

ORDER FOR SUPPLIES OR SERVICES						PAGE OF PAGES	
IMPORTANT: Mark all packages and papers with contract and/or order numbers.						1	28
1. DATE OF ORDER 09/08/2015		2. CONTRACT NO. (If any) NRC-HQ-12-C-02-0089		6. SHIP TO:			
3. ORDER NO. NRC-HQ-50-15-T-0001		4. REQUISITION/REFERENCE NO. NMSS-15-0170		a. NAME OF CONSIGNEE US NUCLEAR REGULATORY COMMISSION-			
5. ISSUING OFFICE (Address correspondence to) US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP 3WFN-05-C64MP ATTN ROB ROBINSON 301-415-0728 WASHINGTON DC 20555-0001				b. STREET ADDRESS MAIL PROCESSING CENTER 4930 BOILING BROOK PARKWAY			
				c. CITY ROCKVILLE	d. STATE MD	e. ZIP CODE 20852	
7. TO: LAURA KLUS				f. SHIP VIA			
a. NAME OF CONTRACTOR SOUTHWEST RESEARCH INSTITUTE				8. TYPE OF ORDER			
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE 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.		<input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
c. STREET ADDRESS 6220 CULEBRA RD							
d. CITY SAN ANTONIO		e. STATE TX	f. ZIP CODE 782385166				
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OFFICE OF NUCLEAR MATERIAL			
11. BUSINESS CLASSIFICATION (Check appropriate box(es))						12. F.O.B. POINT	
<input type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB							
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 03/28/2018		16. DISCOUNT TERMS	
a. INSPECTION Destination		b. ACCEPTANCE Destination					
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)	
	Contract Number NRC-HQ-12-C-02-0089 Task Order NRC-HQ-50-15-T-0001/Task Order 15 The Contractor shall provide services in accordance with the Statement of Work entitled, "Support for Development of the Continued ...						
SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME		US NUCLEAR REGULATORY COMMISSION				\$0.00
	b. STREET ADDRESS (or P.O. Box)		ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE MAILSTOP 03-E17A				
c. CITY		d. STATE	e. ZIP CODE				
	ROCKVILLE	MD	20852-2738		\$700,000.00	17(i) GRAND TOTAL	
22. UNITED STATES OF AMERICA BY (Signature)		09/08/2015		23. NAME (Typed) SHARLENE M. MCCUBBIN TITLE: CONTRACTING/ORDERING OFFICER			

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PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (Rev. 2/2012)
Prescribed by GSA/FAR 48 CFR 53.213(f)

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

JUN - 7 2016

ADM002

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO

2

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

DATE OF ORDER

CONTRACT NO.

09/08/2015

NRC-HQ-12-C-02-0089

ORDER NO.

NRC-HQ-50-15-T-0001

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>Managing Aging Processes in Storage (MAPS) Report."</p> <p>Task Order Ceiling Amount: \$700,000.00 Task Order Obligation Amount: \$275,000.00 Period of Performance: Date of Award - 3/28/2018</p> <p>Signature Executive Director, Contracts Accounting Info: 2015-X0200-FEEBASED-50-50D007-33-7-183-1047-251A</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

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Prescribed by GSA FAR (48 CFR) 53.213(f)

SCHEDULE - CONTINUATION

2

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

DATE OF ORDER	CONTRACT NO.	ORDER NO.
09/02/2015	NRC-HQ-12-C-02-0089	NRC-HQ-50-15-T-0001

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>Managing Aging Processes in Storage (MAPS) Report."</p> <p>Task Order Ceiling Amount: \$700,000.00 Task Order Obligation Amount: \$275,000.00 Period of Performance: Date of Award - 3/28/2018</p> <p> R.B. Kalmbach, 09/03/2015</p> <p>Signature Executive Director, Contracts Accounting Info: 2015-X0200-FEEBASED-50-50D007-33-7-183-1047-251A</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

SECTION B - Supplies or Services/Prices

NRCB010 BRIEF PROJECT TITLE AND WORK DESCRIPTION

(a) The title of this project is:

Support for the Development of the Managing Aging Processes Storage (MAPS) Report

(b) Summary work description:

The objective of this task order is to obtain technical and editorial support for the development of the Managing Aging Processes in Storage (MAPS) Report. The MAPS Report will provide additional guidance to the NRC staff in reviewing license renewal applications for dry storage of spent nuclear fuel and will serve as the dry storage equivalent to NUREG-1801, "Generic Aging Lessons Learned (GALL) Report." The GALL Report has been a well-established part of the regulatory framework for reactor license renewal for over 10 years. Similar to the GALL Report, the MAPS Report will provide a generic evaluation of licensee's dry cask storage systems to identify aging effects requiring management and acceptable AMPs and TLAA's to address those aging effects.

