
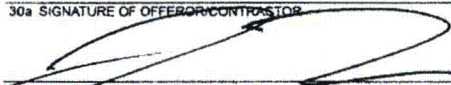
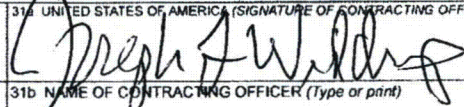


SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30				1 REQUISITION NUMBER OJS-14-0073		PAGE OF 1			
2 CONTRACT NO NRC-HQ-10-14-E-0003		3 AWARD/ EFFECTIVE DATE 12/18/13		4 ORDER NUMBER		5 SOLICITATION NUMBER NRC-HQ-11-R-33-0011		6 SOLICITATION ISSUE DATE	
7. FOR SOLICITATION INFORMATION CALL: 		a NAME HERIBERTO COLON		b TELEPHONE NUMBER (No collect calls) 301-287-0873		8 OFFER DUE DATE/LOCAL TIME			
9 ISSUED BY US NRC - HQ DIVISION OF CONTRACTS		CODE NRCHQ		10 THIS ACQUISITION IS UNRESTRICTED OR <input checked="" type="checkbox"/> SMALL BUSINESS HUBZONE SMALL BUSINESS SERVICE-DISABLED VETERAN OWNED SMALL BUSINESS		WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM EDWOSB 8(A)		SET ASIDE 100.00 % FOR NAICS 541519 SIZE STANDARD: \$25.5	
11 DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED SEE SCHEDULE		12 DISCOUNT TERMS		13a THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		13b RATING		14 METHOD OF SOLICITATION RFQ IFB RFP	
15 DELIVER TO US NUCLEAR REGULATORY COMMISSION- MAIL PROCESSING CENTER 4930 BOILING BROOK PARKWAY ROCKVILLE MD 20852		CODE NRCHQ		16 ADMINISTERED BY US NRC - HQ DIVISION OF CONTRACTS		CODE NRCHQ			
17a CONTRACTOR/ OFFEROR LIST INNOVATIVE SOLUTIONS INC 13921 PARK CENTER RD STE 500 HERNDON VA 201713236		CODE 072296507 FACILITY CODE		18a PAYMENT WILL BE MADE BY US NUCLEAR REGULATORY COMMISSION ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE MAILSTOP 03-E17A ROCKVILLE MD 20852-2738		CODE NRCPAYMENTS			
17b CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER				18b SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED SEE ADDENDUM					
19 ITEM NO	20 SCHEDULE OF SUPPLIES/SERVICES				21 QUANTITY	22 UNIT	23 UNIT PRICE	24 AMOUNT	
00001	BASE PERIODS 1-5 Obligated Amount: \$0.00 Period of Performance: Effective date of Award through 9/25/2018.								
00002	OPTION PERIOD 1 Amount: \$0.00 (Option Line Item) Continued ... <i>(Use Reverse and/or Attach Additional Sheets as Necessary)</i>							0.00	
25 ACCOUNTING AND APPROPRIATION DATA 2014-X0200-FEEBASED-10-10D007-51-J-146-J1267-2500						26 TOTAL AWARD AMOUNT (For Govt Use Only) \$140,000,000.00			
27a SOLICITATION INCORPORATES BY REFERENCE FAR 52 212-1, 52 212-4 FAR 52 212-3 AND 52 212-5 ARE ATTACHED				ADDENDA		ARE	ARE NOT ATTACHED		
27b CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52 212-4 FAR 52 212-5 IS ATTACHED				ADDENDA		ARE	ARE NOT ATTACHED		
28 CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED.					29 AWARD OF CONTRACT: REF OFFER DATED YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS.				
30a SIGNATURE OF OFFEROR/CONTRACTOR 				31a UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER) 					
30b NAME AND TITLE OF SIGNER (Type or print) JAMES THOMAS Director Contracts			30c DATE SIGNED 12/19/2013	31b NAME OF CONTRACTING OFFICER (Type or print) JOSEPH L. WIDDUP			31c DATE SIGNED 12/17/13		

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV. 2/2012)
Prescribed by GSA - FAR (48 CFR) 53.212

SUNSI REVIEW COMPLETE

DEC 30 2013

ADM002

TEMPLATE - ADM001

SECTION A - Solicitation/Contract Form

52.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS. (JUL 2013)

(a) *Inspection/Acceptance.* The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its postacceptance rights -

(1) Within a reasonable time after the defect was discovered or should have been discovered; and

(2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) *Assignment.* The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) *Changes.* Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) *Disputes.* This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) *Definitions.* The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) *Excusable delays.* The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in

connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice. (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include-

- (i) Name and address of the Contractor;
- (ii) Invoice date and number;
- (iii) Contract number, contract line item number and, if applicable, the order number;
- (iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (vi) Terms of any discount for prompt payment offered;
- (vii) Name and address of official to whom payment is to be sent;
- (viii) Name, title, and phone number of person to notify in event of defective invoice; and
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) *Patent indemnity.* The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) *Payment-* (1) Items accepted. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) Prompt payment. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall--

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the--

(A) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) Interest. (i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) Final decisions. The Contracting Officer will issue a final decision as required by 33.211 if--

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on--

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the

Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(j) *Risk of loss.* Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) *Taxes.* The contract price includes all applicable Federal, State, and local taxes and duties.

(l) *Termination for the Government's convenience.* The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) *Termination for cause.* The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) *Title.* Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of

when or where the Government takes physical possession.

(o) *Warranty*. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) *Limitation of liability*. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) *Other compliances*. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) *Compliance with laws unique to Government contracts*. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) *Order of precedence*. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

- (1) The schedule of supplies/services;
- (2) The Assignments, Disputes, Payments, Invoice, Other Compliances, Compliance with Laws Unique to Government Contracts, and Unauthorized Obligations paragraphs of this clause;
- (3) The clause at 52.212-5;
- (4) Addenda to this solicitation or contract, including any license agreements for computer software;
- (5) Solicitation provisions if this is a solicitation;
- (6) Other paragraphs of this clause;
- (7) The Standard Form 1449;
- (8) Other documents, exhibits, and attachments; and
- (9) The specification.

(t) *System for Award Management (SAM)*. (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the SAM database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in

the SAM database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the SAM database to ensure it is current, accurate and complete. Updating information in the SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the SAM database; (B) comply with the requirements of subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the SAM database. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via SAM accessed through <https://www.acquisition.gov>.

(u) *Unauthorized Obligations.* (1) Except as stated in paragraph (u)(2) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(i) Any such clause is unenforceable against the Government.

(ii) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(iii) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(2) Paragraph (u)(1) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

52.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS. (JUL 2013) - ALTERNATE I (AUG 2012)

(a) Inspection/Acceptance. (1) The Government has the right to inspect and test all materials furnished and services performed under this contract, to the extent practicable at all places and times, including the period of performance, and in any event before acceptance. The Government may also inspect the plant or plants of the Contractor or any subcontractor engaged in contract performance. The Government will perform inspections and tests in a manner that will not unduly delay the work.

(2) If the Government performs inspection or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

(3) Unless otherwise specified in the contract, the Government will accept or reject services and materials at the place of delivery as promptly as practicable after delivery, and they will be presumed accepted 60 days after the date of delivery, unless accepted earlier.

(4) At any time during contract performance, but not later than 6 months (or such other time as may be specified in the contract) after acceptance of the services or materials last delivered under this contract, the Government may require the Contractor to replace or correct services or materials that at time of delivery failed to meet contract requirements. Except as otherwise specified in paragraph (a)(6) of this clause, the cost of replacement or correction shall be determined under paragraph (i) of this clause, but the "hourly rate" for labor hours incurred in the replacement or correction shall be reduced to exclude that portion of the rate attributable to profit. Unless otherwise specified below, the portion of the "hourly rate" attributable to profit shall be 10 percent. The Contractor shall not tender for acceptance materials and services required to be replaced or corrected without disclosing the former requirement for replacement or correction, and, when required, shall disclose the corrective action taken. [*Insert portion of labor rate attributable to profit.*]

(5)(i) If the Contractor fails to proceed with reasonable promptness to perform required replacement or correction, and if the replacement or correction can be performed within the ceiling price (or the ceiling price as increased by the Government), the Government may-

(A) By contract or otherwise, perform the replacement or correction, charge to the Contractor any increased cost, or deduct such increased cost from any amounts paid or due under this contract; or

(B) Terminate this contract for cause.

(ii) Failure to agree to the amount of increased cost to be charged to the Contractor shall be a dispute under the Disputes clause of the contract.

(6) Notwithstanding paragraphs (a)(4) and (5) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if the failure is due to-

(i) Fraud, lack of good faith, or willful misconduct on the part of the Contractor's managerial personnel; or

(ii) The conduct of one or more of the Contractor's employees selected or retained by the Contractor after any of the Contractor's managerial personnel has reasonable grounds to believe that the employee is habitually careless or unqualified.

(7) This clause applies in the same manner and to the same extent to corrected or replacement materials or services as to materials and services originally delivered under this contract.

(8) The Contractor has no obligation or liability under this contract to correct or replace materials and services that at time of delivery do not meet contract requirements, except as provided in this clause or as may be otherwise specified in the contract.

(9) Unless otherwise specified in the contract, the Contractor's obligation to correct or replace Government-furnished property shall be governed by the clause pertaining to Government property.

(b) *Assignment.* The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) *Changes.* Changes in the terms and conditions of this contract may be made

only by written agreement of the parties.

(d) *Disputes*. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) *Definitions*. (1) The clause at FAR 52.202-1, Definitions, is incorporated herein by reference. As used in this clause-

(i) Direct materials means those materials that enter directly into the end product, or that are used or consumed directly in connection with the furnishing of the end product or service.

(ii) Hourly rate means the rate(s) prescribed in the contract for payment for labor that meets the labor category qualifications of a labor category specified in the contract that are-

(A) Performed by the contractor;

(B) Performed by the subcontractors; or

(C) Transferred between divisions, subsidiaries, or affiliates of the contractor under a common control.

(iii) Materials means-

(A) Direct materials, including supplies transferred between divisions, subsidiaries, or affiliates of the contractor under a common control;

(B) Subcontracts for supplies and incidental services for which there is not a labor category specified in the contract;

(C) Other direct costs (e.g., incidental services for which there is not a labor category specified in the contract, travel, computer usage charges, etc.);

(D) The following subcontracts for services which are specifically excluded from the hourly rate: N/A; and

(E) Indirect costs specifically provided for in this clause.

(iv) Subcontract means any contract, as defined in FAR Subpart 2.1, entered into with a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract including transfers between divisions, subsidiaries, or affiliates of

a contractor or subcontractor. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(f) *Excusable delays.* The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) *Invoice.* (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include-

- (i) Name and address of the Contractor;
- (ii) Invoice date and number;
- (iii) Contract number, contract line item number and, if applicable, the order number;
- (iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;
- (v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (vi) Terms of any discount for prompt payment offered;
- (vii) Name and address of official to whom payment is to be sent;
- (viii) Name, title, and phone number of person to notify in event of defective invoice; and
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the

invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) *Patent indemnity.* The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) *Payments.* (1) *Work performed.* The Government will pay the Contractor as follows upon the submission of commercial invoices approved by the Contracting Officer:

(i) Hourly rate.

(A) The amounts shall be computed by multiplying the appropriate hourly rates prescribed in the contract by the number of direct labor hours performed. Fractional parts of an hour shall be payable on a prorated basis.

(B) The rates shall be paid for all labor performed on the contract that meets the labor qualifications specified in the contract. Labor hours incurred to perform tasks for which labor qualifications were specified in the contract will not be paid to the extent the work is performed by individuals that do not meet the qualifications specified in the contract, unless specifically authorized by the Contracting Officer.

(C) Invoices may be submitted once each month (or at more frequent intervals, if approved by the Contracting Officer) to the Contracting Officer or the authorized representative.

(D) When requested by the Contracting Officer or the authorized representative, the Contractor shall substantiate invoices (including any subcontractor hours reimbursed at the hourly rate in the schedule) by evidence of actual

payment, individual daily job timecards, records that verify the employees meet the qualifications for the labor categories specified in the contract, or other substantiation specified in the contract.

(E) Unless the Schedule prescribes otherwise, the hourly rates in the Schedule shall not be varied by virtue of the Contractor having performed work on an overtime basis.

(1) If no overtime rates are provided in the Schedule and the Contracting Officer approves overtime work in advance, overtime rates shall be negotiated.

(2) Failure to agree upon these overtime rates shall be treated as a dispute under the Disputes clause of this contract.

(3) If the Schedule provides rates for overtime, the premium portion of those rates will be reimbursable only to the extent the overtime is approved by the Contracting Officer.

(ii) Materials.

(A) If the Contractor furnishes materials that meet the definition of a commercial item at 2.101, the price to be paid for such materials shall not exceed the Contractor's established catalog or market price, adjusted to reflect the-

(1) Quantities being acquired; and

(2) Any modifications necessary because of contract requirements.

(B) Except as provided for in paragraph (i)(1)(ii)(A) and (D)(2) of this clause, the Government will reimburse the Contractor the actual cost of materials (less any rebates, refunds, or discounts received by the contractor that are identifiable to the contract) provided the Contractor-

(1) Has made payments for materials in accordance with the terms and conditions of the agreement or invoice; or

(2) Makes these payments within 30 days of the submission of the Contractor's payment request to the Government and such payment is in accordance with the terms and conditions of the agreement or invoice.

(C) To the extent able, the Contractor shall-

(1) Obtain materials at the most advantageous prices available with due regard to securing prompt delivery of satisfactory materials; and

(2) Give credit to the Government for cash and trade discounts, rebates, scrap, commissions, and other amounts that are identifiable to the contract.

(D) Other Costs. Unless listed below, other direct and indirect costs will not be reimbursed.

(1) Other Direct Costs. The Government will reimburse the Contractor on the basis of actual cost for the following, provided such costs comply with the requirements in paragraph (i)(1)(ii)(B) of this clause: Each order must list separately the elements of other direct charges(s) for that order.

(2) Indirect Costs (Material Handling, Subcontract Administration, etc.). The Government will reimburse the Contractor for indirect costs on a pro-rata basis over the period of contract performance at the following fixed price: \$0

(2) Total cost. It is estimated that the total cost to the Government for the performance of this contract shall not exceed the ceiling price set forth in the Schedule and the Contractor agrees to use its best efforts to perform the work specified in the Schedule and all obligations under this contract within such ceiling price. If at any time the Contractor has reason to believe that the hourly rate payments and material costs that will accrue in performing this contract in the next succeeding 30 days, if added to all other payments and costs previously accrued, will exceed 85 percent of the ceiling price in the Schedule, the Contractor shall notify the Contracting Officer giving a revised estimate of the total price to the Government for performing this contract with supporting reasons and documentation. If at any time during the performance of this contract, the Contractor has reason to believe that the total price to the Government for performing this contract will be substantially greater or less than the then stated ceiling price, the Contractor shall so notify the Contracting Officer, giving a revised estimate of the total price for performing this contract, with supporting reasons and documentation. If at any time during performance of this contract, the Government has reason to believe that the work to be required in performing this contract will be substantially greater or less than the stated ceiling price, the Contracting Officer will so advise the Contractor, giving the then revised estimate of the total amount of effort to be required under the contract.

(3) Ceiling price. The Government will not be obligated to pay the Contractor any amount in excess of the ceiling price in the Schedule, and

the Contractor shall not be obligated to continue performance if to do so would exceed the ceiling price set forth in the Schedule, unless and until the Contracting Officer notifies the Contractor in writing that the ceiling price has been increased and specifies in the notice a revised ceiling that shall constitute the ceiling price for performance under this contract. When and to the extent that the ceiling price set forth in the Schedule has been increased, any hours expended and material costs incurred by the Contractor in excess of the ceiling price before the increase shall be allowable to the same extent as if the hours expended and material costs had been incurred after the increase in the ceiling price.

(4) Access to records. At any time before final payment under this contract, the Contracting Officer (or authorized representative) will have access to the following (access shall be limited to the listing below unless otherwise agreed to by the Contractor and the Contracting Officer):

(i) Records that verify that the employees whose time has been included in any invoice meet the qualifications for the labor categories specified in the contract;

(ii) For labor hours (including any subcontractor hours reimbursed at the hourly rate in the schedule), when timecards are required as substantiation for payment-

(A) The original timecards (paper-based or electronic);

(B) The Contractor's timekeeping procedures;

(C) Contractor records that show the distribution of labor between jobs or contracts; and

(D) Employees whose time has been included in any invoice for the purpose of verifying that these employees have worked the hours shown on the invoices.

(iii) For material and subcontract costs that are reimbursed on the basis of actual cost-

(A) Any invoices or subcontract agreements substantiating material costs; and

(B) Any documents supporting payment of those invoices.

(5) Overpayments/Underpayments. Each payment previously made shall be subject to reduction to the extent of amounts, on preceding invoices, that are found by the Contracting Officer not to have been properly payable and shall also be subject to reduction for overpayments or to increase for underpayments. The Contractor shall promptly pay any such reduction within 30 days unless the parties agree otherwise. The Government within 30 days will pay any such increases, unless the parties agree otherwise. The Contractor's payment will be made by

check. If the Contractor becomes aware of a duplicate invoice payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall-

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

(A) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6)(i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury, as provided in section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, and then at the rate applicable for each six month period as established by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) Final Decisions. The Contracting Officer will issue a final decision as required by 33.211 if-

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see FAR 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(viii) Upon receipt and approval of the invoice designated by the Contractor as the "completion invoice" and supporting documentation, and upon compliance by the Contractor with all terms of this contract, any outstanding balances will be paid within 30 days unless the parties agree otherwise. The completion invoice, and supporting documentation, shall be submitted by the Contractor as promptly as practicable following completion of the work under this contract, but in no event later than 1 year (or such longer period as the Contracting Officer may approve in writing) from the date of completion.

(7) Release of claims. The Contractor, and each assignee under an assignment entered into under this contract and in effect at the time of final payment under this contract, shall execute and deliver, at the time of and as a condition precedent to final payment under this contract, a release discharging the Government, its officers, agents, and employees of and from all liabilities, obligations, and claims arising out of or under this contract, subject only to the following exceptions.

(i) Specified claims in stated amounts, or in estimated amounts if the amounts are not susceptible to exact statement by the Contractor.

(ii) Claims, together with reasonable incidental expenses, based upon the liabilities of the Contractor to third parties arising out of performing this contract, that are not known to the Contractor on the date of the execution of the release, and of which the Contractor gives notice in writing to the Contracting Officer not more than 6 years after the date of the release or the date of any notice to the Contractor that the Government is prepared to make final payment, whichever is earlier.

(iii) Claims for reimbursement of costs (other than expenses of the Contractor by reason of its indemnification of the Government against patent liability), including reasonable incidental expenses, incurred by the Contractor under the terms of this contract relating to patents.

(8) Prompt payment. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(9) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(10) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(j) *Risk of loss*. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) *Taxes*. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) *Termination for the Government's convenience*. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid an amount for direct labor hours (as defined in the Schedule of the contract) determined by multiplying the number of direct labor

hours expended before the effective date of termination by the hourly rate(s) in the contract, less any hourly rate payments already made to the Contractor plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system that have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred that reasonably could have been avoided.

(m) *Termination for cause.* The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon written request, with adequate assurances of future performance. Subject to the terms of this contract, the Contractor shall be paid an amount computed under paragraph (i) Payments of this clause, but the "hourly rate" for labor hours expended in furnishing work not delivered to or accepted by the Government shall be reduced to exclude that portion of the rate attributable to profit. Unless otherwise specified in paragraph (a)(4) of this clause, the portion of the "hourly rate" attributable to profit shall be 10 percent. In the event of termination for cause, the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) *Title.* Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) *Warranty.* The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) *Limitation of liability.* Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) *Other compliances.* The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) *Compliance with laws unique to Government contracts.* The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) *Order of precedence.* Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

- (1) The schedule of supplies/services;
- (2) The Assignments, Disputes, Payments, Invoice, Other Compliances, Compliance with Laws Unique to Government Contracts, and Unauthorized Obligations paragraphs of this clause;
- (3) The clause at 52.212-5;
- (4) Addenda to this solicitation or contract, including any license agreements for computer software;
- (5) Solicitation provisions if this is a solicitation;
- (6) Other paragraphs of this clause;
- (7) The Standard Form 1449;
- (8) Other documents, exhibits, and attachments; and
- (9) The specification.

(t) *System for Award Management (SAM)*. (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the SAM database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the SAM database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the SAM database to ensure it is current, accurate and complete. Updating information in the SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the SAM database; (B) comply with the requirements of subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the

Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the SAM database. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via SAM accessed through <https://www.acquisition.gov>.

(u) *Unauthorized Obligations.* (1) Except as stated in paragraph (u)(2) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(i) Any such clause is unenforceable against the Government.

(ii) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(iii) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(2) Paragraph (u)(1) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS - COMMERCIAL ITEMS. (AUG 2013)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

(2) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(3) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004)
(Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

X (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

X (2) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010)(Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

X (3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

X (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (JUL 2013) (Pub. L. 109-282) (31 U.S.C. 6101 note).

(5) 52.204-11, American Recovery and Reinvestment Act-Reporting Requirements (JUL 2010) (Pub. L. 111-5).

X (6) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (AUG, 2013) (31 U.S.C. 6101 note).

X (7) 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters (JUL 2013) (41 U.S.C. 2313).

X (8) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (MAY 2012) (section 738 of Division C of Pub. L. 112-74, section 740 of Division C of Pub. L. 111-117, section 743 of Division D of Pub. L. 111-8, and section 745 of Division D of Pub. L. 110-161).

(9) 52.219-3, Notice of HUBZone Set-Aside or Sole-Source Award (NOV 2011) (15 U.S.C. 657a).

(10) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

(11) (Reserved)

X (12)(i) 52.219-6, Notice of Total Small Business Set-Aside (NOV 2011) (15 U.S.C. 644).

(ii) Alternate I (NOV 2011).

(iii) Alternate II (NOV 2011).

(13)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUN 2003) (15 U.S.C. 644).

(ii) Alternate I (OCT 1995) of 52.219-7.

(iii) Alternate II (MAR 2004) of 52.219-7.

X (14) 52.219-8, Utilization of Small Business Concerns (JUL 2013) (15 U.S.C. 637 (d)(2) and (3)).

(15)(i) 52.219-9, Small Business Subcontracting Plan (JUL 2013) (15 U.S.C. 637(d)(4)).

- (ii) Alternate I (OCT 2001) of 52.219-9.
- (iii) Alternate II (OCT 2001) of 52.219-9.
- (16) 52.219-13, Notice of Set-Aside of Orders (NOV 2011) (15 U.S.C. 644(r)).
- X (17) 52.219-14, Limitations on Subcontracting (NOV 2011) (15 U.S.C. 637(a)(14)).
- (18) 52.219-16, Liquidated Damages-Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).
- (19)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) (10 U.S.C. 2323)(if the offeror elects to waive the adjustment, it shall so indicate in its offer.)
 - (ii) Alternate I (JUN 2003) of 52.219-23.
- (20) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (JUL 2013) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- (21) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- (22) 52.219-27, Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (NOV 2011) (15 U.S.C. 657f).
- X (23) 52.219-28, Post Award Small Business Program Rerepresentation (JUL 2013) (15 U.S.C. 632(a)(2)).
- (24) 52.219-29, Notice of Set-Aside for Economically Disadvantaged Women-Owned Small Business (EDWOSB) Concerns (JUL 2013) (15 U.S.C. 637(m)).
- (25) 52.219-30, Notice of Set-Aside for Women-Owned Small Business (WOSB) Concerns Eligible Under the WOSB Program (JUL 2013) (15 U.S.C. 637(m)).
- X (26) 52.222-3, Convict Labor (JUN 2003) (E.O. 11755).
- X (27) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (MAR 2012) (E.O. 13126).
- X (28) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
- X (29) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).
- X (30) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).
- X (31) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).
- X (32) 52.222-37, Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212).
- (33) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).
- X (34) 52.222-54, Employment Eligibility Verification (JUL 2012). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)
- (35)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items (MAY 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)
 - (ii) Alternate I (MAY 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

- [] (36) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b).
- [] (37)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).
 - [](ii) Alternate I (DEC 2007) of 52.223-16.
- [] (38) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011).
- [] (39) 52.225-1, Buy American Act - Supplies (FEB 2009) (41 U.S.C. 10a-10d).
- [] (40)(i) 52.225-3, Buy American Act-Free Trade Agreements-Israeli Trade Act (NOV 2012) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, 19 U.S.C. 4001 note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43).
 - [] (ii) Alternate I (MAR 2012) of 52.225-3.
 - [] (iii) Alternate II (MAR 2012) of 52.225-3.
 - [] (iv) Alternate III (NOV 2012) of 52.225-3.
- [] (41) 52.225-5, Trade Agreements (NOV 2012) (19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).
- X (42) 52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- [] (43) 52.225-26, Contractors Performing Private Security Functions Outside the United States (JUL 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).
- [] (44) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (NOV 2007) (42 U.S.C. 5150).
- [] (45) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (NOV 2007) (42 U.S.C. 5150).
- [] (46) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- [] (47) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- X (48) 52.232-33, Payment by Electronic Funds Transfer - System for Award Management (JUL 2013) (31 U.S.C. 3332).
- [] (49) 52.232-34, Payment by Electronic Funds Transfer - Other than System for Award Management (JUL 2013) (31 U.S.C. 3332).
- [] (50) 52.232-36, Payment by Third Party (JUL 2013) (31 U.S.C. 3332).
- X (51) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).
- [] (52)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).
 - [] (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

- [] (1) 52.222-41, Service Contract Act of 1965 "(NOV 2007)" (41 U.S.C. 351, et seq.).
- [] (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- [] (3) 52.222-43, Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Option Contracts) (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- [] (4) 52.222-44, Fair Labor Standards Act and Service Contract Act-Price Adjustment (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- [] (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements "(NOV 2007)" (41 U.S.C. 351, et seq.).
- [] (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009) (41 U.S.C. 351, et seq.).
- [] (7) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O.13495).
- [] (8) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247).
- [] (9) 52.237-11, Accepting and Dispensing of \$1 Coin (SEP 2008) (31 U.S.C. 5112(p)(1)).

(d) *Comptroller General Examination of Record*. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records - Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR

clause, other than those in this paragraph (e)(1) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (JUL 2013) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$650,000 (\$1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause 52.222-17.

