

**ORDER FOR SUPPLIES OR SERVICES**

PAGE OF PAGES

1 2

**IMPORTANT: Mark all packages and papers with contract and/or order numbers.**

BPA NO.

1. DATE OF ORDER <b>SEP 25 2009</b>		2. CONTRACT NO. (if any) GS23F0060L		6. SHIP TO:		
3. ORDER NO. NRC-DR-04-09-160		MODIFICATION NO.		4. REQUISITION/REFERENCE NO.		
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Sharon M. Lim Mail Stop: TWB-01-B10M Washington, DC 20555				a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission		
				b. STREET ADDRESS		
				c. CITY Washington	d. STATE DC	e. ZIP CODE 20555
7. TO:				f. SHIP VIA		
a. NAME OF CONTRACTOR INFORMATION SYSTEMS LABORATORIES, INC.				8. TYPE OF ORDER		
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE	<input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 11140 ROCKVILLE PK STE 500				REFERENCE YOUR Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		
d. CITY ROCKVILLE				e. STATE MD	f. ZIP CODE 208523116	
9. ACCOUNTING AND APPROPRIATION DATA B7R: 960-15-111-205, Job Code: N6895, BOC: 252A, Appropriation No: 31X0200.960, Obligate: \$26,000.00 DUNS: 150135445 FSS: RES-C09-731				10. REQUISITIONING OFFICE RES		
11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B. POINT Destination		
<input type="checkbox"/> a. SMALL	<input checked="" type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED			
<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	<input type="checkbox"/> f. EMERGING SMALL BUSINESS				
13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS	
a. INSPECTION Destination	b. ACCEPTANCE Destination	N/A	8/24/2010		Net 30	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	RADTRAD Verification and Validation Assessment in accordance with the attached Statement of Work  (SEE PAGE 2 FOR LABOR CATEGORIES, HOURLY RATES AND AMOUNTS)  Period of Performance: 9/25/09 - 8/24/10 Order Obligation: \$26,000.00 Order Ceiling: \$203,977.28					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)  17(i) GRAND TOTAL
	21. MAIL INVOICE TO:						
	a. NAME Department of Interior / NBC NRCPayments@nbc.gov						
	b. STREET ADDRESS (or P.O. Box) Attn: Fiscal Services Branch - D2770 7301 W. Mansfield Avenue						
c. CITY Denver		d. STATE CO	e. ZIP CODE 80235-2230			\$203,977.28	
22. UNITED STATES OF AMERICA BY (Signature) 					23. NAME (Typed) Sharon M. Lim Contracting Officer TITLE: CONTRACTING/ORDERING OFFICER		

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

OCT 02 2009

ADM002

**SCHEDULE OF PRICE/COSTS**

**Effective 9/25/09 – 3/31/10**

<u>Item No.</u>	<u>Description</u>	<u>Estimated Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
001	Senior Scientist Fellow	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
002	Engineering Fellow	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
003	Principal Engineer	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
004	Engineer	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
005	Admin. Specialist 3	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
<b>SUBTOTAL</b>					<b>\$84,852.42</b>

**Effective 4/1/10 – 8/24/10**

<u>Item No.</u>	<u>Description</u>	<u>Estimated Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
006	Senior Scientist Fellow	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
007	Engineering Fellow	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
008	Principal Engineer	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
009	Engineer	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
010	Admin. Specialist 3	[REDACTED]	Hrs.	[REDACTED]	[REDACTED]
<b>SUBTOTAL</b>					<b>[REDACTED] 86</b>
<b>TOTAL</b>					<b>\$203,977.28</b>

**NOTE:** This task order is being incrementally funded. The current obligation for this order is \$26,000.00. This is a not to exceed amount. Any work undertaken by the Contractor in excess of this obligation is done at the Contractor's risk.

*[Handwritten Signature]*  
Signature

9/24/09  
Date

V.P.  
Title

**ADDITIONAL NRC APPLICABLE CLAUSES****1) DELIVERY SCHEDULE**

All reports shall be submitted electronically as a Microsoft Word, WordPerfect, or PDF file to the Project Officer and Contracting Officer. In addition to the Technical Progress Reports, additional deliverables are listed below:

