

<b>SOLICITATION, OFFER AND AWARD</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES 1   70	
2. CONTRACT NUMBER 31310018C0003		3. SOLICITATION NUMBER NRC-HQ-50-18-R-0003	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED B D (FB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED 04/06/2018	6. REQUISITION/PURCHASE NUMBER NMSS-18-0002
7. ISSUED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001		CODE NRCHQ	8. ADDRESS OFFER TO (If other than Item 7)		

**NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".**

**SOLICITATION**

9. Sealed offers in original and \_\_\_\_\_ copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in \_\_\_\_\_ until \_\_\_\_\_ (Hour) local time \_\_\_\_\_ (Date)

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

<b>10. FOR INFORMATION CALL:</b>	A. NAME SHARLENE M. MCCUBBIN	B. TELEPHONE (NO COLLECT CALLS)			C. E-MAIL ADDRESS Sharlene.McCubbin@nrc.gov
		AREA CODE 301	NUMBER 415-5392	EXT.	

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**OFFER (Must be fully completed by offeror)**

**NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.**

12. In compliance with the above, the undersigned agrees, if this offer is accepted within \_\_\_\_\_ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
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14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE 041387846	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
UNIVERSITY OF SOUTH CAROLINA ATTN DR TRAVIS KNIGHT PENDLETON ST COLUMBIA SC 29210			

15B. TELEPHONE NUMBER	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.	17. SIGNATURE	18. OFFER DATE
AREA CODE NUMBER EXT.	<input type="checkbox"/>		

**AWARD (To be completed by government)**

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT \$555,871.00	21. ACCOUNTING AND APPROPRIATION See schedule
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304 (c) ( ) <input type="checkbox"/> 41 U.S.C. 253 (c) ( )	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) ITEM
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24. ADMINISTERED BY (If other than Item 7) See Schedule G	CODE NRCHQ	25. PAYMENT WILL BE MADE BY See Schedule G	CODE NRCPAYMENTS
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26. NAME OF CONTRACTING OFFICER (Type or print) ERIKA EAM	27. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	28. AWARD DATE 05/03/2018
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**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
31310018C0003

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NAME OF OFFEROR OR CONTRACTOR  
UNIVERSITY OF SOUTH CAROLINA

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00001	<p>Delivery: 05/31/2020                      Delivery Location Code: NRCHQ                      NUCLEAR REGULATORY COMMISSION                      NUCLEAR REGULATORY COMMISSION                      WASHINGTON DC 20555-0001 USA</p> <p>Accounting Info:                      2018-X0200-FEEBASED-50-50D007-1061-33-6-199-252A-3                      3-6-199-1061                      Period of Performance: 06/01/2018 to 05/31/2020</p> <p>Old Boral Performance in Spent Fuel Storage and                      Transportation                      Line Item Ceiling: \$555,871.00                      Incrementally Funded Amount: \$75,000.00</p> <p>The obligated amount of award: \$75,000.00. The                      total for this award is shown in box 20.</p>				555,871.00

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**SECTION B - Supplies or Services/Prices**

**B.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION**

(a) The title of this project is: Old Boral Performance in Spent Fuel Storage and Transportation

(b) Summary work description: The objective of this contract is to obtain technical assistance. Specifically, the NRC seeks to obtain relevant test data and test data interpretation related to potential older Boral degradation processes under dry storage conditions potentially applicable to transportation. The obtained data and interpretation shall provide regulatory information related to the U.S. Nuclear Regulatory Commission (NRC) Differing Professional Opinion (DPO) concerns.

(End of Clause)

**B.2 LINE ITEMS**

DESCRIPTION	BASE PERIOD		OPTION PERIOD	TOTAL BASE PERIOD + OPTION PERIOD
	YEAR 1	YEAR 2	6 MONTHS	
Direct Labor	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Fringe Benefits	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total Labor	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Other Direct Costs (ODCs)				
Equipment	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Materials/Supplies	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Travel	NTE \$5,000	NTE \$5,000	\$0	NTE \$10,000
Other – Rental Charges	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total Direct Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Indirect Costs – MTDC	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total Costs By Periods	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$555,871

ESTIMATED LABOR HOUR RATES			
DESCRIPTION	BASE PERIOD		OPTION PERIOD
	YEAR 1	YEAR 2	6 MONTHS
Principal Investigator (PI)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Engineer or Scientist	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Administrator/Clerical	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]

**B.3 CONSIDERATION AND OBLIGATION—COST-REIMBURSEMENT – NO FEE**

- (a) The total estimated cost to the Government for full performance of this contract is **\$555,871.00**.
- (b) The amount obligated by the Government with respect to this contract is **\$75,000.00**.
- (c) This is an incrementally-funded contract and FAR 52.232-22 - "Limitation of Funds" applies.

(End of Clause)

**SECTION C - Description/Specifications****C.1 Title of Project**

Old Boral™ (Boral) Performance in Spent Fuel Storage and Transportation

**C.2 Background**

On February 28, 2017, the Director of the Office of Nuclear Material Safety and Safeguards (NMSS) issued a decision on a DPO concerning the evaluation and communication of Boral degradation effects in deployed dry storage systems, submitted on June 29, 2016. The DPO raised concerns that (1) spent fuel storage/transportation cask stakeholders have been inadequately informed by the NRC of safety and operational problems, such as erosion of subcritical safety margins, hydrogen generation, and maintaining radiation exposures as low as reasonably achievable if spent fuel assemblies are bound, that could result from Boral degradation; and (2) that a Generic Safety Issue (GSI) – 196, “Boral Degradation,” follow-up action was not performed involving investigative research to determine if degradation of “older” Boral sheets (i.e., Boral manufactured prior to 2001) would result in erosion of criticality margins.

On September 14, 2016, an Ad Hoc DPO Review Panel (Panel) provided the NMSS Director with the results of its independent review of the DPO submittal. The Panel concluded that Boral degradation in dry storage systems does not appear to represent a significant safety concern. However, the Panel also concluded that uncertainty exists with older Boral (Boral manufactured prior to 2001) due to lack of test data representative of operating conditions in dry storage systems. The Panel noted that a unique opportunity currently exists for some limited testing of older Boral to close this knowledge gap. The Panel concluded that the NRC can improve its communication to stakeholders about industry-recommended limitations on re-flooding cycles for dry storage systems which use Boral as a neutron absorber. The Panel recommended that the NRC (1) communicate to stakeholders the results of Boral testing in dry storage systems; (2) conduct an investigation of older Boral materials, as was recommended in the closure of GSI-196, since there is a knowledge gap with respect to the potential degradation mechanisms of this material in dry storage systems; and (3) consider testing older Boral material obtained from the Zion spent fuel pool under dry storage conditions. The NMSS Director agreed with the Panel’s conclusions and endorsed its first and third recommendations. Regarding the Panel’s second recommendation, the NMSS Director proposed that the NRC staff conduct an assessment of dry storage systems and transportation packages that incorporated older Boral materials, in order to determine whether any indications of potential older Boral degradation have been documented.

**C.3 Objective**

The objective of this contract is to obtain technical assistance. Specifically, the NRC seeks to obtain relevant test data and test data interpretation of (1) potential older Boral degradation processes under dry storage conditions potentially applicable to transportation; and (2) degradation processes of any Boral under dry storage conditions potentially applicable to transportation of older Boral. The obtained data and interpretation shall provide regulatory information related to the NRC DPO concerns (See Section C.2 Background).

**C.4 Scope of Work/Tasks**

The contractor shall provide all resources necessary (personnel, facilities, equipment and materials) to accomplish the task and deliverables described in this Statement of Work (SOW). The NRC may provide (e.g. smaller size) Boral material for testing. However, regardless of whether NRC supplies this material, the contractor is required to provide Boral material as a part of this requirement.

The overall objective of these tasks are for the contractor to perform tests to assess the potential degradation processes of those older Boral type, which have been deployed in storage casks, under spent fuel storage conditions. The NRC will continue to provide necessary background information such as literature and regulatory information. *The test should be representative of operating conditions in dry storage systems. The*

*test requires capability and facilities to mimic the dry storage cask system and its environment (e.g., prototypic or mockup tests) in key findings.* The contractor will interpret the obtained data, and provide technical assistance to the NRC's efforts to establish regulatory safety bases associated with older Boral used in storage.

### Boral and Cask Internal Environment

Currently, neutron absorbing materials (NAM) in dry storage systems are boron-containing materials used to prevent criticality of the spent fuel assembly arrangement. The degradation of NAM in dry storage systems may affect loading, retrievability, and thermal performance functions of the system.

Boral is a Cermet. The Cermet sheets (He, et al., 2016) are formed by hot rolling layers consisting of (i) a core of uniformly mixed and distributed boron carbide and Al (aluminum) 1100 particles and (ii) a surface cladding of Al 1100 on both sides of the core, serving as a protective barrier as shown. The core typically contains between 35 and 65 wt % boron carbide (most often greater than 50 wt %). The core is usually not fully sintered and can have a porosity of 1 to 8 % with varying degrees of interconnectivity among the pores, potentially allowing for water ingress into the core. The total thickness of the laminate ranges from 1.9–11.1 mm and cladding thicknesses are typically between 250–380  $\mu\text{m}$  at each side.

The process of placing fuel assemblies in the cask (or canister) includes loading spent fuel assemblies in a spent fuel pool, followed by draining, drying, and filling the void space with helium to mitigate corrosion of internal components and aid in the removal of decay heat. NAMs are only exposed to water for a period of 48 to 96 hours during spent fuel cask loading. The assessment of aging-related degradation of NAM in this report assumes that adequate drying is performed and there is a minimum amount of water in the canister. Considering inadequate drying, the residual water is expected in a range of 0.01, 0.1 and maximum 1 liter (1 gallon = 3.79 liter) per cask (Jung, et al., 2013). The residual water could undergo radiolysis as a result of the radiation field, producing oxidizing species, such as oxygen and hydrogen, prone to interact chemically with Zr-based spent fuel cladding, spent fuel, and cask internals including NAM. The temperature is distributed spatially and temporally during storage (Jung et al., 2013). During the vacuum drying, the maximum spent fuel temperature allowed is 400 °C (752 °F).

### Primary Test Matrix

Boral is potentially susceptible to wet corrosion and blistering, if water penetrates into the Boral matrix during wet spent fuel loading or from inadequate spent fuel drying. Water moisture pressure and hydrogen generated from corrosion could result in Boral blistering and eventual delamination. Water can be trapped in the porous matrix of Boral under the hydrostatic water pressure when casks containing Boral submerged into spent fuel pool to the depth of 6.1 – 12.2 m (20 – 40 feet) of water for spent fuel loading. During subsequent draining and drying of spent fuel cask, the trapped water within Boral is subjected to a temperature above 200 °C (392 °F) from spent fuel decay heat which could turn the trapped water into high pressure steam causing blisters and delamination of the Boral.

This SOW presents a proposed test matrix on blistering and delamination of Boral under spent fuel loading, vacuum drying and storage conditions. Primary environmental variables include temperature, immersion water, (including simulated reactor pool water), relative humidity inside cask, and times. Other parameters that need to be considered further are spent fuel type, burnup, cask design, and radiation effects on Boral and moisture.

*The test should be representative of operating conditions in dry storage systems. The test requires **capability and facilities** to mimic the dry storage cask system and its environment (e.g., prototypic tests) in key findings. Additional supplemental controlled tests are recommended such as smaller scale simulated tests.*

### Task 1: Submersion Tests

The contractor should review literature information on testing of Boral sheet in water submersion over varying temperatures and time periods. The contractor should design and/or select optimum test equipment with water pressures and duration which best represent the operational conditions of those spent fuel storage



casks which have used older Boral. The contractor should determine the optimum size of Boral test sample, given test equipment and physical arrangement of heater and structure needed. The contractor shall obtain test results on, but not limited to, blistering, void characteristics, and gas generation.

- Submerge sheets in qualifying water and pressurize chamber to reproduce desired hydrostatic pressure.
- Hydrostatic pressure: 14.5 psi (1 bar) increases with 33 feet (10.1 m) depth; 1, 2, 3 days (below 20 feet [20.2 m], 30 feet [30.3 m], 40 feet [40.4 m]).
- Weigh samples before and after submersion.
- After each test conduct visual examination, thickness measurement, and optical microscopy.

Task 2: Drying Tests

The contractor should review literature information on testing of spent fuel drying with Boral sheet over varying temperatures and time periods. The contractor should design and/or select optimum test equipment for the drying techniques (i.e., vacuum drying and/or Forced Helium Dehydration) which have been used for drying the loaded spent fuel storage casks with older Boral. The contractor should consider optimum water amount, temperature and time. The contractor should determine the optimum size of Boral test sample, given drying test system. The contractor shall obtain test results on, but not limited to, blistering, void characteristics, and gas generation.

- Use vacuum network for drying and quantifying water removed.
- Follow typical industry drying practice for vacuum drying and using criteria of holding for 30 minutes below 3 torr. Heating, vacuuming, staying (30 minutes) and cooling.
- Weigh samples before and after drying to estimate water removed.
- Evaluate flow meter data from drying operation to estimate water removed.
- After each test conduct visual examination, thickness measurement, and optical microscopy.