(End of Clause)

NRCB070 CONSIDERATION AND OBLIGATION-COST-PLUS-AWARD-FEE

(a) The total estimated cost to the Government for full performance of this contract is \$700,000.00, of which the sum of \$636,976.00 represents the estimated reimbursable costs, and of which \$25,209.60 represents the base fee.

(b) An award fee pool of \$37,814.40 is hereby established for this contract. Evaluation of award fee earned will be accomplished in accordance with the attached Award Fee Plan (AFP). The Government reserves the right to unilaterally change the content of the AFP at any time during the life of this contract. Any changes to the plan will be furnished to the Contractor prior to the date they become effective. The amount of award fee available for each period of evaluation and the amount of time for each period will be set forth in the AFP. The final evaluation and determination as to the amount of award fee earned during an evaluation period shall be made unilaterally by the Fee Determination Official (FDO). The Contractor shall be advised of the award fee decision by letter which shall include the rationale for reaching the decision.

(c) The amount obligated by the Government with respect to this contract is \$275,000.00.

(d) This is a fully-funded contract and FAR 52.232-20 – "Limitation of Cost" applies.

(End of Clause)

SECTION C - Description/Specifications

Statement of Work

1. PROJECT TITLE

Support for the Development of the Managing Aging Processes in Storage Report

2. BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) licenses dry storage of spent nuclear fuel under the provisions of Title 10 of the Code of Federal Regulations (10 CFR), Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste." According to 10 CFR 72.42, the initial licensing term may be up to 40 years, after which the license may be renewed for periods up to 40 years. The requirements for license renewal include submitting to the NRC time-limited aging analyses (TLAAs) to demonstrate that structures, systems, and components (SSCs) important to safety will continue to perform their intended function during the period of extended operation and a description of aging management programs (AMPs) to address material degradation issues that could affect the SSCs. Staff guidance for the review of TLAAs and AMPs is found in NUREG-1927, "Standard Review Plan for Renewal of Spent Fuel Dry Cask Storage System Licenses and Certificates of Compliance."

Staff in the NRC Office of Nuclear Materials Safety and Safeguards (NMSS) is currently reviewing a number of dry cask storage system (DCSS) license renewal applications, with several more expected over the next few years. The NMSS staff has recognized the need for additional staff guidance to enhance the effectiveness and efficiency of the review process. Specifically, multiple rounds of requests for additional information and a significant amount of staff time have been needed to identify relevant aging-related degradation issues and to determine the appropriate TLAAs and AMPs to address those issues.

3. SCOPE OF WORK

The objective of this task order is to obtain technical and editorial support for the development of the Managing Aging Processes in Storage (MAPS) Report. The MAPS Report will provide additional guidance to the NRC staff in reviewing license renewal applications for dry storage of spent nuclear fuel and will serve as the dry storage equivalent to NUREG-1801, "Generic Aging Lessons Learned (GALL) Report." The GALL Report has been a well-established part of the regulatory framework for reactor license renewal for over 10 years. Similar to the GALL Report, the MAPS Report will provide a generic evaluation of licensee's dry cask storage systems to identify aging effects requiring management and acceptable AMPs and TLAAs to address those aging effects.

4. SPECIFIC TASKS

Task 1 Attend Kick-off Meeting

The Contractor shall participate in a kick-off meeting with the Task Order (TO)

Contracting Officer's Representative (COR) and other NRC technical staff to discuss the scope of work, expectations, project management, deliverables, and performance requirements of the task order. The kick-off meeting shall be held within five (5) working days of task order award.

The Contractor shall prepare a written summary of the meeting that includes, at a minimum, the following information: (1) identification of meeting participants from the NRC and Contractor, (2) minutes of the meeting that clearly describe the substance of the meeting, and (3) any action items and decisions from the meeting.

Task 2 Develop Draft Report on Managing Aging Processes in Storage

The Contractor shall develop a draft report in NUREG format that will identify the aging effects requiring management for dry cask storage systems and appropriate AMPs and TLAAs to address those aging effects. In developing the information to be included in the report, the Contractor shall review design basis documentation on storage systems publically available in ADAMS, review the technical literature on material degradation mechanisms, and perform other technical analyses, as needed, to identify the aging effects that could challenge the function of storage system SSCs in the period of the renewed license.

The Contractor shall incorporate into the draft report AMPs, TLAAs, and aging management tables (AMTs) that are provided by the TO COR. The TO COR will also provide to the Contractor the Argonne National Laboratory (ANL) Report, "Managing Aging Effects on Dry Cask Storage Systems for Extended Long-Term Storage and Transportation of Used Fuel" in Microsoft Word format. To avoid duplication of effort, the contractor shall extract and incorporate into the draft report all applicable factual information from the ANL Report. Table 1 at the end of this task description identifies the minimum information the Contractor shall include in the draft report.