1. Contractor delivers the draft plan of V&V method to NRC  
Completion Date: 1 week after award
2. NRC Staff reviews and provides comments on the GSA draft of V&V method  
Completion Date: 2 weeks after award
3. All testing of features and Analytical Report to support RADTRAD predictions  
Completion Date: 2.5 months after award
4. Contractor delivers V&V comparison draft report and sample inputs  
Completion Date: 3.5 months after award
5. NRC Staff reviews and provides comments on the Contractor Draft Report  
Completion Date: 4.5 months after award
6. Contractor delivers final V&V comparison and sample inputs report to NRC  
Completion Date: 5 months after award
7. Contractor delivers draft documentation of V&V process with recommendations  
Completion Date: 5.5 months after award
8. NRC Staff reviews and provides comments on Contractor draft documentation  
Completion Date: 6.5 months after award
9. Contractor delivers final document of the V&V process with recommendations  
Completion Date: 7 months after award
10. Contractor delivers draft document of How to use RADTRAD Java Version  
Completion Date: 8 months after award
11. NRC Staff reviews and provides comments on How to Use draft  
Completion Date: 9 months after award
12. Contractor delivers final document of How to use RADTRAD Java Version  
Completion Date: 9.5 months after award
13. Contractor train NRC Staff of How to use RADTRAD Java Version  
Completion Date: 10 months after award

**ADDITIONAL NRC APPLICABLE CLAUSES**

14. Contractor delivers draft of Updated NUREG/CR-6604  
Completion Date: 10 months after award

15. NRC Staff reviews and provides comments on Updated NUREG/CR-6604  
Completion Date: 10.5 months after award

16. Contractor delivers final of Updated NUREG/CR-6604  
Completion Date: 11 months after award

**2) PLACE OF DELIVERY--REPORTS (JUN 1988)**

The items to be furnished hereunder shall be delivered, with all charges paid by the Contractor, to:

(a) Project Officer (1 hard & electronic copy)

Gladys Figueroa

Mail Stop: C3 C22  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555-0001

Phone: (301) 251-7545  
Email: [gladys.figueroa@nrc.gov](mailto:gladys.figueroa@nrc.gov)

(b) Contracting Officer (1 copy)

[Sharon.lim@nrc.gov](mailto:Sharon.lim@nrc.gov)

**3) PROJECT OFFICER AUTHORITY (FEB 2004)**

(a) The contracting officer's authorized representative hereinafter referred to as the project officer for this contract is:

Gladys Figueroa

Mail Stop: C3 C22  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555-0001

Phone: (301) 251-7545  
Email: [gladys.figueroa@nrc.gov](mailto:gladys.figueroa@nrc.gov)

**ADDITIONAL NRC APPLICABLE CLAUSES**

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. The term "technical direction" is defined to include the following:

- (1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.
- (2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.
- (3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The project officer does not have the authority to and may not issue any technical direction which:

- (1) Constitutes an assignment of work outside the general scope of the contract.
- (2) Constitutes a change as defined in the "Changes" clause of this contract.
- (3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.
- (4) Changes any of the expressed terms, conditions, or specifications of the contract.
- (5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the project officer or must be confirmed by the project officer in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.

(e) The contractor shall proceed promptly with the performance of technical directions duly issued by the project officer in the manner prescribed by this clause and within the project officer's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the project officer is within one of the categories as defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request the contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

**ADDITIONAL NRC APPLICABLE CLAUSES**

(g) Any unauthorized commitment or direction issued by the project officer may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the contract.

(h) A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto is subject to 52.233-1 Disputes.

(i) In addition to providing technical direction as defined in paragraph (b) of the section, the project officer shall:

(1) Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the contracting officer changes in requirements.

(2) Assist the contractor in the resolution of technical problems encountered during performance.

(3) Review all costs requested for reimbursement by the contractor and submit to the contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(4) Assist the contractor in obtaining the badges for the contractor personnel.

(5) Immediately notify the Security Branch, Division of Facilities and Security (SB/DFS) (via email) when a contractor employee no longer requires access authorization and return of any NRC issued badge to SB/DFS within three days after their termination."

(6) Ensure that all contractor employees that require access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (Safeguards, Official Use Only, and Proprietary information) access to sensitive IT systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants receive approval of SB/DFS prior to access in accordance with Management Directive and Handbook 12.3.

**4) 2052.211-71 TECHNICAL PROGRESS REPORT (JAN 1993)**

The contractor shall provide a monthly Technical Progress Report to the following:

(1) [RESDSAMLSR.Resource@nrc.gov](mailto:RESDSAMLSR.Resource@nrc.gov)

(2) Contracting Officer: [Sharon.lim@nrc.gov](mailto:Sharon.lim@nrc.gov)

The report is due within 15 calendar days after the end of the report period and must identify the title of the project, the contract number, appropriate financial tracking code specified by the NRC

**ADDITIONAL NRC APPLICABLE CLAUSES**

Project Officer, project manager and/or principal investigator, the contract period of performance, and the period covered by the report. Each report must include the following for each discrete task/task order:

- (a) A listing of the efforts completed during the period, and milestones reached or, if missed, an explanation provided;
- (b) Any problems or delays encountered or anticipated and recommendations for resolution. If the recommended resolution involves a contract modification, e.g., change in work requirements, level of effort (cost) or schedule delay, the contractor shall submit a separate letter to the contracting officer identifying the required change and estimated cost impact.
- (c) A summary of progress to date; and
- (d) Plans for the next reporting period.

