3 analyses	24 months after start of project
3.1	Within Monthly Letter Status Report to the NRC: complete list of users, identification of new users added during the period, and significant issues identified, and their resolution	20 th Calendar day of the following month
3.2	Within Monthly Letter Status Report to the NRC: summary of any new reports received that month and documentation of their entry into REAP	20 th Calendar day of the following month
3.3 (OPTION)	Upgraded REAP web-application	08/31/2019
3.3 (OPTION)	List of development steps performed as part of subtask 3.3	08/31/2019
3.4	List of contents of the existing REAP legacy archive	1 month from award of Modification M0003

Subtask	Deliverable	Estimated Due Date
3.4	Functional REAP database and public website	3 months from award of Modification M0003
3.5	All digital files associated with the REAP database, web application, and website as hosted on the contractor controlled servers	03/31/2019
3.5	Written responses to IT questions related to REAP migration, as requested by the COR	1 week after receipt of a question from COR
3.5	Source code related to the migration of REAP to NRC servers	To be agreed upon when requested by COR
4.1	Viewgraphs and Other Supporting Materials for kickoff and annual review meetings	1 week before the meeting
4.2	Draft technical paper	2 weeks before draft submittal deadline
4.2	Final technical paper	1 week before final submittal deadline
5 (OPTION)	Draft TLR that includes analysis results and/or other information as requested by the COR commensurate with the issue being addressed and the needs of the COR	1 month after completion of work required by COR
5 (OPTION)	Final TLR	2 weeks after receiving comments from COR
All	MLSR per Section F.3 of the Base Contract	20 th Calendar day of the following month

The contractor shall submit all raw and processed data and worksheet and/or input files used in testing and analyses with the corresponding Draft TLR, and with the Final TLR, in a tabulated Excel format or other format as directed by the COR.

All other terms and conditions of the task order remain the same.