The Contractor shall attribute work to the NRC, CNWRA, and ANL, as applicable, in the draft report. The Contractor shall ensure that the information in the draft report, including all cited references, are publically available.

The Contractor shall submit an initial Draft MAPS Report (Revision 0) no later than the end of calendar year 2015. The contractor shall submit yearly revisions to the Draft MAPS Report. Revision 1 is due no later than the end of calendar year 2016 and Revision 2 is due no later than the end of calendar year 2017. The scope of the initial draft report and subsequent revised draft reports shall be based upon the system-specific AMTs, TLAAs, and AMPs that the TO COR will provide to the Contractor no later than 60 calendar days prior to the deliverable due date, or as otherwise agreed upon by the COR and the contractor (e.g., the report shall include descriptions of only those storage systems for which the NRC provides corresponding AMTs). The contractor shall incorporate all comments provided by the TO COR into the subsequent revision of the draft report (i.e. comments on the Draft MAPS Report, Revision 0, shall be incorporated into the Draft MAPS Report, Revision 1, and comments on the Draft MAPS Report, Revision 1, shall be incorporated into Draft MAPS Report, Revision 2).

The contractor shall prepare and submit a Final Draft MAPS Report that incorporates all comments provided by the TO COR on Draft MAPS Report, Revision 2.

Table 1 – Draft Report Minimum Information	
Report Sections	Description
Introduction	An introduction on the purpose of the report and how it is to be used
Definitions	Descriptions of terms used in the report narrative and aging management tables
Technical Basis	Technical basis for the aging effects identified in the aging management tables
System Descriptions	Narrative description and system drawings for each dry cask storage system within the scope of the report (as defined by the systems for which the TO COR has provided aging management tables to the Contractor)
AMTs	System-specific tables that identify subcomponents, materials of construction, environments, applicable aging effects, and the aging management approach (i.e., AMPs and TLAAs)
AMPs	A description of aging management programs that provide an acceptable approach to managing the aging effects described in the aging management tables
TLAAs	A description of time-limited aging analyses that demonstrate the capability of components to maintain their intended function throughout the period of the renewed license

Task 3 Meeting Support

As required by the TO COR, the Contractor shall support meetings with the NRC at which the products described in Task 2 will be discussed, including the project status, any technical issues that may be identified by the NRC or Contractor, and clarification of NRC expectations. Support requested by the TO COR may include preparation of materials for distribution at the meetings and/or participating in the meeting via teleconference or in person. Anticipated travel is described in Section 11.1.

5. APPLICABLE DOCUMENTS AND STANDARDS

The Contractor shall prepare reports under this TO in accordance with the most recent guidelines for NUREG-formatting. As these guidelines are subject to change, the TO COR may provide updated information and/or guidance to the Contractor throughout the period of performance of the TO.

The following documents are suggested as informational references:

(a) NUREG-1379, Revision 2, "NRC Editorial Style Guide"

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1379/r2/>

(b) NUREG-0650, Revision 2, "Preparing NUREG-Series Publications"

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0650/>

(c) NUREG-0544, Revision 4, "NRC Collection of Abbreviations"

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0544/r4/>

(d) Management Directive 3.7, "NUREG-Series Publications"

<http://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-3.html>

e) The latest edition of the U.S. Government Printing Office Style Manual: An official guide to the form and style of Federal Government printing (available to purchase from the U.S. Government Printing Office online bookstore at

<http://bookstore.gpo.gov> or to view online at
<http://www.gpoaccess.gov/stylemanual/index.html>)

(f) Nuclear standards such as ANSI Z39.18-1987, "American National Standard, Scientific and Technical Reports," and the "Glossary of Terms in Nuclear Science and Technology," by the American Nuclear Society (available from the standards organizations or public libraries)

(g) The latest edition of The Chicago Manual of Style: The Essential Guide for Writers, Editors, and Publishers published by the University of Chicago Press (available online or from book stores or public libraries)

(h) The NRC's plain language guidelines

<http://www.nrc.gov/public-involve/open/plain-writing/nrc-philosophy.html>

6. DELIVERABLES AND DELIVERY SCHEDULE

Deliverable Number	Deliverable and Acceptance Criteria (AC)	Deliverable Due Date
1	Task 1: Kick-off Meeting Minutes AC: Meeting minutes are complete and contain required content	NLT 5 working days after completion of the kick-off meeting
2	Task 2: Draft MAPS Report, Revision 0 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2015
3	Task 2: Draft MAPS Report, Revision 1 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2016

4	Task 2: Draft MAPS Report, Revision 2 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2017
5	Task 2: Final Draft MAPS Report AC: Report contains the required content and follows the NUREG format	NLT 2-28-2018
6	Monthly Letter Status Report per Sections F.3 and F.4 of the base contract AC: MLSR is complete and contains all required information.	NLT 20 th day of the Month

All deliverables shall include the following identifying information:

Contract No.: NRC-HQ-12-C-02-0089

Task Order No.: NRC-HQ-50-15-T-0001(15)

The TO COR will review all draft deliverables (and coordinate any internal NRC staff review and external stakeholder input, if needed) and provide comments back to the Contractor. When mutually agreed upon between the Contractor and the TO COR, the Contractor may submit preliminary or partial drafts to help gauge the Contractor's understanding of the particular work requirement.