(iv) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).

(vii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(viii) 52.222-41, Service Contract Act of 1965 "(NOV 2007)" (41 U.S.C. 351, et seq.).

(ix) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

___Alternate I (AUG 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(x) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements "(NOV 2007)" (41 U.S.C. 351, et seq.).

(xi) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009)(41 U.S.C. 351, et seq.).

(xii) 52.222-54, Employment Eligibility Verification (JUL 2012).

(xiii) 52.225-26, Contractors Performing Private Security Functions Outside the United States (JUL 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xiv) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xv) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

SECTION B - Supplies or Services/Prices

NRCB044 CONSIDERATION AND OBLIGATION—INDEFINITE-QUANTITY CONTRACT

(a) The estimated total value of this contract for the products/services under this contract is \$100,000,000.00, and the maximum total value is \$140,000,000.00.

(b) The Contracting Officer will obligate funds on each task order issued.

(c) The minimum guarantee under this contract is \$5,000.00.

(d) The obligated amount for this contract is Refer to (b) above.

(e) A total estimated cost and fee, if any, will be negotiated for each task order and will be incorporated as a ceiling in the resultant task order. The Contractor shall comply with the provisions of FAR 52.232-20 - Limitation of Cost for fully-funded task orders and FAR 52.232-22 - Limitation of Funds for incrementally-funded task orders, issued hereunder.

(End of Clause)

NRCB010A BRIEF DESCRIPTION OF WORK ALTERNATE I

(a) The title of this project is: "Maintenance, Operation, and Modernization Support of U.S. Nuclear Regulatory Commission Application Systems and Environment ("MOM") Acquisition" - Functional Area 4 - Legacy Modernization and New Software Application Development and M&O of Modernized Systems

(b) Summary work description: The objective of this acquisition for "Maintenance, Operation, and Modernization Support of U.S. Nuclear Regulatory Commission Application Systems and Environment" is to procure continuous maintenance and operational Information Technology (IT) support services for current and future NRC automated computer systems. This acquisition will also provide modernization support services while replacing legacy technologies with secure, innovative, enterprise-wide IT solutions. This acquisition focuses on both enterprise and service level requirements for IT services.

(b) Summary work description:

(c) Orders will be issued for work in accordance with FAR 52.216-18 – Ordering.

(End of Clause)

PRICE/COST SCHEDULE

BASE PERIOD 1 (Effective Date of Award – 9/25/2014)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

BASE PERIOD 2 (9/26/2014 – 9/25/2015)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

BASE PERIOD 3 (9/26/2015 – 9/25/2016)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

BASE PERIOD 4 (9/26/2016 – 9/25/2017)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

BASE PERIOD 5 (9/26/2017 – 9/25/2018)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

OPTION PERIOD 1 (9/26/2018 – 9/25/2019)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

AWARD TERM I (9/26/2019 – 9/25/2020)

Labor Category (Vendor Labor Category)	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

AWARD TERM II (9/26/2020 – 9/25/2021)

Labor Category	Fixed Hourly Labor Rate
Senior Developer (Senior IT Specialist)	[REDACTED]
Mid-Level Developer (Analyst Programmer 3)	[REDACTED]
Junior Developer (Analyst Programmer 2)	[REDACTED]
Senior Tester (Test Engineer)	[REDACTED]
Junior Tester (Test Engineer – Intermediate)	[REDACTED]
Documentation Specialist (Technical Writer/Editor)	[REDACTED]
Entry-Level Developer (Analyst Programmer 1)	[REDACTED]
Entry-Level Tester (Test Engineer – Associate)	[REDACTED]
Principal Developer (Principle IT Specialist)	[REDACTED]

SECTION C - Description/Specifications

See Section J ATTACHMENTS for the MOM FA1-FA4 Statement of Work

C.4.4 FA4: Modernization and Maintenance of Legacy Systems

This functional area will allow the NRC to modernize legacy application systems.

Figure 6 provides a high level illustration of how the FA4 contractor(s) will interact with the NRC, as well as, contractors in other functional areas (FA1, FA2, and FA3). The FA4 contractor(s) shall modernize the legacy application system based on the requirements and high level functional design provided by the NRC. The FA4 contractor(s) shall work within the centralized environment provided by the FA1 contractor. The FA4 contractor(s) shall ensure open communication with the FA3 contractor(s) to ensure a smooth transition of the requirements and high level functional design into the modernization effort. If a modification to the legacy system is absolutely necessary during modernization efforts, then the FA4 contractor(s) and the FA2 contractor(s) shall work together to ensure continued service to NRC end users.

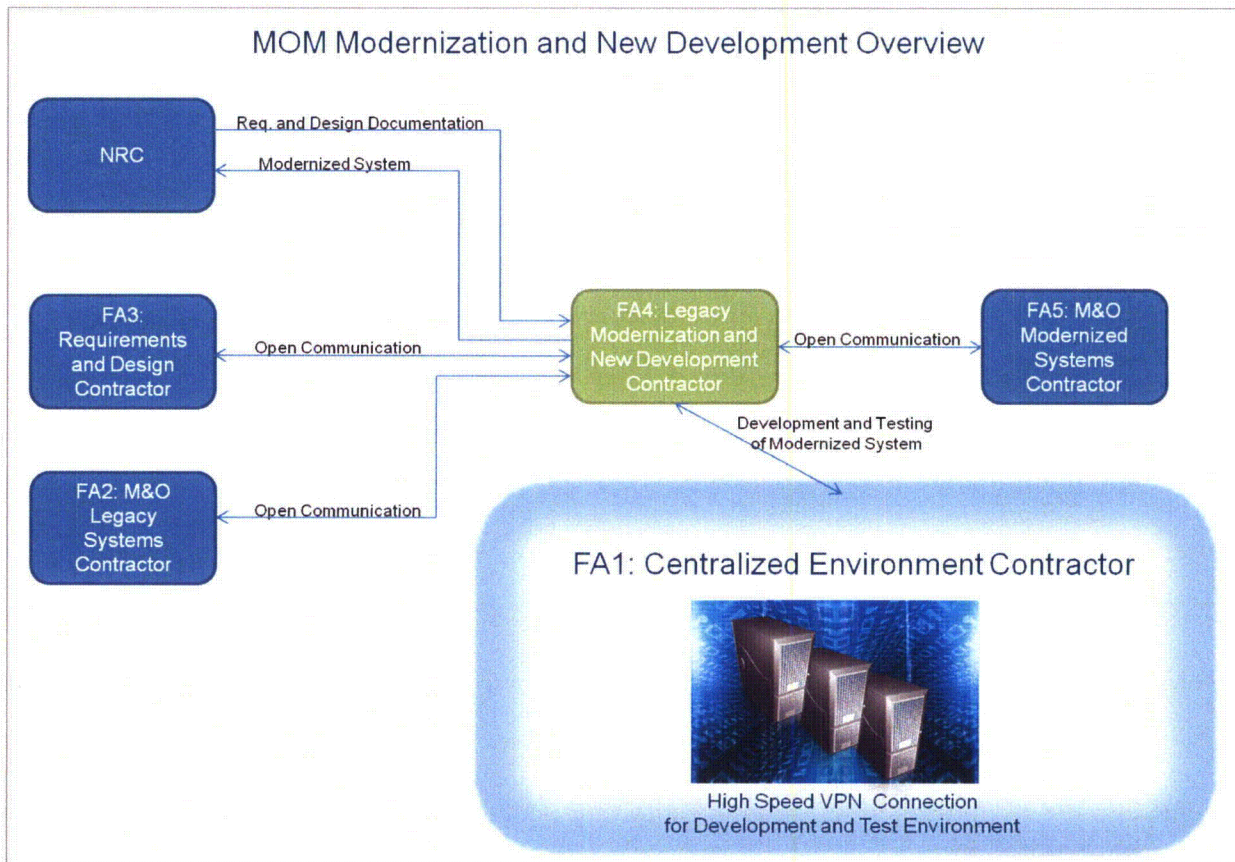


Figure 6: MOM Legacy Modernization and New Development Overview. **Note: FA5 was combined into FA4**

FA4 requirements and deliverables will be dependent on FA3 requirements.

C.4.4.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD.

C.4.4.2 Modernization

Objective – Implement changes to the legacy systems as required to deliver enhancements base on delivered requirements and HLD identified by the FA3 contractor(s).

During the detailed phase the HLD is broken down into modules and programs. Logic design is done for every program and then documented as program specifications. For every program a unit test plan shall be created.

The entry criteria for FA4 will be the Requirements and HLD document. The exit criteria shall be the modernized system, including the program specification and unit test plan comprising the Low Level Design (LLD).

The HLD contains details at macro level and so it cannot be given to programmers as a document for coding. The system analysts shall prepare a micro level design LLD document. This document shall describe each module in an elaborate technical manner, so that the programmer can directly code the program based upon the functional design. The LLD will at a minimum contain:

- a) A detailed programmatic functional logic of the module, in pseudo code
- b) All database tables, with all elements, including their type and size
- c) All interface details with complete Application Programming Interface (API) references (with a visual diagram and supporting text)
- d) All dependencies and constraints
- e) All error responses, recovery and error message listings
- f) Complete list of inputs and outputs for each module

Key objectives are:

- a) Create a more homogeneous NRC IT environment (see architecture requirements and preferred technologies in Appendix F) by modernizing applications to use similar platforms, programming languages, and databases
- b) Implement best practices for modernization support activities
- c) Maintain compliance with applicable industry standards, as specified in task order performance work statement

- d) Apply cost effective approaches for providing all modernization activities

Requirement – Key requirements may include, but are not limited to:

- a) Ensuring the robustness, integrity, quality, consistency and/or performance of the NRC application systems
- b) Providing a detailed segment portfolio modernization plan
- c) Modernization activities shall include one or more of the following approaches:
 - i. Improving the robustness, integrity, quality, consistency, and/or performance of a system
 - ii. Converting an application from one technology set to another (e.g. from PowerBuilder to .Net or Java)
 - iii. Moving a system from one computer platform to another computer platform (e.g. from Windows to Linux platform)
 - iv. Combining two or more systems into one.
- d) Adhere to Maintenance, Operations and Modernization Change Request Process, as described in Section C.5.2
- e) Adhere to documentation support requirements
- f) Screen mock-ups
- g) Usability testing
- h) Coordinate, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls

C.4.4.3 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.5 F4: Maintenance and Operations of Modernized Systems

The contractor(s) selected to provide maintenance and operation of modernized systems shall provide maintenance and operational support for identified NRC application systems.

Figure 7 provides a high level illustration of how the FA4 contractor(s) will interact with the NRC, as well as, contractors in other functional areas (FA1, and FA3). The FA4 contractor(s) shall coordinate with the FA1 contractor to develop and test minor enhancement and maintenance system releases, as directed by NRC change requests. The FA4 contractor shall also ensure a smooth transition of modernized systems to ensure continued M&O support. The FA4 contractor(s) shall also ensure open communication with the FA3 contractor(s) if independent requirements analysis and design is required by the NRC.

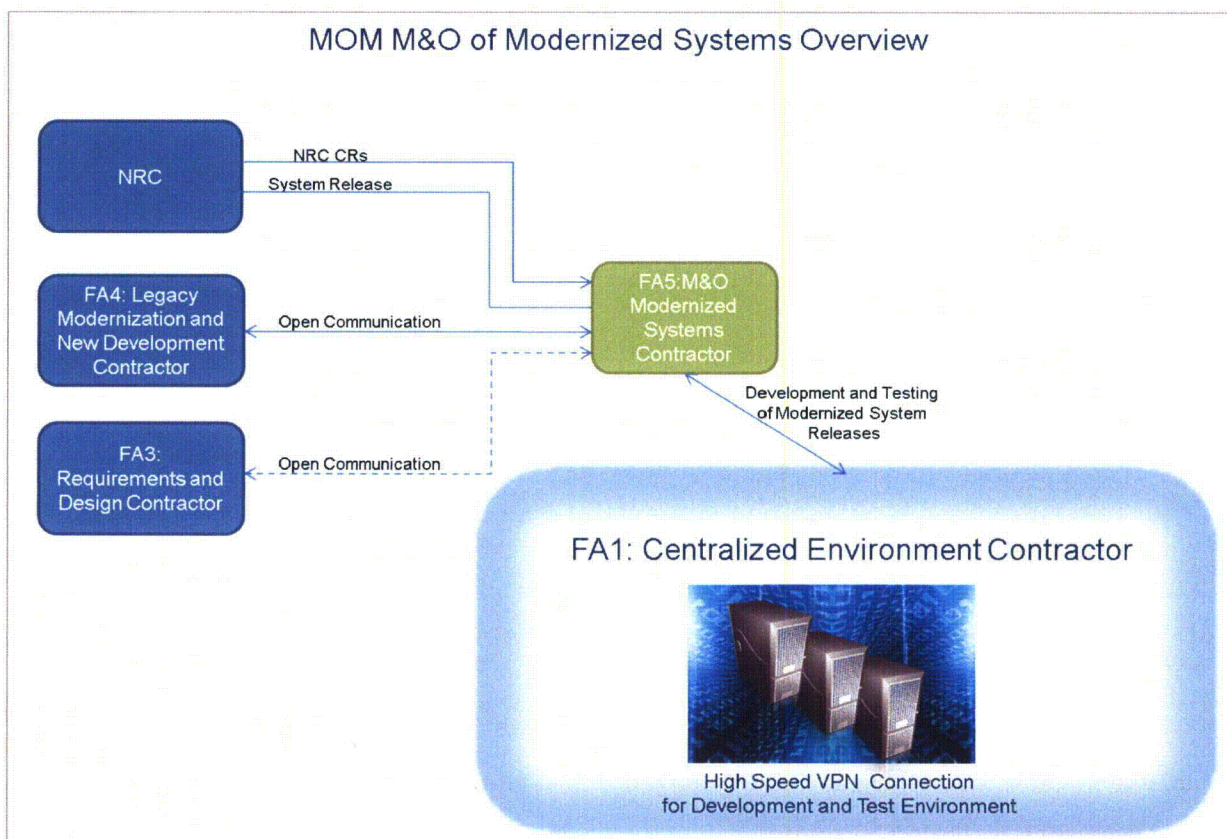


Figure 7: MOM M&O of Modernized Systems Overview. **Note: FA5 was combined into FA4**

Maintenance and Operations of Modernization Systems will be divided into segments, as described in Section C above.

C.4.5.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD.

C.4.5.2 Maintenance of Modernized Systems

Objective – Implement changes to modernized systems as required to deliver minor enhancements and fixes.

The key objectives are:

- a) Implement best practices for maintenance activities.
- b) Facilitate user support during and after transitional periods when moving users to a new release of the software with an increased improvement during normal operational periods.
- c) Apply cost effective approaches for providing all maintenance activities

Requirements – Key requirements may include, but are not limited to:

- a) Providing maintenance support as described in Section C.4.2 above for identified modernized NRC application systems.
- b) Performing configuration management activities as part of all task orders under this acquisition in compliance with Appendix G.
- c) Use the IBM Rational tools and formal CM processes to manage stable baselines and changes requests.
- d) Performing maintenance actions using the current production baseline of the application system which is housed in Rational ClearCase or Rational Team Concert Versioned Object Base (VOBs).
- e) Work with FA3 contractor(s) and the FA1 contractor for any Rational tools used and ensure those tools, as directed in writing by the NRC COR, are integrated into the M&O processes.
- f) The NRC COR or designee shall notify the contractor of maintenance requests using the Rational ClearQuest or Rational Team Concert CR system and approve the CRs that will be included in each system release. The contractor shall follow the procedures and deliverables specified in Sections C.4.4
- g) Updating all application system changes in the system and security documentation, including any changes that affect the security controls within the application system, prior to system deployment.
- h) Coordinate, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls.
- i) Implementing changes to application systems using only the specific vendor products defined in the application system baseline, unless authorization has received in writing from the NRC COR (i.e., if the application is coded in Java 1.5, only Java 1.5 will be used in the changes).

- j) Ensuring that the introduction of any new product to the application system is consistent with the authorized list of products (i.e., the TRM) approved by the NRC Environmental Change Control Board (ECCB) prior to implementation.
- k) Adhere to existing (or as modified by NRC) MOM Change Request Process as defined in Section C.5.2.
- l) Adhere to Documentation Support requirements. The NRC CCB will consist of a Parent CCB board and children CCB, which will be subordinate to the Parent CCB. Parent CCB will review documentation requirements in conjunction with segment architecture to determine documentation needs for legacy systems.
- m) Ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.5.3 Operations of Modernized Systems

Objective – The key objective is:

Implement best practices for operational support activities.

Requirement – Key requirements may include, but are not limited to:

- a) Using the IBM Rational tools and formal CM processes to manage stable baselines and change requests
- b) Developing/Updating a Support Plan to include: how support will be provided, system contact personnel, defect reporting and enhancement request strategy, SLA's, defect prioritization and resolution time periods, defect escalation criteria, how to deliver fixes into production outside the scope of an official release
- c) Developing/Updating an Operations Plan to include how a system will be operated and supported in production
- d) Modifying data
- e) Performing data interpretation
- f) Scanning documents
- g) Performing Optical Character Recognition (OCR)
- h) Entering data
- i) Validating data
- j) Report Generation

- k) Producing standard reports
- l) Producing ad-hoc reports
- m) Providing production support
- n) Initiating schedule program sequences
- o) Transferring data between systems through kick-off of electronic processes or inputs of tapes or other physical media
- p) Performing system monitoring, troubleshooting, and applying immediate corrective measures to agency production application systems (in some cases on a 24-hour, on-call basis)
- q) Planning for disaster recovery
- r) Developing/updating a plan of actions in the event of disaster
- s) Conducting staff training on the disaster recovery plan
- t) Conducting periodic testing of the disaster recovery plan
- u) Recovering from disaster
- v) Developing/updating disaster recovery plan
- w) Executing disaster recovery plan
- x) Coordinating, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls.

C.4.5.4 Enterprise Architecture and Technology Standards

The contractor shall comply with NRC enterprise architecture requirements and technology standards as outlined in Appendix F.

C.4.5.5 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

SECTION D - Packaging and Marking

NRCD020 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 Information Systems, under (identify the contract and order number).

(End of Clause)

NRCD010 PACKAGING AND MARKING

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

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

(c) Additional packaging and/or marking requirements are as follows: N/A.

(End of Clause)

SECTION E - Inspection and Acceptance

Refer to 52.212-4 and 52.212-4 ALTERNATE I for Inspection and Acceptance FAR clauses

SECTION F - Deliveries or Performance

52.242-15 STOP-WORK ORDER. (AUG 1989)

52.242-17 GOVERNMENT DELAY OF WORK. (APR 1984)

52.247-34 F.O.B. DESTINATION. (NOV 1991)

NRCF030A PERIOD OF PERFORMANCE ALTERNATE I

The ordering period for this contract shall commence on the Effective Date of Award and will expire on September 25, 2018 (BASE PERIODS 1-5). The following option period and award terms remain:

OPTION PERIOD 1	(9/26/2018 – 9/25/2019)
AWARD TERM I	(9/26/2019 – 9/25/2020)
AWARD TERM II	(9/26/2020 – 9/25/2021)

Any orders issued during this period shall be completed within the time specified in the order, unless otherwise specified herein. (See FAR 52.216-18 - Ordering).

(End of Clause)

NRCF010 PLACE OF DELIVERY-REPORTS

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

To be specified in each Task Order.

(End of Clause)

SECTION G - Contract Administration Data

NRCG030 ELECTRONIC PAYMENT (SEP 2013)

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 Award Management".

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted on the payee's letterhead, invoice, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal – Continuation Sheet." The preferred method of submitting invoices is electronically to: OCFO ObligationsResource@nrc.gov.

(End of Clause)

NRCG010 ORDERING PROCEDURES

(a) The CO is the only individual who can legally obligate funds and commit the NRC.

(b) All task orders and delivery orders shall be prepared in accordance with FAR 16.505.

(c) In accordance with FAR 16.506(b), the following ordering limitations apply:

Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$5,000.00 [insert dollar figure or quantity], the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

Maximum order. The Contractor is not obligated to honor—

- (1) Any order for a single item in excess of \$5,000,000.
- (2) Any order for a combination of items in excess of \$10,000,000.00; or
- (3) A series of orders from the same ordering office within 25 days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

The Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 10 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons.

(End of Clause)

SECTION H - Special Contract Requirements

2052.204-71 SITE ACCESS BADGE REQUIREMENTS. (JAN 1993)

During the life of this contract, the rights of ingress and egress for contractor personnel must be made available as required. In this regard, all contractor personnel whose duties under this contract require their presence on-site shall be clearly identifiable by a distinctive badge furnished by the Government. The Contracting officer representative shall assist the contractor in obtaining the badges for contractor personnel. It is the sole responsibility of the contractor to ensure that each employee has proper identification at all times. All prescribed identification must be immediately delivered to the Security Office for cancellation or disposition upon the termination of employment of any contractor personnel. Contractor personnel shall have this identification in their possession during on-site performance under this contract. It is the contractor's duty to assure that contractor personnel enter only those work areas necessary for performance of contract work and to assure the safeguarding of any Government records or data that contractor personnel may come into contact with.

(End of Clause)

CONTRACTING OFFICER REPRESENTATIVE

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

Name: Elizabeth Crawford
Address: U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Mail Stop OWFN/ 6 E7A
Rockville, MD 20852
Telephone Number: 301-415-4044

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

(f) If, in the opinion of the contractor, any instruction or direction issued by the contracting officer representative 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 contracting officer representative 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 contracting officer representative shall:

- (1) Monitor the contractor's technical progress, including surveillance and assessment of

performance, and recommend to the contracting officer changes in requirements.

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

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

(End of Clause)

2052.216-72 TASK ORDER PROCEDURES. (OCT 1999)

(a) Task order request for proposal. When a requirement within the scope of work for this contract is identified, the contracting officer shall transmit to the contractor a Task Order Request for Proposal (TORFP) which may include the following, as appropriate:

(1) Scope of work/meetings/travel and deliverables;

(2) Reporting requirements;

(3) Period of performance - place of performance;

(4) Applicable special provisions;

(5) Technical skills required; and

(6) Estimated level of effort.

(b) Task order technical proposal. By the date specified in the TORFP, the contractor shall deliver to the contracting officer a written or verbal (as specified in the TORFP technical proposal submittal instructions) technical proposal that provides the technical information required by the TORFP.

(c) Cost proposal. The contractor's cost proposal for each task order must be fully supported by cost and pricing data adequate to establish the reasonableness of the proposed amounts. When the contractor's estimated cost for the proposed task order exceeds \$100,000 and the period of performance exceeds six months, the contractor may be required to submit a Contractor Spending Plan (CSP) as part of its cost proposal. The TORP indicates if a CSP is required.

(d) Task order award. The contractor shall perform all work described in definitized task orders issued by the contracting officer. Definitized task orders include the following:

(1) Statement of work/meetings/travel and deliverables;

(2) Reporting requirements;

(3) Period of performance;

- (4) Key personnel;
- (5) Applicable special provisions; and
- (6) Total task order amount including any fixed fee.

(End of Clause)

2052.216-73 ACCELERATED TASK ORDER PROCEDURES. (JAN 1993)

(a) The NRC may require the contractor to begin work before receiving a definitized task order from the contracting officer. Accordingly, when the contracting officer verbally authorizes the work, the contractor shall proceed with performance of the task order subject to the monetary limitation established for the task order by the contracting officer.

(b) When this accelerated procedure is employed by the NRC, the contractor agrees to begin promptly negotiating with the contracting officer the terms of the definitive task order and agrees to submit a cost proposal with supporting cost or pricing data. If agreement on a definitized task order is not reached by the target date mutually agreed upon by the contractor and contracting officer, the contracting officer may determine a reasonable price and/or fee in accordance with Subpart 15.8 and Part 31 of the FAR, subject to contractor appeal as provided in 52.233-1, Disputes. In any event, the contractor shall proceed with completion of the task order subject only to the monetary limitation established by the contracting officer and the terms and conditions of the basic contract.

(End of Clause)

NRCH490 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)

NRCH470 GREEN PURCHASING (SEP 2013)

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

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

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

(End of Clause)

NRCH440 CONTRACTOR RESPONSIBILITY FOR PROTECTING PERSONALLY IDENTIFIABLE INFORMATION (PII)

In accordance with the Office of Management and Budget's guidance to Federal agencies and the Nuclear Regulatory Commission's (NRC) implementing policy and procedures, a contractor (including subcontractors and contractor employees), who performs work on behalf of the NRC, is responsible for protecting, from unauthorized access or disclosure, personally identifiable information (PII) that may be provided, developed, maintained, collected, used, or disseminated, whether in paper, electronic, or other format, during performance of this contract.

A contractor who has access to NRC owned or controlled PII, whether provided to the contractor by the NRC or developed, maintained, collected, used, or disseminated by the contractor during the course of contract performance, must comply with the following requirements:

(1) **General.** In addition to implementing the specific requirements set forth in this clause, the contractor must adhere to all other applicable NRC guidance, policy and requirements for the handling and protection of NRC owned or controlled PII. The contractor is responsible for making sure that it has an adequate understanding of such guidance, policy and requirements.

(2) **Use, Ownership, and Nondisclosure.** A contractor may use NRC owned or controlled PII solely for purposes of this contract, and may not collect or use such PII for any purpose outside the contract without the prior written approval of the NRC Contracting Officer. The contractor must restrict access to such information to only

those contractor employees who need the information to perform work under this contract, and must ensure that each such contractor employee (including subcontractors' employees) signs a nondisclosure agreement, in a form suitable to the NRC Contracting Officer, prior to being granted access to the information. The NRC retains sole ownership and rights to its PII. Unless the contract states otherwise, upon completion of the contract, the contractor must turn over all PII in its possession to the NRC, and must certify in writing that it has not retained any NRC owned or controlled PII except as otherwise authorized in writing by the NRC Contracting Officer.

(3) **Security Plan.** When applicable, and unless waived in writing by the NRC Contracting Officer, the contractor must work with the NRC to develop and implement a security plan setting forth adequate procedures for the protection of NRC owned or controlled PII as well as the procedures which the contractor must follow for notifying the NRC in the event of any security breach. The plan will be incorporated into the contract and must be implemented and followed by the contractor once it has been approved by the NRC Contracting Officer. If the contract does not include a security plan at the time of contract award, a plan must be submitted for the approval of the NRC Contracting Officer within 30 days after contract award.