**5) 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST (JAN 1993)**

- (a) Purpose. The primary purpose of this clause is to aid in ensuring that the contractor:
  - (1) Is not placed in a conflicting role because of current or planned interests (financial, contractual, organizational, or otherwise) which relate to the work under this contract; and
  - (2) Does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.
- (b) Scope. The restrictions described apply to performance or participation by the contractor, as defined in 48 CFR 2009.570-2 in the activities covered by this clause.
- (c) Work for others.
  - (1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.
  - (2) The contractor may not represent, assist, or otherwise support an NRC licensee or applicant undergoing an NRC audit, inspection, or review where the activities that are the subject of the audit, inspection, or review are the same as or substantially similar to the services within the scope of this contract (or task order as appropriate) except where the NRC licensee

**ADDITIONAL NRC APPLICABLE CLAUSES**

or applicant requires the contractor's support to explain or defend the contractor's prior work for the utility or other entity which NRC questions.

(3) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site, the contractor shall neither solicit nor perform work in the same or similar technical area for that licensee or applicant organization for a period commencing with the award of the task order or beginning of work on the site (if not a task order contract) and ending one year after completion of all work under the associated task order, or last time at the site (if not a task order contract).

(4) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site,

(i) The contractor may not solicit work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate.

(ii) The contractor may not perform work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate, and for one year thereafter.

(iii) Notwithstanding the foregoing, the contracting officer may authorize the contractor to solicit or perform this type of work (except work in the same or similar technical area) if the contracting officer determines that the situation will not pose a potential for technical bias or unfair competitive advantage.

(d) Disclosure after award.

(1) The contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in this contract, that it does not have any organizational conflicts of interest as defined in 48 CFR 2009.570-2.

(2) The contractor agrees that if, after award, it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement must include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract if termination is in the best interest of the Government.

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants which comes within the scope of work of the underlying contract. Further, if this contract involves work at a licensee or applicant site, the contractor agrees to exercise diligence to discover and disclose any new work at that licensee or applicant site. This disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity and must be received by the NRC at least 15 days before the proposed award date in any event, unless a written justification demonstrating urgency and due diligence to discover and disclose is provided by the contractor and approved by the contracting officer. The disclosure must include the statement of work, the dollar value of the proposed contract, and any other

**ADDITIONAL NRC APPLICABLE CLAUSES**

documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when the work violates paragraphs (c)(2), (c)(3) or (c)(4) of this section.

(e) Access to and use of information.

(1) If in the performance of this contract, the contractor obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), the contractor agrees not to:

(i) Use this information for any private purpose until the information has been released to the public;

(ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;

(iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or

(iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

(2) In addition, the contractor agrees that, to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat the information in accordance with restrictions placed on use of the information.

(3) Subject to patent and security provisions of this contract, the contractor shall have the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.

(f) Subcontracts. Except as provided in 48 CFR 2009.570-2, the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms contract, contractor, and contracting officer, must be appropriately modified to preserve the Government's rights.

(g) Remedies. For breach of any of the above restrictions, or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations that necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies permitted by law or this contract.

(h) Waiver. A request for waiver under this clause must be directed in writing to the contracting officer in accordance with the procedures outlined in 48 CFR 2009.570-9.

**ADDITIONAL NRC APPLICABLE CLAUSES**

(i) Follow-on effort. The contractor shall be ineligible to participate in NRC contracts, subcontracts, or proposals therefore (solicited or unsolicited), which stem directly from the contractor's performance of work under this contract. Furthermore, unless so directed in writing by the contracting officer, the contractor may not perform any technical consulting or management support services work or evaluation activities under this contract on any of its products or services or the products or services of another firm if the contractor has been substantially involved in the development or marketing of the products or services.

(1) If the contractor, under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

(2) Nothing in this paragraph precludes the contractor from offering or selling its standard commercial items to the Government.

**6) 2052.215-70 KEY PERSONNEL (JAN 1993)**

(a) The following individuals are considered to be essential to the successful performance of the work hereunder:



The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the

**ADDITIONAL NRC APPLICABLE CLAUSES**

contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

**7) DISSEMINATION OF INFORMATION**

There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval from the Contracting Officer.