Task 3: Corrosion Tests

The contractor should review literature information on testing of Boral sheet corrosion producing hydrogen over varying temperatures and time periods. The contractor should design and/or select optimum test equipment of Boral corrosion and hydrogen generation which best represent the operating conditions of dry storage systems and transportation packages. The contractor should consider optimum (i) water amount, (ii) temperature and (iii) time. The contractor should determine the optimum size of Boral test sample, given the test system of corrosion and hydrogen generation. The contractor shall obtain test results including, but not limited to, corrosion, hydrogen generation, blistering, and void characteristics.

- Scale amount of water to size of chamber compared to a real cask.
- After each test conduct visual examination, thickness measurement, and optical microscopy.
- Based on the NRC assessment (Jung et al., 2013), a relative time scaling factor is provided for the three different temperature tests below. The testing can be fit into a 1 year period considering the base test at high temperature to be 8 hours. This means longer tests at 200°C (392 °F) would take approximately equivalent 350 days.

Residual water amount: 0.01, 0.1 and 1 liter

	400 °C (752 °F)	300 °C (572 °F)	200 °C (392 °F)
Time scaling factor	1	11	350
At 8 hours for the base tests:	1 day	11 days	350 days

1 gallon = 3.79 liter

#### Task 4: Data, Data Interpretation and Report Preparation

The contractor shall obtain test results on, but not limited, blistering, void characteristics, and gas generation. The contractor should provide reproducible quantitative results when possible. Such examples include (i) the extent of Boron release if potentially occurred for all 3 Tasks above and (ii) the effect of Boral degradation on the efficiency of neutron absorber. The contractor shall provide draft reports to the NRC, and the contractor shall respond to NRC staff comments on the draft and before finalizing the deliverable and administrative items.

#### Deliverable

The contract shall include detailed test summary and test results in the final report for all Tasks.

### **C.5 Level of Effort for Qualified Labor Categories**

**Labor Categories, Requirements and Key Personnel.** Personnel working under this contact/order shall meet the minimum requirements for experience and education, as follows

<b>Labor Category</b>	<b>Position Minimum Requirements</b>	<b>Key Personnel* (yes or no)</b>
Principle Investigator	Ph.D. and research experience longer than 5 years in nuclear materials, related to nuclear fuel cycle and/or neutron absorber (e.g., Boral, vacuum technologies, and corrosion).	yes
Engineer or Scientist	B.S. or M.S. in materials science, chemistry, physics or equivalent	no
Administrative	Certified or equivalent	no

\*See NRCAR 2052.215-70, "Key Personnel"

**Level-of-Effort (in hours).** Estimate the number of hours required for each labor category, including base and option periods.

	<b>Base Year</b>	<b>Year 2</b>	<b>Total</b>
<b>Labor Category</b>	<b>Estimated Hours</b>	<b>Estimated Hours</b>	
Principle Investigator (PI)	208	208	416
Engineer or Scientist	2080	2080	4160
Administrative	40	40	80

- PI to supervise Engineer or Scientist
- Engineer or Scientist to conduct experiments

### **C.6 Reporting Requirements**

#### **C.6.1 Monthly Letter Status Report (MLSR)**

The contractor shall provide a Monthly Letter Status Report which consists of a technical progress report and financial status report. This report will be used by the Government to assess the adequacy of the resources proposed by the contractor to accomplish the work contained in this SOW and provide status of contractor progress in achieving tasks and producing deliverables. The report shall

include contract/order summary information, work completed during the specified period, milestone schedule information, problem resolution, travel plans, and staff hour summary.

### C.6.2 Final Report

The contractor shall provide a final report summarizing the work performed and the results and conclusions under this contract.

The report will be developed in the contractor SharePoint system, if available. The deliverable shall be submitted via electronic mail with electronic attachments consistent with the word processor in use at the NRC or in portable document format (*i.e.*, \*.pdf), as appropriate. The contractor shall also include the NRC COR and NRC TO COR for Job Code xxxxx and the relevant NRC principle investigators in the electronic mail. Reports by the contractor shall be in letter report form. The deliverables should attribute work to both the NRC and the contractor when the outcome is a result of joint effort between the NRC and the contractor.

### C.7 List of Deliverables

The schedule of deliverables for the Task is outlined below.

DELIVERABLE	SCHEDULE (business days)	FORMAT
Progress Presentation and NRC comment	Monthly Report, 20 <sup>th</sup> of following month	Word Document
Professional Meeting (Presentation and/or Paper)	30 days prior to presentation or paper submission	Word Document
NRC Review and Resolution of Comments on Professional Meeting Work	After submission before the meeting or submission	Word Document
Draft Final Report for NRC Review	30 days prior to finalization	Word Document
NRC Review and Comments on Draft	15 days prior to finalization	Word Document
Comment Resolution	15 days prior to finalization	Word Document
Final Report	30 days prior to contract expiration	Word Document
Monthly Letter Status Report (MSLR)	Monthly Report, 20 <sup>th</sup> of following month	Word Document

### C.8 Required Materials/Facilities:

The contractor shall demonstrate that the existing contracting site meets the facility requirements to conduct the test representative of operating conditions in dry storage systems. The test requires capability and facilities to mimic the dry storage cask system and its environment (e.g., prototypic or mockup tests) in key findings. Additional supplemental controlled tests are recommended such as smaller scale simulated tests. In order to be considered as a viable candidate for this award the facility shall meet or exceed the requirements below:

Minimum equipment requirements:

- NRC-provided or as-fabricated older Boral material (e.g. smaller size);
- Contractor supplied Boral material.
- Water and pressurized system
- Vacuum drying system
- Chemical analysis system
- Optical microscopy system
- Materials and supplies: replacement hardware, gases, seals/gaskets, and laboratory supplies

### **C.9 Release of Publications**

Any documents generated by or specifically used by the contractor in the performance of this contract shall not be used, released to others, distributed, or published without CO and COR prior written approval.

### **C.10 Place of Performance**

The work to be performed under this contract will be primarily performed at the contractor's facility.

### **C.11 Contractor Travel**

Contractor will be authorized travel expenses consistent with the Federal Travel Regulation (FTR) and the limitation of funds specified in the travel line item of this contract/order. All travel requires prior written Government approval from the COR.

Principal Investigator and engineer or scientist shall (1) attend one professional meeting (5 days in duration) to present the results of these test for peer reviews; and (2) visit NRC headquarters (3 days in duration) to discuss detailed progress made.

Total travel for the project is estimated to be two (2) trips: #1 – 1, two-to-three-person trip (5 business days in duration) to a professional meeting to present the results of these tests to peers for review; and #2 – 1, two-to-three-person trip (3 business days in duration) to NRC headquarters to discuss detailed progress made.

### **C.12 Data Rights**

These documents and materials may not be used, released to others, reproduced, distributed, published, or sold by the contractor without prior written authorization from the CO. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. The Contractor may not, without prior written approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. This right does not abrogate any other Government rights.

### **C.13 Applicable Publications (Current Editions)**

Electric Power Research Institute (EPRI). "BORAL™ Behavior Under Simulated Cask Vacuum Drying." EPRI Report 1009696. 2004.

He, X., Y.-M. Pan, R. Page, and others. "Assessment of Aging Mechanisms for Stainless Steel-and Al-Based Neutron Absorbing Materials Used in Spent Nuclear Fuel Dry Cask Storage System." NACE CORROSION 2016. Paper No. 7670. 2016.

Jung, H., P. Shukla, T. Ahn, and others. "Extended Storage and Transportation Evaluation of Drying Adequacy." NRC ADAMS ML13169A039. NRC. 2013, <https://www.nrc.gov/docs/ML1316/ML13169A039.pdf>

Knight, T. "Experimental Determination and Modeling of Used Fuel Drying by Vacuum and Gas Circulation for Dry Cask Storage." University of South Carolina, EPRI Extended Storage Collaboration Program (ESCP) Winter Meeting Materials, Charlotte, NC, 2016.

U.S. Nuclear regulatory Commission (NRC). Information Notice, "Weekly Information Report – Week Ending March 10, 2017." SECY-17-0039. NRC ADAMS: ML17075A444. 2017, <https://www.nrc.gov/docs/ML1707/ML17075A444.pdf>

NRC. NRC Information Notice 2009-26, "Degradation of Neutron-Absorbing Materials in the spent Fuel Pool." NRC ADAMS: ML092440545. 2009, <https://www.nrc.gov/docs/ML0924/ML092440545.pdf>

Wang, L. "Evaluation of Aluminum-Boron Carbide Neutron Absorbing Materials for Interim Storage of Used Nuclear Fuel." Project No. 10-961. NEUP. Nuclear energy University Program. U.S. Department of Energy. 2015.

**SECTION D - Packaging and Marking**

**D.1 BRANDING**

The Contractor is required to use the statement below in any publications, presentations, articles, products, or materials funded under this contract/order, to the extent practical, in order to provide NRC with recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Material Safety and Safeguards, under Contract number 31310018C0003.

(End of Clause)

**D.2 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: N/A.

(End of Clause)

**SECTION E - Inspection and Acceptance****E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

NUMBER	TITLE	DATE
	FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)	
52.246-5	INSPECTION OF SERVICES - COST-REIMBURSEMENT.	APR 1984
52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM).	APR 1984

**E.2 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.

The schedule of deliverables for the Task is outlined below.

DELIVERABLE	SCHEDULE (business days)	FORMAT
Progress Presentation and NRC comment	Monthly Report, 20 <sup>th</sup> of following month	Word Document
Professional Meeting (Presentation and/or Paper)	30 days prior to presentation or paper submission	Word Document
NRC Review and Resolution of Comments on Professional Meeting Work	After submission before the meeting or submission	Word Document
Draft Final Report for NRC Review	30 days prior to finalization	Word Document
NRC Review and Comments on Draft	15 days prior to finalization	Word Document
Comment Resolution	15 days prior to finalization	Word Document
Final Report	30 days prior to contract expiration	Word Document
Monthly Letter Status Report (MSLR)	Monthly Report, 20 <sup>th</sup> of following month	Word Document

(End of Clause)

**SECTION F - Deliveries or Performance****F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract.

NUMBER	TITLE	DATE
52.242-15	STOP-WORK ORDER. (AUG 1989) - ALTERNATE I	APR 1984

**F.2 2052.211-70 PREPARATION OF TECHNICAL REPORTS. (JAN 1993)**

All technical reports required by Section C and all Technical Progress Reports required by Section F are to be prepared in accordance with the attached Management Directive 3.8, "Unclassified Contractor and Grantee Publications in the NUREG Series." Management Directive 3.8 is not applicable to any Contractor Spending Plan (CSP) and any Financial Status Report that may be included in this contract. (See List of Attachments).

(End of Clause)

**F.3 PERIOD OF PERFORMANCE ALTERNATE III**

This contract shall commence on **June 1, 2018** and will expire two (2) years (twenty-four (24) months) from date of award. The term of this contract may be extended at the option of the Government for an additional six (6) months, from the current expiration date to plus six (6) months.

The term of this contract may be extended at the option of the Government for an additional six (6) months (not to exceed six months).

Base Period: **June 1, 2018 – May 31, 2020**

Option Period(s): **June 1, 2020**

(End of Clause)

**F.4 PLACE OF DELIVERY-REPORTS**

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

- a. Name: **JIN-PING (JACK) GWO** (1 hard copy)
- b. Contracting Officer's Representative (COR)
- c. U.S. Nuclear Regulatory Commission
- d. Address: **TWFN/ 04 B31**
- e. Electronic copies to:
- f. **[JIN-PING.GWO@NRC.GOV](mailto:JIN-PING.GWO@NRC.GOV)**
- g. Name: Sharlene McCubbin (1 hard copy)
- h. Contracting Officer (CO)
- i. U.S. Nuclear Regulatory Commission



j. Address: **TWFN/ 07 B79**

[Sharlene.McCubbin@nrc.gov](mailto:Sharlene.McCubbin@nrc.gov)

(End of Clause)

**SECTION G - Contract Administration Data****G.1 CONTRACTING OFFICER'S REPRESENTATIVE AUTHORITY**

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

Name: **JIN-PING (JACK) GWO**

Address: **TWFN/ 04 B31**

Telephone Number: **301-415-8736**

E-mail: [JIN-PING.GWO@NRC.GOV](mailto:JIN-PING.GWO@NRC.GOV)

(b) Performance of the work under this contract is subject to the technical direction of the NRC COR. 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 COR 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 COR or must be confirmed by the COR 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 COR in the manner prescribed by this clause and within the COR's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the COR 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 COR 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 COR 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)

## **G.2 REGISTRATION IN FEDCONNECT® (JULY 2014)**

The Nuclear Regulatory Commission (NRC) uses Compusearch Software Systems' secure and auditable two-way web portal, FedConnect®, to communicate with vendors and contractors. FedConnect® provides bi-directional communication between the vendor/contractor and the NRC throughout pre-award, award, and post-award acquisition phases. Therefore, in order to do business with the NRC, vendors and contractors must register to use FedConnect® at <https://www.fedconnect.net/FedConnect>. The individual registering in FedConnect® must have authority to bind the vendor/contractor. There is no charge for using FedConnect®. Assistance with FedConnect® is provided by Compusearch Software Systems, not the NRC. FedConnect® contact and assistance information is provided on the FedConnect® web site at <https://www.fedconnect.net/FedConnect>.

(End of Clause)

## **G.3 ELECTRONIC PAYMENT (DEC 2017)**

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 Transfer-System for Award Management."

