AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

BPA NO.	1. CONTRACT ID CODE	PAGE	OF PAGES
		1	10

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
M003	See Block 15c.	NRR-03-038(033)M3	

6. ISSUED BY CODE 3100

U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: Jennifer DeFino, 301-415-6714
Mail Stop T-7-I-2
Washington, DC 20555

7. ADMINISTERED BY (If other than Item 6) CODE 3100

U.S. Nuclear Regulatory Commission
Div. of Contracts
Mail Stop T-7-I-2

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

CODE 107928806 FACILITY CODE

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO. NRC-03-03-038 NRC T033

X 10B. DATED (SEE ITEM 13) 04-17-2007

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) N/A

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) Mutual Agreement of the Parties Level of Effort Increase

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.)

THE PURPOSE OF THIS MODIFICATION IS TO INCREASE THE LEVEL OF EFFORT AND TASK ORDER CEILING WITHIN SCOPE OF THE TASK ORDER. SEE PAGES TWO (2) THROUGH TEN (10) FOR DESCRIPTION OF MODIFICATION.

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)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
Bruce B. Mrowca V.P.		Donald A. King Contracting Officer	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED 2/9/08	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 1/23/08

NSN 7540-01-152-8070
PREVIOUS EDITION NOT USABLE

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

TEMPLATE - ADM001 SUNSI REVIEW COMPLETE APR 14 2008 ADM002

The purpose of this modification is to: (1) revise the statement of work to add Task 5(c); and (2) increase the task order ceiling by $668, thereby increasing the ceiling from $165,636 to $166,304.

Accordingly, the task order is hereby modified as follows:

1. Delete Attachment No. 1 to the task order entitled "Contract No. NRC-03-03-038, Task Order 33, Statement of Work" in its entirety and replace with Attachment No. 1 to this modification entitled, "Contract No. NRC-03-03-038, Task Order 33, Statement of Work (Modification 3)".

2. Paragraph 2 of the definitization letter is hereby deleted in its entirety and replaced with the following:

   Paragraph 2
   "Task Order number 33 shall be in effect from April 17, 2007, through January 31, 2009, with a cost ceiling of $166,304. The amount of $154,037 represents the reimbursable costs, the amount of $12,267 represents the fixed fee."

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

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

Total FY07 Obligations	$165,600.00
Total NRC Obligations	$165,600.00

This modification does not obligate any funds.

ATTACHMENT 1

Contract No. NRC-03-03-038
Task Order 33
Statement of Work (Modification 3)

Title: Review of the Shearon Harris License Renewal Application (LRA) -Scoping and Screening of Balance of Plant (BOP - Auxiliary and Steam and Power Conversion less HVAC and Containment) Systems and Components that are subject to Aging Management Review (AMR)

Technical Monitor: Stan Gardocki, (301) 415-1023, Email: SJG1@nrc.gov

TAC Number: MD3599

BACKGROUND

Pursuant to Section 50.51 of Title 10 of the Code of Federal Regulations (10 CFR 50.51), licenses to operate nuclear power plants are issued by the U.S. Nuclear Regulatory Commission (NRC) for a fixed period of time not to exceed 40 years; however, these licenses may be renewed by the NRC for a fixed period of time including a period not to exceed 20 years beyond expiration of the current operating license. The Commission's regulations in 10 CFR Part 54, (60 FR 22461) published on May 8, 1995, set forth the requirements for the renewal of operating licenses for commercial nuclear power plants (NPPs).

Applicants for license renewal are required by 10 CFR 54 (The License Renewal Rule) to perform an integrated plant assessment (IPA). As specified in 10 CFR 54.4, the applicant must identify the systems, structures, and components (SSCs) that are within the scope of license renewal (scoping). In addition, in accordance with 10 CFR 54.21(a)(1), the applicant must determine which of the SSCs are subject to an aging management review (screening). 10 CFR 54.21 (a)(2) requires the applicant to describe and justify the methods used to meet the requirements of 10 CFR 54.21(a)(1). Further, 10 CFR 54.21(a)(3) requires that, for each structure and component subject to an aging management review, the applicant must demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis (CLB) for the period of extended operation (aging management program or AMP). 10 CFR 54.21(b) requires that each application contain CLB changes, in the form of an amendment, during NRC review of the license renewal application (LRA). 10 CFR 54.21(c) requires the applicant to provide an evaluation of Time-limited Aging Analyses (TLAAs) including a list of TLAAs, as defined in 10 CFR 54.3 (special reviews for equipment which has aging assumptions integral to the design process). Lastly, 10 CFR 54.21(d) requires that each LRA include a FSAR supplement containing a summary description of the intended aging management programs (AMPs) for the period of extended operation.

For the purposes of this task order, the BOP systems include auxiliary systems and steam and power conversion systems less HVAC and containment systems.