**8) RELEASE OF REPORTS**

The Contractor is prohibited from releasing to any source, other than the sponsoring activity, any interim, draft and final reports or information pertaining to services performed under this contract until report approval or official review has been obtained. Furthermore, the contractor shall insure that the cover of all interim, draft and final reports contain the following statement: "The view, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Government position, policy or decision, unless so designated by other documentation."

**9) RELEASE OF NEWS INFORMATION**

No news release (including photographs and films, public announcements, denial or confirmation of same) on any part of the subject matter of this contract or any phase of any program hereunder shall be made without the prior written approval of the Contracting Officer.

**10) GOVERNMENT FURNISHED EQUIPMENT/PROPERTY (JANUARY 2001)**

None

**11) APPROPRIATE USE OF GOVERNMENT FURNISHED INFORMATION TECHNOLOGY (IT) EQUIPMENT AND/ OR IT SERVICES/ ACCESS (APRIL 2003)**

As part of contract performance the NRC may provide the contractor with information technology (IT) equipment and IT services or IT access as identified in the statement of work or subsequently as identified in the project. Government furnished IT equipment, or IT services, or IT access may include but is not limited to computers, copiers, facsimile machines, printers, pagers, software, phones, Internet access and use, and email access and use. The contractor (including the contractor's employees, consultants and subcontractors) shall use the NRC furnished IT equipment, and/or IT provided services, and/or IT access solely to perform the necessary efforts required under the contract. The contractor (including the contractor's

### ADDITIONAL NRC APPLICABLE CLAUSES

employees, consultants and subcontractors) are prohibited from engaging or using the NRC IT equipment and government provided IT services or IT access for any personal use, misuse, abuses or any other unauthorized usage.

The contractor is responsible for monitoring its employees, consultants and subcontractors to ensure that NRC furnished IT equipment and/or IT services, and/or IT access are not being used for personal use, misused or abused. The NRC reserves the right to withdraw or suspend the use of its government furnished IT equipment, IT services and/ or IT access arising from contractor personal usage, or misuse or abuse; and/or to disallow any payments associated with contractor (including the contractor's employees, consultants and subcontractors) personal usage, misuses or abuses of IT equipment, IT services and/or IT access; and/or to terminate the project arising from violation of this provision.

#### 12) COMPLIANCE WITH U.S. IMMIGRATION LAWS AND REGULATIONS

NRC contractors are responsible to ensure that their alien personnel are not in violation of United States Immigration and Naturalization (INS) laws and regulations, including employment authorization documents and visa requirements. Each alien employee of the Contractor must be lawfully admitted for permanent residence as evidenced by Alien Registration Receipt Card Form 1-151 or must present other evidence from the Immigration and Naturalization Services that employment will not affect his/her immigration status. The INS Office of Business Liaison (OBL) provides information to contractors to help them understand the employment eligibility verification process for non-US citizens. This information can be found on the INS website, <http://www.ins.usdoj.gov/graphics/services/employerinfo/index.htm#obl>.

#### 13) OPTION PERIODS - TASK ORDER/DELIVERY ORDER UNDER A GSA FEDERAL SUPPLY SCHEDULE CONTRACT (MARCH 2007)

The Period of Performance (PoP) for this requirement may extend beyond the Offeror's current PoP on their GSA Schedule. Offerors may submit proposals for the entire PoP as long as their current GSA Schedule covers the requested PoP, or their GSA Schedule contains GSA's "Evergreen Clause" (Option to Extend the Term of the Contract), which covers the requested PoP if/when the option(s) are exercised. Offerors are encouraged to submit accurate/realistic pricing for the requirement's entire PoP, even if the proposed GSA Schedule does not include pricing for the applicable option years, etc.

For proposal evaluation purposes, the NRC assumes that applicable Evergreen Clause Option(s) will be exercised and the NRC will apply price analysis, as applicable. It is in the best interest of the Offeror to explain major deviations in escalation, proposed in any Evergreen Clause option years. Resulting GSA task/delivery order option years subject to the Evergreen

Clause will be initially priced utilizing the same rates proposed under the last GSA-priced year of the subject GSA Schedule. Upon GSA's exercise of the GSA Schedule option year(s) applicable to the Evergreen Clause, the NRC will modify the awarded task/delivery order to

**ADDITIONAL NRC APPLICABLE CLAUSES**

incorporate either the proposed pricing for the option years or the GSA-approved pricing (whichever is lower).