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted through the Invoice Processing Platform (IPP) (<https://www.ipp.gov/>). Back up documentation shall be included as required by the NRC's Billing Instructions.

(End of Clause)

**SECTION H - Special Contract Requirements****H.1 2052.200 AUTHORITY.****H.2 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 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 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.

(i) Follow-on effort. The contractor shall be ineligible to participate in NRC contracts, subcontracts, or proposals therefor (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.

(End of Clause)

### **H.3 MONTHLY LETTER STATUS REPORT (MLSR)**

The contractor shall provide a Monthly Letter Status Report which consists of a technical progress report and financial status report. This report will be used by the Government to assess the adequacy of the resources proposed by the contractor to accomplish the work contained in this SOW and provide status of contractor progress in achieving tasks and producing deliverables. The report shall include contract/order summary information, work completed during the specified period, milestone schedule information, problem resolution, travel plans, and staff hour summary (See Attachment 3)

(End of Clause)

### **H.4 2052.215-70 KEY PERSONNEL. (JAN 1993)**

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

Principal Investigator (PI)

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 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.

(End of Clause)

**H.5 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) - ALTERNATE I (OCT 1999)**

- (a) Total expenditure for travel may not exceed \$10,000 over the life of the contract 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 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.

(End of Clause)

**H.6 2052.216-70 LEVEL OF EFFORT. (JAN 1993)**

The NRC's estimate of the total effort for this project is approximately 4756 professional hours and 80 administrative hours (See Section C.5), staff-years for the duration of this contract. This information is advisory and is not to be considered as the sole basis for the development of the staffing plan. For the purposes of the Government estimate, 2000 hours constitute a staff year.

(End of Provision)

**H.7 2052.216-71 INDIRECT COST RATES. (JAN 1993)**

(a) Pending the establishment of final indirect rates which must be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs as follows:

Description	Rate	Base	Type	Period
Indirect Cost	██████	1/	1/	1/



[REDACTED]

[REDACTED]

(b) The contracting officer may adjust these rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the contractor. It is the contractor's responsibility to notify the contracting officer in accordance with FAR 52.232-20, Limitation of Cost, or FAR 52.232-22, Limitation of Funds, as applicable, if these changes affect performance of work within the established cost or funding limitations.

\*To be incorporated into any resultant contract.

(End of Clause)

#### **H.8 2052.227-70 DRAWINGS, DESIGNS, SPECIFICATIONS, AND OTHER DATA. (JAN 1993)**

All drawings, sketches, designs, design data, specifications, notebooks, technical and scientific data, and all photographs, negatives, reports, findings, recommendations, other data and memoranda of every description relating thereto, as well as all copies of the foregoing relating to the work or any part thereto, are subject to inspection by the Commission at all reasonable times. Inspection of the proper facilities must be afforded the Commission by the contractor and its subcontractors. These data are the property of the Government and may be used by the Government for any purpose whatsoever without any claim on the part of the contractor and its subcontractors and vendors for additional compensation and must, subject to the right of the contractor to retain a copy of the material for its own use, be delivered to the Government, or otherwise disposed of by the contractor as the contracting officer may direct during the progress of the work or upon completion or termination of this contract. The contractor's right of retention and use is subject to the security, patent, and use of information provisions, if any, of this contract.

(End of Clause)

#### **H.9 2052.235-71 SAFETY, HEALTH, AND FIRE PROTECTION. (JAN 1993)**

The contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of its employees and of members of the public, including NRC employees and contractor personnel, and to minimize danger from all hazards to life and property. The contractor shall comply with all applicable health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission and the Department of Labor. If the contractor fails to comply with these regulations or requirements, the contracting officer may, without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work. Thereafter, a start work order for resumption of work may be issued at the discretion of the contracting officer. The contractor may not make a claim for an extension of time or for compensation or damages by reason of, or in connection with, this type of work stoppage.

(End of Clause)

#### **H.10 2052.242-70 RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)**

(a) The Nuclear Regulatory Commission's (NRC) policy is to support the contractor's expression of professional health and safety related concerns associated with the contractor's work for NRC that may differ from a prevailing NRC staff view, disagree with an NRC decision or policy position, or take issue with proposed or established agency practices. An occasion may arise when an NRC contractor, contractor's personnel, or subcontractor personnel believes that a conscientious expression of a competent judgement is required to document such concerns on matters directly associated with its performance of the contract. The NRC's policy is to support these instances as Differing Professional Views (DPVs).

(b) The procedure that will be used provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns associated with the mission of the agency by NRC contractors, contractor personnel or subcontractor personnel on matters directly associated with its performance of the contract. This procedure may be found in Attachments to this document. The contractor shall provide a copy of the NRC DPV procedure to all of its employees



performing under this contract and to all subcontractors who shall, in turn, provide a copy of the procedure to its employees. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(End of Clause)

#### **H.11 2052.242-71 PROCEDURES FOR RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)**

(a) The following procedure provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns of NRC contractors and contractor personnel on matters connected to the subject of the contract. Subcontractor DPVs must be submitted through the prime contractor. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(b) The NRC may authorize up to eight reimbursable hours for the contractor to document, in writing, a DPV by the contractor, the contractor's personnel, or subcontractor personnel. The contractor shall not be entitled to any compensation for effort on a DPV which exceeds the specified eight hour limit.

(c) Before incurring costs to document a DPV, the contractor shall first determine whether there are sufficient funds obligated under the contract which are available to cover the costs of writing a DPV. If there are insufficient obligated funds under the contract, the contractor shall first request the NRC contracting officer for additional funding to cover the costs of preparing the DPV and authorization to proceed.

(d) Contract funds shall not be authorized to document an allegation where the use of this NRC contractor DPV process is inappropriate. Examples of such instances are: allegations of wrongdoing which should be addressed directly to the NRC Office of the Inspector General (OIG), issues submitted anonymously, or issues raised which have already been considered, addressed, or rejected, absent significant new information. This procedure does not provide anonymity. Individuals desiring anonymity should contact the NRC OIG or submit the information under NRC's Allegation Program, as appropriate.

(e) When required, the contractor shall initiate the DPV process by submitting a written statement directly to the NRC Office Director or Regional Administrator responsible for the contract, with a copy to the Contracting Officer, Division of Contracts and Property Management, Office of Administration. Each DPV submitted will be evaluated on its own merits.

(f) The DPV, while being brief, must contain the following as it relates to the subject matter of the contract:

(1) A summary of the prevailing NRC view, existing NRC decision or stated position, or the proposed or established NRC practice.

(2) A description of the submitter's views and how they differ from any of the above items.

(3) The rationale for the submitter's views, including an assessment based on risk, safety and cost benefit considerations of the consequences should the submitter's position not be adopted by NRC.

(g) The Office Director or Regional Administrator will immediately forward the submittal to the NRC DPV Review Panel and acknowledge receipt of the DPV, ordinarily within five (5) calendar days of receipt.

(h) The panel will normally review the DPV within seven calendar days of receipt to determine whether enough information has been supplied to undertake a detailed review of the issue. Typically, within 30 calendar days of receipt of the necessary information to begin a review, the panel will provide a written report of its findings to the Office Director or Regional Administrator and to the Contracting Officer, which includes a recommended course of action.

(i) The Office Director or Regional Administrator will consider the DPV Review Panel's report, make a decision on the DPV and provide a written decision to the contractor and the Contracting Officer normally within seven calendar days after receipt of the panel's recommendation.

(j) Subsequent to the decision made regarding the DPV Review Panel's report, a summary of the issue and its disposition will be included in the NRC Weekly Information Report submitted by the Office Director. The DPV file will be retained

in the Office or Region for a minimum of one year thereafter. For purposes of the contract, the DPV shall be considered a deliverable under the contract. Based upon the Office Director or Regional Administrator's report, the matter will be closed.

(End of Clause)

## **H.12 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS**

(a) All offerors will receive preaward and postaward notices in accordance with FAR 15.503.

(b) It is also brought to your attention that the contracting officer is the only individual who can legally obligate funds or commit the NRC to the expenditure of public funds in connection with this procurement. This means that unless provided in a contract document or specifically authorized by the contracting officer, NRC technical personnel may not issue contract modifications, give formal contractual commitments, or otherwise bind, commit, or obligate the NRC contractually. Informal unauthorized commitments, which do not obligate the NRC and do not entitle the contractor to payment, may include:

(1) Encouraging a potential contractor to incur costs prior to receiving a contract;

(2) Requesting or requiring a contractor to make changes under a contract without formal contract modifications;

(3) Encouraging a contractor to incur costs under a cost-reimbursable contract in excess of those costs contractually allowable; and

(4) Committing the Government to a course of action with regard to a potential contract, contract change, claim, or dispute.

(End of Clause)

## **H.13 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)

## **H.14 GREEN PURCHASING (SEP 2015)**

(a) In furtherance of the sustainable acquisition goals of Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," products and services provided under this contract/order shall be energy efficient (EnergyStar® or Federal Energy Management Program - FEMP-designated products), water efficient, biobased, environmentally preferable (excluding EPEAT®-registered products), non-ozone depleting, contain recycled content, or are non- or low toxic alternatives or hazardous constituents (e.g., non-VOC paint), where such products and services meet agency performance requirements. See: Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade."

(b) The NRC and contractor may negotiate during the contract term to permit the substitution or addition of designated recycled content products (i.e., Comprehensive Procurement Guidelines - CPG), EPEAT®-registered products, EnergyStar®- and FEMP designated energy efficient products and appliances, USDA designated biobased products (Biopreferred® program), environmentally preferable products, WaterSense and other water efficient products, products containing non- or lower-ozone depleting substances (i.e., SNAP), and products containing non- or low-toxic or hazardous constituents (e.g., non-VOC paint), when such products and services are readily available at a competitive cost and satisfy the NRC's performance needs.

(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)

## **H.15 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS**

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR Subpart 42.15, "Contractor Performance Information," normally at or near the time the contractor is notified of the NRC's intent to exercise the contract option. If the multi-year contract does not have option years, then an annual evaluation will be prepared on or about the anniversary date of the contract. Final evaluations of contractor performance will be prepared at the expiration of the contract during the contract closeout process.

The Contracting Officer will transmit the NRC Contracting Officer's Representative's (COR) annual and final contractor performance evaluations to the contractor's Project Manager, unless otherwise instructed by the contractor. The contractor will be permitted thirty days to review the document and submit comments, rebutting statements, or additional information.

Where a contractor concurs with, or takes no exception to an annual performance evaluation, the Contracting Officer will consider such evaluation final and releasable for source selection purposes. Disagreements between the parties regarding a performance evaluation will be referred to an individual one level above the Contracting Officer, whose decision will be final.

The Contracting Officer will send a copy of the completed evaluation report, marked "Source Selection Information", to the contractor's Project Manager for their records as soon as practicable after it has been finalized. The completed evaluation report also will be used as a tool to improve communications between the NRC and the contractor and to improve contract performance.

The completed annual performance evaluation will be used to support future award decisions in accordance with FAR 42.1502 and 42.1503. During the period the information is being used to provide source selection information, the completed annual performance evaluation will be released to only two parties - the Federal government personnel performing the source selection evaluation and the contractor under evaluation if the contractor does not have a copy of the report already.

(End of Clause)

## **H.16 DENIAL OF FEDERAL BENEFITS TO INDIVIDUALS CONVICTED OF DRUG TRAFFICKING OR POSSESSION**

In the event that an award is made to an individual, Section 5301 of the Anti-Drug Abuse Act of 1988 (P.L. 100-690), codified at 21 U.S.C. 862, authorizes denial of Federal benefits such as grants, contracts, purchase orders, financial aid, and business and professional licenses to individuals convicted of drug trafficking or possession.

(End of Clause)

## **H.17 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY**

(a) The NRC will provide the contractor with the following items for use under this contract:

The government will continue to provide information available at NRC for the "Old Boral Performance in Spent Fuel Storage and Transportation" contract to the contractor, such as literature information and regulatory information.

### **Applicable Publications (Current Editions)**

Electric Power Research Institute (EPRI). "BORAL™ Behavior Under Simulated Cask Vacuum Drying." EPRI Report 1009696. 2004.

He, X., Y.-M. Pan, R. Page, and others. "Assessment of Aging Mechanisms for Stainless Steel-and Al-Based Neutron Absorbing Materials Used in Spent Nuclear Fuel Dry Cask Storage System." NACE CORROSION 2016. Paper No. 7670. 2016.

Jung, H., P. Shukla, T. Ahn, and others. "Extended Storage and Transportation Evaluation of Drying Adequacy." NRC ADAMS ML13169A039. NRC. 2013, <https://www.nrc.gov/docs/ML1316/ML13169A039.pdf>

Knight, T. "Experimental Determination and Modeling of Used Fuel Drying by Vacuum and Gas Circulation for Dry Cask Storage." University of South Carolina, EPRI Extended Storage Collaboration Program (ESCP) Winter Meeting Materials, Charlotte, NC, 2016.

U.S. Nuclear regulatory Commission (NRC). Information Notice, "Weekly Information Report – Week Ending March 10, 2017." SECY-17-0039. NRC ADAMS: ML17075A444. 2017, <https://www.nrc.gov/docs/ML1707/ML17075A444.pdf>

NRC. NRC Information Notice 2009-26, "Degradation of Neutron-Absorbing Materials in the spent Fuel Pool." NRC ADAMS: ML092440545. 2009, <https://www.nrc.gov/docs/ML0924/ML092440545.pdf>

Wang, L. "Evaluation of Aluminum-Boron Carbide Neutron Absorbing Materials for Interim Storage of Used Nuclear Fuel." Project No. 10-961. NEUP. Nuclear energy University Program. U.S. Department of Energy. 2015.