The deliverables shall include only publicly available information.

The deliverables shall be provided electronically in Microsoft Word (with no restrictions on document editing) and in hard copy (upon request) to the TO COR.

The TO COR will acknowledge receipt of deliverables by e-mail.

7. REQUIRED LABOR CATEGORIES (Except for Information Technology Services)

Professional staff proposed for the task order shall be familiar with DCSS designs and knowledgeable about the technical aspects of aging management of SSCs important to safety. Specific technical expertise is required for the following areas: materials engineering, mechanical engineering, structural engineering, and nuclear engineering. Staff shall also be familiar with NRC regulatory processes for licensing of dry storage (10 CFR, Part 72) and, preferably, requirements for reactor license renewal under 10 CFR, Part 54.

The Contractor shall assign a project manager who is experienced with overseeing multidisciplinary teams and has strong organizational and communication skills. The project manager shall oversee the effort and ensure the timely submittal of accurate and complete deliverables.

8. GOVERNMENT-FURNISHED PROPERTY

The TO COR will provide copies of the following reports to the Contractor after TO award:

- ANL Report, "Managing Aging Effects on Dry Cask Storage Systems for Extended Long-Term Storage and Transportation of Used Fuel"
- Staff reviewed AMTs, AMPs, and TLAAs
- Other information/reports as need by the Contractor to undertake the tasks described in Section 4.0.

9. PERIOD OF PERFORMANCE

The period of performance is task order award through March 28, 2018.

10. PLACE OF PERFORMANCE

The work to be performed under this TO shall be primarily performed at the Contractor's site. The contractor may be required to attend meetings at NRC Headquarters in Rockville, Maryland.

11. SPECIAL CONSIDERATIONS

11.1 TRAVEL

Travel related to this effort requires the prior written approval by the TO COR.

The following travel is anticipated and included for cost estimating purposes:

Six, two-person, three-day trips to NRC Headquarters in Rockville, Maryland, to attend meetings per Task 3 (2 meetings per FY 16-18)

At the discretion of the TO COR, meetings may be conducted at the Contractor's facility or via telephone or video conference.

11.2 SECURITY

Work performed under this task order will be unclassified.

SECTION D - Packaging and Marking

NRCD010 PACKAGING AND MARKING

(a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

(b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

(c) Additional packaging and/or marking requirements are as follows: Not Applicable.

(End of Clause)

SECTION E - Inspection and Acceptance

NRCE010 INSPECTION AND ACCEPTANCE BY THE NRC (SEP 2013)

Inspection and acceptance of the deliverable items to be furnished hereunder shall be made by the NRC Contracting Officer's Representative (COR) at the destination, accordance with FAR 52.247-34 - F.o.b. Destination.

Contract Deliverables:

Deliverable Number	Deliverable and Acceptance Criteria (AC)	Deliverable Due Date
1	Task 1: Kick-off Meeting Minutes AC: Meeting minutes are complete and contain required content	NLT 5 working days after completion of the kick-off meeting
2	Task 2: Draft MAPS Report, Revision 0 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2015
3	Task 2: Draft MAPS Report, Revision 1 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2016

4	Task 2: Draft MAPS Report, Revision 2 AC: Report contains the required content and follows the NUREG format	NLT 12-31-2017
5	Task 2: Final Draft MAPS Report AC: Report contains the required content and follows the NUREG format	NLT 2-28-2018
6	Monthly Letter Status Report per Sections F.3 and F.4 of the base contract AC: MLSR is complete and contains all required information.	NLT 20 th day of the Month

SECTION F - Deliveries or Performance

NRCF032 TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)

This order shall commence on Date of award and will expire on March 28, 2018.

(End of Clause)

NRCF010 PLACE OF DELIVERY-REPORTS

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

Name: Gina Davis
301-415-5776
Contracting Officer's Representative (COR)
U.S. Nuclear Regulatory Commission
Mailstop: TWFN-04-B72
Gina.davis@nrc.gov

(End of Clause)

SECTION G - Contract Administration Data

NRCG030 ELECTRONIC PAYMENT (SEP 2014)

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds-Central Contractor Registration".

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted on the payee's letterhead, 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." The preferred method of submitting invoices is electronically to: NRCPayments@nrc.gov.