OBJECTIVE

The objective of this task order is to obtain technical expertise from Information Systems Laboratories (ISL) to assist the in determining the adequacy of applicant's screening and

scoping of balance of plant (BOP) systems and components as stated within the scope of the license renewal application for the Shearon Harris Nuclear Power Plant, Unit 1 pursuant to 10 CFR 54 requirements.

TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

This effort will require mechanical/systems engineering expertise, of senior-level and staff-level engineers, on an intermittent, part-time basis, with experience in commercial nuclear power reactor operations (specifically BOP systems), NRC License Renewal Regulations, and regulatory issues associated with BOP SSCs commonly found at commercial nuclear reactor plants.

The proposal should identify who will be designated as the project lead/Principal Investigator, and any other key personnel and the role they will play in performing the work.

WORK REQUIREMENTS AND SCHEDULE

Tasks	Scheduled Completion
1. In accordance with the requirements of Section 2.2 of NUREG-1800, perform a plant level scoping review of all the systems and structures listed in the tables of LRA Section 2.2 and determine if any of the systems and structures that perform their intended functions as defined in 10 CFR 54.4 is missing. Prepare a request for additional or clarifying information. Using the screening criteria found in the Brunswick License Renewal Safety Evaluation Report, ADAMS accession number: ML 05355034 dated December, 2005, determine which systems and structures will be reviewed using the "tier-two"process and which will be reviewed using the "tier-one" process[1]. Prepare a technical letter report.	Four weeks after authorization of work.
2. In accordance with the requirements of Section 2.3 of NUREG-1800, perform a detailed review of all BOP systems according to the level of importance specified in the NUREG and identify those aspects of the application that need additional or clarifying information. Identify systems, if any, that need regional inspection support to verify the results of scoping and screening described in the LRA.	

[1] Based on the review findings, the level of effort for Task 2 may need to be modified. Also, the number of systems for Harris might be too few to separate into tiers.

Prepare a technical letter report.	
a. First-half of the review.	Six weeks after authorization of work.
b. Second-half of the review.	Four weeks after completion of Subtask 2.a.
3. On an as required basis, provide technical review and evaluation of additional information associated with clarifying the RAI or intent of the RAI, resolving an RAI or "open items," and addressing an issue raised by upper NRC management or the ACRS. This task includes participation in telephone conference calls as may be required. If applicable, prepare a technical letter report[2].	As mutually agreed upon; each request will be documented in an E-mail by the Technical Monitor.
4. If necessary, prepare for and travel to the plant site or the applicant's offices to discuss and assist in resolving the RAIs or open items. Prepare a trip report.	One week after the trip.
5. Review the applicant's responses to the RAIs and identify those issues that have been resolved along with the basis for resolution and those items for which further information may be needed, but for which resolution may not be readily forthcoming, i.e, the open items remain. Using the shell provided by the NRC, prepare a technical letter report, to include those items addressed in Tasks 3 and 4, above. **Update the technical letter report to include input from all of the BOP systems reviewed under Task 2.**	
a. Draft report.	Four weeks after receipt of the applicant's responses to the RAIs.
b. Incorporate NRC comments and prepare the final report	Two weeks after receipt of NRC comments.
c. Updated Final Report	**Six weeks after the receipt of the applicants response to RAIs**

[2] As mutually agreed upon, if a technical letter report is not required, document the request for assistance, the results provided and the date provided in the "Work Accomplished During the Period" section of the Monthly Business Letter Report.

6. Prepare for and travel to NRC HQ to participate in the ACRS Subcommittee meeting scheduled in 2008; prepare a trip report. — One week after the meeting.

7. Participate in the ACRS full committee meeting meeting scheduled in 2008.

LEVEL OF EFFORT

The estimated level of effort in professional staff hours apportioned among the tasks is as follows:

Tasks	Level of Effort (hours)	
	FY-07	FY-08
1.	80	
2.	400	
3.	70	
4.	30	
5.	0	460
6.	0	32
7.	0	8
Subtotal	580	500
Project management	80	
Program support	160	
Total (1320)	0820	500

PERIOD OF PERFORMANCE

The projected period of performance is date of task order award through January 31, 2009.

DELIVERABLES

Technical Reporting Requirements

TAC Number: MD3599
Job Code: 4048

NOTE: All reports are to be submitted electronically using WordPerfect 10.0 (font: Arial regular 11 point) to the Technical Monitor with a copy provided to the Project Officer. In all correspondence, include identifying information: JCN No., Task No., the applicant, the facility, TAC No., and NRC/NRR Division and Branch.

1. At the completion of Task 1, submit a technical letter report that contains the identified systems and structures that may be missing or mis-categorized and describe the need for the RAIs and the bases for the RAI. The report will also consist of a listing of those systems and structures for which a "tier-one" or a "tier-two" review is recommended, the basis for the recommendation, the review schedule consistent with the milestones established under Task 2 and the assigned reviewer to each system or structure.