It is incumbent upon the Offeror to provide sufficient documentation (GSA-signed schedule, schedule modifications, etc.) that shows both the effective dates, pricing and terms/conditions of the current GSA Schedule, as well as Evergreen Clause terms/conditions (as applicable). Failure to provide this documentation may result in the Offeror's proposal being found unacceptable.

**14) 2052.211-70 PREPARATION OF TECHNICAL REPORTS (JAN 1993)**

The final report is to be prepared in accordance with NRC Management Directive 3.7, "NUREG Series Publications." Management Directive 3.7 is not applicable to any Contractor Spending Plan (CSP) and any Financial Status Report that may be included in this contract. Management Directive 3.7 may be accessed electronically at the following address:  
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/>

**15) FEDERAL ACQUISITION REGULATION CLAUSES INCORPORATED BY REFERENCE:**

52.227-17 RIGHTS IN DATA – SPECIAL WORKS (DEC 2007)  
52.245-1 GOVERNMENT PROPERTY (JUN 2007)  
52.243-3 CHANGES – TIME-AND-MATERIALS OR LABOR-HOURS (SEP 2000)

**16) NUCLEAR REGULATORY COMMISSION ACQUISITION REGULATION CLAUSES INCORPORATED BY REFERENCE:**

48 CFR Chapter 20 Subpart 2009.5; Organizational Conflicts of Interest

**17) RATE ESCALATION**

It is the Contractor's intent to request an increase in their contract prices under GSA Contract No. GS-23F-0060L via the exercise of Clause 552.216-70 (GSA-Schedule Economic Price Adjustment) of their GSA Contract, to be effective on April 1, 2010. The purpose of this economic price adjustment is to incorporate the Contractor's annual salary increase of 3% into their GSA contract. If the proposed salary increase is obtained from GSA, the increase shall be effective within the task order upon the effective date of the GSA contract price increase. The price increase and accompanying ceiling increase for this task order shall be equivalent to the GSA price increase or 3%, whichever is less. This clause shall be applicable to Items Nos. 007 and 010 of this task order.

**ADDITIONAL NRC APPLICABLE CLAUSES****18) SEAT BELTS**

Contractors, subcontractors, and grantees, are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.

**19) WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES (JULY 2006)**

(a) The U.S. Nuclear Regulatory Commission (NRC) contractor and its subcontractor are subject to the Whistleblower Employee Protection public law provisions as codified at 42 U.S.C. 5851. NRC contractor(s) and subcontractor(s) shall comply with the requirements of this Whistleblower Employee Protection law, and the implementing regulations of the NRC and the Department of Labor (DOL). See, for example, DOL Procedures on Handling Complaints at 29 C.F.R. Part 24 concerning the employer obligations, prohibited acts, DOL procedures and the requirement for prominent posting of notice of Employee Rights at Appendix A to Part 24.

(b) Under this Whistleblower Employee Protection law, as implemented by regulations, NRC contractor and subcontractor employees are protected from discharge, reprisal, threats, intimidation, coercion, blacklisting or other employment discrimination practices with respect to compensation, terms, conditions or privileges of their employment because the contractor or subcontractor employee(s) has provided notice to the employer, refused to engage in unlawful practices, assisted in proceedings or testified on activities concerning alleged violations of the Atomic Energy Act of 1954 (as amended) and the Energy Reorganization Act of 1974 (as amended).

(c) The contractor shall insert this or the substance of this clause in any subcontracts involving work performed under this contract.

## STATEMENT OF WORK

TITLE: RADTRAD VERIFICATION AND VALIDATION ASSESSMENT

I. BACKGROUND

RADionuclide Transport and Removal And Dose Estimation (RADTRAD) code models the accident dose consequences resulting from the release and transport of fission products. This code was developed to model the accident alternative source terms (AST) described in NUREG-1465, "Accident Source Terms for Light-Water Nuclear Power Plants." Further guidance for implementing an AST is provided in Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," dated July 2000.

II. OBJECTIVE

The purpose of this contract is to develop a Verification and Validation (V&V) method to confirm the functionality of NRC's new RADTRAD Java-based code.

III. SCOPE OF WORK**A. Develop a V&V method**

The contractor shall establish criteria for the V&V process and shall define the range of applicability of fission product transport and deposition models, primarily for various forms of iodine. The contractor shall recommend the best available models and values of important parameters for various accident scenarios. The contractor shall update, for NRC's new RADTRAD Java-based version, Acceptance Test Cases in NUREG/CR-6604 used for V&V of Fortran-based RADTRAD version. The contractor shall use Fortran-based RADTRAD version as a guide and contractor shall coordinate with the Project Manager (PM) on models.