(End of Clause)

SECTION H - Special Contract Requirements

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

2052.215-70 KEY PERSONNEL. (JAN 1993)

2052.215-71 PROJECT OFFICER AUTHORITY. (OCT 1999)

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

Name: Gina Davis
Address: Mailstop: TWFN-04-B72
Telephone Number: 301-415-5776

(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 or changes to specific travel identified in the Statement of Work), fills in details, or otherwise serves to accomplish the contractual statement of work.

(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, approve 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 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 that 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.

(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 to the instruction or direction 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.

(End of Clause)

**2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) -
ALTERNATE I (OCT 1999)**

(a) Total expenditure for travel may not exceed \$13,511.00 without the prior approval of the contracting officer.

(b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR

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NRC-HQ-50-15-T-0001(15)

52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel.

(c) The contractor will be reimbursed only for travel costs incurred that are directly related to this contract and are allowable subject to the limitations prescribed in FAR 31.205-46.

(d) It is the responsibility of the contractor to notify the contracting officer in accordance with the FAR Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the travel ceiling amount identified in paragraph (a) of this clause.

(e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, must be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

*To be incorporated into any resultant contract

(End of Clause)

NRCH480 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

(End of Clause)

NRCH470 GREEN PURCHASING (SEP 2013)

(a) In furtherance of the sustainable acquisition goals included in Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," products and services acquired under this contract/order shall be energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, recycled content, and non-toxic or less toxic alternatives, to the maximum extent practicable in meeting NRC contractual requirements.

(b) See NRC's Green Purchasing Plan (GPP) at:
<http://pbadupws.nrc.gov/docs/ML1219/ML12191A130.pdf> and the General Service Administration's (GSA) Green Procurement Compilation at:
<http://www.gsa.gov/portal/content/198257>.

(c) The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order.

(End of Clause)

**NRCH410 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND
SUBCONTRACTOR EMPLOYEES**

(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 entitled: "Your Rights Under the Energy Reorganization Act".

(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.

(End of Clause)

SECTION I - Contract Clauses

52.202-1 DEFINITIONS. (NOV 2013)

52.203-5 COVENANT AGAINST CONTINGENT FEES. (MAY 2014)

**52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT.
(SEP 2006)**

52.203-7 ANTI-KICKBACK PROCEDURES. (MAY 2014)

**52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND
REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS. (APR
2014)**

52.215-23 LIMITATIONS ON PASS-THROUGH CHARGES. (OCT 2009)

52.216-25 CONTRACT DEFINITIZATION. (OCT 2010)

(a) A Cost-Plus-Award-Fee definitive contract is contemplated. The Contractor agrees to begin promptly negotiating with the Contracting Officer the terms of a definitive contract that will include (1) all clauses required by the Federal Acquisition Regulation (FAR) on the date of execution of the letter contract, (2) all clauses required by law on the date of execution of the definitive contract, and (3) any other mutually agreeable clauses, terms, and conditions. The Contractor agrees to submit a Cost-Plus-Award-Fee proposal, including data other than certified cost or pricing data, and certified cost or pricing data, in accordance with FAR 15.408, Table 15-2, supporting its proposal.

(b) The schedule for definitizing this contract is (insert target date for definitization of the contract and dates for submission of proposal, beginning of negotiations; and, if appropriate, submission of make-or-buy and subcontracting plans and certified cost or pricing data:) []

(c) If agreement on a definitive contract to supersede this letter contract is not reached by the target date in paragraph (b) of this section, or within any extension of it granted by the Contracting Officer, the Contracting Officer may, with the approval of the head of the contracting activity, determine a reasonable price or fee in accordance with Subpart 15.4 and Part 31 of the FAR, subject to Contractor appeal as provided in the Disputes clause. In any event, the Contractor shall proceed with completion of the contract, subject only to the Limitation of Government Liability clause.

(1) After the Contracting Officer's determination of price or fee, the contract shall be governed by-

(i) All clauses required by the FAR on the date of execution of this letter contract for either fixed-price or cost-reimbursement contracts, as determined by the Contracting Officer under this paragraph (c);

(ii) All clauses required by law as of the date of the Contracting Officer's determination; and

(iii) Any other clauses, terms, and conditions mutually agreed upon.

(2) To the extent consistent with subparagraph (c)(1) of this section, all clauses, terms, and conditions included in this letter contract shall continue in effect, except those that by their nature apply only to a letter contract.