Include an asterisk (\*) if the item also applies to paragraph (b) below.

(b) The equipment/property listed below is hereby transferred from contract/agreement number: **NA**, to contract/agreement number: **NA**:

1. NA
2. NA
3. NA

(c) Only the equipment/property listed above in the quantities shown will be provided by the Government. The contractor shall be responsible and accountable for all Government property provided under this contract and shall comply with the provisions of the FAR Government Property Clause under this contract and FAR Subpart 45.5, as in effect on the date of this contract. The contractor shall investigate and provide written notification to the NRC Contracting Officer (CO) and the NRC Division of Facilities and Security, Physical Security Branch of all cases of loss, damage, or destruction of Government property in its possession or control not later than 24 hours after discovery. The contractor must report stolen Government property to the local police and a copy of the police report must be provided to the CO and to the Division of Facilities and Security, Office of Administration.

(d) All other equipment/property required in performance of the contract shall be furnished by the Contractor.

(End of Clause)

## SECTION I - Contract Clauses

## I.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE

The following contract clauses pertinent to this section are hereby incorporated by reference (by Citation Number, Title, and Date) in accordance with the clause at FAR "52.252-2 CLAUSES INCORPORATED BY REFERENCE" in Section I of this contract. See FAR 52.252-2 for an internet address (if specified) for electronic access to the full text of a clause.

FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)		
NUMBER	TITLE	DATE
52.202-1	DEFINITIONS.	NOV 2013
52.203-3	GRATUITIES.	APR 1984
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
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY.	MAY 2014
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY.	MAY 2014
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS.	OCT 2010
52.203-17	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS.	APR 2014
52.203-19	PROHIBITION ON REQUIRING CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS OR STATEMENTS.	JAN 2017
52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER.	MAY 2011
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS.	OCT 2016
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT.	OCT 2015
52.209-10	PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS.	NOV 2015
52.215-2	AUDIT AND RECORDS - NEGOTIATION.	OCT 2010
52.215-8	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT.	OCT 1997
52.215-23	LIMITATIONS ON PASS-THROUGH CHARGES.	OCT 2009
52.215-23	LIMITATIONS ON PASS-THROUGH CHARGES.	OCT 2009
	-- ALTERNATE I	OCT 2009
52.216-7	ALLOWABLE COST AND PAYMENT.	JUN 2013
	ALTERNATE II	AUG 2012
52.216-7	ALLOWABLE COST AND PAYMENT.	JUN 2013
	ALTERNATE IV	AUG 2012
52.216-15	PREDETERMINED INDIRECT COST RATES.	APR 1998
52.217-2	CANCELLATION UNDER MULTI-YEAR CONTRACTS.	OCT 1997
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS.	NOV 2016
52.222-3	CONVICT LABOR.	JUN 2003
52.222-21	PROHIBITION OF SEGREGATED FACILITIES.	APR 2015
52.222-26	EQUAL OPPORTUNITY.	SEP 2016
52.222-37	EMPLOYMENT REPORTS ON VETERANS.	FEB 2016
52.222-40	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT.	DEC 2010

52.222-50	COMBATING TRAFFICKING IN PERSONS.	MAR 2015
52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION.	OCT 2015
52.223-6	DRUG-FREE WORKPLACE.	MAY 2001
52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING.	AUG 2011
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES.	JUN 2008
52.227-1	AUTHORIZATION AND CONSENT. ALTERNATE I	DEC 2007 APR 1984
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT.	DEC 2007
52.227-14	RIGHTS IN DATA-GENERAL.	MAY 2014
52.227-14	RIGHTS IN DATA-GENERAL. - ALTERNATE I	DEC 2007
52.227-14	RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE IV	DEC 2007
52.228-7	INSURANCE - LIABILITY TO THIRD PERSONS.	MAR 1996
52.230-2	COST ACCOUNTING STANDARDS.	OCT 2015
52.230-5	COST ACCOUNTING STANDARDS - EDUCATIONAL INSTITUTION.	AUG 2016
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS.	JUN 2010
52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS.	APR 1984
52.232-20	LIMITATION OF COST.	APR 1984
52.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS.	DEC 2013
52.233-3	PROTEST AFTER AWARD.	AUG 1996
52.233-3	PROTEST AFTER AWARD. - ALTERNATE I	JUN 1985
52.232-18	AVAILABILITY OF FUNDS.	APR 1984
52.232-22	LIMITATION OF FUNDS.	APR 1984
52.232-23	ASSIGNMENT OF CLAIMS.	MAY 2014
52.232-25	PROMPT PAYMENT.	JAN 2017
52.232-25	PROMPT PAYMENT - ALTERNATE I	FEB 2002
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER – SYSTEM FOR AWARD MANAGEMENT.	JUL 2013
52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS.	JUN 2013
52.233-1	DISPUTES.	MAY 2014
52.233-3	PROTEST AFTER AWARD. (AUG 1996) - ALTERNATE I	JUN 1985
52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM.	OCT 2004
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS.	APR 1984
52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS.	JAN 1997
52.242-13	BANKRUPTCY.	JUL 1995
52.243-2	CHANGES - COST-REIMBURSEMENT. (AUG 1987) – ALTERNATE V	APR 1984
52.244-5	COMPETITION IN SUBCONTRACTING.	DEC 1996
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS.	JAN 2017
52.245-1	GOVERNMENT PROPERTY. (JAN 2017) - ALTERNATE II	APR 2012
52.245-9	USE AND CHARGES	APR 2012
52.246-25	LIMITATION OF LIABILITY - SERVICES.	FEB 1997
52.247-63	PREFERENCE FOR U.S.-FLAG AIR CARRIERS.	JUN 2003
52.249-5	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS).	AUG 2016
52.249-14	EXCUSABLE DELAYS.	APR 1984
52.253-1	COMPUTER GENERATED FORMS.	JAN 1991

## **I.2 52.216-7 ALLOWABLE COST AND PAYMENT. (JUN 2013)**

(a) *Invoicing.* (1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in

amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) subpart 31.2 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request.

In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) *Reimbursing costs.* (1) For the purpose of reimbursing allowable costs (except as provided in paragraph (b)(2) of the clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term *costs* includes only-

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for-

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check, or other forms of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) below, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) below.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) *Small business concerns.* A small business concern may receive more frequent payments than every 2 weeks.

(d) *Final indirect cost rates.* (1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

(A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.

(B) General and Administrative expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).

(C) Overhead expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.

(D) Occupancy expenses (intermediate indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.

(E) Claimed allocation bases, by element of cost, used to distribute indirect costs.

(F) Facilities capital cost of money factors computation.



(G) Reconciliation of books of account (i.e., General Ledger) and claimed direct costs by major cost element.

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

(I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.

(J) Subcontract information. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the subcontractor name, address, and point of contact information).

(K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.

(L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.

(M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.

(N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).

(O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

(A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.

(B) General organizational information and limitation on allowability of compensation for certain contractor personnel. See 31.205-6(p). Additional salary reference information is available at [http://www.whitehouse.gov/omb/procurement\\_index\\_exec\\_comp/](http://www.whitehouse.gov/omb/procurement_index_exec_comp/).

(C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changed from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc.).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(I) of this section, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify (i) the agreed-upon final annual indirect cost rates, (ii) the bases to which the rates apply, (iii) the periods for which the rates apply, (iv) any specific indirect cost items treated as direct costs in the settlement, and (v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates. The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, the Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may-

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) *Billing rates.* Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates-

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) *Quick-closeout procedures.* Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) *Audit.* At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be-

(1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs or

(2) Adjusted for prior overpayments or underpayments.

(h) *Final payment.* (1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver-

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except-

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

(End of clause)

### **I.3 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days.

(End of clause)

### **I.4 52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (OCT 2015)**

(a) Definitions. As used in this clause-

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

### **I.5 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES. (JUL 2014)**

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

### **I.6 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE II (DEC 2007)**

(a) *Definitions.* As used in this clause-

*Computer database or database* means a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

*Computer software-* (1) Means (i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and

(ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.

*Computer software documentation* means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

*Data* means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

*Form, fit, and function data* means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

*Limited rights* means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

*Limited rights data* means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

*Restricted computer software* means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

*Restricted rights*, as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

*Technical data*, means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases. (See 41 U.S.C. 116).

*Unlimited rights* means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of rights.* (1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in-

- (i) Data first produced in the performance of this contract;
- (ii) Form, fit, and function data delivered under this contract;
- (iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and
- (iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to-

- (i) Assert copyright in data first produced in the performance of this contract to the extent provided in paragraph (c)(1) of this clause;
- (ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;
- (iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and
- (iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) *Copyright-* (1) Data first produced in the performance of this contract. (i) Unless provided otherwise in paragraph (d) of this clause, the Contractor may, without prior approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Contracting Officer is required to assert copyright in all other data first produced in the performance of this contract.

- (ii) When authorized to assert copyright to the data, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).
- (iii) For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without the prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the Contractor-

- (i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) *Release, publication, and use of data.* The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except-

(1) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);

(2) As expressly set forth in this contract; or

(3) If the Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(e) *Unauthorized marking of data.* (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 4703, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer will make written inquiry to the Contractor affording the Contractor 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Contracting Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor will be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer will furnish the Contractor a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in paragraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by paragraph (e) of the clause from bringing a claim, in accordance with the Disputes clause of this contract, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) *Omitted or incorrect markings.* (1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2) If the unmarked data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Contractor's expense. The Contracting Officer may agree to do so if the Contractor-

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability for the disclosure, use, or reproduction of any data made prior to the addition of the notice or resulting from the omission of the notice.

(3) If data has been marked with an incorrect notice, the Contracting Officer may-

(i) Permit correction of the notice at the Contractor's expense if the Contractor identifies the data and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) *Protection of limited rights data and restricted computer software.* (1) The Contractor may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Contractor shall-

(i) Identify the data being withheld; and

(ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

(3) Notwithstanding paragraph (g)(1) of this clause, the contract may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be entitled to be withheld. If delivery of that data is required, the Contractor shall affix the following "Limited Rights Notice" to the data and the Government will treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with the notice:

LIMITED RIGHTS NOTICE (DEC 2007)



(a) These data are submitted with limited rights under Government Contract No. **31310018C0003** (and subcontract [NA], if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any; provided that the Government makes such disclosure subject to prohibition against further use and disclosure: [ ](Agencies may list additional purposes as set forth in 27.404-2(c)(1) or if none, so state.)

1. U.S. Nuclear Regulatory Commission Regulation (NUREG);
2. Generic Communications Report

(b) This notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

(h) *Subcontracting*. The Contractor shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government those rights, the Contractor shall promptly notify the Contracting Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Contracting Officer.

(i) *Relationship to patents or other rights*. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

#### **I.7 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE V (DEC 2007)**

(a) *Definitions*. As used in this clause-

*Computer database* or *database* means a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

*Computer software*- (1) Means (i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and (ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.

*Computer software documentation* means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

*Data* means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

*Form, fit, and function data* means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For

computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

*Limited rights* means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

*Limited rights data* means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

*Restricted computer software* means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

*Restricted rights*, as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

*Technical data*, means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases (See 41 U.S.C. 116).

*Unlimited rights* means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of rights.* (1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in-

(i) Data first produced in the performance of this contract;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to-

(i) Assert copyright in data first produced in the performance of this contract to the extent provided in paragraph (c)(1) of this clause;

(ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;

(iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) *Copyright-* (1) Data first produced in the performance of this contract. (i) Unless provided otherwise in paragraph (d) of this clause, the Contractor may, without prior approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Contracting Officer is required to assert copyright in all other data first produced in the performance of this contract.

(ii) When authorized to assert copyright to the data, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).

(iii) For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without the prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the Contractor-

(i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) *Release, publication, and use of data.* The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except-

(1) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);

(2) As expressly set forth in this contract; or

(3) If the Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(e) *Unauthorized marking of data.* (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 4703, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer will make written inquiry to the Contractor affording the Contractor 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Contracting Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor will be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer will furnish the Contractor a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in paragraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by paragraph (e) of the clause from bringing a claim, in accordance with the Disputes clause of this contract, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) *Omitted or incorrect markings.* (1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2) If the unmarked data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Contractor's expense. The Contracting Officer may agree to do so if the Contractor-

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability for the disclosure, use, or reproduction of any data made prior to the addition of the notice or resulting from the omission of the notice.

(3) If data has been marked with an incorrect notice, the Contracting Officer may-

(i) Permit correction of the notice at the Contractor's expense if the Contractor identifies the data and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) *Protection of limited rights data and restricted computer software.* (1) The Contractor may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Contractor shall-

(i) Identify the data being withheld; and

(ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

(3) (Reserved)

(h) *Subcontracting.* The Contractor shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government those rights, the Contractor shall promptly notify the Contracting Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Contracting Officer.

(i) *Relationship to patents or other rights.* Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(j) The Contractor agrees, except as may be otherwise specified in this contract for specific data deliverables listed as not subject to this paragraph, that the Contracting Officer may, up to three years after acceptance of all deliverables under this contract, inspect at the Contractor's facility any data withheld pursuant to paragraph (g)(1) of this clause, for purposes of verifying the Contractor's assertion of limited rights or restricted rights status of the data or for evaluating work performance. When the Contractor whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if a particular representative made the inspection, the Contracting Officer shall designate an alternate inspector.

