

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

BPA NO.

1. CONTRACT ID CODE

PAGE

OF PAGE

1

2

2. AMENDMENT/MODIFICATION NO. 0002

3. EFFECTIVE DATE APR 16 2009

4. REQUISITION/PURCHASE REQ. NO. 42-07-036T016M02&M03 09703616160

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: Kala Shankar 301-415-6310 Mail Stop TWB 01-B10M Washington, DC 20555

U.S. Nuclear Regulatory Commission Div. of Contracts Mail Stop TWB 01-B10M Washington, DC 20555

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

INFORMATION SYSTEMS LABORATORIES, INC ISL ATTN: DR. JAMES F. MEYER 11140 ROCKVILLE PIKE, SUITE 500 ROCKVILLE MD 20852

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO. NRC-42-07-036 0016

10B. DATED (SEE ITEM 13)

CODE 107928806

FACILITY CODE

X 01-11-2008

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.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

B.B.&R 925-15-171-103; JC: Q-4160; BOC: 252A APPN: 31X0200.925; Obligate: \$160,610

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:

X D. OTHER (Specify type of modification and authority) Pursuant to FAR 52.243-2, Changes Cost Reimbursement ALT 1 Mutual Agreement of Both Parties

E. IMPORTANT: Contractor is not, X 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.)

The purpose of this modification is to 1) incorporate the revised statement of work reflecting additional effort to the task order; 2) increase the task order ceiling and obligation; and 3) extend the performance period until 7/23/2010.

Task Order Ceiling Amount: \$621,656 (changed)

Total Obligated Amount: \$621,656 (changed)

Period of Performance: 01/24/08 - 07/23/10 (changed)

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)

Bruce B. Mrowca V.P.

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

Kala Shankar Contracting Officer

15B. CONTRACTING OFFICER

(Signature of person authorized to sign)

15C. DATE SIGNED

4/16/09

16B. UNITED STATES OF AMERICA

BY Kala Shankar (Signature of Contracting Officer)

16C. DATE SIGNED

4/18/09

The purpose of this modification is to 1) incorporate the revised statement of work to this task order; 2) increase the task order ceiling and obligation by \$160,610; 3) extend the performance period to July 23, 2010. Accordingly, the subject task order is hereby modified as follows:

Page 2 of 2 under the base Task Order 16, paragraphs 2 and 3 are hereby deleted in its entirety and replaced with the following:

“Task Order No. 16 shall be in effect from January 24, 2008 through July 23, 2010, with a cost ceiling of \$621,656. The amount of \$579,600 represents the estimated reimbursable costs, and the amount of \$42,056 represents the fixed fee.”

“The amount obligated by the Government with respect to this task order is \$621,656, of which \$579,600 represents the estimated reimbursable costs, and the amount of \$42,056 represents the fixed fee.”

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

Total FY08 Obligation Amount:	\$461,046.00
Total FY09 Obligation Amount:	<u>\$160,610.00</u>
Total Obligation:	\$621,656.00

****ALL OTHER TERMS AND CONDITIONS OF THE SUBJECT TASK ORDER
REMAIN UNCHANGED****

Tasks/Standards	Scheduled Completion	Deliverables
<p>4. Review Chapter 15.0-15.4 and all GSI related action items (GSI, USI, GLs, BLs and TMI action items).</p> <p>Determine if the methods and approach proposed by the applicant meet the review guidance. Identify issues and the need for any additional or clarifying information (requests for additional information, RAIs). Identify those aspects of the application that need additional or clarifying information (RAIs). Evaluate the applicant analysis using NRC's confirmatory analysis results of TRACE EPR model. Thoroughly review AREVA SRELAP-5 EPR model and its development process. Based on the review, prepare a Technical Evaluation Report (TER).</p> <p>STANDARD: Complete Technical Evaluation Report that follows the NRC provided template without deviation. However, if deviation is needed, prior approval of the template from NRC technical monitor is needed.</p>		
<p>a. Prepare and participate the NRC on-site review activity to interact with AREVA technical staff and identify additional supporting materials needed to support the official RAI and TER development.</p>	<p>Two weeks after the initiation of official DCD review or notified by the NRC technical monitor.</p>	<p>Trip report with the list of additional technical reports and draft RAIs, which identify the potential technical issues.</p>

Tasks/Standards	Scheduled Completion	Deliverables
<p>c2. Review three topical report SEs (LBLOCA, Fuel Mechanical and Set Point Methodology). Identify the limitations and evaluate the impacts of these limitations to Chapter 15 analysis. Develop technical constraints and proper ITTAC and follow-up conditions and items.</p>	<p>Complete the work before May 30, 2009. Follow-up support if Tech Report is revised-complete by 7/1/2010</p>	<p>Phase 2 TER.</p>
<p>c3. Additional LOCA calculations will be performed as the results of latest RAIs sent to AREVA. Review the modified FSAR sections and relevant new calculation reports and develop Phase Two TER input on Section 15.6.5.</p>	<p>Complete the work before May 30, 2009. Follow-up support if Tech Report is revised-complete by 7/1/2010</p>	<p>Phase 2 TER input.</p>
<p>c4. Travel to NRC and perform S-RELAP5 EPR LBLOCA sensitivity runs and develop technical positions relevant to core flow oscillation, vessel pressurization and other significant issues identified through RAI process.</p>	<p>Complete the work before May 30, 2009</p>	<p>Phase 2 TER input.</p>
<p>d. Review the submitted DCD material and supporting technical reports and develop 2nd round of RAIs based on the 1st round of RAI responses and participate meetings with staff and AREVA personals.</p>	<p>Seventeenth to eighteenth week into the DCD review.</p>	<p>1. Deliver 2nd draft RAIs identifying potential technical issues. 2. Provide weekly status report.</p>