(4) **Breach Notification.** The contractor must immediately notify the NRC Contracting Officer and the NRC Contracting Officer's Representative (COR) upon discovery of any suspected or confirmed breach in the security of NRC owned or controlled PII.

(5) **Legal Demands for Information.** If a legal demand is made for NRC owned or controlled PII (such as by subpoena), the contractor must immediately notify the NRC Contracting Officer and the NRC Contracting Officer's Representative (COR). After notification, the NRC will determine whether and to what extent to comply with the legal demand. The Contracting Officer will then notify the contractor in writing of the determination and such notice will indicate the extent of disclosure authorized, if any. The contractor may only release the information specifically demanded with the written permission of the NRC Contracting Officer.

(6) **Audits.** The NRC may audit the contractor's compliance with the requirements of this clause, including through the use of online compliance software.

(7) **Flow-down.** The prime contractor will flow this clause down to subcontractors that would be covered by any portion of this clause, as if they were the prime contractor.

(8) **Remedies:**

(a) The contractor is responsible for implementing and maintaining adequate security controls to prevent the loss of control or unauthorized disclosure of NRC owned or controlled PII in its possession. Furthermore, the contractor is responsible for reporting any known or suspected loss of control or unauthorized access to PII to the NRC in accordance with the provisions set forth in Article 4 above.

(b) Should the contractor fail to meet its responsibilities under this clause, the NRC reserves the right to take appropriate steps to mitigate the contractor's violation of this clause. This may include, at the sole discretion of the NRC, termination of the subject contract.

(9) Indemnification. Notwithstanding any other remedies available to the NRC, the contractor will indemnify the NRC against all liability (including costs and fees) for any damages arising out of violations of this clause.

(End of Clause)

NRCH430 DRUG FREE WORKPLACE TESTING: UNESCORTED ACCESS TO NUCLEAR FACILITIES, ACCESS TO CLASSIFIED INFORMATION OR SAFEGUARDS INFORMATION, OR PERFORMING IN SPECIALLY SENSITIVE POSITIONS

All contractor employees, subcontractor employees, and consultants proposed for performance or performing under this contract shall be subject to pre-assignment, random, reasonable suspicion, and post-accident drug testing applicable to: (1) individuals who require unescorted access to nuclear power plants, (2) individuals who have access to classified or safeguards information, (3) individuals who are required to carry firearms in performing security services for the NRC, (4) individuals who are required to operate government vehicles or transport passengers for the NRC, (5) individuals who are required to operate hazardous equipment at NRC facilities, or (6) individuals who admit to recent illegal drug use or those who are found through other means to be using drugs illegally. The Plan includes a contractor's employees and their subcontractors are subject to the procedures and terms of their employment agreements with their employer.

The NRC Drug Program Manager will schedule the drug testing for all contractor employees, subcontractor employees, and consultants who are subject to testing under this clause. Any NRC contractor found to be using, selling, or possessing illegal drugs, or any contractor with a verified positive drug test result under this program while in a duty status will immediately be removed from working under the NRC contract. The contractor's employer will be notified of the denial or revocation of the individual's authorization to have access to information and ability to perform under the contract. The individual may not work on any NRC contract for a period of not less than one year from the date of the failed drug test and will not be considered for reinstatement unless evidence of rehabilitation, as determined by the NRC "drug testing contractor's" Medical Review Officer, is provided.

Contractor drug testing records are protected under the NRC Privacy Act Systems of Records, System 35, "Drug Testing Program Records - NRC" found at:
<http://www.nrc.gov/reading-rm/foia/privacy-systems.html>

(End of Clause)

NRCH420 AUTHORITY TO USE GOVERNMENT PROVIDED SPACE AT NRC HEADQUARTERS (SEP 2013)

Prior to occupying any Government provided space at NRC Headquarters in Rockville Maryland, the Contractor shall obtain written authorization to occupy specifically designated government space, via the NRC Contracting Officer's Representative (COR), from the Chief, Space Design Branch, Office of Administration. Failure to obtain this prior authorization can result in one, or a combination, of the following remedies as deemed appropriate by the Contracting Officer.

(1) Rental charge for the space occupied will be deducted from the invoice amount due the Contractor

(2) Removal from the space occupied

(3) Contract Termination

(End of Clause)

NRCH410 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES

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

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

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

(End of Clause)

NRCH400 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORT(S) OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS

Review and Approval of Reports

(a) Reporting Requirements. The contractor/grantee shall comply with the terms and conditions of the contract/grant regarding the contents of the draft and final report, summaries, data, and related documents, to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein, at no additional cost to the NRC. Performance under the contract/grant will not be deemed accepted or completed until it complies with the NRC's directions. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor/grantee agrees that the direction, determinations, and

decisions on approval or disapproval of reports, summaries, data, and related documents created under this contract/grant remain solely within the discretion of the NRC.

(b) Publication of Results. Prior to any dissemination, display, publication, or release of articles, reports, summaries, data, or related documents developed under the contract/grant, the contractor/grantee shall submit them to the NRC for review and approval. The contractor/grantee shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents, or the contents therein, that have not been reviewed and approved by the NRC for release, display, dissemination or publication. The contractor/grantee agrees to conspicuously place any disclaimers, markings or notices, directed by the NRC, on any articles, reports, summaries, data, and related documents that the contractor/grantee intends to release, display, disseminate or publish to other persons, the public, or any other entities. The contractor/grantee agrees, and grants, a royalty-free, nonexclusive, irrevocable worldwide license to the government, to use, reproduce, modify, distribute, prepare derivative works, release, display or disclose the articles, reports, summaries, data, and related documents developed under the contract/grant, for any governmental purpose and to have or authorize others to do so.

(c) Identification/Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI). The decision, determination, or direction by the NRC that information possessed, formulated or produced by the contractor/grantee constitutes SUNSI or SGI is solely within the authority and discretion of the NRC. In performing the contract/grant, the contractor/grantee shall clearly mark SUNSI and SGI, to include for example, OUO-Allegation Information or OUO-Security Related Information on any reports, documents, designs, data, materials, and written information, as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet (e.g., NRC Form 461 Safeguards Information) in maintaining these records and documents. The contractor/grantee shall ensure that SUNSI and SGI is handled, maintained and protected from unauthorized disclosure, consistent with NRC policies and directions. The contractor/grantee shall comply with the requirements to mark, maintain, and protect all information, including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954 as amended, its implementing regulations (10 CFR 73.21), Sensitive Unclassified Non-Safeguards and Safeguards Information policies, and NRC Management Directives and Handbooks 12.5, 12.6 and 12.7.

(d) Remedies. In addition to any civil, criminal, and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions, and/or NRC directions, may result in suspension, withholding, or offsetting of any payments invoiced or claimed by the contractor/grantee.

(e) Flowdown. If the contractor/grantee intends to enter into any subcontracts or other agreements to perform this contract/grant, the contractor/grantee shall include all of the above provisions in any subcontracts or agreements.

(End of Clause)

NRCH390 NRC INFORMATION TECHNOLOGY SECURITY

NRC 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.

Contractor employees, consultants, and subcontractors shall complete the NRC's online annual, "Computer Security Awareness" course on the same day that they receive access to the agency's IT equipment and/or services, as their first action using the equipment/service. For those contractor employees, consultants, and subcontractors who are already working under this contract, the on-line training must be completed in accordance with agency Network Announcements issued throughout the year, within three weeks of issuance of this modification.

Contractor employees, consultants, and subcontractors who have been granted access to NRC information technology equipment and/or IT services must continue to take IT security refresher training offered online by the NRC throughout the term of the contract. Contractor employees will receive notice of NRC's online IT security refresher training requirements through agency-wide notices.

The NRC reserves the right to deny or withdraw Contractor use or access to NRC IT equipment and/or services, and/or take other appropriate contract administrative actions (e.g., disallow costs, terminate for cause) should the Contractor violate the Contractor's responsibility under this clause.

(End of Clause)

NRCH370 SAFETY OF ON-SITE CONTRACTOR PERSONNEL

Ensuring the safety of occupants of Federal buildings is a responsibility shared by the professionals implementing our security and safety programs and the persons being protected. The NRC's Office of Administration (ADM) Division of Facilities and Security (DFS) has coordinated an Occupant Emergency Plan (OEP) for NRC Headquarters buildings with local authorities. The OEP has been approved by the Montgomery County Fire and Rescue Service. It is designed to improve building occupants' chances of survival, minimize damage to property, and promptly account for building occupants when necessary.

The contractor's Project Director shall ensure that all personnel working full time on-site at NRC Headquarters read the NRC's OEP, provided electronically on the NRC Intranet at <http://www.internal.nrc.gov/ADM/OEP.pdf>. The contractor's Project Director also shall emphasize to each staff member that they are to be familiar with and guided by the OEP, as well as by instructions given by emergency response personnel in situations which pose an immediate health or safety threat to building occupants.

The NRC Contracting Officer's Representative (COR) shall ensure that the contractor's Project Director has communicated the requirement for on-site contractor staff to follow the guidance in the OEP. The NRC Contracting Officer's Representative (COR) also

will assist in accounting for on-site contract persons in the event of a major emergency (e.g., explosion occurs and casualties or injuries are suspected) during which a full evacuation will be required, including the assembly and accountability of occupants. The NRC DFS will conduct drills periodically to train occupants and assess these procedures.

(End of Clause)

NRCH360 INTERNET

Neither NRC nor its third party contractors that manage or develop the NRC web site shall send persistent cookies, place persistent cookies on users' computers, nor collect personally identifiable information from visitors to the NRC web site unless in addition to clear and conspicuous notice, each of the following conditions are met: there is a compelling need to gather the data on the site; there are appropriate and publicly disclosed privacy safeguards for handling of information derived from "cookies"; and personal approval is obtained from the head of the agency.

(End of Clause)

NRCH350 FOREIGN OWNERSHIP, CONTROL, OR INFLUENCE OVER CONTRACTOR

The National Industrial Security Program Operating Manual (NISPOM) implements the provisions of E.O. 12829, "National Industrial Security Program." A company is considered to be under FOCl whenever a foreign interest has the power, direct or indirect, whether or not exercised, and whether or not exercisable through the ownership of the U.S. company's securities, by contractual arrangements or otherwise, to direct or decide matters affecting the management or operations of that company in a manner that may result in unauthorized access to classified information or may adversely affect the performance of classified information contracts. (See NRC Management Directive 12.2 – "NRC Classified Information Security Program")

(a) For purposes of this clause, a foreign interest is defined as any of the following:

- (1) A foreign government or foreign government agency;
- (2) Any form of business enterprise organized under the laws of any country other than the United States or its possessions;
- (3) Any form of business enterprise organized or incorporated under the laws of the U.S., or a State or other jurisdiction within the U.S., which is owned, controlled, or influenced by a foreign government, agency, firm, corporation or person; or
- (4) Any person who is not a U.S. citizen.

(b) A U.S. company determined to be under FOCl is not eligible for facility clearance (FCL). If a company already has an FCL, the FCL shall be suspended or revoked unless security measures are taken to remove the possibility of unauthorized access to classified information.

(c) For purposes of this clause, subcontractor means any subcontractor at any tier and the term "contracting officer" shall mean NRC contracting officer. When this clause is included in a subcontract, the term "contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

(d) The contractor shall complete and submit and SF-328, DD-441 and DD-441-1 forms, prior to contract award. The information contained in these forms may be used in making a determination as to whether a contractor is eligible to participate in the National Industrial Security Program and have a facility security clearance.

(e) The contractor shall immediately provide the contracting officer written notice of any changes in the extent and nature of FOCI over the contractor which would affect the answers to the questions presented in SF-328, "Certificate Pertaining to Foreign Interest". Further, notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice shall also be furnished concurrently to the contracting officer.

(f) In those cases where a contractor has changes involving FOCI, the NRC must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, the contracting officer shall consider proposals made by the contractor to avoid or mitigate foreign influences.

(g) The contractor agrees to insert terms that conform substantially to the language of this clause including this paragraph (g) in all subcontracts under this contract that will require access to classified information and shall require such subcontractors to submit completed SF-328, DD-441 and DD-441-1 forms prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the contracting officer.

(h) Information submitted by the contractor or any affected subcontractor as required pursuant to this clause shall be treated by NRC to the extent permitted by law, as business or financial information submitted in confidence to be used solely for purposes of evaluating FOCI.

(i) The requirements of this clause are in addition to the requirement that a contractor obtain and retain the security clearances required by the contract. This clause shall not operate as a limitation on NRC's rights, including its rights to terminate this contract.

(j) The contracting officer may terminate this contract for default either if the contractor fails to meet obligations imposed by this clause, e.g., provide the information required by this clause, comply with the contracting officer's instructions about safeguarding classified information, or make this clause applicable to subcontractors, or if, in the contracting officer's judgment, the contractor creates a FOCI situation in order to avoid performance or a termination for default. The contracting officer may terminate this contract for convenience if the contractor becomes subject to FOCI and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the FOCI problem.

(End of Clause)

NRCH340 COMPLIANCE WITH U.S. IMMIGRATION LAWS AND REGULATIONS

NRC contractors are responsible to ensure that their alien personnel are not in violation of United States immigration laws and regulations, including employment authorization documents and visa requirements. Each alien employee of the Contractor must be lawfully admitted for permanent residence as evidenced by Permanent Resident Form I-551 (Green Card), or must present other evidence from the U.S. Department of Homeland Security/U.S. Citizenship and Immigration Services that employment will not affect his/her immigration status. The U.S. Citizenship and Immigration Services provides information to contractors to help them understand the employment eligibility verification process for non-US citizens. This information can be found on their website, <http://www.uscis.gov/portal/site/uscis>.

The NRC reserves the right to deny or withdraw Contractor use or access to NRC facilities or its equipment/services, and/or take any number of contract administrative actions (e.g., disallow costs, terminate for cause) should the Contractor violate the Contractor's responsibility under this clause.

(End of Clause)

NRCH330 RULES OF BEHAVIOR FOR AUTHORIZED COMPUTER USE

In accordance with Appendix III, "Security of Federal Automated Information Resources," to Office of Management and Budget (OMB) Circular A-130, "Management of Federal Information Resources," NRC has established rules of behavior for individual users who access all IT computing resources maintained and operated by the NRC or on behalf of the NRC. In response to the direction from OMB, NRC has issued the "Agency-wide Rules of Behavior for Authorized Computer Use" policy, hereafter referred to as the rules of behavior. The rules of behavior for authorized computer use will be provided to NRC computer users, including contractor personnel, as part of the annual computer security awareness course.

The rules of behavior apply to all NRC employees, contractors, vendors, and agents (users) who have access to any system operated by the NRC or by a contractor or outside entity on behalf of the NRC. This policy does not apply to licensees. The next revision of Management Directive 12.5, "NRC Automated Information Security Program," will include this policy. The rules of behavior can be viewed at <http://www.internal.nrc.gov/CSO/documents/ROB.pdf> or use NRC's external Web-based ADAMS at <http://wba.nrc.gov:8080/ves/> (Under Advanced Search, type ML082190730 in the Query box).

The rules of behavior are effective immediately upon acknowledgement of them by the person who is informed of the requirements contained in those rules of behavior. All current contractor users are required to review and acknowledge the rules of behavior as part of the annual computer security awareness course completion. All new NRC contractor personnel will be required to acknowledge the rules of behavior within one week of commencing work under this contract and then acknowledge as current users thereafter. The acknowledgement statement can be viewed at http://www.internal.nrc.gov/CSO/documents/ROB_Ack.pdf or use NRC's external Web-based ADAMS at <http://wba.nrc.gov:8080/ves/> (Under Advanced Search, type ML082190730 in the Query box).

The NRC Computer Security Office will review and update the rules of behavior annually beginning in FY 2011 by December 31st of each year. Contractors shall ensure that their personnel to which this requirement applies acknowledge the rules of behavior before beginning contract performance and, if the period of performance for the contract lasts more than one year, annually thereafter. Training on the meaning and purpose of the rules of behavior can be provided for contractors upon written request to the NRC Contracting Officer's Representative (COR).

The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order if such subcontracts/agreements will authorize access to NRC electronic and information technology (EIT) as that term is defined in FAR 2.101.

(End of Clause)

NRCH320 COMPENSATION FOR ON-SITE CONTRACTOR PERSONNEL

(a) NRC facilities may not be available due to (1) designated Federal holiday, any other day designated by Federal Statute, Executive Order, or by President's Proclamation; (2) early dismissal of NRC employees during working hours (e.g., special holidays, water emergency); or (3) occurrence of emergency conditions during nonworking hours (e.g., inclement weather).

(b) When NRC facilities are unavailable, the contractor's compensation and deduction policy (date), incorporated herein by reference, shall be followed for contractor employees performing work on-site at the NRC facility. The contractor shall promptly submit any revisions to this policy to the Contracting Officer for review before they are incorporated into the contract.

(c) The contractor shall not charge the NRC for work performed by on-site contractor employees who were reassigned to perform other duties off site during the time the NRC facility was closed.

(d) On-site contractor staff shall be guided by the instructions given by a third party (e.g., Montgomery County personnel in situations which pose an immediate health or safety threat to employees (e.g., water emergency)).

(e) The contractor's Project Director shall first consult the NRC Contracting Officer's Representative (COR) before releasing on-site personnel in situations which do not impose an immediate safety or health threat to employees (e.g., special holidays). That same day, the contractor must then alert the Contracting Officer of the NRC Contracting Officer's Representative's (COR) direction. The contractor shall continue to provide sufficient personnel to perform the requirements of essential tasks as defined in the Statement of Work which already are in operation or are scheduled.

(End of Clause)

NRCH310 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 Within 120 days after each contract year. 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)

NRCH039 IT SECURITY REQUIREMENTS – NRC AND CONTRACTOR (NON-NRC) FACILITIES

BACKUPS

The contractor shall ensure that backup media is created, encrypted (in accordance with information sensitivity) and verified to ensure that data can be retrieved and is restorable to NRC systems based on information sensitivity levels. Backups shall be executed to create readable media that allows successful file/data restoration at the following frequencies:

- At least every 1 calendar day for a high sensitivity system
- At least every 1 calendar day for a moderate sensitivity system
- At least every 7 calendar days for a low sensitivity system

PERIMETER PROTECTION

The Contractor must employ perimeter protection mechanisms, such as firewalls and routers, to deny all communications unless explicitly allowed by exception.

The contractor must deploy and monitor intrusion detection capability and have an always deployed and actively engaged security monitoring capability in place for systems placed in operation for the NRC. Intrusion detection and monitoring reports will be made available to the NRC upon request for following security categorizations and reporting timeframes:

- 5 calendar days after being requested for a high sensitivity system
- 10 calendar days after being requested for a moderate sensitivity system
- 15 calendar days after being requested for a low sensitivity system

CONTRACTOR FACILITY REVIEW AND APPROVAL PROCESS

The contractor shall complete a security survey of the proposed facility in accordance with MD 12.1 in order for NRC to determine the adequacy and effectiveness of the administration of the security program and the protection afforded NRC information, employees, and assets before the facility is used for any NRC effort that includes IT.

Upon facility approval per MD 12.1, the contractor shall perform a full certification and obtain accreditation of the facility and computing systems that will be used by the contractor as part of the NRC effort that includes IT prior to commencing the effort. The certification shall be performed at the level of the highest sensitivity of the data that is used at the facility or will ultimately be used by the product of the effort.

(End of Clause)

NRCH036 IT SECURITY REQUIREMENTS - DEVELOPMENT AND OPERATIONS AND MAINTENANCE REQUIREMENTS

O&M Security Requirements

All system modifications to classified systems must comply with NRC security policies and procedures for classified systems, as well as federal laws, guidance, and standards to ensure Federal Information Security Management Act (FISMA) compliance.

The Contractor shall correct errors that are discovered by the NRC or the contractor in contractor developed software and applicable documentation that are not commercial off-the-shelf which are discovered by the NRC or the contractor. Inability of the parties to determine the cause of software errors shall be resolved in accordance with the Disputes clause, FAR 52.233-1, incorporated by reference in the contract.

The Contractor shall adhere to the guidance outlined in NIST, SP 800-53, FIPS 200 and NRC guidance for the identification and documentation of minimum security controls.

The contractor shall provide the system requirements traceability matrix at the end of the initiation phase, development/acquisition phase, implementation/assessment phase, operation & maintenance phase and disposal phase that provides the security requirements in a separate section so that they can be traced through the development life cycle. The contractor shall also provide the software and hardware designs and test

plan documentation, and source code upon request to the NRC for review.

All development and testing of the systems shall be protected at their assigned system sensitivity level and shall be performed on a network separate and isolated from the NRC operational network.

All system computers must be properly configured and hardened according to NRC policies, guidance, and standards and comply with all NRC security policies and procedures as commensurate with the system security categorization.

All contractor provided deliverables identified in the project plan will be subject to the review and approval of NRC Management. The PM will establish review time based on the complexity of the system and incorporate into the project schedule. The contractor will make the necessary modifications to project deliverables to resolve any identified issues. Project deliverables include but are not limited to: requirements, architectures, design documents, test plans, and test reports.

System development schedules shall include computer security office go/no-go decision points, including but not limited to the following system milestones:

1. Requirements review
2. Architecture review
3. Detailed design review
4. Code review
5. System test
6. System readiness review

Access Controls

The contractor shall not hardcode any passwords into the software unless the password only appears on the server side (e.g. using server-side technology such as ASP, PHP, or JSP).

The contractor shall ensure that the software does not contain undocumented functions and undocumented methods for gaining access to the software or to the computer system on which it is installed. This includes, but is not limited to, master access keys, back doors, or trapdoors.

Cryptography

Cryptographic modules provided as part of the system shall be validated under the Cryptographic Module Validation Program to conform to NIST FIPS 140-2 and must be operated in FIPS mode. The contractor shall provide the FIPS 140-2 cryptographic module certificate number and a brief description of the encryption module that includes the encryption algorithm(s) used, the key length, and the vendor of the product.

Configuration Management And Control

The contractor must ensure that the system will be divided into configuration items (CIs). CIs are parts of a system that can be individually managed and versioned. The system shall be managed at the CI level.

The contractor must have a configuration management plan that includes all hardware and software that is part of the system and contains at minimum the following sections:

1. Introduction
 - a. Purpose & Scope
 - b. Definitions
 - c. References
2. Configuration Management
 - a. Organization
 - b. Responsibilities
 - c. Tools and Infrastructure
3. Configuration Management Activities
 - a. Specification Identification
 - b. Change control form identification
 - c. Project baselines
4. Configuration and Change Control
 - a. Change Request Processing and Approval
 - b. Change Control Board
5. Milestones
 - a. Define baselines, reviews, audits
 - b. Training and Resources

The Information System Security Officer's (ISSO's) role in the change management process must be described. The ISSO is responsible for the security posture of the system. Any changes to the system security posture must be approved by the ISSO. The contractor should not have the ability to make changes to the system's security posture without the appropriate involvement and approval of the ISSO.

The contractor shall track and record information specific to proposed and approved changes that minimally include:

1. Identified configuration change
2. Testing of the configuration change
3. Scheduled implementation the configuration change
4. Track system impact of the configuration change
5. Track the implementation of the configuration change
6. Recording & reporting of configuration change to the appropriate party
7. Back out/Fall back plan
8. Weekly Change Reports and meeting minutes
9. Emergency change procedures
10. List of team members from key functional areas

The contractor shall provide a list of software and hardware changes in advance of placing them into operation within the following timeframes:

-30 calendar days for a classified, SGI, or high sensitivity system

- 20 calendar days for a moderate sensitivity system
- 10 calendar days for a low sensitivity system

The contractor must maintain all system documentation that is current to within:

- 10 calendar days for a classified, SGI, or high sensitivity system
- 20 calendar days for a moderate sensitivity system
- 30 calendar days for a low sensitivity system

Modified code, tests performed and test results, issue resolution documentation, and updated system documentation shall be deliverables on the contract.

Any proposed changes to the system must have written approval from the NRC Contracting Officer's Representative (COR).

The contractor shall maintain a list of hardware, firmware and software changes that is current to within:

- 15 calendar days for a classified, SGI or high sensitivity system
- 20 calendar days for a moderate sensitivity system
- 30 calendar days for a low sensitivity system

The contractor shall analyze proposed hardware and software configurations and modification as well as addressed security vulnerabilities in advance of NRC accepted operational deployment dates within:

- 15 calendar days for a classified, SGI, or high sensitivity system
- 20 calendar days for a moderate sensitivity system
- 30 calendar days for a low sensitivity system

The contractor shall provide the above analysis with the proposed hardware and software for NRC testing in advance of NRC accepted operational deployment dates within:

- 15 calendar days for a classified, SGI, or high sensitivity system
- 20 calendar days for a moderate sensitivity system
- 30 calendar days for a low sensitivity system

Control Of Hardware And Software

The contractor shall demonstrate that all hardware and software meet security requirements prior to being placed into the NRC production environment.

The contractor shall ensure that the development environment is separated from the operational environment using NRC CSO approved controls.

Auditing

The system shall be able to create, maintain and protect from modification or unauthorized access or destruction an audit trail of accesses to the objects it protects. The audit data shall be protected so that read access to it is limited to those who are authorized.

The system shall be able to record the following types of events: use of identification and authentication mechanisms, introduction of objects into a user's address space (e.g., file open, program initiation), deletion of objects, and actions taken by computer operators and system administrators or system security officers and other security relevant events. The system shall be able to audit any override of security controls.

The Contractor shall ensure auditing is implemented on the following:

- Operating System
- Application
- Web Server
- Web Services
- Network Devices
- Database
- Wireless

The contractor shall perform audit log reviews daily using automated analysis tools. In addition, the contractor must log at least the following events on systems that process NRC information:

- Audit all failures
- Successful logon attempt
- Failure of logon attempt
- Permission Changes
- Unsuccessful File Access
- Creating users & objects
- Deletion & modification of system files
- Registry Key/Kernel changes
- Startup & shutdown
- Authentication
- Authorization/permission granting
- Actions by trusted users
- Process invocation
- Controlled access to data by individually authenticated user
- Unsuccessful data access attempt
- Data deletion
- Data transfer
- Application configuration change
- Application of confidentiality or integrity labels to data
- Override or modification of data labels or markings
- Output to removable media
- Output to a printer

(End of Clause)

NRCH034 INFORMATION TECHNOLOGY (IT) SECURITY REQUIREMENTS – GENERAL EXCEPTIONS

All purchases shall comply with the latest version of policy, procedures and standards. Individual task orders will reference latest versions of policy, procedures, standards or

exceptions as necessary. These policy, procedures and standards include: NRC Management Directive (MD) volume 12 Security, Computer Security Office policies, procedures and standards, National Institute of Standards and Technology (NIST) guidance and Federal Information Processing Standards (FIPS), and Committee on National Security Systems (CNSS) policy, directives, instructions, and guidance. This information is available at the following links:

All procurements must be certified and accredited prior to being placed into an operational state.