(End of clause)

#### **I.8 52.227-16 ADDITIONAL DATA REQUIREMENTS. (JUN 1987)**

(a) In addition to the data (as defined in the clause at 52.227-14, Rights in Data - General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.

(b) The Rights in Data - General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall

require the Contractor to deliver any data the withholding of which is authorized by the Rights in Data - General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.

(c) When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(d) The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

(End of clause)

#### **I.9 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL). (JUN 1987)**

Except for data contained on pages [ ], it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data - General" clause contained in this contract) in and to the technical data contained in the proposal dated [ ], upon which this contract is based.

(End of clause)

#### **I.10 52.232-16 PROGRESS PAYMENTS. (APR 2012)**

The Government will make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts of \$2,500 or more approved by the Contracting Officer, under the following conditions:

(a) *Computation of amounts.* (1) Unless the Contractor requests a smaller amount, the Government will compute each progress payment as 80 percent of the Contractor's total costs incurred under this contract whether or not actually paid, plus financing payments to subcontractors (see paragraph (j) of this clause), less the sum of all previous progress payments made by the Government under this contract. The Contracting Officer will consider cost of money that would be allowable under FAR 31.205-10 as an incurred cost for progress payment purposes.

(2) The amount of financing and other payments for supplies and services purchased directly for the contract are limited to the amounts that have been paid by cash, check, or other forms of payment, or that are determined due and will be paid to subcontractors-

(i) In accordance with the terms and conditions of a subcontract or invoice; and

(ii) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government.

(3) The Government will exclude accrued costs of Contractor contributions under employee pension plans until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's total costs for progress payments until paid).

(4) The Contractor shall not include the following in total costs for progress payment purposes in paragraph (a)(1) of this clause:

(i) Costs that are not reasonable, allocable to this contract, and consistent with sound and generally accepted accounting principles and practices.

(ii) Costs incurred by subcontractors or suppliers.

(iii) Costs ordinarily capitalized and subject to depreciation or amortization except for the properly depreciated or amortized portion of such costs.

(iv) Payments made or amounts payable to subcontractors or suppliers, except for -

(A) Completed work, including partial deliveries, to which the Contractor has acquired title; and

(B) Work under cost-reimbursement or time-and-material subcontracts to which the Contractor has acquired title.

(5) The amount of unliquidated progress payments may exceed neither (i) the progress payments made against incomplete work (including allowable unliquidated progress payments to subcontractors) nor (ii) the value, for progress payment purposes, of the incomplete work. Incomplete work shall be considered to be the supplies and services required by this contract, for which delivery and invoicing by the Contractor and acceptance by the Government are incomplete.

(6) The total amount of progress payments shall not exceed 80 percent of the total contract price.

(7) If a progress payment or the unliquidated progress payments exceed the amounts permitted by subparagraphs (a)(4) or (a)(5) above, the Contractor shall repay the amount of such excess to the Government on demand.

(8) Notwithstanding any other terms of the contract, the Contractor agrees not to request progress payments in dollar amounts of less than \$2,500. The Contracting Officer may make exceptions.

(9) The costs applicable to items delivered, invoiced, and accepted shall not include costs in excess of the contract price of the items.

(b) *Liquidation*. Except as provided in the Termination for Convenience of the Government clause, all progress payments shall be liquidated by deducting from any payment under this contract, other than advance or progress payments, the unliquidated progress payments, or 80 percent of the amount invoiced, whichever is less. The Contractor shall repay to the Government any amounts required by a retroactive price reduction, after computing liquidations and payments on past invoices at the reduced prices and adjusting the unliquidated progress payments accordingly. The Government reserves the right to unilaterally change from the ordinary liquidation rate to an alternate rate when deemed appropriate for proper contract financing.

(c) *Reduction or suspension*. The Contracting Officer may reduce or suspend progress payments, increase the rate of liquidation, or take a combination of these actions, after finding on substantial evidence any of the following conditions:

(1) The Contractor failed to comply with any material requirement of this contract (which includes paragraphs (f) and (g) below).

(2) Performance of this contract is endangered by the Contractor's-

(i) Failure to make progress; or

(ii) Unsatisfactory financial condition.

(3) Inventory allocated to this contract substantially exceeds reasonable requirements.

(4) The Contractor is delinquent in payment of the costs of performing this contract in the ordinary course of business.

(5) The fair value of the undelivered work is less than the amount of unliquidated progress payments for that work.

(6) The Contractor is realizing less profit than that reflected in the establishment of any alternate liquidation rate in paragraph (b) above, and that rate is less than the progress payment rate stated in subparagraph (a)(1) above.

(d) *Title.* (1) Title to the property described in this paragraph (d) shall vest in the Government. Vestiture shall be immediately upon the date of this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.

(2) "Property," as used in this clause, includes all of the below-described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted accounting principles and practices.

(i) Parts, materials, inventories, and work in process;

(ii) Special tooling and special test equipment to which the Government is to acquire title;

(iii) Nondurable (*i.e.*, noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment, and other similar manufacturing aids, title to which would not be obtained as special tooling under subparagraph (ii) above; and

(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.

(3) Although title to property is in the Government under this clause, other applicable clauses of this contract; *e.g.*, the termination clauses, shall determine the handling and disposition of the property.

(4) The Contractor may sell any scrap resulting from production under this contract without requesting the Contracting Officer's approval, but the proceeds shall be credited against the costs of performance.

(5) To acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor must obtain the Contracting Officer's advance approval of the action and the terms. The Contractor shall (i) exclude the allocable costs of the property from the costs of contract performance, and (ii) repay to the Government any amount of unliquidated progress payments allocable to the property. Repayment may be by cash or credit memorandum.

(6) When the Contractor completes all of the obligations under this contract, including liquidation of all progress payments, title shall vest in the Contractor for all property (or the proceeds thereof) not-

(i) Delivered to, and accepted by, the Government under this contract; or

(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.



(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.

(e) *Risk of loss.* Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. The Contractor shall repay the Government an amount equal to the unliquidated progress payments that are based on costs allocable to property that is lost (see 45.101).

(f) *Control of costs and property.* The Contractor shall maintain an accounting system and controls adequate for the proper administration of this clause.

(g) *Reports, forms, and access to records.* (1) The Contractor shall promptly furnish reports, certificates, financial statements, and other pertinent information (including estimates to complete) reasonably requested by the Contracting Officer for the administration of this clause. Also, the Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's books, records, and accounts.

(2) The Contractor shall furnish estimates to complete that have been developed or updated within six months of the date of the progress payment request. The estimates to complete shall represent the Contractor's best estimate of total costs to complete all remaining contract work required under the contract. The estimates shall include sufficient detail to permit Government verification.

(3) Each Contractor request for progress payment shall:

(i) Be submitted on Standard Form 1443, Contractor's Request for Progress Payment, or the electronic equivalent as required by agency regulations, in accordance with the form instructions and the contract terms; and

(ii) Include any additional supporting documentation requested by the Contracting Officer.

(h) *Special terms regarding default.* If this contract is terminated under the Default clause, (i) the Contractor shall, on demand, repay to the Government the amount of unliquidated progress payments and (ii) title shall vest in the Contractor, on full liquidation of progress payments, for all property for which the Government elects not to require delivery under the Default clause. The Government shall be liable for no payment except as provided by the Default clause.

(i) *Reservations of rights.* (1) No payment or vesting of title under this clause shall-

(i) Excuse the Contractor from performance of obligations under this contract; or

(ii) Constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause-

(i) Shall not be exclusive but rather shall be in addition to any other rights and remedies provided by law or this contract; and

(ii) Shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.

(j) *Financing payments to subcontractors.* The financing payments to subcontractors mentioned in paragraphs (a)(1) and (a)(2) of this clause shall be all financing payments to subcontractors or divisions, if the following conditions are met:

- (1) The amounts included are limited to-
  - (i) The unliquidated remainder of financing payments made; plus
  - (ii) Any unpaid subcontractor requests for financing payments.
- (2) The subcontract or interdivisional order is expected to involve a minimum of approximately 6 months between the beginning of work and the first delivery; or, if the subcontractor is a small business concern, 4 months.
- (3) If the financing payments are in the form of progress payments, the terms of the subcontract or interdivisional order concerning progress payments-
  - (i) Are substantially similar to the terms of this clause for any subcontractor that is a large business concern, or this clause with its Alternate I for any subcontractor that is a small business concern;
  - (ii) Are at least as favorable to the Government as the terms of this clause;
  - (iii) Are not more favorable to the subcontractor or division than the terms of this clause are to the Contractor;
  - (iv) Are in conformance with the requirements of FAR 32.504(e); and
  - (v) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if-
    - (A) The Contractor defaults; or
    - (B) The subcontractor becomes bankrupt or insolvent.
- (4) If the financing payments are in the form of performance-based payments, the terms of the subcontract or interdivisional order concerning payments-
  - (i) Are substantially similar to the Performance-Based Payments clause at FAR 52.232-32 and meet the criteria for, and definition of, performance-based payments in FAR Part 32;
  - (ii) Are in conformance with the requirements of FAR 32.504(f); and
  - (iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if-
    - (A) The Contractor defaults; or
    - (B) The subcontractor becomes bankrupt or insolvent.
- (5) If the financing payments are in the form of commercial item financing payments, the terms of the subcontract or interdivisional order concerning payments -
  - (i) Are constructed in accordance with FAR 32.206(c) and included in a subcontract for a commercial item purchase that meets the definition and standards for acquisition of commercial items in FAR Parts 2 and 12;
  - (ii) Are in conformance with the requirements of FAR 32.504(g); and

(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if-

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(6) If financing is in the form of progress payments, the progress payment rate in the subcontract is the customary rate used by the contracting agency, depending on whether the subcontractor is or is not a small business concern.

(7) Concerning any proceeds received by the Government for property to which title has vested in the Government under the subcontract terms, the parties agree that the proceeds shall be applied to reducing any unliquidated financing payments by the Government to the Contractor under this contract.

(8) If no unliquidated financing payments to the Contractor remain, but there are unliquidated financing payments that the Contractor has made to any subcontractor, the Contractor shall be subrogated to all the rights the Government obtained through the terms required by this clause to be in any subcontract, as if all such rights had been assigned and transferred to the Contractor.

(9) To facilitate small business participation in subcontracting under this contract, the Contractor shall provide financing payments to small business concerns, in conformity with the standards for customary contract financing payments stated in FAR 32.113. The Contractor shall not consider the need for such financing payments as a handicap or adverse factor in the award of subcontracts.

(k) *Limitations on undefinitized contract actions.* Notwithstanding any other progress payment provisions in this contract, progress payments may not exceed 80 percent of costs incurred on work accomplished under undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes. This limitation shall apply to the costs incurred, as computed in accordance with paragraph (a) of this clause, and shall remain in effect until the contract action is definitized. Costs incurred which are subject to this limitation shall be segregated on Contractor progress payment requests and invoices from those costs eligible for higher progress payment rates. For purposes of progress payment liquidation, as described in paragraph (b) of this clause, progress payments for undefinitized contract actions shall be liquidated at 80 percent of the amount invoiced for work performed under the undefinitized contract action as long as the contract action remains undefinitized. The amount of unliquidated progress payments for undefinitized contract actions shall not exceed 80 percent of the maximum liability of the Government under the undefinitized contract action or such lower limit specified elsewhere in the contract. Separate limits may be specified for separate actions.

(l) *Due date.* The designated payment office will make progress payments on the 30th day after the designated billing office receives a proper progress payment request. In the event that the Government requires an audit or other review of a specific progress payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date. Progress payments are considered contract financing and are not subject to the interest penalty provisions of the Prompt Payment Act.

(m) *Progress payments under indefinite-delivery contracts.* The Contractor shall account for and submit progress payment requests under individual orders as if the order constituted a separate contract, unless otherwise specified in this contract.

(End of clause)

**I.11 52.244-2 SUBCONTRACTS. (OCT 2010) - ALTERNATE I (JUN 2007)**

(a) *Definitions.* As used in this clause-

*Approved purchasing system* means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

*Consent to subcontract* means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

*Subcontract* means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds-

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: [ ]

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c) or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting-

(A) The principal elements of the subcontract price negotiations;

- (B) The most significant considerations controlling establishment of initial or revised prices;
- (C) The reason certified cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
- (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
- (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c) or (d) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds either the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (e)(1)(iv) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination-

- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: [ ]

(End of clause)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <https://www.acquisition.gov/?q=browsefar>

(End of clause)

**I.13 NRC ACQUISITION REGULATION (NRCAR) PROVISIONS AND CLAUSES (AUG 2011)**

Applicable NRCAR provisions and clauses located in 48 CFR Chapter 20 are hereby incorporated by reference into this contract.