Tasks/Standards	Scheduled Completion	Deliverables
<p>5. Use the EPR TRACE and RELAP-5 models developed by NRC Office of Regulatory Research to perform EPR cold leg and hot leg large break LOCA analysis.</p> <p>a. Update the EPR model using the latest information provided by AREVA. Meet with NRC TM to discuss the status of the work.</p> <p>b. Finalize the model change with detailed steady state calculation and document all the changes in a complete written report with a proper QA review.</p> <p>c. In parallel of Task 5.c, use the EPR model to perform the EPR cold leg and hot leg large break LOCA scoping analyses until the long term cooling is achieved.</p> <p>d. After the completion of Task 5.b and Task 5.c, finalize the EPR LBLOCA analysis and prepare a complete written report with a proper QA review. The detailed calculation report shall describe the detailed progression of the LBLOCA scenario and consolidate Task 5.b report with this report.</p> <p>e. Provide a Power Point presentation summarizing the calculation results of the final EPR calculation report and meet with NRC technical staff to discuss any findings.</p> <p>f. Travel to NRC to participate in a meeting with ACRS. Prepare a summary meeting notes.</p> <p>Note: NRC TM will determine what computer code would be used to perform the analysis at the initiation of this task.</p>	<p>One week after authorization of work or receiving the latest AREVA EPR information.</p> <p>Three weeks after initiation of Task 5.a.</p> <p>Three weeks after authorization of work.</p> <p>Four weeks after completion of Task 5.c</p> <p>One week after completion of Task 5.d</p> <p>Per TM direction</p>	<p>Provide a summary sheet documenting the model changes.</p> <p>Provide a complete model update report.</p> <p>Provide a calculation summary sheet documenting the key changes.</p> <p>Provide a complete EPR LBLOCA analysis report.</p> <p>Power Point presentation.</p> <p>ACRS meeting notes.</p>

* These Work Schedules are subject to change by the NRC Contracting Officer (CO), Project Manager (NRC PM) and Technical Monitors to support the needs of the NRC Licensing

specialization to work in the proposed area. The use of particular personnel on this contract is subject to the NRC technical monitor's (TM) and Contracting Officer (CO) approval. This includes any proposed changes to key personnel during the life of the task order.

5.0 REPORTING REQUIREMENTS

Task Order Progress Report

The contractor shall provide a bi-weekly progress report summarizing accomplishments, expenditures, contractor staff hours expended, percent completed for each task under this task order, and any problems encountered by the contractor. The report shall be sent via e-mail to the NRC TM, TAPM and CO. Please refer to Section F of the basic contract award document for contract reporting requirements.

Technical reporting requirements

Unless otherwise specified above, the contractor shall provide all deliverables as draft products. The NRC TM 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 TM, and then deliver the final version of the deliverable. When mutually agreed upon between the contractor and the TM, the contractor may submit preliminary or partial drafts to help gauge the contractor's understanding of the particular work requirement.

The contractor shall provide the following deliverables in hard copy and electronic formats. The electronic format shall be provided in WordPerfect 10.0 or other word processing software approved by the TM. For each deliverable, the contractor shall provide one hard copy and electronic copy to both the TAPM and the TM. The schedule for deliverables shall be contained in the approved project plan for the task order effort.

In all correspondence, include identifying information: **JCN No.: Q-4160; Task Order: 16 the applicant: AREVA.**

7.0 MEETINGS AND TRAVEL

Two three-person, one-day working meeting to kickoff project and contractor orientation at NRC headquarters.

One two-person, 5-day on-site DCD review trip to Lynchberg, VA.

One three-person, two-day meeting with ACRS.

One person 5-day computer analysis using NRC's HP workstation.

Note: At the discretion of the NRC TM, meetings may be conducted via telephone or video conference or changed.

<u>Task(s)</u>	<u>Labor Category</u>	<u>Level of Effort FY-08 (hours)</u>	<u>Level of Effort FY-09(hours)</u>	<u>Level of Effort FY-10(hours)</u>
5.d	Safety Analysts	160		
5.e	Safety Analysts	60		
5.f	Safety Analysts	60		
Task 1-5	Project Manager	200	80	10
Total		2980	920	100

10.0 PERIOD OF PERFORMANCE

The projected period of performance should already be through 7/23/2010.

11.0 EVALUATION CRITERIA

The NRC will award a task order to the offeror whose proposal is determined to offer the best value to the Government, cost and other factors considered. Cost is considered a substantial factor, but is less important than the non-price factors listed below. Cost will not be scored. If there are no other significant technical differences among offerors, cost alone will be the determining factor for source selection.

CRITERIA:

1. Personnel Qualification/Experience (100 points)

Key personnel qualification and experience in the area of RELAP-5 and TRACE code internal numerical schemes; and physical models and regulatory analysis and review experience with SRP Chapter 15 and associated PWR safety systems.

12.0. OTHER APPLICABLE INFORMATION

a. License Fee Recovery

- All work under this task order is fee recoverable and must be charged to the appropriate TAC number(s).

b. Assumptions and Understandings:

- The level of effort is based on the volume of materials to be reviewed; Task 1. is for familiarity and not for evaluation.
- The level of effort for Task 4 is based on the assumption that the contractor is familiar with the review procedures of SRP 15.0-15.4.