All electronic processing of NRC sensitive information, including all system development and operations and maintenance activities performed at non-NRC facilities shall be in facilities, networks, and computers that have been accredited by NRC for processing information at the highest sensitivity of the information that is processed or will ultimately be processed.

All systems used to process NRC sensitive information shall meet NRC configuration standards available at: <http://www.internal.nrc.gov/CSO/standards.html> .

(End of Clause)

NRCH032 INFORMATION TECHNOLOGY (IT) SECURITY REQUIREMENTS - GENERAL

Basic Contract IT Security Requirements

For unclassified information used for the effort, the contractor shall provide an information security categorization document indicating the sensitivity of the information processed as part of this contract if the information security categorization was not provided in the statement of work. The determination shall be made using National Institute of Standards and Technology (NIST) Special Publication (SP) 800-60 and must be approved by CSO. The NRC contracting officer and Contracting Officer's Representative (COR) shall be notified immediately before the contractor begins to process information at a higher sensitivity level.

If the effort includes use or processing of classified information, the NRC contracting officer and Contracting Officer's Representative (COR) shall be notified before the contractor begins to process information at a more restrictive classification level.

All work under this contract shall comply with the latest version of policy, procedures and standards. Individual task orders will reference latest versions of standards or exceptions as necessary. These policy, procedures and standards include: NRC Management Directive (MD) volume 12 Security, Computer Security Office policies, procedures and standards, National Institute of Standards and Technology (NIST) guidance and Federal Information Processing Standards (FIPS), and Committee on National Security Systems (CNSS) policy, directives, instructions, and guidance. This information is available at the following links:

NRC Policies, Procedures and Standards (CSO internal website):
<http://www.internal.nrc.gov/CSO/policies.html>

NRC Policy and Procedures For Handling, Marking and Protecting Sensitive Unclassified Non-Safeguards Information (SUNSI):
<http://www.internal.nrc.gov/sunsi/pdf/SUNSI-Policy-Procedures.pdf>

All NRC Management Directives (public website):
<http://www.nrc.gov/reading-rm/doc-collections/management-directives/>

NIST SP and FIPS documentation is located at:
<http://csrc.nist.gov/>

CNSS documents are located at:
<http://www.cnss.gov/>

The Contractor shall ensure compliance with the latest version of NIST guidance and FIPS standards available at contract issuance and continued compliance with the latest versions within one year of the release date.

When e-mail is used, the Contractors shall only use NRC provided e-mail accounts to send and receive sensitive information (information that is not releasable to the public) or mechanisms to protect the information during transmission to NRC that have been approved by CSO.

All Contractor employees must sign the NRC Agency-Wide Rules of Behavior for Authorized Computer Use prior to being granted access to NRC computing resources.

The Contractor shall adhere to following NRC policies:

1. Management Directive 12.5, Automated Information Security Program
2. NRC Sensitive Unclassified Non-Safeguards Information (SUNSI)
3. Computer Security Policy for Encryption of Data at Rest When Outside of Agency Facilities
4. Policy for Copying, Scanning, Printing, and Faxing SGI & Classified Information
5. Computer Security Information Protection Policy
6. Remote Access Policy
7. Use of Commercial Wireless Devices, Services and Technologies Policy
8. Laptop Security Policy
9. Computer Security Incident Response Policy

Contractor will adhere to NRC's prohibition of use of personal devices to process and store NRC sensitive information.

All electronic process of NRC sensitive information, including system development and operations and maintenance performed at non-NRC facilities shall be in facilities, networks, and computers that have been accredited by NRC for processing information at the highest sensitivity of the information that is processed or will ultimately be processed.

Contract Performance And Closeout

The contractor shall ensure that the NRC data processed during the performance of this contract shall be purged from all data storage components of the contractor's computer

facility. Tools used to perform data purging shall be approved by the CISO. The contractor shall provide written certification to the NRC contracting officer that the contractor does not retain any NRC data within 30 calendar days after contract completion. Until all data is purged, the contractor shall ensure that any NRC data remaining in any storage component will be protected to prevent unauthorized disclosure.

When contractor employees no longer require access to an NRC system, the contractor shall notify the Contracting Officer's Representative (COR) within 24 hours.

Upon contract completion, the contractor shall provide a status list of all contractor employees who were users of NRC systems and shall note if any users still require access to the system to perform work if a follow-on contract or task order has been issued by NRC.

Control Of Information And Data

The contractor shall not publish or disclose in any manner, without the contracting officer's written consent, the details of any security controls or countermeasures either designed or developed by the contractor under this contract or otherwise provided by the NRC.

Any IT system used to process NRC sensitive information shall:

1. Include a mechanism to require users to uniquely identify themselves to the system before beginning to perform any other actions that the system is expected to provide.
2. Be able to authenticate data that includes information for verifying the claimed identity of individual users (e.g., passwords)
3. Protect authentication data so that it cannot be accessed by any unauthorized user
4. Be able to enforce individual accountability by providing the capability to uniquely identify each individual computer system user
5. Report to appropriate security personnel when attempts are made to guess the authentication data whether inadvertently or deliberately.

Access Controls

Any contractor system being used to process NRC data shall be able to define and enforce access privileges for individual users. The discretionary access controls mechanisms shall be configurable to protect objects (e.g., files, folders) from unauthorized access.

The contractor system being used to process NRC data shall provide only essential capabilities and specifically prohibit and/or restrict the use of specified functions, ports, protocols, and/or services.

The contractors shall only use NRC approved methods to send and receive information considered sensitive or classified. Specifically,

1. Classified Information - All NRC Classified data being transmitted over a network shall use NSA approved encryption and adhere to guidance in MD 12.2 NRC Classified Information Security Program, MD 12.5 NRC Automated Information Security Program

and Committee on National Security Systems. Classified processing shall be only within facilities, computers, and spaces that have been specifically approved for classified processing.

2. SGI Information – All SGI being transmitted over a network shall adhere to guidance in MD 12.7 NRC Safeguards Information Security Program and MD 12.5 NRC Automated Information Security Program. SGI processing shall be only within facilities, computers, and spaces that have been specifically approved for SGI processing. Cryptographic modules provided as part of the system shall be validated under the Cryptographic Module Validation Program to conform to NIST FIPS 140-2 overall level 2 and must be operated in FIPS mode. The contractor shall provide the FIPS 140-2 cryptographic module certificate number and a brief description of the encryption module that includes the encryption algorithm(s) used, the key length, and the vendor of the product.

The most restrictive set of rights/privileges or accesses needed by users (or processes acting on behalf of users) for the performance of specified tasks must be enforced by the system through assigned access authorizations.

Separation of duties for contractor systems used to process NRC information must be enforced by the system through assigned access authorizations.

The mechanisms within the contractor system or application that enforces access control and other security features shall be continuously protected against tampering and/or unauthorized changes.

Configuration Standards

All systems used to process NRC sensitive information shall meet NRC configuration standards available at: <http://www.internal.nrc.gov/CSO/standards.html> .

Media Handling

All media used by the contractor to store or process NRC information shall be controlled in accordance with the sensitivity level.

The contractor shall not perform sanitization or destruction of media approved for processing NRC information designated as SGI or Classified. The contractor must provide the media to NRC for destruction.

Vulnerability Management

The Contractor must adhere to NRC patch management processes for all systems used to process NRC information. Patch Management reports will made available to the NRC upon request for following security categorizations and reporting timeframes:

- 5 calendar days after being requested for a high sensitivity system
- 10 calendar days after being requested for a moderate sensitivity system
- 15 calendar days after being requested for a low sensitivity system

For any contractor system used to process NRC information, the contractor must ensure

that information loaded into the system is scanned for viruses prior to posting; servers are scanned for viruses, adware, and spyware on a regular basis; and virus signatures are updated at the following frequency:

- 1 calendar day for a high sensitivity system
- 3 calendar days for a moderate sensitivity system
- 7 calendar days for a low sensitivity system

(End of Clause)

NRCH030 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY LEVEL I OR LEVEL II ACCESS APPROVAL (SEP 2013)

The contractor must identify all individuals selected to work under this contract. The NRC Contracting Officer's Representative (COR) shall make the final determination of the level, if any, of IT access approval required for all individuals working under this contract/order using the following guidance. The Government shall have full and complete control and discretion over granting, denying, withholding, or terminating IT access approvals for contractor personnel performing work under this contract/order.

The contractor shall conduct a preliminary security interview or review for each employee requiring IT level I or II access and submit to the Government only the names of candidates that have a reasonable probability of obtaining the level of IT access approval for which the employee has been proposed. The contractor shall pre-screen its applicants for the following:

- (a) felony arrest in the last seven (7) years; (b) alcohol related arrest within the last five (5) years; (c) record of any military courts-martial convictions in the past ten (10) years; (d) illegal use of narcotics or other controlled substances possession in the past year, or illegal purchase, production, transfer, or distribution of narcotics or other controlled substances in the last seven (7) years; and (e) delinquency on any federal debts or bankruptcy in the last seven (7) years.

The contractor shall make a written record of its pre-screening interview or review (including any information to mitigate the responses to items listed in (a) - (e)), and have the employee verify the pre-screening record or review, sign and date it. The contractor shall supply two (2) copies of the signed contractor's pre-screening record or review to the NRC Contracting Officer's Representative (COR), who will then provide them to the NRC Office of Administration, Division of Facilities and Security, Personnel Security Branch with the employee's completed IT access application package.

The contractor shall further ensure that its personnel complete all IT access approval security applications required by this clause within fourteen (14) calendar days of notification by the NRC Contracting Officer's Representative (COR) of initiation of the application process. Timely receipt of properly completed records of the pre-screening record and IT access approval applications (submitted for candidates that have a reasonable probability of obtaining the level of security assurance necessary for access to NRC's IT systems/data) is a requirement of this contract/order. Failure of the contractor to comply with this requirement may be a basis to terminate the contract/order for cause, or offset from the contract's invoiced cost or price the NRC's incurred costs or delays as a result of inadequate pre-screening by the contractor.

SECURITY REQUIREMENTS FOR IT LEVEL I

Performance under this contract/order will involve contractor personnel who perform services requiring direct access to or operate agency sensitive information technology systems or data (IT Level I). The IT Level I involves responsibility for the planning, direction, and implementation of a computer security program; major responsibility for the direction, planning, and design of a computer system, including hardware and software; or the capability to access a computer system during its operation or maintenance in such a way that could cause or that has a relatively high risk of causing grave damage; or the capability to realize a significant personal gain from computer access.

Contractor personnel shall not have access to sensitive information technology systems or data until they are approved by DFS/PSB and they have been so informed in writing by the NRC Contracting Officer's Representative (COR). Temporary IT access may be approved by DFS/PSB based on a favorable review or adjudication of their security forms and checks. Final IT access may be approved by DFS/PSB based on a favorably review or adjudication of a completed background investigation. However, temporary access authorization approval will be revoked and the employee may subsequently be denied IT access in the event the employee's investigation cannot be favorably adjudicated. Such an employee will not be authorized to work under any NRC contract/order requiring IT access without the approval of DFS/PSB, as communicated in writing to the contractor by the NRC Contracting Officer's Representative (COR). Where temporary access authorization has been revoked or denied by DFS/PSB, the contractor shall assign another contractor employee to perform the necessary work under this contract/order without delay to the contract/order performance schedule, or without adverse impact to any other terms or conditions of the contract/order. When an individual receives final IT access approval from DFS/PSB, the individual will be subject to a reinvestigation every ten (10) years thereafter (assuming continuous performance under contract/order at NRC) or more frequently in the event of noncontinuous performance under contract/order at NRC.

CORs are responsible for submitting the completed access/clearance request package as well as other documentation that is necessary to DFS/PSB. The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) copies of the Contractor's signed pre-screening record and two (2) FD 258 fingerprint charts, to DFS/PSB for review and adjudication, prior to the individual being authorized to perform work under this contract/order requiring access to sensitive information technology systems or data. Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than seven (7) years residency in the U.S. will not be approved for IT Level I access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB. The contractor shall ensure that all forms are accurate, complete, and legible. Based on DFS/PSB review of the contractor employee's security forms and/or the receipt of adverse information by NRC, the contractor individual may be denied access to NRC facilities and sensitive information technology systems or data until a final determination is made by DFS/PSB and thereafter communicated to the

contractor by the NRC Contracting Officer's Representative (COR) regarding the contractor person's eligibility.

In accordance with NRCAR 2052.204-70 "Security," IT Level I contractors shall be subject to the attached NRC Form 187 and SF-86 which furnishes the basis for providing security requirements to contractors that have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems or remote development and/or analysis of sensitive information technology systems or data or other access to such systems and data; access on a continuing basis (in excess more than 30 calendar days) to NRC buildings; or otherwise requires issuance of an unescorted NRC badge.

SECURITY REQUIREMENTS FOR IT LEVEL II

Performance under this contract/order will involve contractor personnel that develop and/or analyze sensitive information technology systems or data or otherwise have access to such systems or data (IT Level II).

The IT Level II involves responsibility for the planning, design, operation, or maintenance of a computer system and all other computer or IT positions.

Contractor personnel shall not have access to sensitive information technology systems or data until they are approved by DFS/PSB and they have been so informed in writing by the NRC Contracting Officer's Representative (COR). Temporary access may be approved by DFS/PSB based on a favorable review of their security forms and checks. Final IT access may be approved by DFS/PSB based on a favorable adjudication. However, temporary access authorization approval will be revoked and the contractor employee may subsequently be denied IT access in the event the employee's investigation cannot be favorably adjudicated. Such an employee will not be authorized to work under any NRC contract/order requiring IT access without the approval of DFS/PSB, as communicated in writing to the contractor by the NRC Contracting Officer's Representative (COR). Where temporary access authorization has been revoked or denied by DFS/PSB, the contractor is responsible for assigning another contractor employee to perform the necessary work under this contract/order without delay to the contract/order performance schedule, or without adverse impact to any other terms or conditions of the contract/order. When a contractor employee receives final IT access approval from DFS/PSB, the individual will be subject to a review or reinvestigation every ten (10) years (assuming continuous performance under contract/order at NRC) or more frequently in the event of noncontinuous performance under contract/order at NRC.

CORs are responsible for submitting the completed access/clearance request package as well as other documentation that is necessary to DFS/PSB. The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) copies of the Contractor's signed pre-screening record and two (2) FD 258 fingerprint charts, to DFS/PSB for review and adjudication, prior to the contractor employee being authorized to perform work under this contract/order. Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services.

Any applicant with less than seven (7) years residency in the U.S. will not be approved for IT Level II access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB. The contractor shall ensure that all forms are accurate, complete, and legible. Based on DFS/PSB review of the contractor employee's security forms and/or the receipt of adverse information by NRC, the contractor employee may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made by DFS/PSB regarding the contractor person's eligibility.

In accordance with NRCAR 2052.204-70 "Security," IT Level II contractors shall be subject to the attached NRC Form 187, SF-86, and contractor's record of the pre-screening which furnishes the basis for providing security requirements to contractors that have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems or remote development and/or analysis of sensitive information technology systems or data or other access to such systems or data; access on a continuing basis (in excess of more than 30 calendar days) to NRC buildings; or otherwise requires issuance of an unescorted NRC badge.

CANCELLATION OR TERMINATION OF IT ACCESS/REQUEST

When a request for IT access is to be withdrawn or canceled, the contractor shall immediately notify the NRC Contracting Officer's Representative (COR) by telephone so that the access review may be promptly discontinued. The notification shall contain the full name of the contractor employee and the date of the request. Telephone notifications must be promptly confirmed by the contractor in writing to the NRC Contracting Officer's Representative (COR), who will forward the confirmation to DFS/PSB. Additionally, the contractor shall immediately notify the NRC Contracting Officer's Representative (COR) in writing, who will in turn notify DFS/PSB, when a contractor employee no longer requires access to NRC sensitive automated information technology systems or data, including the voluntary or involuntary separation of employment of a contractor employee who has been approved for or is being processed for IT access.

The contractor shall flow the requirements of this clause down into all subcontracts and agreements with consultants for work that requires them to access NRC IT resources.

(End of Clause)

NRCH020 SECURITY REQUIREMENTS FOR BUILDING ACCESS APPROVAL (SEP 2013)

The Contractor shall ensure that all its employees, subcontractor employees or consultants who are assigned to perform the work herein for contract performance for periods of more than 30 calendar days at NRC facilities, are approved by the NRC for unescorted NRC building access.

The Contractor shall conduct a preliminary federal facilities security screening interview or review for each of its employees, subcontractor employees, and consultants and submit to the NRC only the names of candidates for contract performance that have a reasonable probability of obtaining approval necessary for access to NRC's federal

facilities. The Contractor shall pre-screen its applicants for the following:

(a) felony arrest in the last seven (7) years; (b) alcohol related arrest within the last five (5) years; (c) record of any military courts-martial convictions in the past ten (10) years; (d) illegal use of narcotics or other controlled substances possession in the past year, or illegal purchase, production, transfer, or distribution of narcotics or other controlled substances in the last seven (7) years; and (e) delinquency on any federal debts or bankruptcy in the last seven (7) years.

The Contractor shall make a written record of its pre-screening interview or review (including any information to mitigate the responses to items listed in (a) - (e)), and have the applicant verify the pre-screening record or review, sign and date it. Two (2) copies of the pre-screening signed record or review shall be supplied to the Division of Facilities and Security, Personnel Security Branch (DFS/PSB) with the Contractor employee's completed building access application package.

The Contractor shall further ensure that its employees, any subcontractor employees and consultants complete all building access security applications required by this clause within fourteen (14) calendar days of notification by DFS/PSB of initiation of the application process. Timely receipt of properly completed records of the Contractor's signed pre-screening record or review and building access security applications (submitted for candidates that have a reasonable probability of obtaining the level of access authorization necessary for access to NRC's facilities) is a contract requirement. Failure of the Contractor to comply with this contract administration requirement may be a basis to cancel the award, or terminate the contract for default, or offset from the contract's invoiced cost or price the NRC's incurred costs or delays as a result of inadequate pre-screening by the Contractor. In the event of cancellation or termination, the NRC may select another firm for contract award.

A Contractor, subcontractor employee or consultant shall not have access to NRC facilities until he/she is approved by DFS/PSB. Temporary access may be approved based on a favorable NRC review and discretionary determination of their building access security forms. Final building access will be approved based on favorably adjudicated checks by the Government. However, temporary access approval will be revoked and the Contractor's employee may subsequently be denied access in the event the employee's investigation cannot be favorably determined by the NRC. Such employee will not be authorized to work under any NRC contract requiring building access without the approval of DFS/PSB. When an individual receives final access, the individual will be subject to a review or reinvestigation every five (5) or ten (10) years, depending on their job responsibilities at the NRC.

The Government shall have and exercise full and complete control and discretion over granting, denying, withholding, or terminating building access approvals for individuals performing work under this contract. Individuals performing work under this contract at NRC facilities for a period of more than 30 calendar days shall be required to complete and submit to the Contractor representative an acceptable OPM Standard Form 85 (Questionnaire for Non-Sensitive Positions), and two (2) FD 258 (Fingerprint Charts). Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than five (5)

years residency in the U.S. will not be approved for building access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB.

DFS/PSB may, among other things, grant or deny temporary unescorted building access approval to an individual based upon its review of the information contained in the OPM Standard Form 85 and the Contractor's pre-screening record. Also, in the exercise of its authority, the Government may, among other things, grant or deny permanent building access approval based on the results of its review or investigation. This submittal requirement also applies to the officers of the firm who, for any reason, may visit the NRC work sites for an extended period of time during the term of the contract. In the event that DFS/PSB are unable to grant a temporary or permanent building access approval, to any individual performing work under this contract, the Contractor is responsible for assigning another individual to perform the necessary function without any delay in the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. The Contractor is responsible for informing those affected by this procedure of the required building access approval process (i.e., temporary and permanent determinations), and the possibility that individuals may be required to wait until permanent building access approvals are granted before beginning work in NRC's buildings.

CANCELLATION OR TERMINATION OF BUILDING ACCESS/ REQUEST

The Contractor shall immediately notify the COR when a Contractor or subcontractor employee or consultant's need for NRC building access approval is withdrawn or the need by the Contractor employee's for building access terminates. The COR will immediately notify DFS/PSB (via e-mail) when a Contractor employee no longer requires building access. The Contractor shall be required to return any NRC issued badges to the COR for return to DFS/FSB (Facilities Security Branch) within three (3) days after their termination.

(End of Clause)

SECTION I - Contract Clauses

52.216-18 ORDERING. (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from Effective Date of Award through Contract Expiration Date.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

52.216-19 ORDER LIMITATIONS. (OCT 1995)

(a) *Minimum order.* When the Government requires supplies or services covered by this contract in an amount of less than \$5,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) *Maximum order.* The Contractor is not obligated to honor-

(1) Any order for a single item in excess of \$5,000,000.00;

(2) Any order for a combination of items in excess of \$10,000,000.00; or

(3) A series of orders from the same ordering office within 25 days that together call for quantities exceeding the limitation in subparagraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (*i.e.*, includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 10 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

52.216-22 INDEFINITE QUANTITY. (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified,

and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; *provided*, that the Contractor shall not be required to make any deliveries under this contract after September 25, 2022.

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 10 days before the contract expires.

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT. (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within anytime during the period of performance of the contract; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 10 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seven (7) years.

52.227-3 PATENT INDEMNITY. (APR 1984)

(a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States

patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property (hereinafter referred to as "construction work") under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

(b) This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense. Further, this indemnity shall not apply to -

(1) An infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor;

(2) An infringement resulting from addition to or change in supplies or components furnished or construction work performed that was made subsequent to delivery or performance; or

(3) A claimed infringement that is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

52.227-17 RIGHTS IN DATA—SPECIAL WORKS. (DEC 2007)

(a) Definitions. As used in this clause—

"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.

"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) The Government shall have—

(i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause.

(ii) The right to limit assertion of copyright in data first produced in the performance of this contract, and to obtain assignment of copyright in that data, in accordance with paragraph (c)(1) of this clause.

(iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

(2) The Contractor shall have, to the extent permission is granted in accordance with paragraph (c)(1) of this clause, the right to assert claim to copyright subsisting in data first produced in the performance of this contract.

(c) Copyright—

(1) Data first produced in the performance of this contract.

(i) The Contractor shall not assert or authorize others to assert any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When copyright is asserted, the Contractor shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all delivered data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(ii) If the Government desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in paragraph (c)(1)(i) of this clause, the Contracting Officer shall direct the Contractor to assign (with or without registration), or obtain the assignment of, the copyright to the Government or its designated assignee.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without 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 and that contain the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and 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.

(d) Release and use restrictions. Except as otherwise specifically provided for in this contract, the Contractor shall not use, release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the Contracting Officer.

(e) Indemnity. The Contractor shall indemnify the Government and its officers, agents, and employees acting for the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the Government provides notice to the Contractor as soon as practicable of any claim or suit, affords the Contractor an opportunity under applicable laws, rules, or regulations to participate in the defense of the claim or suit, and obtains the Contractor's consent to the settlement of any claim or suit other than as required by final decree of a court of competent

jurisdiction; and these provisions do not apply to material furnished to the Contractor by the Government and incorporated in data to which this clause applies.

(End of clause)

52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL). (JUN 1987)

Except for data contained on pages N/A, 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 April 16, 2012, August 12, 2013, and September 23, 2013 (Final Proposal Revision), upon which this contract is based.

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

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

52.237-3 CONTINUITY OF SERVICES. (JAN 1991)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to -

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and

efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to 90 days after this contract expires and (2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (*i.e.*, costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

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): <http://www.acquisition.gov.gov/far>.

SECTION J - List of Documents, Exhibits and Other Attachments

Attachment Number	Attachment Title	Number of Pages	Document Version
1	DESCRIPTION/SPECIFICATIONS/ STATEMENT OF WORK	84	BASE
2	APPENDICES A-G	28	BASE
3	APPENDIX H	9	BASE
4	BILLING INSTRUCTIONS FFP	2	BASE
5	BILLING INTRUCTIONS T&M/LH	8	BASE
6	MOM FA4 TO INSTRUCTIONS AND EVALUATION FACTORS	2	BASE
7	NRC FORM 187	2	BASE
8	AWARD TERM PLAN	4	BASE

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Overview

C.1.1 Background

The U.S. Nuclear Regulatory Commission (NRC) was created as an independent Agency by Congress in 1974 to enable the nation to safely use radioactive materials for beneficial civilian purposes while ensuring that people and the environment are protected. It regulates commercial nuclear power plants and other uses of nuclear materials, such as in nuclear medicine, through licensing, inspection, and enforcement of its requirements. The NRC's headquarters are in Rockville, Maryland, and there are a number of other offices around the United States.

C.1.2 Objectives

The objective of this acquisition for "Maintenance, Operation, and Modernization Support of U.S. Nuclear Regulatory Commission Application Systems and Environment" (also referred to as "MOM") is to procure continuous maintenance and operational Information Technology (IT) support services for current and future NRC automated computer systems. This acquisition will also provide modernization support services while replacing legacy technologies with secure, innovative, enterprise-wide IT solutions. This acquisition focuses on both enterprise and service level requirements for IT services. The modernization support services and replacement of legacy technologies will help reduce maintenance and operation (M&O) costs while achieving the goals stated in Section C.

C.1.3 Specific Service Objectives

The NRC currently has approximately 100 computer-based application systems that require MOM support services. These systems are generally managed by separate NRC organizations responsible for related functional use and system operation. In addition, the NRC anticipates adding approximately three new application systems each year over the duration of this contract.