(End of Clause)

**SECTION J - List of Documents, Exhibits and Other Attachments**

## J.1 List of Documents, Exhibits, and Other Attachments

<b>Attachment Number</b>	<b>Title</b>	<b>Date</b>
Attachment 1	Subpart 2009.5 Organizational Conflicts of Interest	N/A
Attachment 2	Template Contractor Spending Plan	05/01/2012
Attachment 3	Monthly Letter Status Report (MLSR) Instructions for Contracts	N/A
Attachment 4	Billing Instructions Cost-Reimbursement Type Contracts	03/2018

## ATTACHMENT 1

**Subpart 2009.5 Organizational Conflicts of Interest****§2009.500 Scope of subpart.**

In accordance with 42 U.S.C. 2210a., NRC acquisitions are processed in accordance with §2009.570, which takes precedence over FAR 9.5 with respect to organizational conflicts of interest. Where non-conflicting guidance appears in FAR 9.5, that guidance must be followed.

**§2009.570 NRC organizational conflicts of interest.****§2009.570-1 Scope of policy.**

(a) It is the policy of NRC to avoid, eliminate, or neutralize contractor organizational conflicts of interest. The NRC achieves this objective by requiring all prospective contractors to submit information describing relationships, if any, with organizations or persons (including those regulated by the NRC) which may give rise to actual or potential conflicts of interest in the event of contract award.

(b) Contractor conflict of interest determinations cannot be made automatically or routinely. The application of sound judgment on virtually a case-by-case basis is necessary if the policy is to be applied to satisfy the overall public interest. It is not possible to prescribe in advance a specific method or set of criteria which would serve to identify and resolve all of the contractor conflict of interest situations that might arise. However, examples are provided in these regulations to guide application of this policy guidance. The ultimate test is as follows: Might the contractor, if awarded the contract, be placed in a position where its judgment may be biased, or where it may have an unfair competitive advantage?

(c) The conflict of interest rule contained in this subpart applies to contractors and offerors only. Individuals or firms who have other relationships with the NRC (e.g., parties to a licensing proceeding) are not covered by this regulation. This rule does not apply to the acquisition of consulting services through the personnel appointment process, NRC agreements with other Government agencies, international organizations, or state, local, or foreign Governments. Separate procedures for avoiding conflicts of interest will be employed in these agreements, as appropriate.

**§2009.570-2 Definitions.**

Affiliates means business concerns which are affiliates of each other when either directly or indirectly one concern or individual controls or has the power to control another, or when a third party controls or has the power to control both.

Contract means any contractual agreement or other arrangement with the NRC except as provided in §2009.570-1(c).

Contractor means any person, firm, unincorporated association, joint venture, co-sponsor, partnership, corporation, affiliates thereof, or their successors in interest, including their chief executives, directors, key personnel (identified in the contract), proposed consultants or subcontractors, which are a party to a contract with the NRC.



Evaluation activities means any effort involving the appraisal of a technology, process, product, or policy.

Offeror or prospective contractor means any person, firm, unincorporated association, joint venture, co-sponsor, partnership, corporation, or their affiliates or successors in interest, including their chief executives, directors, key personnel, proposed consultants, or subcontractors, submitting a bid or proposal, solicited or unsolicited, to the NRC to obtain a contract.

Organizational conflicts of interest means that a relationship exists whereby a contractor or prospective contractor has present or planned interests related to the work to be performed under an NRC contract which:

- (1) May diminish its capacity to give impartial, technically sound, objective assistance and advice, or may otherwise result in a biased work product; or
- (2) May result in its being given an unfair competitive advantage.

Potential conflict of interest means that a factual situation exists that suggests that an actual conflict of interest may arise from award of a proposed contract. The term potential conflict of interest is used to signify those situations that

- (1) Merit investigation before contract award to ascertain whether award would give rise to an actual conflict; or
- (2) Must be reported to the contracting officer for investigation if they arise during contract performance.

Research means any scientific or technical work involving theoretical analysis, exploration, or experimentation.

Subcontractor means any subcontractor of any tier who performs work under a contract with the NRC except subcontracts for supplies and subcontracts in amounts not exceeding \$10,000.

Technical consulting and management support services means internal assistance to a component of the NRC in the formulation or administration of its programs, projects, or policies which normally require that the contractor be given access to proprietary information or to information that has not been made available to the public. These services typically include assistance in the preparation of program plans, preliminary designs, specifications, or statements of work.

**§2009.570-3 Criteria for recognizing contractor organizational conflicts of interest.**

(a) General.

(1) Two questions will be asked in determining whether actual or potential organizational conflicts of interest exist:

(i) Are there conflicting roles which might bias an offeror's or contractor's judgment in relation to its work for the NRC?

(ii) May the offeror or contractor be given an unfair competitive advantage based on the performance of the contract?

(2) NRC's ultimate determination that organizational conflicts of interest exist will be made in light of common sense and good business judgment based upon the relevant facts. While it is difficult to identify and to prescribe in advance a specific method for avoiding all of the various situations or

relationships that might involve potential organizational conflicts of interest, NRC personnel will pay particular attention to proposed contractual requirements that call for the rendering of advice, consultation or evaluation activities, or similar activities that directly lay the groundwork for the NRC's decisions on regulatory activities, future procurements, and research programs. Any work performed at an applicant or licensee site will also be closely scrutinized by the NRC staff.

(b) Situations or relationships. The following situations or relationships may give rise to organizational conflicts of interest:

(1) The offeror or contractor shall disclose information that may give rise to organizational conflicts of interest under the following circumstances. The information may include the scope of work or specification for the requirement being performed, the period of performance, and the name and telephone number for a point of contact at the organization knowledgeable about the commercial contract.

(i) Where the offeror or contractor provides advice and recommendations to the NRC in the same technical area where it is also providing consulting assistance to any organization regulated by the NRC.

(ii) Where the offeror or contractor provides advice to the NRC on the same or similar matter on which it is also providing assistance to any organization regulated by the NRC.

(iii) Where the offeror or contractor evaluates its own products or services, or has been substantially involved in the development or marketing of the products or services of another entity.

(iv) Where the award of a contract would result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC, or would result in an unfair competitive advantage for the offeror or contractor.

(v) Where the offeror or contractor solicits or performs work at an applicant or licensee site while performing work in the same technical area for the NRC at the same site.

(2) The contracting officer may request specific information from an offeror or contractor or may require special contract clauses such as provided in §2009.570-5(b) in the following circumstances:

(i) Where the offeror or contractor prepares specifications that are to be used in competitive procurements of products or services covered by the specifications.

(ii) Where the offeror or contractor prepares plans for specific approaches or methodologies that are to be incorporated into competitive procurements using the approaches or methodologies.

(iii) Where the offeror or contractor is granted access to information not available to the public concerning NRC plans, policies, or programs that could form the basis for a later procurement action.

(iv) Where the offeror or contractor is granted access to proprietary information of its competitors.

(v) Where the award of a contract might result in placing the offeror or contractor in a conflicting role in which its judgment may be biased in relation to its work for the NRC or might result in an unfair competitive advantage for the offeror or contractor.

(c) Policy application guidance. The following examples are illustrative only and are not intended to identify and resolve all contractor organizational conflict of interest situations.

(1)(i) Example. The ABC Corp., in response to a Request For Proposal (RFP), proposes to undertake certain analyses of a reactor component as called for in the RFP. The ABC Corp. is one of several companies considered to be technically well qualified. In response to the inquiry in the RFP, the ABC Corp. advises that it is currently performing similar analyses for the reactor manufacturer.

(ii) Guidance. An NRC contract for that particular work normally would not be awarded to the ABC Corp. because the company would be placed in a position in which its judgment could be biased in relationship to its work for the NRC. Because there are other well-qualified companies available, there would be no reason for considering a waiver of the policy.

(2)(i) Example. The ABC Corp., in response to an RFP, proposes to perform certain analyses of a reactor component that is unique to one type of advanced reactor. As is the case with other technically qualified companies responding to the RFP, the ABC Corp. is performing various projects for several different utility clients. None of the ABC Corp. projects have any relationship to the work called for in the RFP. Based on the NRC evaluation, the ABC Corp. is considered to be the best qualified company to perform the work outlined in the RFP.

(ii) Guidance. An NRC contract normally could be awarded to the ABC Corp. because no conflict of interest exists which could motivate bias with respect to the work. An appropriate clause would be included in the contract to preclude the ABC Corp. from subsequently contracting for work with the private sector that could create a conflict during the performance of the NRC contract. For example, ABC Corp. would be precluded from the performance of similar work for the company developing the advanced reactor mentioned in the example.

(3)(i) Example. The ABC Corp., in response to a competitive RFP, submits a proposal to assist the NRC in revising NRC's guidance documents on the respiratory protection requirements of [10 CFR Part 20](#). ABC Corp. is the only firm determined to be technically acceptable. ABC Corp. has performed substantial work for regulated utilities in the past and is expected to continue similar efforts in the future. The work has and will cover the writing, implementation, and administration of compliance respiratory protection programs for nuclear power plants.

(ii) Guidance. This situation would place the firm in a role where its judgment could be biased in relationship to its work for the NRC. Because the nature of the required work is vitally important in terms of the NRC's responsibilities and no reasonable alternative exists, a waiver of the policy, in accordance with §2009.570-9 may be warranted. Any waiver must be fully documented in accordance with the waiver provisions of this policy with particular attention to the establishment of protective mechanisms to guard against bias.

(4)(i) Example. The ABC Corp. submits a proposal for a new system to evaluate a specific reactor component's performance for the purpose of developing standards that are important to the NRC program. The ABC Corp. has advised the NRC that it intends to sell the new system to industry once its practicability has been demonstrated. Other companies in this business are using older systems for evaluation of the specific reactor component.

(ii) Guidance. A contract could be awarded to the ABC Corp. if the contract stipulates that no information produced under the contract will be used in the contractor's private activities unless this information has been reported to the NRC. Data on how the reactor component performs, which is reported to the NRC by contractors, will normally be disseminated by the NRC to others to preclude an unfair competitive advantage. When the NRC furnishes information about the reactor component to the contractor for the performance of contracted work, the information may not be used in the contractor's private activities unless the information is generally available to others. Further, the contract will stipulate that the contractor will inform the NRC contracting officer of all situations in which the information, developed about the performance of the reactor component under the contract, is proposed to be used.

(5)(i) Example. The ABC Corp., in response to a RFP, proposes to assemble a map showing certain

seismological features of the Appalachian fold belt. In accordance with the representation in the RFP and §2009.570-3(b)(1)(i), ABC Corp. informs the NRC that it is presently doing seismological studies for several utilities in the eastern United States, but none of the sites are within the geographic area contemplated by the NRC study.

(ii) Guidance. The contracting officer would normally conclude that award of a contract would not place ABC Corp. in a conflicting role where its judgment might be biased. Section 2052.209- 72(c) Work for Others, would preclude ABC Corp. from accepting work which could create a conflict of interest during the term of the NRC contract.

(6)(i) Example. AD Division of ABC Corp., in response to a RFP, submits a proposal to assist the NRC in the safety and environmental review of applications for licenses for the construction, operation, and decommissioning of fuel cycle facilities. ABC Corp. is divided into two separate and distinct divisions, AD and BC. The BC Division performs the same or similar services for industry. The BC Division is currently providing the same or similar services required under the NRC's contract for an applicant or licensee.

(ii) Guidance. An NRC contract for that particular work would not be awarded to the ABC Corp. The AD Division could be placed in a position to pass judgment on work performed by the BC Division, which could bias its work for NRC. Further, the Conflict of Interest provisions apply to ABC Corp. and not to separate or distinct divisions within the company. If no reasonable alternative exists, a waiver of the policy could be sought in accordance with §2009.570-9.

(7)(i) Example. The ABC Corp. completes an analysis for NRC of steam generator tube leaks at one of a utility's six sites. Three months later, ABC Corp. is asked by this utility to perform the same analysis at another of its sites.

(ii) Guidance. Section 2052.290-72(c)(3) would prohibit the contractor from beginning this work for the utility until one year after completion of the NRC work at the first site.

(8)(i) Example. ABC Corp. is assisting NRC in a major on-site analysis of a utility's redesign of the common areas between its twin reactors. The contract is for two years with an estimated value of \$5 million. Near the completion of the NRC work, ABC Corp. requests authority to solicit for a \$100K contract with the same utility to transport spent fuel to a disposal site. ABC Corp. is performing no other work for the utility.

(ii) Guidance. The Contracting Officer would allow the contractor to proceed with the solicitation because it is not in the same technical area as the NRC work; and the potential for technical bias by the contractor because of financial ties to the utility is slight due to the relative value of the two contracts.

(9)(i) Example. The ABC Corp. is constructing a turbine building and installing new turbines at a reactor site. The contract with the utility is for five years and has a total value of \$100 million. ABC Corp. has responded to an NRC Request For Proposal requiring the contractor to participate in a major team inspection unrelated to the turbine work at the same site. The estimated value of the contract is \$75K.

(ii) Guidance. An NRC contract would not normally be awarded to ABC Corp. because these factors create the potential for financial loyalty to the utility that may bias the technical judgment of the contractor.

(d) Other considerations.

(1) The fact that the NRC can identify and later avoid, eliminate, or neutralize any potential organizational conflicts arising from the performance of a contract is not relevant to a determination of the existence of conflicts prior to the award of a contract.

(2) It is not relevant that the contractor has the professional reputation of being able to resist temptations which arise from organizational conflicts of interest, or that a follow-on procurement is not involved, or that a contract is awarded on a competitive or a sole source basis.

#### **§2009.570-4 Representation.**

(a) The following procedures are designed to assist the NRC contracting officer in determining whether situations or relationships exist which may constitute organizational conflicts of interest with respect to a particular offeror or contractor. The procedures apply to small purchases meeting the criteria stated in the following paragraph (b) of this section.