52.222-50 COMBATING TRAFFICKING IN PERSONS. (MAR 2015)

52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING. (AUG 2011)

52.225-3 BUY AMERICAN - FREE TRADE AGREEMENTS - ISRAELI TRADE ACT. (MAY 2014)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES. (JUN 2008)

52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS. (JUN 2013)

52.233-1 DISPUTES. (MAY 2014)

52.233-3 PROTEST AFTER AWARD. (AUG 1996)

52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM. (OCT 2004)

52.242-1 NOTICE OF INTENT TO DISALLOW COSTS. (APR 1984)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS. (APR 2015)

NRCI020 COMPLIANCE WITH SECTION 508 OF THE REHABILITATION ACT OF 1973, AS AMENDED (SEP 2013)

In 1998, Congress amended the Rehabilitation Act of 1973 (29 U.S.C. §794d) as amended by the Workforce Investment Act of 1998 (P.L. 105 - 220), August 7, 1998 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. Inaccessible technology interferes with an ability to obtain and use information quickly and easily. Section 508 was enacted to eliminate barriers in information technology, open new opportunities for people with disabilities, and encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508 (29 U.S.C. §794d), agencies must give disabled employees and members of the public access to information that is comparable to access available to others.

Specifically, Section 508 of that Act requires that when Federal agencies develop, procure, maintain, or use EIT, Federal employees with disabilities have access to and

use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. (36 C.F.R. §1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at: <http://www.access-board.gov/sec508/standards.htm>)

Exceptions.

All EIT that the government acquires by purchase or by lease/rental under this contract must meet the applicable accessibility standards at 36 C.F.R. Part 1194, unless one or more of the following exceptions at FAR 39.204 applies to this acquisition (applicable if checked):

- ☐ The EIT is for a national security system.
- ☐ The EIT is acquired by a contractor incidental to a contract.
- ☐ The EIT is located in spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment.
- ☐ Compliance with the applicable 36 C.F.R. Part 1194 provisions would impose an undue burden on the agency.

Applicable Standards.

The following accessibility standards from 36 C.F.R. Part 1194 have been determined to be applicable to this contract/order. See www.section508.gov for more information:

- ☐ 1194.21 Software applications and operating systems.
- ☐ 1194.22 Web-based intranet and internet information and applications. 16 rules.
- ☐ 1194.23 Telecommunications products.
- ☐ 1194.24 Video and multimedia products.
- ☐ 1194.25 Self contained, closed products.
- ☐ 1194.26 Desktop and portable computers.
- ☐ 1194.31 Functional performance criteria.
- ☐ 1194.41 Information, documentation, and support.

Note: Under the Exceptions paragraph, the Contracting Officer should check the boxes for any exceptions that apply. If no exceptions apply, then the Contracting Officer should, under the Applicable Standards paragraph, check the boxes that indicate which of the standards apply. See FAR Subpart 39.2 and www.section508.gov for additional guidance.

(End of Clause)

**BILLING INSTRUCTIONS FOR
COST-REIMBURSEMENT TYPE CONTRACTS (MAY 2013)**

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

The contractor shall prepare invoices/vouchers for reimbursement of costs in the manner and format described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

Standard Forms: Reimbursement requests shall be submitted on the payee's letterhead, invoice/voucher, 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."

Electronic Invoice/Voucher Submissions: The preferred method of submitting invoices/vouchers is electronically to the U.S. Nuclear Regulatory Commission, via email to: NRCPayments@nrc.gov.

Hard-Copy Invoice/Voucher Submissions: If you submit a hard-copy of the invoice/voucher, a signed original and supporting documentation shall be submitted to the following address:

NRC Payments
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mailstop O3-E17A
Rockville, MD 20852-2738

Purchase of Capital Property: *(\$50,000 or more with life of one year or longer)*

Contractors must report to the Contracting Officer, electronically, any capital property acquired with contract funds having an initial cost of \$50,000 or more, in accordance with procedures set forth in NRC Management Directive (MD) 13.1, IV, C – "Reporting Requirements" (revised 2/16/2011).

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

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

Format: Invoices/Vouchers shall be submitted in the format depicted on the attached sample form entitled "Invoice/Voucher for Purchases and Services Other Than Personal". Alternate formats are permissible only if they address all requirements of the Billing Instructions. The instructions for preparation and itemization of the

invoice/voucher are included with the sample form.

Task Order Contracts: The contractor must submit a separate invoice/voucher for each individual task order with detailed cost information. This includes all applicable cost elements and other items discussed in paragraphs (a) through (s) of the attached instructions. In addition, the invoice/voucher must specify the contract number, and the NRC-assigned task/delivery order number.

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

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

Currency: Invoices/Vouchers must be expressed in U.S. Dollars.

Supersession: These instructions supersede previous Billing Instructions for Cost-Reimbursement Type Contracts (July 2011).