The NRC has the following goals for this acquisition:

- a) Establish secure, enterprise-wide, and standardized IT solutions
- b) Maximize flexibility, agility, and innovation in IT service delivery
- c) Deliver reliable, high quality, and cost effective IT solutions
- d) Create effective IT governance where appropriate
- e) Enable the NRC to more effectively meet its mission

C.2 Maintenance, Operations and Modernization

C.2.1 Maintenance

NRC's application system maintenance is defined as modification and/or correction of application system code and/or data to make the application system perform as intended in support of the business process for which the code was written. These modifications may include those made to programs, scripts, job control languages, and data. Maintenance also includes, but is not limited to, analysis of conditions and outputs to identify root causes of problems and define methods for correction by troubleshooting, executing backups, restoring archives, and housekeeping.

Maintenance may take the form of preventive, corrective, adaptive, or perfective actions or any combination of these actions.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- a) Preventive Maintenance – identify potential future faults and modify the system to mitigate the risk
- b) Corrective Maintenance – identify current system faults and modify the system to fix them
- c) Adaptive Maintenance – modify the system to maintain compliance with changing IT infrastructure, IT security requirements, and technology upgrades
- d) Perfective Maintenance – modify the system to add new or improved functionality

C.2.2 Operations

The primary goal for the operation function is to manage and support NRC's software in a production environment. The focus of operations is to ensure that software is running properly and that the appropriate data is backed up and restored as needed. Disaster recovery plans are created and, in the event a disaster occurs, are executed to restore primary systems. The focus of operational support is to assist end users by answering their questions, analyzing the problems they are encountering with production systems, recording requests for new functionality, and making/applying fixes.

The contractor shall keep systems running, back-up and restore data based on the operations plan and system requirements, manage problems, performing periodic cleanup, fine tune system reconfigurations, monitor systems, and redeploy systems as necessary.

Contractor operational support may take various forms including, but not limited to, the following:

- a) Data Support – perform data entry, interpretation, scanning, and verification
- b) Report Generation – produce standard and ad hoc reports
- c) Production Support – perform data transfers, system monitoring, and troubleshooting
- d) Test Support – perform application testing in accordance with testing procedures contained in the Project Management Methodology (PMM) and Test Management Guide
- e) Plan for Disaster Recovery – define and update steps for staff to follow to achieve critical system back up and operation in the event of catastrophe
- f) Disaster Recovery– maintain, store, and execute the Disaster Recovery Plan to ensure timely recovery of critical systems

C.2.3 Modernization

Agency system modernization support is a proactive approach to managing the ongoing evolution of business processes and systems, while focusing on achieving an optimized IT environment for value, cost, and risk.

Many outdated legacy systems will be on unsupported software during the period of performance of this contract and therefore modernization activities must be executed. The NRC will review the current IT environment to identify outdated or unsupported application systems for modernization.

To facilitate optimum business processes and systems, modernization may take the form of application improvement, language-to-language conversion, platform migration, consolidation, or any combination of the following activities:

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- a) Application Improvement – improve the robustness, integrity, quality, consistency, and/or performance of a system
- b) Language-to-Language Conversion – convert an application from one computer language to another computer language
- c) Platform Migration – move a system from one computer platform to another computer platform
- d) Consolidation – combine two or more systems into one

C.3 NRC Segment Architecture

The NRC continues to mature its Enterprise Architecture (EA) to help achieve its mission goals of nuclear safety, nuclear security, and operational excellence. To effectively manage the complexities of architecting the enterprise, the NRC uses the Office of Management and Budget's (OMB) segment architecture approach to analyze similar business functions within the agency, based on a framework and vocabulary common across the Federal Government.

The NRC has defined 14 segments that are divided into core mission areas that align to the major business functions of the organization, as well as the business and enterprise service areas necessary to maintain operational excellence. NRC system architecture can be seen in Figure 1 below.

Nuclear Regulatory Commission Segment Architecture		ENTERPRISE SERVICES					
CORE MISSION AREAS	Nuclear Reactor Safety	Nuclear Materials and Waste Safety		Security	Project Management	Information Management	IT Infrastructure
	Nuclear Security and Incident Response						
	Adjudication						
BUSINESS SERVICES	Administrative Management						
	Financial Management						
	Human Resource Management						
	Information and Technology Management						
	Management Oversight						
	Regulatory Activities						

Figure 1: NRC Segment Architecture

This NRC segment architecture will be utilized during performance of MOM task orders to group application systems into the appropriate segment. To insure greater consistency among NRC application systems, the NRC segment architecture will allow MOM contractors to focus on a group of related NRC application systems while providing M&O support to legacy systems, developing requirements and design, modernizing legacy systems, and providing M&O support for the modernized systems.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.4 Functional Area Requirements

The solicitation requirements have been broken down into five functional areas (FAs) in order to ensure superior maintenance, operations, and modernization support for NRC application systems. The NRC anticipates awarding separate Indefinite-Delivery, Indefinite-Quantity (IDIQ) contracts under each of the following five functional areas.

- a) FA1: Centralized Environment Support
- b) FA2: M&O of Legacy Systems
- c) FA3: Requirements and Design
- d) FA4: Legacy Modernization and New Software Application Development and M&O of Modernized Systems

These functional areas all play an important role in the success of this acquisition. Contractors under this acquisition shall ensure open communication between all functional areas in order to seamlessly provide maintenance, operations, and modernization support. Figure 2, below, shows the flow of information between contractors in each of the five functional areas. The NRC will interact directly with contractors in each of the four functional areas. Contractors for FA2, FA3, and FA4 shall all work within the development and testing environments provided by the FA1 contractor.

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ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

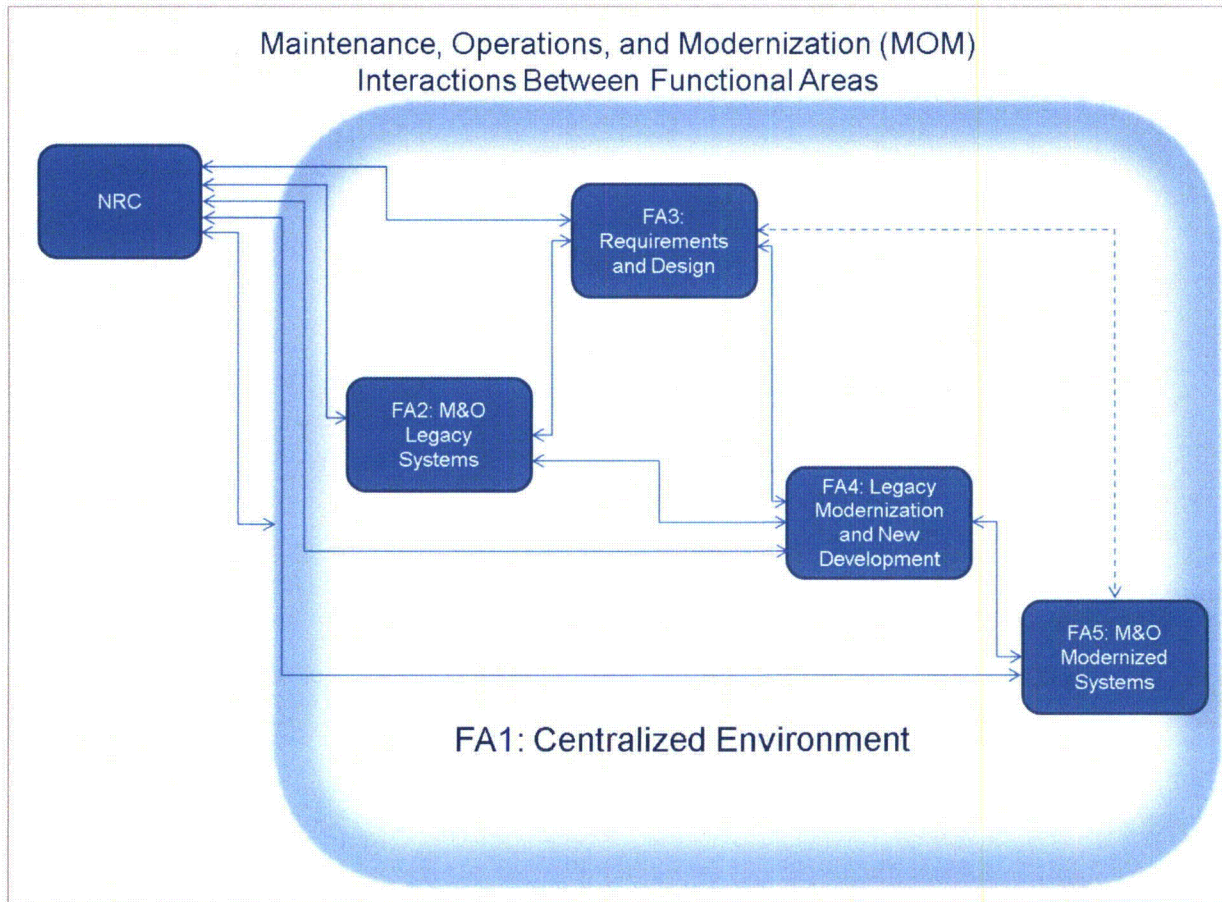


Figure 2: MOM Interactions between Functional Areas **Note: FA5 was combined into FA4**

The following sections describe each of the five functional areas in more detail. More detailed requirements for each functional area will be specified in the performance work statement for each individual task order.

C.4.1 FA1: Centralized Environment Support

This functional area requires the contractor to provide the development and test environments to be utilized by each contractor that receives an award under this acquisition. The development and test environments shall simulate the NRC's IT environment. The FA1 contractor shall provide high-speed (something other than dial-up) internet access and a Virtual Private Network (VPN) connection to other awardees under this acquisition for development and test efforts. Contractors in the other four functional areas are responsible for implementing and funding their own high-speed access and VPN connection in order to access the NRC Centralized Environment.

This FA may also include requirements for non-standard technologies (outside of what is in Appendix F) for engineering technical services that need to be introduced for modernization.

Figure 3 provides a high level illustration of how the FA1 contractor will interact with the NRC, as well as with contractors in other functional areas (FA2, FA3, and FA4).

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

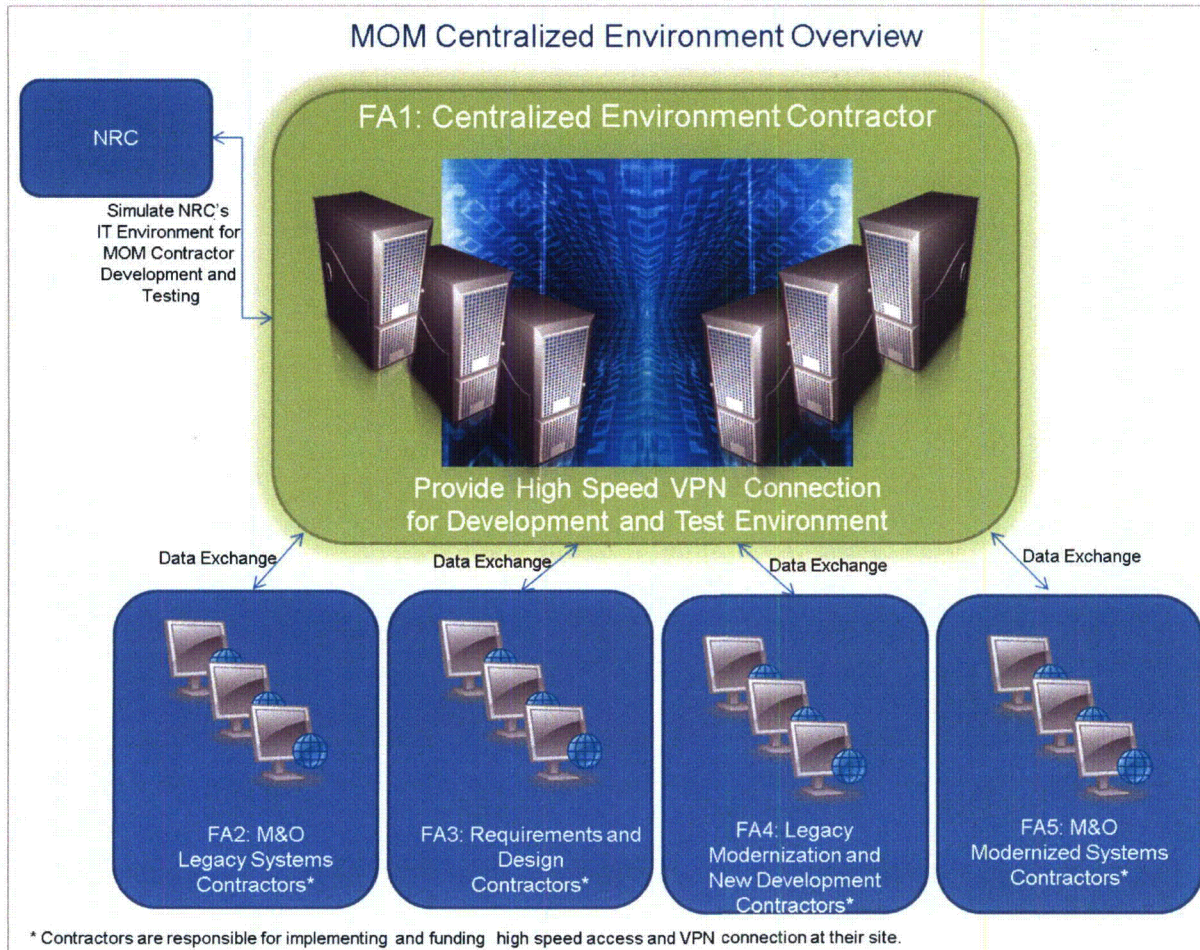


Figure 3: MOM Centralized Environment Overview **Note: FA5 was combined into FA4**

C.4.1.1 Government Furnished Equipment

For physically based hosting solutions, the NRC will provide all equipment and server software (except for access specific software) required for the centralized environment infrastructure. If a cloud based solution is proposed, then the Government will only provide server software if appropriate. Additional Government Furnished Equipment (GFE) may be provided for individual task order requirements.

C.4.1.2 System Administration Support

- a) The contractor shall provide on-site application systems administration system support.
- b) The contractor shall provide hardware administration, configuration, and software installation and deployment support including application support. Support developers and testers in the activities associated with design, code, test, debug and documentation of applications and administration. Provide access controls in accordance with Agency procedures and maintain and review audit logs. Work at the highest technical level of all phases of system administration, system engineering, access control, and security control. Ensure operational availability of the centralized environment in accordance with the performance metrics defined in Appendix D.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.4.1.3 Place of Performance

The anticipated place of performance shall be at the contractor site and/or Government sites in Rockville, MD. The FA1 contractor site and their deployed resources must be within a ten mile radius of the NRC Headquarters Building (11555 Rockville Pike, Rockville, MD 20852) and be within Montgomery County, Maryland.

C.4.1.4 Centralized Environment Support

In the accomplishment of its mission, NRC utilizes a wide diversity of general purpose digital computers ranging from servers to desktop workstations. These systems, while diverse in capability, are functionally interoperable through their support of IP networking and interoperability standards. These systems provide source code and application interoperability and portability through their support of the applications development and testing with other IT standards and alternate operating systems, such as Windows and Linux. They allow users to move between machines in a heterogeneous networked environment while maintaining an interoperable user environment. The FA1 contractor shall host IBM Rational tools (Rational Enterprise Suite and Rational Jazz Platform) to be used by FA2, FA3, and FA4 contractors to perform development and testing activities.

a) Software Support

Software support service shall only be applicable to software provided as GFE under this contract. Software support shall consist of correction or updates revisions through software patches, software upgrades, and technical support for problem resolution of operating systems and the development tools in the JAVA or .Net platform suites or any software located in the centralized environment. The FA1 contractor shall only make changes to the development and test environments after an approved change request has been issued from the NRC Contracting Officer Representative (COR) for the FA1 contract.

b) Software Patches

Software patches are modifications to the software that provide fixes to address security issues and known problems. The contractor shall provide software patches to all end users through on-line access.

c) Technical Support

The contractor shall provide technical support to NRC end users and, as applicable, other contractors supporting NRC. This technical support shall be provided, at a minimum, from 8:00 a.m. to 6:00 p.m. (Eastern Time), Monday through Friday (excluding Government holidays and other days when NRC is closed). Technical support may include, but is not limited to, the following:

- i. Access support to environment
- ii. Telephone support or support located within the centralized environment
- iii. Developer and tester support
- iv. Deployment support
- v. Configuration and change management support
- vi. Troubleshooting
- vii. Backups

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

d) Software/System Deployment Support

Applications and systems that are new, undergoing maintenance, enhancement or modernization, must follow a formal configuration/change management (CM) process to ensure proper controls over scope, performance, quality, and security management of the application system. Separation of duties between the application/system personnel and CM personnel is necessary to ensure consistency of controls and the quality of baselines that are migrated between environments.

Therefore, the contractor shall support NRC COR and their designees in promoting approved system baselines between environments. The contractor shall provide technical support for the change impact and risk evaluations as part of the NRC CM process. Ensure development and test environments are kept in synch with the current CM baseline definitions. The contractor shall use IBM Rational tools and formal CM processes (described in Section C.5.2) to manage stable baselines and change requests. The contractor shall follow this same CM process to manage the environment infrastructure changes.

C.4.1.5 Development Environment

Objective – New IT applications and systems are regularly brought into the NRC production environment. These are either custom developed or commercial items. Many of these systems are developed by third-party contractors who know very little about the NRC production environments. Currently, development environments are set up completely externally to the NRC, and it is only at the test stage that system integrators encounter problems related to bringing their systems into the production environment.

Therefore, the contractor shall provide a development environment for developers and/or system integrators to work in, which is separated from the production environment. This development environment must simulate the actual production environment so that development issues can be resolved early and real problems can be identified and corrected. Although individual IT system owners must take the responsibility to move their systems through this process, the contractor may be required to assist them in this endeavor.

Requirement – The contractor shall operate the development environment and maintain the ability to develop new applications and hardware to ensure a smooth transition to the test environment

In addition, the contractor shall:

- a) Maintain the development environment network including infrastructure, servers, and applications with up to date patching at the same level of the NRC production environment.
- b) Ensure that the development environment is segregated from the centralized test and NRC production environments.
- c) Operate and manage the development environment to support application development, network performance impact analysis, network modeling and simulation, integration, demonstration, product briefings, evaluation and orientation/training for any software products and custom services and applications to be integrated into the centralized environment.
- d) Ensure application and hardware integration into the development environment without adverse impact on the centralized environment.
- e) Ensure non-production data sets for development systems can be imported into the development environment. No production data shall be used in the development environment.
- f) Provide recommendations for a solution that allows users to develop applications from anywhere by accessing a virtual desktop within the development environment without any risk to the production environment. The NRC

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

reserves the right to decline the recommended solution; therefore, the contractor shall provide this capability upon request and approval in writing by the NRC COR. The recommendation will also need to be approved by the NRC prior to production implementation.

- g) Manage a schedule of development environment availability, publish that schedule, and work with customers (to include NRC and other contractors under this acquisition) in scheduling the use of the environment.
- h) Ensure availability of the development environment in accordance with the performance metrics defined in Appendix D.
- i) Support NRC's centralized CM personnel in promoting approved system baselines between environments.
- j) Minimize the number of incidents associated with any change to the development environment.
- k) Provide technical support for the change impact and risk evaluations as part of the NRC CM process.
- l) Ensure development environment is kept in synch with the current CM baseline definitions.
- m) Use the IBM Rational tools and formal CM processes to manage stable baselines and change requests.
- n) Follows the standard CM process to manage the environment infrastructure changes.

C.4.1.6 Test Environment

Objective – The NRC regularly adds and changes technologies. However, as existing IT services are vital to the day-to-day productivity of NRC users, it is essential that the introduction of these changes does not disrupt normal Agency operations. Therefore, all modifications must be thoroughly tested in the NRC's test environment and appropriate precautions must be taken to mitigate any disruptions that they might introduce.

The contractor shall maintain and operate a Government furnished test environment that simulates the production environment so that tests can be as accurate as possible and real problems can be identified and corrected. Although individual IT system owners must take the responsibility to move their systems through this process, the contractor may be required to assist them to succeed in this endeavor by providing expertise in test environment management and resolving common test environment issues through ensuring that appropriate controls are maintained in the test environment.

The test environment shall operate on a separate network from the production environment. However, personnel in the NRC Infrastructure Computer Operations Division (ICOD) will have the ability to pull code from the NRC centralized test environment for NRC acceptance testing prior to deployment in the NRC production environment.

Requirement – The contractor shall operate the test environment and maintain the ability to test all new applications and hardware to ensure a smooth transition to the production environment.

In addition, the contractor shall:

- a) Maintain the test environment network including infrastructure, servers and applications with up-to-date patching at the same level as the production environment.
- b) Ensure that the test environment is segregated from the centralized development and NRC production environments.
- c) Operate and manage the test environment to support testing, network performance impact analysis, network modeling and simulation, load testing, application testing, testing relating to Section 508 of the Rehabilitation

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Act of 1973, as amended (see www.section508.gov), integration, demonstration, product briefings, evaluation and orientation/training for all software and custom services and applications to be integrated into the centralized environment.

- d)** Ensure application and hardware deployed into NRC Consolidated Test Facility (CTF) without adverse impact on the infrastructure.
- e)** Ensure non-production data sets for testing systems can be imported into the test environment. No production data shall be used in the test environment.
- f)** Provide recommendations for a solution that allows users to test applications from anywhere by accessing a virtual desktop within the test environment without any risk to the production environment. The NRC reserves the right to decline the recommended solution; therefore, the contractor shall provide this capability upon request and in written approval by the NRC COR. The recommendation will also need to be approved in writing by the NRC COR prior to production implementation.
- g)** Manage a schedule of test environment availability, publish that schedule, and work with customers (to include NRC and other awardees under this MOM acquisition) in scheduling the use of the environment.
- h)** Ensure availability of the test environment in accordance with the performance metrics defined in Appendix D.
- i)** Support NRC's centralized CM personnel in promoting approved system baselines between environments.
- j)** Minimize the number of incidents associated with any change to the test environment.
- k)** Minimize the incidents/problems/errors that are discovered found in the live environment, after system release.
- l)** Provide technical support for the change impact and risk evaluations as part of the NRC CM process.
- m)** Ensure test environment is kept in synch with the current CM baseline definitions.
- n)** Use the IBM Rational tools and formal CM processes to manage stable baselines and change requests.
- o)** Follows the standard CM process to manage the environment infrastructure changes.

C.4.1.7 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.2 FA2: Maintenance and Operations of Legacy Systems

The FA2 contractor(s) shall provide M&O support for the approximately 100 legacy NRC application systems.

Figure 4 provides a high level illustration of how the FA2 contractor(s) will interact with the NRC, as well as, contractors in other functional areas (FA1, FA3, and FA4). The FA2 contractor(s) shall coordinate with the FA1 contractor to develop and test legacy system releases, as directed by NRC change requests. The FA2 contractor(s) shall also provide open communications with FA3 contractor(s) in order to ensure legacy systems are accurately documented during retirements and design efforts. Finally, FA2 contractor(s) shall coordinate with the FA4 contractor(s) during modernization efforts. The FA2 contractor(s) shall ensure that legacy system code is stable and unchanged while modernization efforts are performed. If maintenance is required (and approved in writing by the NRC COR) on a legacy system during modernization efforts, the NRC, FA2 contractor(s), and the FA4 contractor(s)

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

shall work together to ensure any changes to the legacy system are incorporated into the modernized system during the transition period from a legacy system to a modernized system.

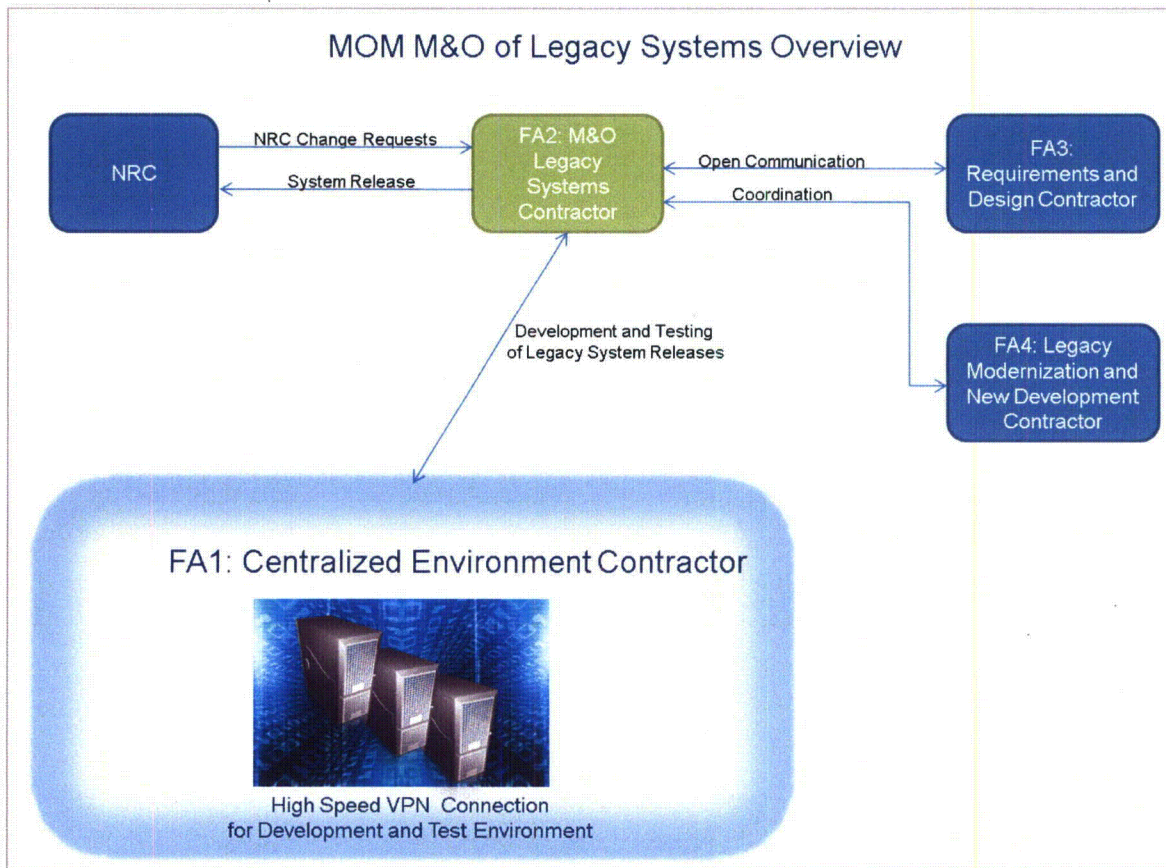


Figure 4: MOM M&O of Legacy Systems Overview

As legacy systems are modernized, the requirement for maintenance and operations of legacy systems will diminish.