(b) The organizational conflicts of interest representation provision at §2052.209-71 must be included in solicitations and contracts resulting from unsolicited proposals. The contracting officer must also include this provision for task orders and contract modifications for newwork for:

(1) Evaluation services or activities;

(2) Technical consulting and management support services;

(3) Research; and

(4) Other contractual situations where special organizational conflicts of interest provisions are noted in the solicitation and would be included in the resulting contract. This representation requirement also applies to all modifications for additional effort under the contract except those issued under the "Changes" clause. Where, however, a statement of the type required by the organizational conflicts of interest representation provisions has previously been submitted with regard to the contract being modified, only an updating of the statement is required.

(c) The offeror may, because of actual or potential organizational conflicts of interest, propose to exclude specific kinds of work contained in a RFP unless the RFP specifically prohibits the exclusion. Any such proposed exclusion by an offeror will be considered by the NRC in the evaluation of proposals. If the NRC considers the proposed excluded work to be an essential or integral part of the required work and its exclusion would be to the detriment of the competitive posture of the other offerors, the NRC shall reject the proposal as unacceptable.

(d) The offeror's failure to execute the representation required by paragraph (b) of this section with respect to an invitation for bids is considered to be a minor informality. The offeror will be permitted to correct the omission.

#### **§2009.570-5 Contract clauses.**

(a) General contract clause. All contracts and simplified acquisitions of the types set forth in §2009.570-4(b) must include the clause entitled, "Contractor Organizational Conflicts of Interest," set forth in §2052.209-72.

(b) Other special contract clauses. If it is determined from the nature of the proposed contract that an organizational conflict of interest exists, the contracting officer may determine that the conflict can be avoided, or, after obtaining a waiver in accordance with §2009.570-9, neutralized through the use of an appropriate special contract clause. If appropriate, the offeror may negotiate the terms and conditions of these clauses, including the extent and time period of any restriction. These clauses include but are not limited to:

(1) Hardware exclusion clauses which prohibit the acceptance of production contracts following a related non-production contract previously performed by the contractor;

- (2) Software exclusion clauses;
- (3) Clauses which require the contractor (and certain of its key personnel) to avoid certain organizational conflicts of interest; and
- (4) Clauses which provide for protection of confidential data and guard against its unauthorized use.

**§2009.570-6 Evaluation, findings, and contract award.**

The contracting officer shall evaluate all relevant facts submitted by an offeror and other relevant information. After evaluating this information against the criteria of §2009.570-3, the contracting officer shall make a finding of whether organizational conflicts of interest exist with respect to a particular offeror. If it has been determined that real or potential conflicts of interest exist, the contracting officer shall:

- (a) Disqualify the offeror from award;
- (b) Avoid or eliminate such conflicts by appropriate measures; or
- (c) Award the contract under the waiver provision of §2009.570-9.

**§2009.570-7 Conflicts identified after award.**

If potential organizational conflicts of interest are identified after award with respect to a particular contractor and the contracting officer determines that conflicts do exist and that it would not be in the best interest of the Government to terminate the contract, as provided in the clauses required by §2009.570-5, the contracting officer shall take every reasonable action to avoid, eliminate, or, after obtaining a waiver in accordance with §2009.570-9, neutralize the effects of the identified conflict.

**§2009.570-8 Subcontracts.**

The contracting officer shall require offerors and contractors to submit a representation statement from all subcontractors (other than a supply subcontractor) and consultants performing services in excess of \$10,000 in accordance with §2009.570-4(b). The contracting officer shall require the contractor to include contract clauses in accordance with §2009.570-5 in consultant agreements or subcontracts involving performance of work under a prime contract.

**§2009.570-9 Waiver.**

- (a) The contracting officer determines the need to seek a waiver for specific contract awards with the advice and concurrence of the program office director and legal counsel. Upon the recommendation of the Senior Procurement Executive, and after consultation with legal counsel, the Executive Director for Operations may waive the policy in specific cases if he determines that it is in the best interest of the United States to do so.
- (b) Waiver action is strictly limited to those situations in which:
  - (1) The work to be performed under contract is vital to the NRC program;
  - (2) The work cannot be satisfactorily performed except by a contractor whose interests give rise to a question of conflict of interest.
  - (3) Contractual and/or technical review and surveillance methods can be employed by the NRC to neutralize the conflict.

(c) The justification and approval documents for any waivers must be placed in the NRC Public Document Room.

**§2009.570-10 Remedies.**

In addition to other remedies permitted by law or contract for a breach of the restrictions in this subpart or for any intentional misrepresentation or intentional nondisclosure of any relevant interest required to be provided for this section, the NRC may debar the contractor from subsequent NRC contracts.

ATTACHMENT 2

CONTRACTOR SPENDING PLAN (CSP)

(TO BE COMPLETED AS A PART OF THE OFFEROR'S COST PROPOSAL FOR EACH COST REIMBURSEMENT CONTRACT OR INDIVIDUAL TASK ORDER OR FOR ANY CONTRACT OR TASK ORDER MODIFICATION WHICH EXCEEDS \$100,000 AND HAS A PERFORMANCE PERIOD EXCEEDING 6 MONTHS)

Solicitation No. \_\_\_\_\_ Period of Performance: From \_\_\_\_\_ To \_\_\_\_\_

Contract No. \_\_\_\_\_

Task Order No. \_\_\_\_\_ Modification No. \_\_\_\_\_ Total Estimated Costs (including fixed fee, \$  
 Offeror/Contractor Name: \_\_\_\_\_ if any) of the Proposed Contract/Task Order/  
 Modification (to a contract or task order) at the time of proposal submission. Does not include options.

Provide cost details by month for the total contract/task order/or task order modification

Cost Elements	<u>1st Month</u>	<u>2nd Month</u>	<u>3rd Month</u>	<u>4th Month</u>	<u>5th Month</u>	<u>6th Month</u>
Direct Costs	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Indirect Costs	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Total Estimated Costs including fixed fee if any	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Projected Completion	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %

Cost Elements	<u>7th Month</u>	<u>8th Month</u>	<u>9th Month</u>	<u>10th Month</u>	<u>11th Month</u>	<u>12th Month</u>
Direct Costs	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Indirect Costs	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Total Estimated Costs including fixed fee if any	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
Projected Completion	_____ %	_____ %	_____ %	_____ %	_____ %	_____ %



## ATTACHMENT 3

**MONTHLY LETTER STATUS REPORT INSTRUCTIONS FOR CONTRACTS AND ORDERS**

The contractor shall submit an electronic Monthly Letter Status Report (MLSR) by the 20<sup>th</sup> day of each month to the Contracting Officer's Representative (COR) and the Contracting Officer (CO). If orders are issued under the contract, a separate MLSR must be provided for each order. MLSRs are not required once the NRC determines that work under the contract/order is complete, and the final costs are acceptable. A SAMPLE TEMPLATE, WHICH MAY BE USED TO COMPLETE THE MLSR, IS ENCLOSED.

*Provide the information requested in each of the following sections if applicable.*

**I. CONTRACT/ORDER IDENTIFICATION & CONTACT INFORMATION**

- Reporting period:
- Contract number:
- Order number:
- Contract title and period of performance:
- Order title and period of performance:
- COR's name, telephone number, and e-mail address:
- Full name and address of the contractor:
- Name, telephone numbers and email addresses of the Contractor Project Manager(s)/Contractor Lead Reviewer:

**II. FINANCIAL STATUS****A. Overall Funding Information**

- Total Ceiling Amount: \$
- Total Amount of Funds Obligated to Date: \$
- Total Invoiced for this Reporting Period: \$
- Total Amount Invoiced - Cumulative Amount to Date: \$
- Total Amount of Funds Expended to Date (Based on Obligated Funds): \$
- Percentage of Funds Expended to Date (Based on Obligated Funds): %
- Balance of Obligated Funds Remaining (Based on Invoiced Amount): \$
- Total Amount Invoiced & Costs Incurred (Invoiced amounts & amounts not yet invoiced—e.g. pending /outstanding to subcontractor): \$
- Balance of Obligated Funds Remaining After Deducting Total Amount Invoiced & Amounts Not Yet Invoiced (Costs Incurred): \$
- Balance of Funds Required for Completion: \$

**B. Contractor Acquired Property**

Report all property with an acquisition cost of \$5,000 or more (including Information Technology (IT) hardware and software), acquired for the project during the month. Report all sensitive property regardless of cost. The following information is required for each reported item:

- Item/property description;

- Manufacturer, model number, and serial number, if applicable;
- Acquisition cost or development cost; and
- Date received.

If property was not acquired during the reporting month, include a negative statement to that effect in the MLSR.

The final MLSR for the contract shall include a closeout property report certifying that property with an acquisition cost of greater than \$5,000 (including IT hardware and software) and sensitive property regardless of cost is included in the final property report and that the list is complete. For each item listed, the report shall contain:

- Item/property description;
- Manufacturer; the model number, & the serial number, if applicable;
- Acquisition or development cost; and
- Date received.

The closeout property report shall identify any ongoing or contemplated NRC projects on which the property could be utilized. If no property was acquired under the contract, include a negative report. Note any property requiring special handling based on security, health, safety, or other reasons as part of the report.

### **C. NRC-Funded Software**

Report NRC funded software with a useful life of 2 years or more and a development cost of greater than \$5,000. Provide the following information for each item of NRC funded software:

- Software name and function:
- Development cost:
- Computer language used:
- Operating system:
- Physical location of the software and/or the hardware system:
- Date the software development was completed:
- Scheduled replacement date or projected useful life. If the useful life is not readily apparent, the useful life is considered to be 5 years from the day the software was considered operational:

## **III. TECHNICAL STATUS**

### **A. Deliverables/Milestones Schedule**

Provide the following information for each deliverable/milestone identified in the SOW:

- Task/subtask:
- Description:
- Planned completion date:
- Revised completion date if applicable:
- Actual completion date:

The deliverables/milestones schedule shall be revised as necessary. **Any variance in schedule shall be identified and discussed in detail. Discussion shall include the cause for the variance, together with any proposed solution to bring the dates within the original planned dates.**

## B. Progress During Reporting Period

Provide a clear and concise discussion of the work performed during the reporting period. Include sufficient detail to support the costs reported for the reporting period. A summary of significant meetings and conference calls must be included. In addition, the current status of each deliverable, task, or service shall be identified. **Progress reported as "worked on all tasks" is not acceptable.**

## C. Travel

Travel taken during the reporting period shall be fully described and shall include, at a minimum, the purpose of the travel, whether prior NRC authorization was required and obtained, the names of all travelers, the beginning and ending dates of the travel, and the destination point.

## D. Anticipated and Encountered Problem Areas

Problems encountered during the reporting period and anticipated in subsequent period(s) (*to include, for example, problems or circumstances that require a change in the level of effort or estimated cost, scope of work, or travel requirements*) shall be identified.

Discussion of problems encountered during the reporting period shall include the actual solution. If the solution was not implemented during the reporting period, a detailed discussion of the proposed solution shall be included. The status of the problem shall be updated in subsequent MLSRs until problem resolution is achieved and reported. **Clearly identify the person(s) and/or organization(s) with responsibility to address the problem.** If NRC is required to take action to resolve a problem or concern, the COR should be notified separately.

A discussion of the impact on the projected cost and schedule of the project or task order shall be included. If the projected actual cost is expected to be greater than or less than the planned cost and/or if the schedule is projected to be longer than or less than the planned schedule, an in depth rationale for the difference(s) shall be provided. Actions to mitigate schedule delays and/or cost/price increases shall be thoroughly described.

Problems or circumstances requiring a modification to the level of effort, estimated cost, scope of work, or travel requirements shall also be discussed in the MLSR. The COR should be notified separately if a modification is needed. **Such notification shall not be delayed until issuance of the MLSR.**

## E. Plans for the Next Reporting Period

Provide a concise discussion of work to be performed and a description of anticipated travel during the next reporting period. Describe milestones anticipated to be completed in the next reporting period.

## F. Staff Hours Summary

The staff hours summary must identify the task/subtask, the staff assigned to the task/subtask, hours budgeted, hours expended for this reporting period, total cumulative hours expended and the task/subtask status.

## IV. INFORMATION TECHNOLOGY SECURITY TRAINING

In accordance with the clause, NRC INFORMATION TECHNOLOGY SECURITY TRAINING,

contractors shall ensure that their employees, consultants, and subcontractors with access to the agency's information technology (IT) equipment and/or IT services complete NRC's online initial and refresher IT security training requirements to ensure that their knowledge of IT threats, vulnerabilities, and associated countermeasures remains current. Both the initial and refresher IT security training courses generally last an hour or less and can be taken during the employee's regularly scheduled work day.

Where the contract/order includes the clause, **NRC INFORMATION TECHNOLOGY SECURITY TRAINING**, the MLSR must include the following information for all completed training:

- (1) Name of the individual completing the course:
- (2) Course title:
- (3) Course completion date:

The MLSR must also include the following information for those individuals who have not completed their required training:

- (1) Name of the individual who has not yet completed the training:
- (2) Title of the course(s) which must still be completed:
- (3) Anticipated course completion date(s):

## V. LICENSE FEE RECOVERY COST STATUS

This section is required if any portion of the work described in the Statement of Work is fee recoverable.