**B. Testing of new RADTRAD Features by contractor and Review of V&V status**

The contractor shall test all features of the new Java-based version RADTRAD code. Features of the code include but are not limited to aerosols and depositions. This task includes formulating and executing sample input problems that test all of the new Java-based version RADTRAD code's features, capabilities and limitations and documenting the results. In addition, this task includes executing the new Java-based version V&V analytical method and comparing the results of the V&V method with the new Java-based version RADTRAD code results. V&V status shall be reviewed by the NRC and a report establishing, documenting, and comparing the detailed analytical calculations to the new Java-based version RADTRAD predictions is required. If discrepancies are

found between the new Java-based version RADTRAD results and the V&V method results, the contractor shall work with the PM to eliminate the discrepancies.

**C. V&V Comparisons and Library of Sample Input**

The contractor shall report a list of the V&V comparisons. In addition, the contractor shall establish a library of sample input in a letter report to RES.

**D. Report Results, Recommend Options and Document RADTRAD Java-based version**

The contractor shall report and document the V&V process including a description of models applicability, limitations and recommended options. In addition, the contractor shall prepare a document describing how to use the RADTRAD Java-based version. This task includes training NRC staff on how to run the V&V method. The contractor shall update code's manual NUREG/CR-6604 for RADTRAD Java-based version using NUREG/CR-6604, Fortran-based RADTRAD, as a guide. Updated NUREG/CR-6604 for RADTRAD Java-based version shall include analytical calculation documentation to support the new RADTRAD Java-based version predictions.

**IV. RESEARCH QUALITY**

The quality of NRC research programs are assessed each year by the Advisory Committee on Reactor Safeguards. Within the context of their reviews of RES programs, the definition of quality research is based upon several major characteristics:

Results meet the objectives (75% of overall score)  
Justification of major assumptions (12%)  
Soundness of technical approach and results (52%)  
Uncertainties and sensitivities addressed (11%)

Documentation of research results and methods is adequate (25% of overall score)  
Clarity of presentation (16%)  
Identification of major assumptions (9%)

It is the responsibility of the contractor to ensure that these quality criteria are adequately addressed throughout the course of the research that is performed. The NRC project manager and technical monitor shall review all research products with these criteria in mind.

**V. TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED**

Proposed personnel should have an engineering background, preferably at least an undergraduate degree in chemical, nuclear or civil engineering. Proposed personnel must have some demonstrated (reference-able) experience in technical writing as well as experience with computer code documentation and scientific computer code validation methodologies.

In addition to the education requirement stated above, proposed personnel should possess the following skills/knowledge/experience:

- experience with tasks similar to those described in this statement of work;
- training and education related to engineering code models;
- experience related to radiation dose and radionuclides;
- experience in writing NUREG Manuals;
- experience in writing "How to Use" manuals;
- experience in training people.

#### VI. PUBLICATIONS NOTE

RES encourages the publication of the scientific results from RES sponsored programs in refereed scientific and engineering journals as appropriate. If the laboratory proposes to publish in the open literature or present the information at meeting in addition to submitting the required technical reports, approval of the proposed article or presentation should be obtained from the NRC Project Manager. The RES Project Manager shall either approve the material as submitted, approve it subject to NRC suggested revisions, or disapprove it. In any event, the RES Project Manager may disapprove or delay presentation or publication of papers on information that is subject to Commission approval that has not been ruled upon or which has been disapproved. Additional information regarding the publication of NRC sponsored research is contained in NRC Management Directives 3.7, "NUREG Series Publications," and 3.9, "NRC Staff and Contractor Speeches, Papers, and Journal Articles on Regulatory and Technical Subjects."

If the presentation or paper is in addition to the required technical reports and the RES Project Manager determines that it shall benefit the RES project, the Project Manager may authorize payment of travel and publishing costs, if any, from the project funds. If the Project Manager determines that the article or presentation would not benefit the RES project, the costs associated with the preparation, presentation, or publication shall be borne by the contractor. For any publication or presentations falling into this category, the NRC reserves the right to require that such presentation or publication shall not identify the NRC's sponsorship of the work.

#### VII. NEW STANDARDS FOR CONTRACTORS WHO PREPARE NUREG-SERIES MANUSCRIPTS

The U.S. Nuclear Regulatory Commission (NRC) began to capture most of its official records electronically on January 1, 2000. The NRC shall capture each final NUREG-series publication in its native application. Therefore, please submit your final manuscript that has been approved by your NRC Project Manager in both electronic and camera-ready copy.