C.4.2.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD.

C.4.2.2 Maintenance of Legacy Systems

Objective – Implement changes to the legacy systems as required to deliver minor enhancements.

The key objectives are:

Implement best practices for maintenance activities

Facilitate user support during and prior to and during transitional periods when moving users to a new release of the software with an increased improvement during normal operational periods.

Apply cost effective approaches for providing all maintenance activities

Requirements – Key requirements may include, but are not limited to:

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- a) Providing maintenance support as described in Section C.2.1 above for all identified legacy NRC application systems. The contractor shall ensure perfective maintenance actions are not to be performed while a system is being modernized.
- b) Performing configuration management activities as part of all task orders under this acquisition in compliance with Appendix G.
- c) Use the IBM Rational tools and formal CM processes to manage stable baselines and change requests.
- d) Performing maintenance actions using the current production baseline of the application system which is housed in Rational ClearCase or Rational Team Concert Versioned Object Base (VOBs).
- e) Work with FA3 contractor(s) and the FA1 contractor for any Rational tools used and ensure those tools, as directed in writing by the NRC COR, are integrated into the M&O processes.
- f) The NRC COR or designee shall notify the contractor of maintenance requests using the Rational ClearQuest or Rational Team Concert CR system and approve the CRs that will be included in each system release using the procedures specified in MD 2.8.
- g) Updating all application system changes in the system and security documentation, including any changes that affect the security controls within the application system, prior to system deployment.
- h) Coordinate, through the NRC COR, with the NRC Computer Security Office (CSO) and ICOD on changes relating to security controls.
- i) Implementing changes to application systems using only the specific products defined in the application system baseline, unless authorization has been received in writing from the NRC COR (i.e., if the application is coded in Java 1.5, only Java 1.5 will be used in the changes).
- j) Ensuring that the introduction of any new product to the application system is consistent with the authorized list of products (i.e., the Technical Reference Model (TRM)) or approved by the NRC Environmental Change Control Board (ECCB) prior to implementation.
- k) Adhere to existing (or as modified by NRC) Maintenance, Operations, and Modernization Change Request Process as defined in Section C.5.2.
- l) Adhere to documentation support requirements. The NRC Configuration Control Board (CCB) will consist of a Parent CCB board and children CCB, which will be subordinate to the Parent CCB. Parent CCB will review documentation requirements in conjunction with segment architecture to determine documentation needs for legacy systems.
- m) Ensure all changes requested, while the legacy system is being modernized are formally approved in writing by the NRC CCB prior to system modification.
- n) Ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.2.3 Operations of Legacy Systems

Objective – The key objective is:

Implement best practices for operational support activities.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Requirement – Key requirements may include, but are not limited to:

- a)** Using the IBM Rational tools and formal CM processes to manage stable baselines and change requests
- b)** Developing/Updating a Support Plan to include: how support will be provided, system contact personnel, defect reporting and enhancement request strategy, Performance Metrics, defect prioritization and resolution time periods, defect escalation criteria, how to deliver fixes into production outside the scope of an official release
- c)** Developing/Updating an Operations Plan to include how a system will be operated and supported in production
- d)** Modifying data
- e)** Performing data interpretation
- f)** Scanning documents
- g)** Performing Optical Character Recognition (OCR)
- h)** Entering data
- i)** Validating data
- j)** Report generation
- k)** Producing standard reports
- l)** Producing ad-hoc reports
- m)** Providing production support
- n)** Initiating schedule program sequences
- o)** Transferring data between systems through kick-off of electronic processes or inputs of tapes or other physical media
- p)** Performing system monitoring, troubleshooting, and applying immediate corrective measures to agency production application systems (in some cases on a 24-hour, on-call basis)
- q)** Planning for disaster recovery
- r)** Developing/updating a plan of actions in the event of disaster
- s)** Conducting staff training on the disaster recovery plan
- t)** Conducting periodic testing of the disaster recovery plan
- u)** Recovering from disaster
- v)** Developing/updating disaster recovery plan
- w)** Executing disaster recovery plan
- x)** Coordinating through the NRC COR with the NRC CSO and ICOD on changes relating to security controls.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.4.2.4 Enterprise Architecture and Technology Standards

The contractor shall comply with NRC EA requirements and technology standards as outlined in Appendix F.

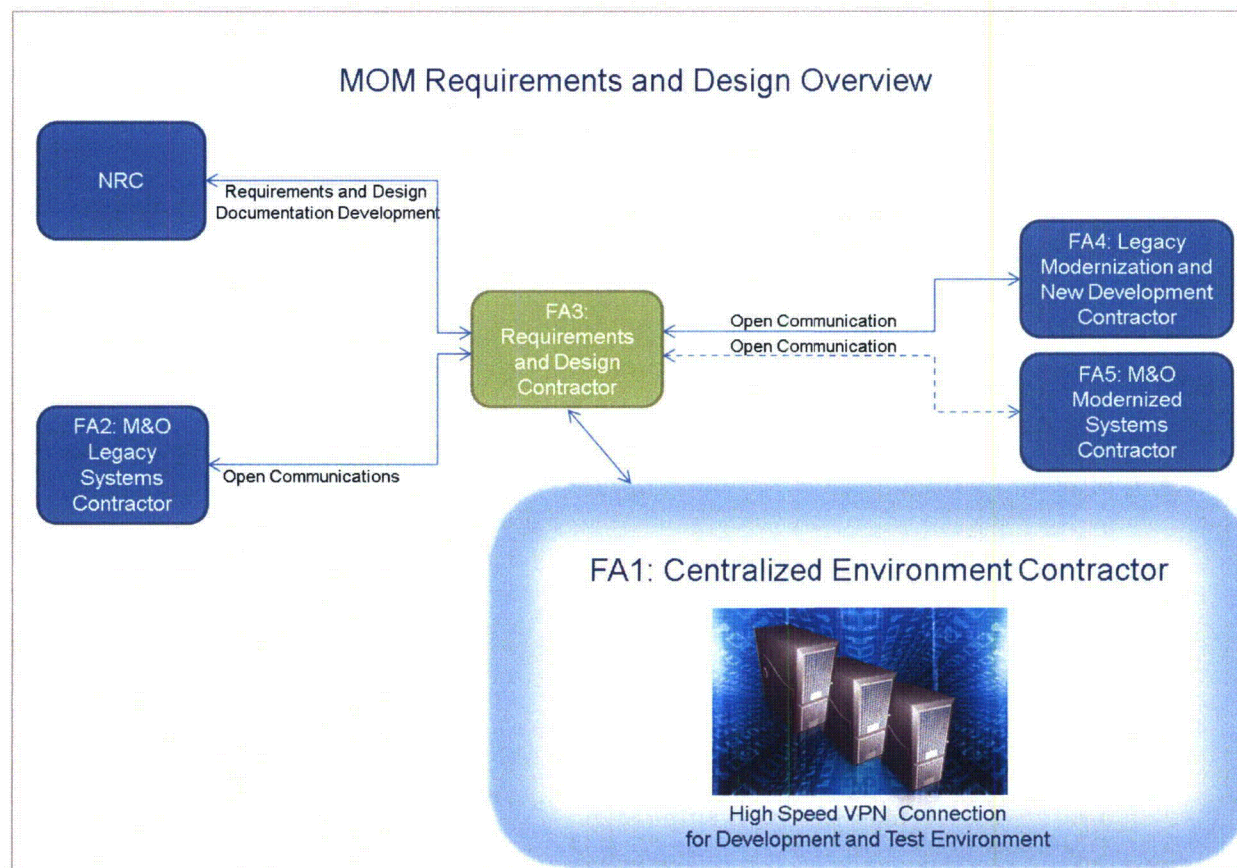
C.4.2.5 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.3 FA3: Requirements and Design

The contractor(s) for FA3 support shall provide NRC with clear requirements definition and high level design recommendations for modernizing NRC's legacy application systems.

Figure 5 provides a high level illustration of how the FA3 contractor(s) will interact with the NRC, as well as with contractors in other functional areas (FA1, FA2, and FA4). The NRC will work with the FA3 contractor(s) to identify system requirements. The FA3 contractor(s) shall document requirements within the IBM Rational tools provided by the FA1 contractor in the centralized environment. The FA3 contractor(s) shall also develop the high level functional design recommendations based on the requirements collected. The FA3 contractor(s) shall coordinate with the FA2 contractor(s) to ensure legacy systems are accurately documented during retirements and design efforts. The FA3 contractor(s) shall also ensure open communication with the FA4 contractor(s) to ensure the FA4 contractor(s) understands the requirements and design prior to implementation during modernization efforts. The FA3 contractor(s) shall also coordinate with the FA4 contractor(s) as necessary. The FA4 contractor(s) may identify new requirements and may require an independent analysis from the FA3 contractor(s).



ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Figure 5: MOM Requirements and Design Overview. **Note: FA5 was combined into FA4**

FA3 requirements will be divided into application system segments, as described in Section C above.

C.4.3.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD. Travel requirements will be identified in specific tasks, if required.

C.4.3.2 Requirements Development

Objective – The key objectives are:

The contractor shall produce documentation capturing the business need and translating it into a functional requirements as well as a recommendation for systems infrastructure design.

Requirement – Key requirements may include, but are not limited to:

- a) Validate scope provided in task order performance work statement: review and refine the scope as needed and identify any changes to what is in or out of scope once the requirements have been developed. Complete this prior to obtaining the NRC COR sign-off and locking down the scope of the project. Any changes to the requirements after this phase shall be handled through the NRC change control process as defined in MD 2.8 and approved in writing by the NRC COR.
- b) Stakeholder Analysis: Perform stakeholder analysis for individual systems to determine stakeholder needs and their relative importance. Use stakeholder input and appropriate methodologies for data collection and analysis, and properly document the process and the findings of the analysis.
 - i. Identify system stakeholders including all entities that impact or are impacted by the system. Stakeholder identification is to be based on system review by the contractor, and in collaboration with the system owner (appropriate NRC unit). The stakeholder list shall include the system owner, operators, users, and other entities that may be affected positively or negatively by system modification or change. Key stakeholders may include, but are not limited to:
 - 1) Anyone who benefits from the system (functional, political, financial and social beneficiaries)
 - 2) Anyone involved in purchasing or procuring the system.
 - 3) Organizations which regulate aspects of the system (financial, safety, and other regulators)
 - 4) People or organizations opposed to the system
 - 5) Organizations and people responsible for systems which interface with the system under design
 - 6) Organizations who integrate horizontally with the organization for whom the contractor is designing the system
 - 7) Anyone who operates the system (normal and maintenance operators)

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- ii. Using the stakeholder list, develop appropriate criteria to screen the stakeholders. The stakeholder analysis must be based on actual input (information and quantitative data) provided by all key stakeholders and such input is to be thoroughly analyzed using appropriate methods to identify stakeholder needs and rank their relative importance (e.g., critical requirements, good to have functions and utilities, and functions and utilities that are not needed).
 - iii. Documented all of the information, data, and methods used in the analysis.
- c) Document systems and processes impacted: Create a design-elements diagram for each process function for impact assessment for:
- i. People
 - ii. Process
 - iii. Technology
 - iv. Materials and supplies
 - v. Facilities
 - vi. Machinery and equipment
 - vii. Others as necessary (depending on the organization)
- d) Document definitions and acronyms: Define any terms not clearly understood by all.
- e) Base on requirements, perform alternatives assessment, considering EA requirements in Appendix F and submitting a request to the ECCB to modify the architecture if necessary.
- f) The contractor shall provide a target architecture based upon the information gathered above including a detailed process map of the target architecture. When distinguishing impacts group the process functions into the following categories:
- i. People: People are processing information and making decisions [core team designs high-level design/low-level design (HLD/LLD)]
 - ii. Systems: Systems is processing information and making decisions
 - iii. Systems/People Dependencies and Action Points: System is processing information and people are making the decisions
 - iv. Fishbone: For each process function for impact assessment
 - v. Requirements and design will cover all nonfunctional items. Examples:
 - 1) Identify the intended user
 - 2) Identify the number and type of users
 - 3) Identify the level of computer experience users will have (or will need)
 - 4) Identify architecture constraints and requirements

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- 5) Identify hardware and network constraints – networked or stand-alone
 - 6) Identify statutory and regulatory requirements, to include, but not limited to:
 - i. Section 508 of the Rehabilitation Act of 1973, as amended
 - ii. Federal Information Systems Management Act (FISMA) security controls
 - iii. National Archives and Record Administration
 - iv. Privacy Act
 - 7) Identify the approximate data and performance requirements and anticipated growth
 - 8) Determine change management requirements
 - 9) Identify technical support needs and in-house availability
 - 10) Identify what other systems are needed to integrate/communicate
 - 11) Determine backup and disaster recovery requirements
 - 12) Define expected deliverables (e.g. – system requirements and design documentation)
 - 13) Determine which requirements are mandatory versus optional
- g) Use the IBM Rational tools and formal CM processes to document requirements.
- h) Coordinate through the NRC COR with the NRC CSO and ICOD on changes relating to security controls.

C.4.3.3 High Level Design or System Design

High Level Design (HLD) gives the overall System Design, in terms of functional architecture, user interface definitions, process flows, as well as database design. This is very useful for the developers to understand the flow of the system. In this phase, the design team, testers, and end users play a major role. The entry criteria shall be the functional requirements document and the exit criteria shall be HLD recommendations, the functional design documents, and the database design document.

Objective – The key objectives are:

High level software design, also called software functional architecture, is the first step to analyze and consider all requirements and attempt to define a system that will support implementation. The non-functional requirements have to be considered, such as scalability, portability and maintainability. This first design step has to be mostly independent of a programming language and infrastructure.

Requirement – HLD – Based on business requirements, business process analysts will convert the requirements into a usable product. This design depicts the business process flow and decision points. In the design process, the product is to be broken into independent functional modules.

- a) The HLD functional design document will at a minimum contain the following items at a macro level:
 - i. A list of functional modules and a brief description of each module

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- ii. A brief description of functionality of each module and what data or calculations are required
- iii. A definition of any interface relationship among functional modules
- iv. Any dependencies between functional modules
- v. Any known data sources identified along with key elements
- vi. An overall functional architecture diagram along with any known technology details.

b) Coordinate through the NRC COR with the NRC CSO and ICOD on changes relating to security controls.

C.4.3.4 Use Cases, Test Plans, and Test Cases,

The contractor shall develop use cases, test plans and test cases based on the requirements and design efforts. The contractor shall use the IBM Rational tools to document use cases, test plans and test cases. The contractor shall update any and all associated documents any time changes are made during the contractor's period of performance.

C.4.3.5 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.4 FA4: Modernization and Maintenance of Legacy Systems

This functional area will allow the NRC to modernize legacy application systems.

Figure 6 provides a high level illustration of how the FA4 contractor(s) will interact with the NRC, as well as, contractors in other functional areas (FA1, FA2, and FA3). The FA4 contractor(s) shall modernize the legacy application system based on the requirements and high level functional design provided by the NRC. The FA4 contractor(s) shall work within the centralized environment provided by the FA1 contractor. The FA4 contractor(s) shall ensure open communication with the FA3 contractor(s) to ensure a smooth transition of the requirements and high level functional design into the modernization effort. If a modification to the legacy system is absolutely necessary during modernization efforts, then the FA4 contractor(s) and the FA2 contractor(s) shall work together to ensure continued service to NRC end users.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

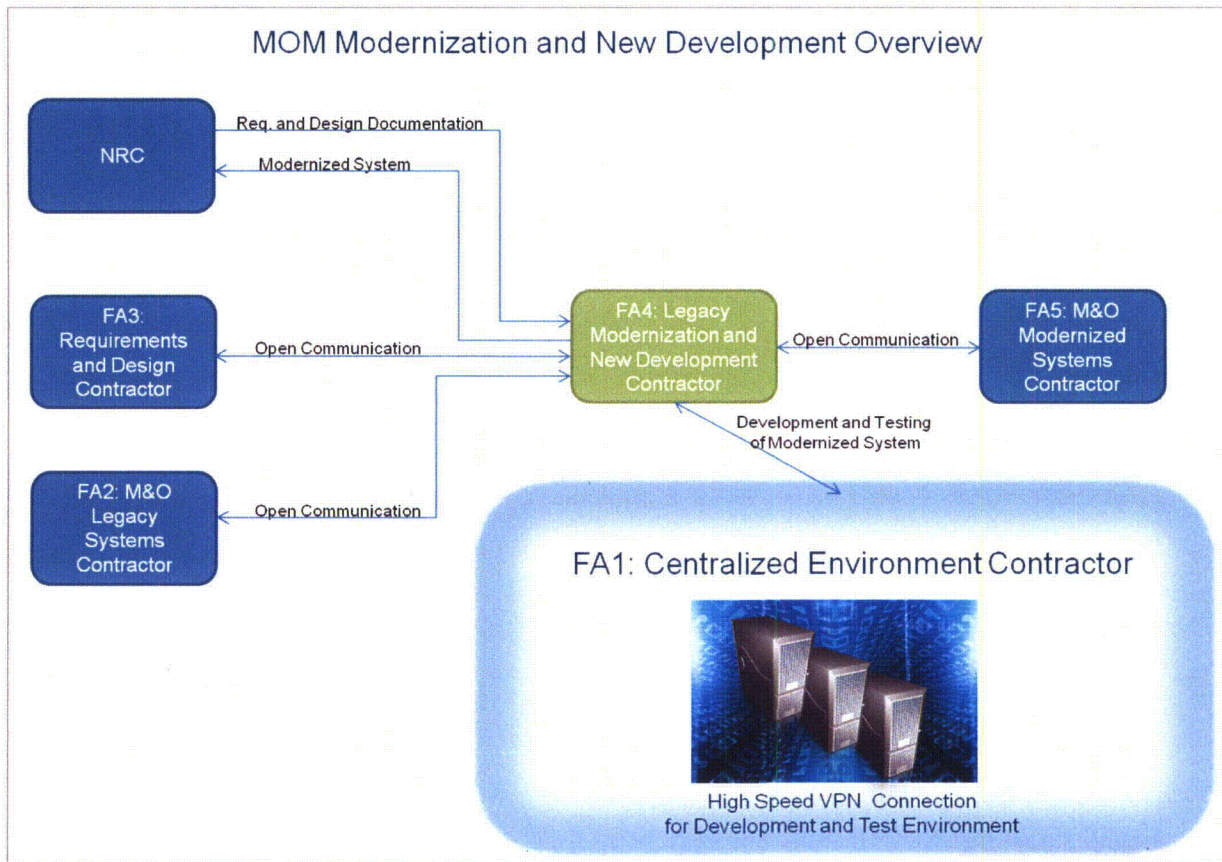


Figure 6: MOM Legacy Modernization and New Development Overview. **Note: FA5 was combined into FA4**

FA4 requirements and deliverables will be dependent on FA3 requirements.

C.4.4.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD.

C.4.4.2 Modernization

Objective – Implement changes to the legacy systems as required to deliver enhancements base on delivered requirements and HLD identified by the FA3 contractor(s).

During the detailed phase the HLD is broken down into modules and programs. Logic design is done for every program and then documented as program specifications. For every program a unit test plan shall be created.

The entry criteria for FA4 will be the Requirements and HLD document. The exit criteria shall be the modernized system, including the program specification and unit test plan comprising the Low Level Design (LLD).

The HLD contains details at macro level and so it cannot be given to programmers as a document for coding. The system analysts shall prepare a micro level design LLD document. This document shall describe each module in an elaborate technical manner, so that the programmer can directly code the program based upon the functional design. The LLD will at a minimum contain:

- a) A detailed programmatic functional logic of the module, in pseudo code

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- b) All database tables, with all elements, including their type and size
- c) All interface details with complete Application Programming Interface (API) references (with a visual diagram and supporting text)
- d) All dependencies and constraints
- e) All error responses, recovery and error message listings
- f) Complete list of inputs and outputs for each module

Key objectives are:

- a) Create a more homogeneous NRC IT environment (see architecture requirements and preferred technologies in Appendix F) by modernizing applications to use similar platforms, programming languages, and databases
- b) Implement best practices for modernization support activities
- c) Maintain compliance with applicable industry standards, as specified in task order performance work statement
- d) Apply cost effective approaches for providing all modernization activities

Requirement – Key requirements may include, but are not limited to:

- a) Ensuring the robustness, integrity, quality, consistency and/or performance of the NRC application systems
- b) Providing a detailed segment portfolio modernization plan
- c) Modernization activities shall include one or more of the following approaches:
 - i. Improving the robustness, integrity, quality, consistency, and/or performance of a system
 - ii. Converting an application from one technology set to another (e.g. from PowerBuilder to .Net or Java)
 - iii. Moving a system from one computer platform to another computer platform (e.g. from Windows to Linux platform)
 - iv. Combining two or more systems into one.
- d) Adhere to Maintenance, Operations and Modernization Change Request Process, as described in Section C.5.2
- e) Adhere to documentation support requirements
- f) Screen mock-ups
- g) Usability testing
- h) Coordinate, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls

C.4.4.3 Communication

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.5 F4: Maintenance and Operations of Modernized Systems

The contractor(s) selected to provide maintenance and operation of modernized systems shall provide maintenance and operational support for identified NRC application systems.

Figure 7 provides a high level illustration of how the FA4 contractor(s) will interact with the NRC, as well as, contractors in other functional areas (FA1, and FA3). The FA4 contractor(s) shall coordinate with the FA1 contractor to develop and test minor enhancement and maintenance system releases, as directed by NRC change requests. The FA4 contractor shall also ensure a smooth transition of modernized systems to ensure continued M&O support. The FA4 contractor(s) shall also ensure open communication with the FA3 contractor(s) if independent requirements analysis and design is required by the NRC.

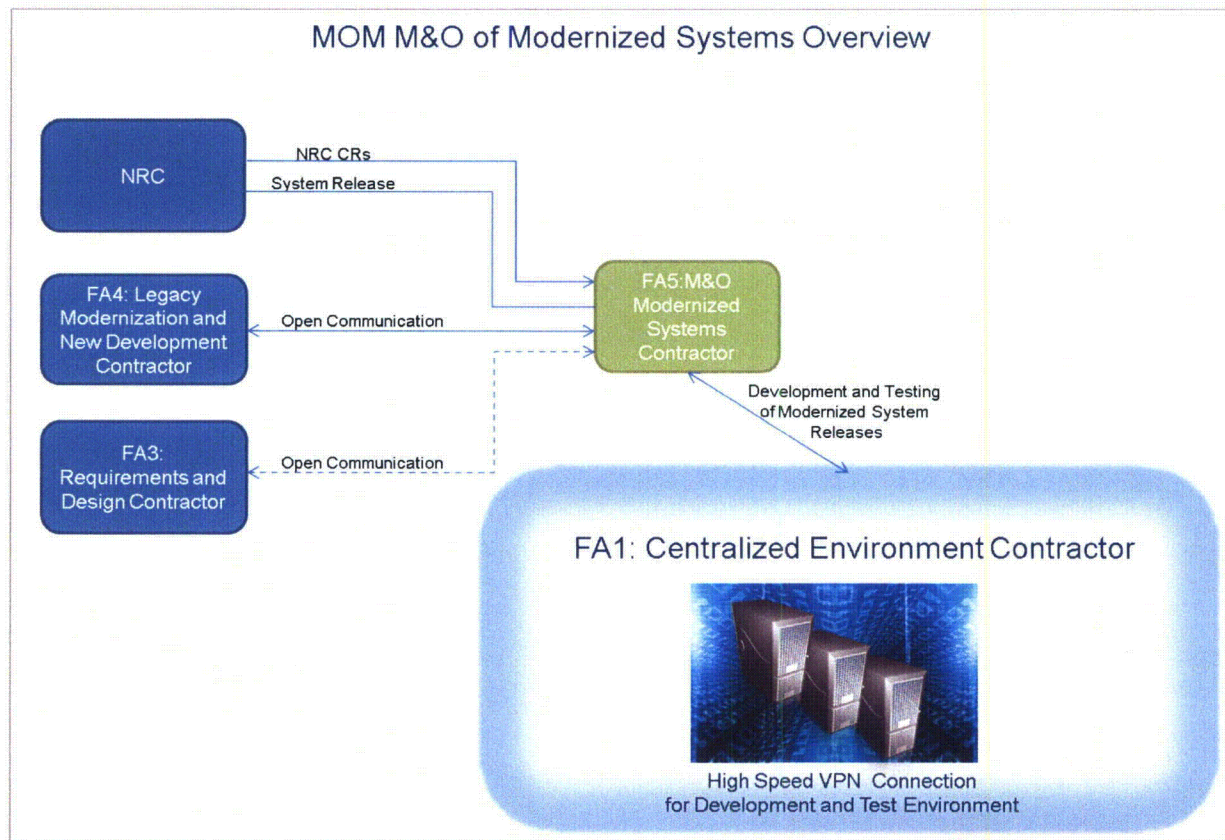


Figure 7: MOM M&O of Modernized Systems Overview. **Note: FA5 was combined into FA4**

Maintenance and Operations of Modernization Systems will be divided into segments, as described in Section C above.

C.4.5.1 Place of Performance

The anticipated places of performance shall be at the contractor site(s) and/or Government sites in Rockville, MD.

C.4.5.2 Maintenance of Modernized Systems

Objective – Implement changes to modernized systems as required to deliver minor enhancements and fixes.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

The key objectives are:

- a) Implement best practices for maintenance activities.
- b) Facilitate user support during and after transitional periods when moving users to a new release of the software with an increased improvement during normal operational periods.
- c) Apply cost effective approaches for providing all maintenance activities

Requirements – Key requirements may include, but are not limited to:

- a) Providing maintenance support as described in Section C.4.2 above for identified modernized NRC application systems.
- b) Performing configuration management activities as part of all task orders under this acquisition in compliance with Appendix G.
- c) Use the IBM Rational tools and formal CM processes to manage stable baselines and changes requests.
- d) Performing maintenance actions using the current production baseline of the application system which is housed in Rational ClearCase or Rational Team Concert Versioned Object Base (VOBs).
- e) Work with FA3 contractor(s) and the FA1 contractor for any Rational tools used and ensure those tools, as directed in writing by the NRC COR, are integrated into the M&O processes.
- f) The NRC COR or designee shall notify the contractor of maintenance requests using the Rational ClearQuest or Rational Team Concert CR system and approve the CRs that will be included in each system release. The contractor shall follow the procedures and deliverables specified in Sections C.4.4
- g) Updating all application system changes in the system and security documentation, including any changes that affect the security controls within the application system, prior to system deployment.
- h) Coordinate, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls.
- i) Implementing changes to application systems using only the specific vendor products defined in the application system baseline, unless authorization has received in writing from the NRC COR (i.e., if the application is coded in Java 1.5, only Java 1.5 will be used in the changes).
- j) Ensuring that the introduction of any new product to the application system is consistent with the authorized list of products (i.e., the TRM) approved by the NRC Environmental Change Control Board (ECCB) prior to implementation.
- k) Adhere to existing (or as modified by NRC) MOM Change Request Process as defined in Section C.5.2.
- l) Adhere to Documentation Support requirements. The NRC CCB will consist of a Parent CCB board and children CCB, which will be subordinate to the Parent CCB. Parent CCB will review documentation requirements in conjunction with segment architecture to determine documentation needs for legacy systems.
- m) Ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.4.5.3 Operations of Modernized Systems

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Objective – The key objective is:

Implement best practices for operational support activities.