2. At the completion of Subtasks 2.a. and 2.b., submit a technical letter report that contains the list of RAIs the basis or bases for the RAIs clearly articulated.

3. For Task 3, at the completion of each request for technical assistance to address an RAI, close an open item or to address a management comment or concern, submit a technical letter report that contains the results of the work performed in the format suitable for incorporation into the safety analysis report, if applicable. If the submission of a technical letter report is not required, a brief summary of the request, results provided and date provided is to be described in the Monthly Business Letter Report.

4. At the completion of Task 4, submit a trip report that contains a summary of major discussion points, decisions and agreements reached, information provided by the applicant, open issues and follow-up actions, responsible party/individual(s) for the action(s), action(s) due date, and a list of attendees.

5. At the completion of Task 5, submit a technical letter report that contains the results of the review and evaluation of the RAI responses, essentially updating the report prepared under Task 2 **(which will address 100% of the required systems).** Within the report, identify those aspects of the application that are still considered as "Open Items" and the basis for why they remain open items.

6. At the completion of Task 6, submit a technical letter report that contains a summary of major discussion points, decisions and agreements reached, information provided by the applicant, open issues and follow-up actions, responsible party/individual(s) for the action(s), and the action(s) due date.

Monthly Business Reporting Requirements

A budget is to be developed for each Task based on the agreed upon allocation of the level of effort among the Tasks. Separate expenditures for each Task will be reported in the MBLR against the budget using the following format:

Authorized Cost Ceiling: $ _____ Funds Obligated to date: $ _____

Tasks	Planned Budget	Expenditures for the Period	Task Expenditures Cumulative	Percentage vs. Budget
1.	$	$	$	%
2.	$	$	$	%
3.	$	$	$	%
4.	$	$	$	%
5.	$	$	$	%
6.	$	$	$	%
7.	$	$	$	%
Proj Mgt.	$	$	$	%
Support	$	$	$	%
Travel	$	$	$	%
Total	$	$	$	%

A monthly expense variance greater than 10 percent must be explained in the "Problem/Resolution" section.

NOTE: Once a variance reaches 15 percent, prior approval is required in writing from the NRC Project Officer, or a Modification is to be processed.

MEETINGS AND TRAVEL

One one-person, five-day trip to the plant site in New Hill, NC

NRC FURNISHED MATERIAL

Compact Disk containing the Shearon Harris LRA

See Enclosure 1 for other sources of information and documents needed.

OTHER APPLICABLE INFORMATION

License Fee Recovery

All work specified in this SOW is license fee recoverable and must be charged to TAC number indicated above.

Assumptions and Understandings

It is assumed that the documents listed **Enclosure 1** or the appropriate reference locations (i.e. NRC web page address) can be accessed directly by the contractor.

It is understood that the review of this LRA will be conducted in such a manner that the majority of SER development will occur during the first six-month period, subject to unavoidable delays in obtaining needed information.

The review goal is to evaluate the LRA in such a way that the documentation that results consists of input to be used in the NRC safety evaluation report and identifies, simultaneously and on a continuing basis as needed, the need for RAIs. That is, where "gaps " exist in the report, there will exist an RAI or, ultimately, an initial open item. Initial open items are to eventually be resolved between the applicant and the NRC staff. See the specific reporting requirements that are defined in the Technical Reporting Requirements section.

The level of effort assumption for Tasks 1, and 3 is based on the average level of effort spent on this type of effort on past LRA reviews.

The level of effort assumption for Task 2 is based on reviewing the LRA, and its supporting documentation including the License Renewal Boundary Drawings and the Updated Final Safety Analysis Report.

The level of effort assumption for Task 4 consists of two days for travel and report writing and three days for the meeting.

The level of effort assumption for Task 5 is based on addressing/resolving approximately 60 RAIs or open items which will take, on the average, five hours each to review, evaluate and prepare the documentation.

ENCLOSURE 1

WEB ADDRESS FOR NRC FURNISHED MATERIAL AVAILABLE ON-LINE

The following NRC furnished materials are available on-line at the web addresses provided below:

1. License Renewal Rule, 10 CFR Part 54, "Requirements for Renewal of Operating Licenses For Nuclear Power Plants," as amended in 1995.

2. Standard Review Plan for License Renewal (SRP-LR) NUREG 1800, Revision 1 dated September 2005.

3. Regulatory Guide 1.188, Revision 1 dated September 2005, "Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses."

4. Nuclear Energy Institute Guidance in NEI- 95-10, "Nuclear Energy Institute (NEI) Guidance Document NEI 95-10, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54--The License Renewal Rule," Revision 6, dated June, 2005.

The quick link to the various references to Title 10 of the Code of Federal Regulations (10 CFR) is shown below:

http://www.nrc.gov/reading-rm/doc-collections/cfr/

The quick link to the various license renewal references and guidance documents is shown below:

http://www.nrc.gov/reactors/operating/licensing/renewal/guidance.html