All format guidance, as specified in NUREG-0650, Revision 2, shall remain the same with one exception. You shall no longer be required to include the NUREG-series designator on the bottom of each page of the manuscript. The NRC shall assign this designator when we send the

camera-ready copy to the printer and shall place the designator on the cover, title page, and spine. The designator for each report shall no longer be assigned when the decision to prepare a publication is made. The NRC's Publishing Services Branch shall inform the NRC Project Manager for the publication of the assigned designator when the final manuscript is sent to the printer.

For the electronic manuscript, the Contractor shall prepare the text in Microsoft Word, and use any of the following file types for charts, spreadsheets, and the like.

File Types to be Used for NUREG-Series Publications	
File Type	File Extension
Microsoft®Word®	.doc
Microsoft® PowerPoint®	.ppt
Microsoft®Excel	.xls
Microsoft®Access	.mdb
Portable Document Format	.pdf

This list is subject to change if new software packages come into common use at NRC or by our licensees or other stakeholders that participate in the electronic submission process. If a portion of your manuscript is from another source and you cannot obtain an acceptable electronic file type for this portion (e.g., an appendix from an old publication), the NRC can, if necessary, create a tagged image file format (file extension.tif) for that portion of your report. Note that you should continue to submit original photographs, which shall be scanned, since digitized photographs do not print well.

If you choose to publish a compact disk (CD) of your publication, place on the CD copies of the manuscript in both (1) a portable document format (PDF); (2) a Microsoft Word file format, and (3) an Adobe Acrobat Reader, or, alternatively, print instructions for obtaining a free copy of Adobe Acrobat Reader on the back cover insert of the jewel box.

#### VIII. MEETINGS AND TRAVEL

At least one contractor representative will be required to attend four project meetings in person at NRC facilities in Rockville, MD. The following meetings will require in person attendance for the contractor and the contractor should be available to support this meeting in person.

- Kick off meeting
- Review Meeting
- Status/Progress Meeting
- Final Delivery Meeting

**BILLING INSTRUCTIONS FOR  
LABOR HOUR/TIME AND MATERIALS TYPE CONTRACTS (JUNE 2008)**

**General:** During performance and through final payment of this contract, the contractor is responsible for the accuracy and completeness of data within the Central Contractor Registration (CCR) database and for any liability resulting from the Government's reliance on inaccurate or incomplete CCR data.

The contractor shall prepare vouchers/invoices as prescribed herein. FAILURE TO SUBMIT VOUCHERS/INVOICES IN ACCORDANCE WITH THESE INSTRUCTIONS WILL RESULT IN REJECTION OF THE VOUCHER/INVOICE AS IMPROPER.

**Form:** Claims shall be submitted on the payee's letterhead, voucher/invoice, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal--Continuation Sheet."

**Number of Copies:** A signed original shall be submitted. If the voucher/invoice includes the purchase of any property with an initial acquisition cost of \$50,000 or more, a copy of the signed original is also required.

**Designated Agency Billing Office:** The preferred method of submitting vouchers/invoices is electronically to the Department of the Interior at [NRCPayments@nbc.gov](mailto:NRCPayments@nbc.gov)

If the voucher/invoice includes the purchase of any property with an initial acquisition cost of \$50,000 or more, a copy of the signed original shall be electronically sent to: [Property@nrc.gov](mailto:Property@nrc.gov)

However, if you submit a hard-copy of the voucher/invoice, it shall be submitted to the following address:

Department of the Interior  
National Business Center  
Attn: Fiscal Services Branch - D2770  
7301 West Mansfield Avenue  
Denver, CO 80235-2230

If you submit a hard-copy of the voucher/invoice and it includes the purchase of any property with an initial acquisition cost of \$50,000 or more, a copy of the signed original shall be mailed to the following address:

U.S. Nuclear Regulatory Commission  
NRC Property Management Officer  
Mail Stop: O-4D15  
Washington, DC 20555-0001

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED

**Agency Payment Office:** Payment will continue to be made by the office designated in the contract in Block 12 of Standard Form 26, Block 25 of Standard Form 33, or Block 18a. of Standard Form 1449, whichever is applicable.

**BILLING INSTRUCTIONS FOR  
LABOR HOUR/TIME AND MATERIALS TYPE CONTRACTS (JUNE 2008)**

**Frequency:** The contractor shall submit claims for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

**Format:** Claims shall be submitted in the format depicted on the attached sample form entitled "Voucher/Invoice for Purchases and Services Other than Personal" (see Attachment 1). The sample format is provided for guidance only. The format is not required for submission of a voucher/invoice. Alternate formats are permissible provided all requirements of the billing instructions are addressed.