Requirement – Key requirements may include, but are not limited to:

- a) Using the IBM Rational tools and formal CM processes to manage stable baselines and change requests
- b) Developing/Updating a Support Plan to include: how support will be provided, system contact personnel, defect reporting and enhancement request strategy, SLA's, defect prioritization and resolution time periods, defect escalation criteria, how to deliver fixes into production outside the scope of an official release
- c) Developing/Updating an Operations Plan to include how a system will be operated and supported in production
- d) Modifying data
- e) Performing data interpretation
- f) Scanning documents
- g) Performing Optical Character Recognition (OCR)
- h) Entering data
- i) Validating data
- j) Report Generation
- k) Producing standard reports
- l) Producing ad-hoc reports
- m) Providing production support
- n) Initiating schedule program sequences
- o) Transferring data between systems through kick-off of electronic processes or inputs of tapes or other physical media
- p) Performing system monitoring, troubleshooting, and applying immediate corrective measures to agency production application systems (in some cases on a 24-hour, on-call basis)
- q) Planning for disaster recovery
- r) Developing/updating a plan of actions in the event of disaster
- s) Conducting staff training on the disaster recovery plan
- t) Conducting periodic testing of the disaster recovery plan
- u) Recovering from disaster

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- v) Developing/updating disaster recovery plan
- w) Executing disaster recovery plan
- x) Coordinating, through the NRC COR, with the NRC CSO and ICOD on changes relating to security controls.

C.4.5.4 Enterprise Architecture and Technology Standards

The contractor shall comply with NRC enterprise architecture requirements and technology standards as outlined in Appendix F.

C.4.5.5 Communication

The contractor shall ensure open communication and appropriate information transfer with the NRC COR and other contractors during the period of performance of this acquisition.

C.5 Standards for Maintenance and Modernization

C.5.1 Documentation Support

Documentation support may be required by all five functional areas, as appropriate. Specific requirements for documentation support will be provided in the performance work statement for each task order, as appropriate.

Objective – Key objectives are:

- a) Maintain the NRC application documentation by updating documentation in conjunction with system updates.
- b) Ensure all NRC applications have current documentation required by MD 2.8 and Certification and Accreditation (C&A) processes. (this section only applies to FA1)
- c) Ensure all documents associated with an application system are populated into the Rational tools. (this section only applies to FA3)
- d) Update any and all associated system documents any time changes are made to the system during the contractor's period of performance. (this section applies to FA2, and FA4)

Requirement – Key requirements may include, but are not limited to:

- a) Updating documents required by MD 2.8 and C&A documentation (MD 12.5) in conjunction with system maintenance releases at no direct cost to the Government, unless their standard accounting practice requires otherwise, in which case those charges should be attributed directly to the system. (FA1 only)
- b) Creating and maintaining system level documentation required by MD2.8 and MD 12.5. Documentation that does not now exist will be identified in task order project plans and will be directly charged to the applicable task order, as required. (FA2, FA3, and FA4 only)

C.5.2 Maintenance, Operations, and Modernization Change Request Process

Objective – Key objectives are:

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Maintain NRC applications following the procedures contained in the NRC documents titled "OIS Application Change Request System Guide Using Rational ClearQuest" and "NRC Master Configuration Management Plan" to document all maintenance work performed and completed.

Appendix G provides a visual description of the MOM Change Request Process.

Phase Requirements:

- a) Inception Phase Requirements – Key requirements may include, but are not limited to:
- b) Identifying individual application system failures or other reasons or problems that necessitate a maintenance action using the Rational ClearQuest or Rational Team Concert Change Request (CR) system.
- c) Providing a preliminary project plan (including initial cost estimate and schedule for the release) to determine the feasibility of incorporating the CRs in the next release.
- d) Identifying major milestones with scheduled completion dates included in the preliminary schedule for major project phases, including dates for completing the elaboration phase and delivery of the release to User Acceptance Testing (UAT).
- e) Providing preliminary "ballpark" cost estimate and schedule by the due date agreed upon in writing between the NRC COR and contractor.

Elaboration Phase Requirements – Key requirements may include, but are not limited to:

- a) Providing the final release project plan (including cost estimate and schedule), initial test plans, and a technical approach/design (if requested by the NRC COR) at completion of the elaboration phase.
- b) Project Plan:
 - i. Performing a detailed analysis to identify what needs to be accomplished to complete the approved CRs in the next release.
 - ii. Developing and maintaining a project schedule consistent with the MD 2.8 phases (See Appendix C) by system on a per release basis.
 - 1) Storing the project plan in ClearCase or Rational Team Concert and attaching a copy of the plan to the release record in ClearQuest or Rational Team Concert. The project schedule shall include preliminary estimates and shall reflect the final development estimates (hours and cost) for each change request as approved by the NRC Representative before development. The development estimates shall include the cost of all CM activities, including updating all applicable documentation and artifacts.
 - iii. Including in the project schedule a time period for the NRC to accomplish User Acceptance Testing (UAT) as determined by the NRC COR.
 - iv. Baseline the project schedule after entry of the final development estimates (hours and cost) for each CR, once approved by the NRC COR, and attaching the final technical approach to each CR record in ClearQuest or Rational Team Concert.
- c) Test Plans and User Acceptance Testing:

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- i. Creating test plans in the Rational Test Management software, or as specified by the NRC COR, that include test cases covering all new requirements for the release, as specified in the CR records in ClearQuest or Rational Team Concert.
 - ii. Ensuring that any change to existing security controls or requirements for new security controls are implemented and tested.
 - iii. Developing tests based on original content of the CR together with the technical approach/design, as approved by the NRC COR.
 - iv. Validating that test cases fully exercise and verify the CR's requirements.
 - v. Executing tests on the software build that is delivered to NRC for UAT.
 - vi. Providing additional test coverage (such as regression testing) through ClearQuest or Rational Team Concert CRs that provide the details for the additional testing requirements.
 - vii. Exercising the test plan to demonstrate systems security controls, security requirements, associated technical resolutions, risk mitigation, and implementations are confirmed and operating as intended, and in accordance with Federal Information Processing Standard (FIPS) and National Institute of Standards and Technology (NIST) guidelines.
 - viii. Updating the test plan after completion of the system security test and evaluation plan test report to reflect validated information.
 - ix. Obtaining agreement between NRC COR and contractor on the test cases or general technical approach/design, which is required for the NRC COR to accept the system, before the contractor creates the final project plan baseline for the release.
 - x. Delivering detailed test scripts/procedures to execute the test cases. These may be due at an alternative date after the end of the elaboration phase, at the option of the NRC Representative, but must be delivered and accepted by the NRC Representative prior to the UAT target date.
- d) Technical Approach/Design:
- i. Ensuring that the technical approach and/or design, as prepared by the contractor during elaboration, are integral components of each CR.
 - ii. Ensuring that all major system modifications undergo a security engineering review commensurate with the Security Categorization of the system and the NRC Senior Information Security Technology Officer/Designated Approving Authority (SITSO/DAA)-approved FIPS 199 security baseline for the system.

Construction Phase Requirements – Key requirements may include, but are not limited to:

- a) Ensuring final cost and schedule have been approved in writing by the NRC COR prior to initiating the construction phase of the release.
- b) Ensuring all software changes made in each release are completed no later than the UAT target date specified in the schedule.
- c) Updating all documentation which was affected by changes implemented in the release, including all security documentation.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- d) Managing timeliness, quality and cost performance on each software maintenance release.
- e) Providing a statement regarding the impact of any CRs on the cost and schedule of the release, if a NRC COR submits any new CRs after a new release is approved and baselined. If the NRC COR approves, in writing, the new CR for inclusion in the current release, then the contractor shall re-baseline the project plan accordingly.

Transition Phase Requirements – Key requirements may include, but are not limited to:

- a) Updating all system security in accordance with MD 12.5, as necessary, for all system releases prior to deployment of the release to the production environment.
- b) Providing user and administrator training as required.
- c) Providing the NRC a self-contained installation package for applications or upgrades that need to be placed in the production environment. (For example MSI, self-extracting executable, etc.) These packages should also have the ability to be installed silently. For each executable all command line switches related to installation will also be provided.

Emergency Releases Requirements – Key requirements may include, but are not limited to:

- a) Providing assistance for fixing a problem and begin work immediately in the case of a system failure. If directed in writing by the NRC COR to perform an emergency release, the contractor may begin work on identifying and fixing the problem without following the maintenance phases required in the above sections.
- b) Creating documentation of the emergency maintenance request as a CR, with an estimated completion date. If the effort required exceeds 24 work hours, the contractor must then follow the maintenance phases as required in the above sections.
- c) Updating all testing documentation and testing systems to incorporate any new or altered test cases into the regression test suite.

Retirement Releases Requirements – Key requirements may include, but are not limited to:

- a) Estimating the overall impact, cost, schedule, and potential risks of removing the system.
- b) Developing and executing a Decommissioning Plan that details the steps required to retire the system, which include its software, hardware, system artifacts, and data.
- c) Ensuring proper protection and/or deletion of the system data.

Modernization Release Requirements – Key requirements may include, but are not limited to:

- a) Following all the phase requirements described above.
- b) Improving the robustness, integrity, quality, consistency, and/or performance of the NRC IT environment.
- c) Providing a detailed portfolio modernization plan attached to the ClearQuest Release record or Rational Team Concert Release record.
- d) Improving the robustness, integrity, quality, consistency, and/or performance of a system.
- e) Modernization releases shall include one or more of the following approaches:

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- i. Improving the robustness, integrity, quality, consistency, and/or performance of a system.
- ii. Converting an application from one computer language to another computer language.
- iii. Moving a system from one computer platform to another computer platform.
- iv. Combining two or more systems into one.

C.5.3 Project Management

MD 2.8 provides mandatory guidance and standards for developing and maintaining software application systems within the NRC. MD 2.8 is based on the Rational Unified Process (RUP). MD 2.8 contains policies and guidance for configurable processes and tools as well as templates to support the implementation of configurable processes. In addition, the MD 2.8 ensures that quality and continuous improvements are an integral part of NRC's IT system development and provide value to all NRC customers. The solution provider will adhere to NRC's MD 2.8 methodology and related change management tools and processes.

In addition the contractor shall:

- a) Track project status using Microsoft Project and come to the NRC location on a weekly basis to enter data into Enterprise Project Management (Microsoft Project Enterprise)
- b) Follow NRC Change Request Process identified in Section C.5.2
- c) Attend regular NRC program meetings to review program considerations and process updates and issues
- d) Attend regular NRC project meetings to review project schedules, status and resource allocations
- e) Coordinate closely with the other personnel (NRC employees, MOM contractors, etc.) on projects to ensure smooth transitions
- f) Implement and coordinate the use of NRC MD 2.8 for all IT infrastructure programs and efforts
- g) Minimize the discrepancy between the milestones defined in Microsoft Projects, and the actual delivery of these project milestones

C.5.4 Quality Assurance

The contractor shall maintain a formal Quality Assurance Program (QAP) that assures the accuracy and completeness of the required deliverables. The QAP shall include minimal effort requirements and escalating stages as needed to identify and correct deficiencies and errors.

C.6 NRC Environment

C.6.1 NRC Business Hours

- a) NRC provides for flextime for its employees, however, core business hours are 8:00am-6:00pm Eastern Time (ET) Monday thru Friday, excluding Federal Holidays and excluding when the NRC is otherwise closed due to inclement weather or other atypical event. Maintenance and production changes typically shall not be made prior to 9:00pm ET or after 5:00am ET, unless an indication to the contrary is provided in the performance work statement for an individual task order.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- b) Some specific functions require 24 x 7 x 365 support and such requirements are noted within the individual task order performance work statement.
- c) The FA1 contractor shall ensure that the centralized environment (development environment and test environment) is available 24 hours a day, 7 days a week, except for backup and deployment periods or as otherwise indicated in the task order performance work statement; however, FA1 contractor support will only be required from 8:00am to 6:00pm Monday-Friday.

C.6.2 Existing Information Technology Infrastructure

The NRC IT environment is currently composed of stand-alone and networked thick and thin client server, multi-tier web based and enterprise composite applications. The NRC's IT environment includes application systems built on different platforms and developed with different programming languages. Table 1 identifies the current platforms and programming languages included in the NRC's IT environment. Appendix E details the application systems residing on the various platforms.

Platform	Programming Languages
Client Server	Visual Basic 6.0
	IBM Content Services (FileNet) 4.0
	Visual Studio 2005 .Net
	PowerBuilder 11.5
	ColdFusion 7.02 MX
	Java 1.3.1
	Delphi 3 and Delphi 2009
	DOCS OPEN
Enterprise COTS	SharePoint 2007
	Microsoft Project 2007
	Microsoft Project Server
	Crystal Reports 11
Mainframe	COBOL/390 v2.2
	JCL 2.8
	ISPF 5.9
	QMF 9.1
	RAMIS
PC Standalone	Delphi 3 and Delphi 2009
PC Shared	Clipper 5.x
	Delphi 3 and Delphi 2009
	ColdFusion 7.02 MX
Web	ColdFusion 7.02 MX
	Java 1.5 and 1.6
	BEA Weblogic
	ASP.NET
	RADMAT
	Delphi 3 and Delphi 2009
	SharePoint 2007
Web Server and Database Server	C++ 6.0
	Java 1.5
	Adobe Forms * and 9

Table 1: NRC IT Environment

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

The NRC developed a three-tier client-server architecture with the presentation, application processing, and data management as logically separate processes. Table 2 identifies the products on which the three-tier architecture is based.

Product	IT Environment
Web Browser	Internet Explorer 8
Web Design	Adobe Creative Suite 3 and 4, which includes; DreamWeaver, Flash, Fireworks, Photoshop, Illustrator, and Acrobat
	SharePoint 2007
Web Content Management	Mediaspan Online Services
External Web Server	Sun One Web Server 6.0, running on a Solaris 8 platform
Internal Web Server	Sun Java System Web Server 6.1, running on a Solaris 8 platform
NRC Lightweight Directory Access Protocol (LDAP)	Novell E-directory
	Microsoft Active Directory
Middleware Server	Cold Fusion MX, version 8.0, running on the Solaris 10 platform
Backend Database	Sybase Adaptive Server Enterprise (ASE), version 15
	Microsoft (MS) SQL Server 2000 and 2005 (preferred for web applications)
	Access 97
	Oracle 9i and 10g
	Dbase 3+
	IBM DB2 8.1

Table 2: Web Based IT Environment

Maintenance and operational support will be required for the following application servers: Microsoft Windows Sever 2003, Internet Information Server 6, Project Server 2003/2007, SharePoint Portal Server 2007, SQL Server 2005 Enterprise, BizTalk Server, Internet Security and Acceleration (ISA) Server, Active Directory, Exchange, Crystal Enterprise X/XI Server, and supporting technologies.

C.7 Government and Contractor-Furnished Equipment & Software

The NRC will provide equipment and server software (except for access specific software) necessary for the contractor to work in NRC's network environment. In addition, all applications software necessary to maintain NRC application systems contained in each task order will be provided. The NRC will also provide routers and switches necessary to connect to the NRC network. The contractor must ensure that NRC-provided equipment remains separated from the contractor's own network environment.

The FA1 contractor shall procure, operate and maintain a 100 Mbps DS-3 WAN connection between their facility and NRC Headquarters. The price for products and services required to maintain this connection shall be treated as a direct cost to the NRC. The FA1 contractor shall provide a DS-3 BNC connection at each end of the DS-3 WAN connection. The NRC will provide a Government router for connection to the WAN connection at the contractor location and at NRC Headquarters. The FA1 contractor shall provide a BNC coaxial cable that is capable and fully functional for connecting the Government router to the DS-3 WAN connection at each location

C.7.1 RESERVED

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.7.2 Government Furnished Property

For contractor personnel performing work at the NRC headquarters site, the NRC will provide a computer workstation and administrative software necessary for the contractor to work effectively in NRC's network environment. In addition, NRC will provide all applications software necessary to maintain NRC application systems contained in each task order. NRC will also be providing routers and switches necessary to connect to the NRC network. The contractor shall ensure that NRC-provided equipment remains separated from the contractor's own network environment and is managed, along with any other Government Furnished Property (GFP) provided to the contractor, according to the Government Furnished Property clause in the contract.

C.7.3 Government Furnished Equipment Property Requirements

- a) The contractor shall provide a GFE report monthly or more frequently as may be requested by the NRC COR. The contractor shall also respond to periodic queries of their GFE inventory systems as requested by the NRC COR. The monthly reports shall be cumulative to date from the start of the task order.
 - i. The minimum data to be provided in the monthly GFE report is –
 - ii. Task Order #
 - iii. NRC Property TAG #
 - iv. Serial #
 - v. Location
 - vi. Person Assigned to
 - vii. Item Type Code (HW, SW, License, etc.)
 - viii. Item Name (i.e., PC, server, tape drive, modem, etc.)
 - ix. Comments/disposition
- b) Changes in project needs may also require adjustments in GFE at a contractor site. If additional hardware and software are needed, the contractor shall inform the NRC COR who may arrange for these items to be delivered either from NRC stock or via a procurement action conducted by the NRC. The adding or removing of support tools per staff member or per project shall be controlled and reflected in the GFE inventory.
- c) Movement of GFE into and/or out of contractor site space must be accomplished by using the "Government Furnished Property Transfer Notification" form. This form will be completed by the contractor and thereafter be provided to the NRC COR within five working days.

C.8 Deliverable Formats

The contractor shall provide all documentation to the NRC COR electronically in one or more of the following formats, except as specifically stated herein: Microsoft Word (version 2007 or latest version), Microsoft Excel (version 2007 or latest version), Microsoft Project (version 2007 or latest version), and Adobe PDF (version 9.0 or latest version) formats.

C.8.1 Standard for Grammar and Mechanics

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

All documentation submitted by the contractor shall conform to the Chicago Manual of Style, as amended by any applicable NRC format templates and requirements.

C.8.2 Draft Submission and Final Submission of Documentation Deliverables

All documentation deliverables shall be submitted in draft form to the NRC COR for their review. The contractor shall incorporate any written comments that they receive from the NRC COR regarding the draft submission into the final deliverable documentation within five business days of receipt of comments from the NRC COR.

C.8.3 The following provisions also apply to all deliverables:

C.8.3.1 Reporting Requirements:

In addition to meeting the delivery schedule in the timely submission of any draft and final reports, summaries, data and documents that are created in the performance of this delivery order, the contractor shall comply with the directions of the NRC COR regarding the contents of the report, summaries, data and related documents to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein. The reports, summaries, data and related documents will be considered draft until approved in writing by the NRC COR.

C.8.3.2 Publication of Results:

- a) Prior to any dissemination, display, publication or release of articles, reports, summaries, data or related documents developed under the delivery order, the contractor shall submit, for review and approval in writing by the NRC Contracting Officer and NRC COR, the proposed articles, reports, summaries, data and related documents that the contractor intends to release, disseminate or publish to other persons, the public or any other entities. The contractor shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents or the contents therein that have not been reviewed and approved in writing by the NRC COR and the NRC Contracting Officer and their designees for release, display, dissemination or publication. The contractor agrees to conspicuously place any disclaimers, markings or notices directed by the NRC on any articles, reports, summaries, data and related documents that the contractor intends to release, display, disseminate or publish to other persons, the public or any other entities.
- b) Identification/ Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI): The decision, determination or direction by the NRC that information constitutes sensitive or safeguards information remains exclusively a matter within the authority of the NRC to make, unless that authority is delegated by the NRC COR. The contractor shall comply with all SGI access requirements as prescribed by NRC governing directives and applicable 10 Code of Federal Regulations Part 73. In performing the contract, the contractor shall clearly mark SUNSI and SGI to include for example Official Use Only and SGI on any reports, documents, designs, data, materials and written information as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet forms, when applicable, (e.g. NRC Form 461 – Safeguards Information; NRC Form 761- Warning Confidential Allegation Material; and NRC Form 762 – Warning Sensitive Allegation Material) in maintaining these records and documents. The contractor will ensure that SUNSI and SGI is handled appropriately, maintained and protected from unauthorized disclosure. The contractor shall comply with the requirements to mark, maintain and protect all information including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954, as amended, its implementing regulations (10 CFR 73.21), the Designation Guide for SGI, the NRC Management Directive and Handbook 12.6, subsequent guidance related to information security and in accordance with NRC Policy for Handling, Marking, and Protecting Sensitive Unclassified Non-Safeguards Information (ML052990146), Yellow Announcement 2005-077, "Policy Revision: NRC Policy for Handling, Marking, and Protecting Sensitive Unclassified Non-Safeguards Information (SUNSI), dated October 26, 2005; and SUNSI instructions contained on the NRC intranet Web site at www.internal.nrc.gov/sunsi.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C.9 Additional Environment Requirements

C.9.1 MOM Security Requirements

- a) All system modifications to classified systems must comply with NRC security policies and procedures for classified systems, as well as federal laws, guidance, and standards to ensure Federal Information Security Management Act (FISMA) compliance.
- b) The contractor shall correct errors in contractor-developed software and applicable documentation that are not commercial-off-the-shelf which are discovered by the NRC or by the contractor.
- c) The contractor shall adhere to the guidance outlined in NIST SP 800-53, FIPS 200 and NRC guidance for the identification and documentation of minimum security controls.
- d) The contractor shall provide the system requirements traceability matrix at the end of the initiation phase, development/acquisition phase, implementation/assessment phase, operation & maintenance phase and disposal phase that provides the security requirements in a separate section so that they can be traced through the development life cycle. The contractor shall also provide the software and hardware designs and test plan documentation, and source code upon request to the NRC for review.
- e) All development and testing of the systems shall be protected at their assigned system sensitivity level and shall be performed on a network separate and isolated from the NRC operational network.
- f) All system computers must be properly configured and hardened according to NRC policies, guidance, and standards and comply with all NRC security policies and procedures as commensurate with the system security categorization.
- g) All contractor provided deliverables identified in the project plan will be subject to the review and written approval of the NRC COR. Time should be reserved for those reviews based upon the complexity and agreed to milestones of the system. The contractor shall make the necessary modifications to project deliverables to resolve any identified issues. Project deliverables include but are not limited to: requirements, architectures, design documents, test plans, and test reports. Contract schedules shall include NRC COR go/no-go decision points, including but not limited to the following system milestones:
 - i. Requirements review
 - ii. Architecture review
 - iii. Detailed design review
 - iv. Code review
 - v. System test
 - vi. System readiness review

C.9.2 Access Controls

- a) The contractor shall not hardcode any passwords into the software unless the password only appears on the server side (e.g. using server-side technology such as ASP, PHP, or JSP).

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- b) The contractor shall ensure that the software does not contain undocumented functions and undocumented methods for gaining access to the software or to the computer system on which it is installed. This includes, but is not limited to, master access keys, back doors, or trapdoors.

C.9.3 Cryptography

Cryptographic modules provided as part of the system shall be validated under the Cryptographic Module Validation Program to conform to NIST FIPS 140-2 and must be operated in FIPS mode. The contractor shall provide the FIPS 140-2 cryptographic module certificate number and a brief description of the encryption module that includes the encryption algorithm(s) used, the key length, and the vendor of the original equipment manufacturer/copyright holder.

C.9.4 Control of Hardware and Software

- a) The contractor shall demonstrate that all hardware and software meet security requirements prior to being placed into the NRC production environment.
- b) The contractor shall ensure that the development environment is separated from the operational environment using NRC COR approved controls.
- c) The contractor shall only use licensed software and in-house developed authorized software (including NRC and contractor developed) on the system and for processing NRC information. Public domain, shareware, or freeware not listed in Appendix F shall only be installed after prior written approval is obtained from the NRC COR.

C.9.5 Configuration Management and Control

- a) The contractor must ensure that the system will be divided into configuration items (CIs). CIs are parts of a system that can be individually managed and versioned. The system shall be managed at the CI level.
- b) The contractor must have a configuration management plan that includes all hardware and software that is part of the system. Legacy systems may be addressed in an overall configuration management plan. The contractor's configuration management plan must contain at minimum the following sections:
 - i. Introduction
 - 1) Purpose & Scope
 - 2) Definitions
 - 3) References
 - ii. Configuration Management
 - 1) Organization
 - 2) Responsibilities
 - 3) Tools and Infrastructure
 - iii. Configuration Management Activities
 - 1) Specification Identification
 - 2) Change control form identification
 - 3) Project baselines
 - iv. Configuration and Change Control
 - 1) Change Request Processing and Approval
 - 2) Change Control Board
 - v. Milestones

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

1) Define baselines, reviews, audits

vi. Training and Resources

C.9.6 Control of Information and Data

- a) The contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any security controls or countermeasures either designed or developed by the contractor under this contract or otherwise provided by the NRC.
- b) Any IT system used to process NRC sensitive information shall:
 - i. Include a mechanism to require users to uniquely identify themselves to the system before beginning to perform any other actions that the system is expected to provide.
 - ii. Be able to authenticate data that includes information for verifying the claimed identity of individual users (e.g., passwords).
 - iii. Protect authentication data so that it cannot be accessed by any unauthorized user.
 - iv. Be able to enforce individual accountability by providing the capability to uniquely identify each individual computer system user.
 - v. Report to appropriate security personnel when attempts are made to guess the authentication data whether inadvertently or deliberately.