Pursuant to the provisions on fees of Title 10 of the *Code of Federal Regulations* Parts 170 and 171, provide the total amount of fee recoverable costs incurred during the reporting period, the fiscal year to date costs, and the cumulative total costs to date for each task/project. The License Fee Recovery Cost Status (LFRCS) shall be recorded on a separate page as part of the MLSR, and shall be in the format provided in the MLSR template under the LFRCS Section.

Each report will contain a docket number, cost activity code (CAC) or other unique identifier. Facilities must be sorted by docket number/identifier. Unit numbers must be identified for each facility included in the LFRCS table. For work that involves more than one facility at the same site, each facility should be listed separately, and the costs should be split appropriately between the facilities. Common costs, as defined below, must be identified separately in the LFRCS.

Common costs are those costs that are not licensee unique and associated with the performance of an overall program that benefit all similar licensees covered under that program or that are required to satisfactorily carry out the program. Common costs include costs associated with the following: preparatory or start-up efforts to interpret and reach agreement on methodology, approach, acceptance criteria, regulatory position, or technical reporting requirements; efforts associated with the "lead plant" concept that might be involved during the first one or two plant reviews; meetings and discussions involving the above efforts to provide orientation, background knowledge or guidance during the course of a program; any technical effort applied to a docket or other unique identifier; and project management. Common costs must be reported monthly for each docket or unique identifier. Common costs must be computed based on the proportion of direct costs incurred against each docket or unique identifier for the reporting period.

Any/all non-fee recoverable costs must be accounted for in the cost breakdown table of the MLSR template with the corresponding non-fee recoverable CAC as directed by the COR.

**VI. SPENDING PLAN UPDATE—Required for Cost Reimbursement, Labor-Hour and Time- and- Materials Contracts/Orders (Complete as Applicable for Other Contract Types)**

The initial Spending Plan must be included in the initial MLSR. Thereafter, the spending plan shall be updated on the MLSR Spending Plan Update Template in Excel (enclosed), and submitted with the MLSR. Spending plan updates shall encompass two fiscal years (current fiscal year and following fiscal year). Discussion shall include significant spending plan variances, the cause for the variance, and proposed solutions to bring the cost within planned amounts. Definitions of spending plan terms are provided below:

Planned – Spending plan agreed to by the parties at time of award.

Revised – Updated spending plan revised by the contractor. Spending plan shall be updated as necessary.

Actual – Total amount/costs expended by the contractor as reported in the MLSR.

Variance – Percentage difference between planned, or revised if applicable, and actual

## MONTHLY LETTER STATUS REPORT-TEMPLATE

Reporting Period Start Date		Reporting Period End Date	
NRC Contract Number		Order Number (if applicable)	
Contract/Order Title			
Period of Performance Start Date:		Period of Performance End Date:	
Contracting Officer's Representative (COR)	COR Telephone	COR E-mail	
Contractor Name			
Contractor Complete Address (Street, City , State, and Zip Code)			
Contract Project Manager(s)/Contractor Lead Reviewer	Telephone	E-mail	

Provide the information requested in each of the following sections if applicable. (Please insert N/A beside items that are not applicable)

## FINANCIAL STATUS

## A. Overall Funding:

1.	Total Ceiling Amount	\$
2.	Total Amount of Funds Obligated to Date	\$
3.	Total Amount Invoiced - This Period	\$
4.	Total Amount Invoiced - Cumulative Amount to Date	\$
5.	Total Amount of Funds Expended to Date (Based on Obligated Funds)	\$
6.	Percentage of Funds Expended to Date (Based on Obligated Funds)	_%
7.	Balance of Obligated Funds Remaining (Based on Invoiced Amounts)	\$
8.	Total Amount/Costs Incurred (Invoiced amounts & amounts not yet invoiced—e.g. pending; outstanding to subcontractor)	\$
9.	Balance of Obligated Funds Remaining after Deducting Total Incurred Amounts/Costs	\$
10.	Balance of Funds Required for Completion	\$

**B. Contractor Acquired Property:**

Item*	Description	Manufacturer	Model Number	Serial Number	Acquisition Cost (\$)	Receipt Date	Property Identification Number

\*Asterisk represents sensitive item

**C. NRC-Funded Software:**

Name*	Function	Development Cost (\$)	Computer Language Used	Operating System	Location of System	Date Software Completed	Date of Scheduled Replacement/ Useful Life

\*Asterisk represents sensitive software

**TECHNICAL STATUS**

**A. Deliverables/Milestones Schedule:**

(Any variance in schedule shall be identified and discussed in detail. Discussion shall include the cause for the variance, together with any proposed solution to bring the dates within the original planned dates.)

Task/Subtask	Description	Planned Completion Date	Revised Completion Date (if applicable)	Actual Completion Date

**B. Progress during Reporting Period:** \_\_\_\_\_

**C. Travel for this Period:**

Staff	Purpose of Travel	NRC Authorization Required/ Obtained*	Start Date	End Date	Destination/Activity

\*Include name of NRC authorizing official and date authorization was obtained.

D. Anticipated and Encountered Problem Areas: \_\_\_\_\_

E. Plans for the Next Reporting Period: \_\_\_\_\_

F. Staff Hours Summary:

Task/Subtask/Phase	Staff Assigned	Hours Budgeted	Hours Expended This Reporting Period	Total Cumulative Hours Expended	Notes

**TRAINING**

(Complete if contract/order includes the clause, NRC INFORMATION TECHNOLOGY SECURITY TRAINING)

Completed Training:

Name of Individual Completing the Course During This Period	Course Title	Course Completion Date

Training To Be Completed:

Name of Individual Who has NOT, To Date, Completed the Required Training	Course Title	Anticipated Course Completion Date



**LICENSE FEE RECOVERY COST STATUS**

<b>Reporting Period Start Date</b>	<b>Reporting Period End Date</b>
<b>Contract Number</b>	<b>Order Number</b>
<b>Project Title</b>	

<b>Licensee</b>	<b>Task Order No.</b>	<b>Facility Name/Unit Number</b>	<b>Docket Number</b>	<b>CAC Number</b>	<b>Period Costs</b>	<b>Fiscal Year Costs to Date</b>	<b>Cumulative Costs to Date</b>

Important Note - Individual administrative costs (e.g. costs associated with overall project management/coordination, administrative setup/monitoring of the task order/agreement, preparation of the MLSR, etc.) must be included in the current period costs (i.e. these costs should not be noted as separate costs/items). Administrative costs must be proportionately allocated to each line item listed in the summary table above. Any/all non-fee-recoverable costs must be accounted for in the above table with the appropriate non-billable Cost Activity Code (CAC) as provided by the COR. The total Period Costs in the above table shall equal the total amount charged to NRC for this period.

**SPENDING PLAN - Fiscal Year (FY) \_\_\_\_\_**

**Required for Cost Reimbursement, Labor-Hour and Time-and-Materials Contracts/Orders (Complete as applicable for other contract types)**

<b>FY _____</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>	<b>Sept.</b>	<b>TOTAL</b>
<b>Planned (\$)</b>													
<b>Revised (\$)</b>													
<b>Actual (\$)</b>													
<b>Variance (%)</b>													

<b>FY _____</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>	<b>Sept.</b>	<b>TOTAL</b>
<b>Planned (\$)</b>													
<b>Revised (\$)</b>													
<b>Actual (\$)</b>													
<b>Variance (%)</b>													



Spending Plan.xlsx

ATTACHMENT 4

**BILLING INSTRUCTIONS FOR  
COST-REIMBURSEMENT TYPE CONTRACTS (MARCH 2018)**

**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 the Invoice Processing Platform (IPP) system and for any liability resulting from the Government's reliance on inaccurate or incomplete SAM and/or IPP data.

The contractor shall prepare invoices/vouchers for payment of deliverables identified in the contract, in the manner described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

**Electronic Invoice/Voucher Submissions:** Invoices/vouchers shall be submitted electronically to the U.S. Nuclear Regulatory Commission (NRC) through the Invoice Processing Platform (IPP) at [www.ipp.gov](http://www.ipp.gov).

**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 \(MD\) 11.1](#), NRC Acquisition of Supplies and Services.

**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.

**Supporting Documentation:** Any supporting documentation required to substantiate the amount billed shall be included as an attachment to the invoice created in IPP. If the necessary supporting documentation is not included, the invoice will be rejected.

**Task Order Contracts:** The contractor must submit a separate invoice/voucher for each individual task order with detailed cost information included as Supporting Documentation. This includes all applicable cost elements and other items discussed in paragraphs (a) through (k) of the attached instructions.

**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 (SEPT 2017).

***Does my company need to register in IPP?***

If your company is currently registered in IPP and doing business with other Federal Agencies in IPP, you will not be required to re-register.

If your company is not currently registered in IPP, please note the following:

- You will be receiving an invitation to register for IPP from IPP Customer Support, [STLS.IPPHELPDESK@stls.frb.org](mailto:STLS.IPPHELPDESK@stls.frb.org).
- IPP Customer Support will send you two emails: the first email will contain the initial administrative IPP User ID and the second email, sent within 24 hours of receipt of the first email, will contain a temporary password.
- Please add the Customer Support email address ([STLS.IPPHELPDESK@stls.frb.org](mailto:STLS.IPPHELPDESK@stls.frb.org)) to your address book so you do not disregard these emails or mistake them for spam.
- During registration, one initial administrative user account will be created for your company and this user will be responsible for setting up all other user accounts including other administrators.
- Registration is complete when the initial administrative user logs into the IPP web site with the User ID and password provided by Treasury and accepts the rules of behavior.

***What type of training is provided?***

Vendor training materials, including a first time login tutorial, user guides, a [quick reference guide](#), and [frequently asked questions](#) are available on Treasury's IPP [website](#). **Individuals within your company responsible for submitting invoices should review these materials before work begins on the contract.**

***How do I receive assistance with IPP?***

Treasury's IPP Customer Support team provides vendor assistance related to the IPP application, and is also available to assist IPP users and to answer any questions related to accessing IPP or completing the registration process. IPP application support is also available via phone at (866) 973-3131, Monday through Friday from 8:00 am to 6:00 pm ET, and via email at [IPPCustomerSupport@fiscal.treasury.gov](mailto:IPPCustomerSupport@fiscal.treasury.gov).

Specific questions regarding your contract or task order should be directed to the appropriate NRC Contracting Officer.

**INVOICE/VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL  
(SAMPLE FORMAT – INVOICE ATTACHMENT)**

- a. 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.
- b. Description of Deliverables. Provide a brief description of supplies or services, quantity, unit cost, and total cost.
- c. 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).
- d. Shipping. Insert weight and zone of shipment, if shipped by parcel post.
- e. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.
- f. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.
- g. 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</u> <u>Category</u>	<u>Staff</u> <u>Assigned</u>	<u>Hours</u> <u>Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative</u> <u>Hours Billed</u>
---------------------------------	---------------------------------	-------------------------------	-------------	--------------	--

- 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.)* To include **a copy of the airfare receipt to include airline itinerary (boarding pass), lodging receipt(s), and car rental receipt(s), regardless of the dollar amount. Receipts are also required for any other items over \$75.** 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 52.247-63, Preference for U.S. Flag Air Carriers.

Per Diem allowances covers lodging, meals, and incidental expenses. The rates for U.S. lodging must be in accordance with the rates on GSA website: <https://www.gsa.gov/travel/plan-book/per-diem-rates>. International travel rates must be in accordance the rates found on the Department of State's website: [https://aoprals.state.gov/web920/per\\_diem.asp](https://aoprals.state.gov/web920/per_diem.asp).

- 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.
- h. 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.
- i. Total Amount Billed. Insert columns for total amounts for the current and cumulative periods.
- j. Adjustments. Insert columns for any adjustments, including outstanding suspensions for deficient or defective products or nonconforming services, for the current and cumulative periods.
- k. Grand Totals.

**3. Sample Invoice/Voucher Information (to be included as an attachment)**

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>
<b>(a)</b>	<b><u>Direct Costs</u></b>		
(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>(b)</b>	<b><u>Indirect Costs</u></b> <i>(provide the rate information applicable to your firm)</i>		
(10)	Overhead ___ % of _____ (Indicate Base)	\$ _____	\$ _____
(11)	General and Administrative (G&A) ___ % of _____ (Indicate Base)	\$ _____	\$ _____
	Total Indirect Costs:	\$ _____	\$ _____
<b>(c)</b>	<b>Total Amount Billed</b>	\$ _____	\$ _____
<b>(d)</b>	<b>Adjustments (+/-)</b>	\$ _____	\$ _____
<b>(e)</b>	<b>Grand Total</b>	\$ _____	\$ _____

(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>Staff Assigned</u>	<u>Hours Billed</u>	<u>Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
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**31310018C0003**

Senior Engineer I	Pete Smith	100	\$14.00	\$1,400	975
Engineer	Rob Johnson	50	\$10.00	\$ 500	465
Computer Analyst	John Roberts	100	\$ 5.00	<u>\$ 500</u>	<u>320</u>
				\$2,400	1,760 hrs

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 - \$2,000

10 Radon tubes @ \$110.00	= \$1,100
6 Pairs Electrostatic gloves @ \$150.00	= <u>\$ 900</u>
	\$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	= <u>\$20,000</u>
	\$30,000



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(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)	Total Amount Billed	\$175,020
	Adjustments (+/-)	<u>- \$ 0</u>
	Grand Total	\$175,020