**Billing of Cost after Expiration of Contract:** If costs are incurred during the contract period and claimed after the contract has expired, you must cite the period during which these costs were incurred. To be considered a proper expiration voucher/invoice, the contractor shall clearly mark it "EXPIRATION VOUCHER" or "EXPIRATION INVOICE".

Final vouchers/invoices shall be marked "FINAL VOUCHER" or "FINAL INVOICE".

**Currency:** Billings may be expressed in the currency normally used by the contractor in maintaining his accounting records and payments will be made in that currency. However, the U.S. dollar equivalent for all vouchers/invoices paid under the contract may not exceed the total U.S. dollars authorized in the contract.

**Supersession:** These instructions supersede any previous billing instructions.

R:\txtselden\billing instructions LH or TM revised 2008

**BILLING INSTRUCTIONS FOR  
LABOR HOUR/TIME AND MATERIALS TYPE CONTRACTS (JUNE 2008)**

**INVOICE/VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL  
(SAMPLE FORMAT - COVER SHEET)**

**1. Official Agency Billing Office**

Department of the Interior  
National Business Center  
Attn: Fiscal Services Branch - D2770  
7301 West Mansfield Avenue  
Denver, CO 80235-2230

**2. Voucher Information**

a. Payee's DUNS Number or DUNS+4. The Payee shall include the Payee's Data Universal Number (DUNS) or DUNS+4 number that identifies the Payee's name and address. The DUNS+4 number is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the Payee to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.

b. Payee's Name and Address. Show the name of the Payee as it appears in the contract and its correct address. If the Payee assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the Central Contractor Registration (CCR) database at <http://www.ccr.gov> and shall be paid by EFT in accordance with the terms of this contract. See Federal Acquisition Regulation 52.232-33(g) Payment by Electronic Funds Transfer - Central Contractor Registration (October 2003).

c. Contract Number. Insert the NRC contract number.

d. Voucher/Invoice. The appropriate sequential number of the voucher/invoice, beginning with 001 should be designated. Contractors may also include an individual internal accounting number, if desired, in addition to the 3-digit sequential number.

e. Date of Voucher/Invoice. Insert the date the voucher/invoice is prepared.

f. Billing period. Insert the beginning and ending dates (day, month, and year) of the period during which costs were incurred and for which reimbursement is claimed.

**g. Required Attachments (Supporting Documentation).** Direct Costs. The contractor shall submit as an attachment to its invoice/voucher cover sheet a listing of labor categories, hours billed, fixed hourly rates, total dollars, and cumulative hours billed to date under each labor category authorized under the contract/purchase order for each of the activities to be performed under the contract/purchase order. The contractor shall include incurred costs for: (1) travel, (2) materials, including non-capitalized equipment and supplies, (3) capitalized nonexpendable equipment, (4) materials handling fee, (5) consultants (supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval), and (6) subcontracts (include separate detailed breakdown of all costs paid to approved subcontractors during the billing period) with the required supporting documentation, as well as the cumulative total of each cost, billed to date by activity.

**BILLING INSTRUCTIONS FOR  
LABOR HOUR/TIME AND MATERIALS TYPE CONTRACTS (JUNE 2008)**

**3. Definitions**

- a. Non-capitalized Equipment, Materials, and Supplies. These are equipment other than that described in number (4) below, plus consumable materials, supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.
- b. Capitalized Non Expendable Equipment. List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) the item number for the specific piece of equipment listed in the property schedule of the contract; or (b) the Contracting Officer's approval letter if the equipment is not covered by the property schedule.
- c. Material handling costs. When included as part of material costs, material handling costs shall include only costs clearly excluded from the labor-hour rate. Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the contractor's usual accounting procedures.

---

**Sample Voucher Information (Supporting Documentation must be attached)**

This voucher/invoice represents reimbursable costs for the billing period from \_\_\_\_\_ through \_\_\_\_\_.

		<u>Amount Billed</u>	
		<u>Current Period</u>	<u>Cumulative</u>
(f)	<u>Direct Costs:</u>		
	(1) Direct Labor	\$ _____	\$ _____
	(2) Travel	\$ _____	\$ _____
	(3) Materials	\$ _____	\$ _____
	(4) Equipment	\$ _____	\$ _____
	(5) Materials Handling Fee	\$ _____	\$ _____
	(6) Consultants	\$ _____	\$ _____
	(7) Subcontracts	\$ _____	\$ _____
	<b>Total Direct Costs:</b>	\$ _____	\$ _____