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

1. Official Agency Billing Office

NRC Payments
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mailstop O3-E17A
Rockville, MD 20852-2738

2. Invoice/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. **Taxpayer Identification Number.** The Payee shall include the Payee's taxpayer identification number (TIN) used by the Internal Revenue Service (IRS) in the administration of tax laws. (See IRS Web site: [http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Employer-ID-Numbers-\(EINs\)](http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Employer-ID-Numbers-(EINs))).

c. **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 System for Award Management (SAM) database at <http://sam.gov> and shall be paid by EFT in accordance with the terms of this contract. See Federal Acquisition Regulation (FAR) 52.232-33(g) Payment by Electronic Funds Transfer - Central Contractor Registration (October 2003).

d. Contract Number. Insert the NRC contract number (including Enterprise-wide Contract (EWC)), GSA Federal Supply Schedule (FSS), Governmentwide Agency Contract (GWAC) number, or Multiple Agency Contract (MAC) number, as applicable.

e. Task Order Number. Insert the task/delivery order number (If Applicable). **Do not include more than one task order per invoice or the invoice may be rejected as improper.**

f. Invoice/Voucher. The appropriate sequential number of the invoice/voucher, 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.

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

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

i. Description of Deliverables. Provide a brief description of supplies or services, quantity, unit cost, and total cost.

j. Work Completed. Provide a general summary description of the services performed or products submitted for the invoice period and specify the section or Contract Line Item Number (CLIN) or SubCLIN in the contract pertaining to the required deliverable(s).

k. Shipping. Insert weight and zone of shipment, if shipped by parcel post.

l. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.

m. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.

n. For Indefinite Delivery contracts, the final invoice/voucher shall be marked "FINAL INVOICE" or "FINAL VOUCHER".

o. Direct Costs. Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period).

(1) Direct Labor. This consists of salaries and wages paid (or accrued) for direct performance of the contract itemized as follows:

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
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(2) **Fringe Benefits.** This represents fringe benefits applicable to direct labor and billed as a direct cost. Where a rate is used indicate the rate. Fringe benefits included in direct labor or in other indirect cost pools should not be identified here.

(3) **Contractor-acquired property (\$50,000 or more).** 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) an item description, (b) manufacturer, (c) model number, (d) serial number, (e) acquisition cost, (f) date of purchase, and (g) a copy of the purchasing document.

(4) **Contractor-acquired property (under \$50,000), Materials, and Supplies.** These are equipment other than that described in (3) above, plus consumable materials and 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.

(5) **Premium Pay.** This enumeration in excess of the basic hourly rate. (Requires written approval of the Contracting Officer.)

(6) **Consultant Fee.** The supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval (if not specifically approved in the original contract).

(7) **Travel.** Total costs associated with each trip must be shown in the following format:

<u>Start Date</u>		<u>Destination</u>		<u>Costs</u>
From	To	From	To	\$

(Must include separate detailed costs for airfare, per diem, and other transportation expenses. All costs must be adequately supported by copies of receipts or other documentation.)

(8) **Subcontracts.** Include separate detailed breakdown of all costs paid to approved subcontractors during the billing period.

(9) **Other Costs.** List all other direct costs by cost element and dollar amount separately.

p. **Indirect Costs (Overhead and General and Administrative Expense).** Cite the formula (rate and base) in effect in accordance with the terms of the contract, during the time the costs were incurred and for which reimbursement is requested.

q. **Fixed-Fee.** If the contract provides for a fixed-fee, it must be reimbursed as indicated in the contract. Cite the formula or method of computation. Include this information as it applies to individual task orders as well.

- (1) The NRC will withhold payment of 15% of the negotiated contract fixed-fee amount, not to exceed \$100,000.
- (2) If the fee withholding amount has reached \$100,000, the contractor may resume billing the NRC for the balance of its fee under subsequent invoices for work completed.
- (3) Any fee amounts withheld by the NRC will be paid to the contractor during contract closeout in increments, following the submission/settlement of indirect rate proposals in accordance with FAR 52.216-8, "Fixed Fee" (JUN 2011).

r. Total Amount Billed. Insert columns for total amounts for the current and cumulative periods.

s. Adjustments. Insert columns for any adjustments, including outstanding suspensions for deficient or defective products or nonconforming services, for the current and cumulative periods.

t. Grand Totals.

3. Sample Invoice/Voucher Information

Sample Invoice/Voucher Information (Supporting Documentation must be attached)

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

	<u>Amount Billed</u>	<u>Current Period</u>	<u>Cumulative</u>
(a) <u>Direct Costs</u>			
(1) Direct labor	\$ _____	\$ _____	\$ _____
(2) Fringe benefits (% of direct labor)	\$ _____	\$ _____	\$ _____
(3) Government property (\$50,000 or more)	\$ _____	\$ _____	\$ _____
(4) Government property, Materials, and Supplies (under \$50,000 per item)	\$ _____	\$ _____	\$ _____
(5) Premium pay (NRC approved overtime)	\$ _____	\$ _____	\$ _____
(6) Consultants Fee	\$ _____	\$ _____	\$ _____
(7) Travel	\$ _____	\$ _____	\$ _____
(8) Subcontracts	\$ _____	\$ _____	\$ _____
(9) Other costs	\$ _____	\$ _____	\$ _____
Total Direct Costs:	\$ _____	\$ _____	\$ _____

(b) Indirect Costs (provide the rate information applicable to your firm)

(10) Overhead ____ % of
____ (Indicate Base) \$ _____ \$ _____

(11) General and Administrative (G&A) ____ %
of ____ (Indicate Base) \$ _____ \$ _____

Total Indirect Costs: \$ _____ \$ _____

(c) **Fixed-Fee:**

- (12) Fixed-Fee Calculations:
- i. Total negotiated contract fixed-fee percent ____ and amount
\$ _____
 - ii. 85% allowable fee amount \$ _____
 - iii. Cumulative fee billed on prior invoices \$ _____
 - iv. Fee due this invoice (*not to exceed 85% of fee earned based upon negotiated contract fee percentage*) \$ _____

Note: The fee balance withheld by NRC may not exceed \$100,000.

Total Fixed-Fee: \$ _____ \$ _____

(d) Total Amount Billed \$ _____ \$ _____

(e) Adjustments (+/-) \$ _____ \$ _____

(f) Grand Total \$ _____ \$ _____

(The invoice/voucher format provided above must include information similar to that included below in the following to ensure accuracy and completeness.)

SAMPLE SUPPORTING INFORMATION

The budget information provided below is for format purposes only and is illustrative.

Cost Elements:

1) **Direct Labor - \$2,400**

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
Senior Engineer I	100	\$14.00	\$1,400	975
Engineer	50	\$10.00	\$500	465
Computer Analyst	100	\$5.00	<u>\$500</u>	<u>320</u>
			\$2,400	1,760hrs

2) **Fringe Benefits - \$480**

Fringe @ 20% of Direct Salaries

<u>Labor Category</u>	<u>Salaries</u>	<u>Fringe Amount</u>
Senior Engineer I	\$1,400	\$280
Engineer	\$500	\$100
Computer Analyst	<u>\$500</u>	<u>\$100</u>
	\$2,400	\$480

- 3) Government-furnished and contractor-acquired property (\$50,000 or more) - \$60,000

Prototype Spectrometer - item number 1000-01 = \$60,000

- 4) Government-furnished and contractor-acquired property (under \$50,000). Materials and Supplies - \$2000

10 Radon tubes @ \$110.00 = \$1,100
6 Pairs Electrostatic gloves @ \$150.00 = \$900
\$2,000

- 5) Premium Pay - \$150

Walter Murphy - 10 hours @ \$10.00 Per Hour (Reg. Pay) = \$100 x 1.5 OT rate = \$150
(EX: Premium pay for this individual was approved and authorized under this contract by the NRC Contracting Officer by letter dated 6/1/2011.)

- 6) Consultants' Fee - \$100

Dr. Carney - 1 hour fully-burdened @ \$100 = \$100

- 7) Travel - \$2,640

(i) Airfare: (2 Roundtrip trips for 1 person @ \$300 per r/t ticket)

<u>Start Date</u>	<u>End Date</u>	<u>Days</u>	<u>From</u>	<u>To</u>	<u>Cost</u>
4/1/2011	4/7/2011	7	Philadelphia, PA	Wash, D.C.	\$300
7/1/2011	7/8/2011	8	Philadelphia, PA	Wash, D.C.	\$300

(ii) Per Diem: \$136/day x 15 days = \$2,040

- 8) Subcontracting - \$30,000

Company A = \$10,000
Company B = \$20,000
\$30,000

(EX: Subcontracts for Companies A & B were consented to by the Contracting Officer by letter dated 6/15/2011.)

9) Other Costs - \$5,100

Honorarium for speaker at American Nuclear Society conference = \$5,000
Nuclear Planet Journal subscription fee = \$100

10) Overhead Expense - \$41,148

Overhead @ 40% of Total Direct Costs

11) General and Administrative (G&A) Expense - \$22,784

G&A @ 20% of Total Costs, excluding subcontracts and consultants

12) Fixed-Fee - \$8,218

Fixed-Fee applied to Total Costs @ 5%

Fixed-Fee Calculations:

- i. Total contract fixed-fee \$100,000
- ii. 85% allowable fee \$85,000
- iii. Cumulative fee billed on prior invoices \$85,000
- iv. Fee due this invoice (*not to exceed 85% of fee earned based upon negotiated contract fee percentage*) \$8,218

Total Amount Billed	\$175,020
Adjustments (+/-)	<u>- \$8,218</u>
Grand Total	\$166,802