C.9.7 Access Controls

- a) Any contractor system being used to process NRC data shall be able to define and enforce access privileges for individual users. The discretionary access controls mechanisms shall be configurable to protect objects (e.g., files, folders) from unauthorized access.
- b) The contractor system being used to process NRC data shall provide only essential capabilities and specifically prohibit and/or restrict the use of specified functions, ports, protocols, and/or services.
- c) The contractors shall only use NRC approved methods to send and receive information considered sensitive or classified. Specifically,
- d) Classified Information – All NRC Classified data being transmitted over a network shall use NSA approved encryption and adhere to guidance in MD 12.2 NRC Classified Information Security Program, MD 12.5 NRC Automated Information Security Program and Committee on National Security Systems. Classified processing shall be only within facilities, computers, and spaces that have been specifically approved for classified processing.
- e) SGI Information – All SGI being transmitted over a network shall adhere to guidance in MD 12.7 NRC Safeguards Information Security Program and MD 12.5 NRC Automated Information Security Program. SGI processing shall be only within facilities, computers, and spaces that have been specifically approved for SGI processing. Cryptographic modules provided as part of the system shall be validated under the Cryptographic Module Validation Program to conform to NIST FIPS 140-2 overall level 2 and must be operated in FIPS mode. The contractor shall provide the FIPS 140-2 cryptographic module certificate number and a brief description of the encryption module that includes the encryption algorithm(s) used, the key length, and the original equipment manufacturer/copyright holder of the product.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- f) The most restrictive set of rights/privileges or accesses needed by users (or processes acting on behalf of users) for the performance of specified tasks must be enforced by the system through assigned access authorizations.
- g) Separation of duties for contractor systems used to process NRC information must be enforced by the system through assigned access authorizations.
- h) The mechanisms within the contractor system or application that enforces access control and other security features shall be continuously protected against tampering and/or unauthorized changes.

C.9.8 Configuration Standards

All systems used to process NRC sensitive information shall meet NRC configuration standards available at: <http://www.internal.nrc.gov/CSO/standards.html>.

C.9.9 Information Security Training and Awareness Training

- a) The contractor shall ensure that its personnel that have significant IT responsibilities (e.g. IT administrators, developers, project leads), in performance of the contract, receive in-depth IT security training. The NRC will not directly reimburse the contractor for those training costs. The contractor must provide the COR written certification that training is complete, along with the title of the course and dates of training as a prerequisite to start of work on task order(s) under the contract.
- b) The contractor must ensure that required refresher training for its personnel is accomplished in accordance with the required frequency specifically associated with the IT security role.

C.9.10 Media Handling

- a) All media used by the contractor to store or process NRC information shall be controlled in accordance with the applicable sensitivity level.
- b) The contractor shall not perform sanitization or destruction of media approved for processing NRC information designated as SGI or Classified. The contractor must provide the media to the COR for destruction.

C.9.11 Vulnerability Management

- a) The contractor must adhere to NRC patch management processes for all systems used to process NRC information. The contractor shall provide Patch Management reports to the COR upon their written request for following security categorizations and reporting timeframes:
 - i. No more than 5 calendar days after being requested for a high sensitivity system
 - ii. No more than 10 calendar days after being requested for a moderate sensitivity system
 - iii. No more than 15 calendar days after being requested for a low sensitivity system
- b) For any contractor system used to process NRC information, the contractor must ensure that information loaded into the system is scanned at appropriate intervals for viruses prior to posting; servers are scanned for viruses, adware, and spyware on a regular basis; and virus signatures are updated at the following frequency:
 - i. At least every 1 calendar day for a high sensitivity system
 - ii. At least every 3 calendar days for a moderate sensitivity system
 - iii. At least every 7 calendar days for a low sensitivity system

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- c) For unclassified information used for the effort, the contractor shall provide an information security categorization document to the COR, indicating the sensitivity of the information processed as part of this contract if the information security categorization was not provided in the PWS. The determination shall be made using NIST SP 800-60 and must be approved by the COR. The contractor shall notify the contracting officer and NRC COR in writing immediately before the contractor begins to process information at a higher sensitivity level.
 - i. If the effort includes use or processing of classified information, the contractor shall notify the contracting officer and NRC COR in writing before the contractor begins to process information at a more restrictive classification level.
- d) All work under this contract shall comply with the latest version of all applicable guidance and standards. Individual task orders may reference applicable versions of standards or exceptions as necessary. These standards may include, but are not limited to, NRC Management Directive (MD) volume 12 Security, computer security policies issued until MD 12.5, NRC Automated Information Security Program is updated, National Institute of Standards and Technology (NIST) guidance and Federal Information Processing Standards (FIPS), and Committee on National Security Systems (CNSS) policy, directives, instructions, and guidance. This information is available at the following links:
 - i. NRC Policies, Procedures and Standards (CSO internal website):
 - ii. <http://www.internal.nrc.gov/CSO/policies.html>
 - iii. NRC Policy and Procedures for Handling, Marking and Protecting Sensitive Unclassified Non-Safeguards Information (SUNSI):
 - iv. <http://www.internal.nrc.gov/sunsi/pdf/SUNSI-Policy-Procedures.pdf>
 - v. All NRC Management Directives (public website):
 - vi. <http://www.nrc.gov/reading-rm/doc-collections/management-directives/>
 - vii. NIST SP and FIPS documentation is located at: <http://csrc.nist.gov/>
- e) The contractor shall ensure compliance with the latest version of NIST guidance and FIPS standards available at contract issuance and continued compliance with the latest versions within one year of the release date.
- f) CNSS documents are located at: <http://www.cnss.gov/>
- g) When e-mail is used, the contractor shall only use NRC provided e-mail accounts to send and receive sensitive information (information that is not releasable to the public) or mechanisms to protect the information during transmission to NRC that have been approved by the NRC COR.
- h) All contractor personnel must sign the NRC Agency Rules of Behavior for Secure Computer Use prior to being granted access to NRC computing resources.
- i) The contractor shall adhere to following NRC policies, including but not limited to:
 - i. Management Directive 12.5, Automated Information Security Program
 - ii. NRC SUNSI
 - iii. Computer Security Policy for Encryption of Data at Rest When Outside of Agency Facilities
 - iv. Policy for Copying, Scanning, Printing, and Faxing SGI & Classified Information
 - v. Computer Security Information Protection Policy

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- vi. Remote Access Policy
 - vii. Use of Commercial Wireless Devices, Services and Technologies Policy
 - viii. Laptop Security Policy
 - ix. Computer Security Incident Response Policy
- j) The contractor shall also maintain and update all system documentation required by the MD 2.8, in conjunction with system maintenance releases.
- k) The contractor shall adhere to NRC's prohibition of use of personal devices in accordance with MD 12.5 to process and store NRC sensitive information.
- l) All work performed at non-NRC facilities shall be in facilities, networks, and computers that have been accredited by NRC for processing information at the highest sensitivity of the information that is processed or will ultimately be processed.
- m) Before introducing hardware or software changes into operation, the contractor shall provide a list of software and hardware changes to the NRC COR and obtain their written approval. The contractor shall provide a list of changes to the NRC COR within the following timeframes prior to the change occurring:
- No more than 30 calendar days for a classified, SGI, or high sensitivity system
 - No more than 20 calendar days for a moderate sensitivity system
 - No more than 10 calendar days for a low sensitivity system
- n) The contractor must maintain and update all system documentation to include such change within the following time frames after the change occurs.
- No more than 10 calendar days for a classified, SGI, or high sensitivity system
 - No more than 20 calendar days for a moderate sensitivity system
 - No more than 30 calendar days for a low sensitivity system
- Modified code, tests performed and test results, issue resolution documentation, and updated system documentation shall be deliverables on the contract.
- Any proposed changes to the system must have written approval from the NRC COR.
- o) The contractor shall maintain and update a list of hardware, firmware and software changes for all systems. Updates shall be made within the following time frames after the change occurs,
- No more than 15 calendar days for a classified, SGI or high sensitivity system
 - No more than 20 calendar days for a moderate sensitivity system
 - No more than 30 calendar days for a low sensitivity system
- p) The contractor shall analyze proposed hardware and software configurations and modification as well as addressed security vulnerabilities in advance of NRC accepted operational deployment dates. The contractor shall provide proposed hardware and software configurations and modifications and address security vulnerabilities within the timeframes below prior to operational deployment.
- No more than 15 calendar days for a classified, SGI, or high sensitivity system
 - No more than 20 calendar days for a moderate sensitivity system

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

No more than 30 calendar days for a low sensitivity system

- q) The contractor shall provide the above analysis with the proposed hardware and software for NRC testing in advance of NRC accepted operational deployment dates. The contractor shall provide proposal for hardware and software required for testing within the timeframes below prior to operational deployment.

No more than 15 calendar days for a classified, SGI, or high sensitivity system

No more than 20 calendar days for a moderate sensitivity system

No more than 30 calendar days for a low sensitivity system

- r) The contractor shall demonstrate that all hardware and software meet security requirements to the NRC COR prior to being placed into the NRC production environment.
- s) The contractor shall ensure that the development environment is separated from the operational environment.
- t) The contractor shall only use licensed software and in-house developed authorized software (including NRC and contractor developed) on the system and for processing NRC information. Public domain, shareware, or freeware shall only be installed after prior written approval is obtained from the NRC COR.
- u) The contractor shall provide proof of valid software licensing upon request of the Contracting Officer, the NRC COR.

C.9.12 Auditing

- a) The Centralized Environment (FA1) shall be able to create, maintain and protect from modification or unauthorized access or destruction an audit trail of accesses to the objects it protects. The audit data shall be protected so that read access to it is limited to those who are authorized.
- b) The Centralized Environment shall be able to record the following types of events: use of identification and authentication mechanisms, introduction of objects into a user's address space (e.g., file open, program initiation), deletion of objects, and actions taken by computer operators and system administrators or system security officers and other security relevant events. The system shall be able to audit any override of security controls.
- c) The FA1 contractor shall ensure auditing is implemented on the following:
- i. Operating System
 - ii. Application
 - iii. Web Server
 - iv. Web Services
 - v. Network Devices
 - vi. Database
 - vii. Wireless
- d) The FA1 contractor shall perform audit log reviews daily using automated analysis tools. In addition, the contractor must log at least the following events on systems that process NRC information:
- i. Audit all failures
 - ii. Successful logon attempt
 - iii. Failure of logon attempt
 - iv. Permission Changes
 - v. Unsuccessful File Access
 - vi. Creating users & objects

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- vii. Deletion & modification of system files
- viii. Registry Key/Kernel changes
- ix. Startup & shutdown
- x. Authentication
- xi. Authorization/permission granting
- xii. Actions by trusted users
- xiii. Process invocation
- xiv. Controlled access to data by individually authenticated user
- xv. Unsuccessful data access attempt
- xvi. Data deletion
- xvii. Data transfer
- xviii. Application configuration change
- xix. Application of confidentiality or integrity labels to data
- xx. Override or modification of data labels or markings
- xxi. Output to removable media
- xxii. Output to a printer

C.9.13 Backups

The FA1 contractor shall ensure that backup media are created, encrypted (in accordance with information sensitivity) and verified to ensure that data can be retrieved and is restorable to NRC systems based on information sensitivity levels. Backups shall be executed to create readable media to which allows successful file/data restoration at the following frequencies:

- At least every 1 calendar day for a high sensitivity system
- At least every 1 calendar day for a moderate sensitivity system
- At least every 7 calendar days for a low sensitivity system

C.9.14 Perimeter Protection

The contractor must employ perimeter protection mechanisms, such as firewalls and routers, to deny all communications unless explicitly allowed by exception.

The contractor must deploy and monitor intrusion detection capability and have an always deployed and actively engaged security monitoring capability in place for systems placed in operation for the NRC. Intrusion detection and monitoring reports will be made available to the NRC upon request for following security categorizations and reporting timeframes:

- No more than 5 calendar days after being requested for a high sensitivity system
- No more than 10 calendar days after being requested for a moderate sensitivity system
- No more than 15 calendar days after being requested for a low sensitivity system

C.9.15 Certification and Accreditation

This acquisition is not a requirement for C&A activities, but the contractor shall support the NRC in its information systems security C&A process implementation, as defined in NIST SP 800-37, Guide for the Security Certification and Accreditation of Federal Information Systems. The NRC has a separate contractor who has primary responsibility for developing systems security C&A documentation to obtain an Authorization to Operate for the agency's application systems.

Security Risk Assessment

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

The contractor shall work with the NRC COR in performing Risk Assessment activities according to NRC policy, standards, and guidance. The contractor shall perform Risk Assessment activities that include analyzing how the architecture implements the NRC documented security policy for the system, assessing how management, operational, and technical security control features are planned or implemented and how the system interconnects to other systems or networks while maintaining security.

a) System Security Plan

The contractor shall develop the system security plan according to NRC policy, standards, and guidance to define the implementation of IT security controls necessary to meet both the functional assurance and security requirements. The contractor shall ensure that all controls required to be implemented are documented in the SSP.

b) Assessment Procedures – Security Test & Evaluation

- i. The contractor shall follow NRC policy, standards, and guidance for execution of the test procedures. These procedures shall be supplemented and augmented by tailored test procedures based on the control objective as it applies to NRC. The contractor shall include verification and validation to ensure that appropriate corrective action was taken on identified security weaknesses.
- ii. The contractor shall perform Security Test and Evaluation (ST&E) activities, including but not limited to, coordinating the ST&E and developing the ST&E Plan, execution ST&E test cases and documentation of test results. The contractor shall prepare the Plan of Action and Milestones (POA&M) based on the ST&E results.

c) POA&M Maintenance & Reporting

- i. The contractor shall provide a determination, in a written form agreed to by the NRC COR, on whether the implemented corrective action was adequate to resolve the identified information security weaknesses and provide the reasons for any exceptions or risk-based decisions. The contractor shall document any vulnerabilities indicating which portions of the security control have not been implemented or applied.
- ii. The contractor shall develop and implement solutions that provide a means of planning and monitoring corrective actions; define roles and responsibilities for risk mitigation; assist in identifying security funding requirements; track and prioritize resources; and inform decision-makers of progress of open POA&M items.
- iii. The contractor shall perform verification of IT security weaknesses to ensure that all weaknesses identified through third party (e.g., OIG) audits are included in the POA&Ms that the quarterly reporting to OMB is accurate, and the reasons for any exceptions or risk-based decisions are reasonable and clearly documented. This verification process will be done in conjunction with the continuous monitoring activities.

d) Certification & Accreditation Documentation

- i. The contractor shall create, update maintain all C&A documentation in accordance with the following NRC Certification and Accreditation procedures and guidance:

- 1) C&A Non-SGI Unclassified Systems
- 2) C&A SGI Unclassified Systems
- 3) C&A Classified Systems

- e) The contractor must develop contingency plan and ensure annual contingency testing is completed within one year of previous test and provide an updated security plan and test report according to NRC's policy and procedure.

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- f) The contractor must conduct annual security control testing according to NRC's policy and procedure and update POA&M, SSP, etc. to reflect any findings or changes to management, operational and technical controls.
- g) The contractor shall meet the Continuous Monitoring requirements identified in NIST Special Publication 800-37 Revision 1.
- h) The contractor shall perform, document and report to NRC management the results of continuous monitoring activities which include, but are not limited to the following: assessment of selected security controls, configuration management, security impact analysis on changes, C&A documentation updates.
- i) Applicable C&A documents to be used as reference when creating documentation to validate FISMA compliancy can be located at the following: <http://csrc.nist.gov/publications/index.html> and http://www.internal.nrc.gov/pmm/index.htm#pmm_security_c&a/guidances/supportingmaterials/ISS_C%20A_Program_Overview_EFBCC9FA.html

C.9.16 Incident Management

The NRC is responsible for setting the escalation and incident severity rating scales with the contractor, and for the review of incidents to identify problems with the contractor. The contractor is responsible for providing Level 2 support for the resolution incidents for certain applications:

C.9.17 Problem Management

- a) The contractor is responsible for problem management. At the time of competition of each task order requirement, the contractor shall propose a problem management approach and implement that approach. The contractor shall utilize the NRC's Known Error Database (KEDB) to record known errors, their resolution, and workarounds. The contractor shall also populate the KEDB as errors are identified.
- b) In addition, the contractor shall minimize the time between the identification of a problem and the resolution of that problem by identifying a suitable workaround and/or permanent solution.
- c) The contractor is responsible for the identification of the root cause of problems and the development of an implementation plan. Upon written approval of the NRC COR, the contractor shall remediate the underlying problem based on established release and change management processes and procedures.

C.9.18 Other Expectations

IT services to be performed under this acquisition shall:

- a) Define system operational performance requirements.
- b) Align and map services to technology.
- c) Update system and IT security documentation and all other documentation associated with the application systems.
- d) Provide the ability to model the effect of changes in technology to changes in business requirements.

C.10 Contract Performance and Closeout

ATTACHMENT 1 - SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

- a) The contractor shall ensure that the NRC data processed during the performance of this IDIQ contract is purged from all data storage components of the contractor's computer facility as specified in each task order. Tools used to perform data purging are include in shall be Appendix F. The contractor shall provide written certification to the NRC Contracting Officer that the contractor does not retain any NRC data within 30 calendar days after IDIQ contract completion. Until all data is purged, the contractor shall ensure that any NRC data remaining in any storage component is adequately protected to prevent unauthorized disclosure.
- b) When contractor personnel no longer require access to an NRC system, the contractor shall notify the COR in writing within 24 hours.

Upon IDIQ contract completion, the contractor shall provide a status list to the COR of all NRC system users and shall note if any users still require access to the system to perform work if a follow-on contract or task order has been issued by NRC.

SECTION D - PACKAGING AND MARKING

D.1 PACKAGING AND MARKING (AUG 2011)

(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:

D.2 BRANDING (AUG 2011)

The Contractor is required to use the official NRC branding logo or seal on any publications, presentations, products, or materials funded under this contract, to the extent practical, in order to provide NRC 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.

Access the following websites for branding information and specifications:

<http://www.internal.nrc.gov/ADM/branding/> and Management Directive and Handbook 3.13 -

(internal NRC website): <http://www.internal.nrc.gov/policy/directives/toc/md3.13.htm>

(external public website): <http://pbadupws.nrc.gov/docs/ML1122/ML112280190.pdf>

STATEMENT OF WORK
INTERNATIONAL REGULATORY ASSISTANCE
NOVEMBER 2013

1. BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) has been providing regulatory assistance and support to its international counterparts since 1991. Initial efforts focused on certain countries of the former Soviet Union, but have since expanded globally. The general areas where NRC has focused its technical safety and security assistance and training efforts include currently operating nuclear power and research reactors, nuclear power plants planned or under construction, radioactive waste, nuclear fuel cycle, radioactive sources and fissile materials. At the present time, work involving select countries of the Commonwealth of Independent States, the Middle East, Europe, Latin America, Africa and Asia is either underway or planned for the near future. Continuation of these efforts is anticipated for the next five to ten years, and new needs will likely arise.

2. CONTRACT OBJECTIVES

The Contractor shall provide personnel with specific technical and scientific expertise applicable to nuclear safety and security regulations, including operating nuclear power plants, nuclear power plants planned or under construction, radioactive sources, materials and waste, to assist the NRC's Office of International Programs (OIP) staff in providing a continuous and uninterrupted transfer of nuclear-related assistance to select countries of the Commonwealth of Independent States, the Middle East, Europe, Latin America, Africa and Asia. Specific activities the contractor may be asked to support include: program planning and management; development of a country-specific legal basis needed for regulatory oversight of new and/or existing nuclear power plants; development of model and/or country-specific regulatory requirements covering the design, licensing, construction and operation of new or existing nuclear power plants; review and development of regulatory, legislative and technical bases for oversight of nuclear and radioactive materials and waste; development of a national database (registry) of radioactive sources; enhancing day-to-day oversight of radioactive sources; and coordination of ongoing and/or planned assistance-related activities.

3. WORK REQUIREMENTS

The Contractor shall assist OIP staff in conducting work activities to support the Office's goal of providing continuous and uninterrupted technical training and assistance to select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia. Contractor personnel will act independently and not as an agent of the U.S. government. Extended stays in the country receiving assistance by contractor personnel may occasionally be required (usually one person).

Contractor support shall be required, but not limited to, assisting national regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia in:

- Achieving goals and objectives identified in IAEA Nuclear Energy Series NG-G-3.1 "Milestones in the Development of a National Infrastructure for Nuclear Power;"
- Adopting and implementing the IAEA-sponsored "Code of Conduct on the Safety and

Comment [AXP141]: Define acronym.

Security of Radioactive Sources;”

- Adopting and implementing the IAEA-sponsored “Code of Conduct on the Safety of Research Reactors”;
- Implementing the IAEA’s post-Fukushima Nuclear Safety Action Plan;
- Developing and implementing nuclear safety and security regulations, licensing, and inspection programs for nuclear power reactors, research reactors, and fuel cycle facilities patterned after NRC and other internationally accepted practices and methodology; and
- Developing and implementing nuclear safety and security regulations, licensing and inspection programs for accountancy, control, and physical protection of nuclear materials (including radioactive sources) and physical protection of nuclear facilities.

Comment [AXP142]: Is this a summary? How does this relate to Section 4. Activities?

The contractor may also be required to procure and install personal computers, means of transportation, radiation monitoring and/or communications equipment and basic office supplies at the sites of the respective national regulatory authorities in support of the activities listed above.

Comment [BJD23]: Suggest SOW reflect any purchases over \$3k require approval from the CO.

4. ACTIVITIES

ACTIVITY 1 RADIOACTIVE SOURCES

SUB-ACTIVITY 1.1 PROGRAM PLANNING AND MANAGEMENT

The contractor shall assist the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, ~~if funding is available~~, and their technical support organizations in the establishment of country-specific long-term plans for strengthening regulatory oversight of nuclear and radioactive materials. The plan will identify the priority of areas of work; define detailed scope of work for each area and the associated schedule and level of effort. The contractor shall also participate in the periodic review and update of the long-term plan.

Comment [AXP144]: Information to be addressed in section Other Direct Costs (ODCs) and/or in Estimated Materials. IGCE shall be reflective of this costs. What is going to happen with the property acquired once contract expires? Address the disposal of the property once the contract expires.

Comment [AXP145]: Seems it should be an activity to request performance once funding becomes available via a delivery/task order. Suggest deletion of all instances since the Limitation of funds clause is expected to be included in the contract.

The contractor’s project manager will periodically review and develop, in consultation with the ~~NRC project manager~~ NRC Contracting Officer Representative, the short-term objectives of ongoing or planned country-specific work. The short-term objectives and scope of work will depend on a number of factors, including achievements to date, immediate needs and funding availability. The contractor’s project manager shall also prepare and periodically update and review with the ~~NRC project manager~~ NRC Contracting Officer Representative the short-term and long-term costs associated with executing the assistance program.

SUB-ACTIVITY 1.2 LEGISLATIVE AND TECHNICAL BASES

The contractor shall provide both technical and legal assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, ~~if funding is available~~, in reviewing country-specific laws, regulations, standards and guides utilized in performing regulatory oversight of nuclear and radioactive materials and modifying them to reflect U.S. and IAEA regulations, standards and guides considered appropriate by the regulator. Differences (strengths, weaknesses, omissions, etc.) between the country-specific regulations, standards and guides currently used and those used internationally ~~should~~ shall be identified and recommendations for improvements made. A prioritized plan, as appropriate, should also be developed for revising

Comment [AXP146]: Suggest changing to shall.

the existing country-specific regulatory structure and for the introduction and adoption of new regulatory requirements.

The Contractor shall provide both technical and legal assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. It may, in some cases, also involve experts from other national regulatory authorities. In addition, support ~~should~~ shall be provided to the national regulatory authority for the conduct of seminars for providing information to appropriate in-country entities (end users, licensees, etc.) on the changes made to laws, regulations and guides.

Comment [AXP147]: Suggest changing to shall.

The Contractor shall assist the national regulatory authority and its client organizations in developing and establishing internal procedures needed to consistently implement the developed basic regulations, standards and guides. This will include both technical and administrative procedures.

SUB- ACTIVITY 1.3 NATIONAL REGISTRY

The contractor shall provide technical assistance to select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, if funding is available, in establishing an effective and operational radioactive sources database (registry) and radioactive source registration process. This effort should build upon any existing country-specific database/registry and registration process.

The database/registry should preferably be based upon and/or consistent with international practice. Initial efforts ~~should~~ shall include such activities as reviewing existing country-specific information on radioactive sources, performing field verification as necessary, reviewing existing procedures for populating and maintaining the source database/registry, and reviewing existing technical requirements for the source database/registry. A prioritized plan for enhancing the existing country-specific source database/registry and registration process ~~should~~ shall then be developed and implemented. A plan ~~should~~ shall be developed and implemented for populating the enhanced database/registry with updated information. A means to ensure continued long-term updating and maintenance for both the source database/registry and the registration process ~~should~~ shall also be established.

Comment [AXP148]: Suggest changing to shall.

Comment [AXP149]: Suggest changing to shall.

Comment [AXP1410]: Suggest changing to shall.

Comment [AXP1411]: Suggest changing to shall.

SUB-ACTIVITY 1.4 OPERATIONAL OVERSIGHT

The contractor shall provide technical assistance, ~~contingent on available funds~~, to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, to enhance day-to-day safety and security oversight of radioactive sources. The contractor shall perform an initial assessment of the designated regulatory authority to determine whether effective day-to-day oversight of radioactive sources (taking into account the insights developed during conduct of Activity 1.2 and 1.3 above) can be accomplished from a central location (i.e., a single headquarters office) or whether more localized, regional offices are needed. Based upon the aforementioned needs assessment, the contractor shall establish and/or update physical and technical infrastructure that will serve as a base of the operations for the regional and/or headquarters office(s). Activities to be conducted may include renovation of laboratory and inspection office facilities, upgrading office equipment and communication tools and transportation facilities and providing

basic radiological equipment for inspections of regional user facilities (where applicable).

The contractor shall also provide technical assistance to the national regulatory authority in establishing an initial qualification and re-qualification program and training for regional office and headquarters staff. Activities to be conducted may will include establishing qualifications necessary for all inspection-related staff, developing training programs in the areas of regulation, data base management, control and accounting, physical security, inspection and enforcement, conducting training of key inspection personnel and training for laboratory and inspection equipment maintenance staff.

Comment [BJD212]: Is this work part of the inspection program listed under Work Requirements?

Comment [AXP1413]: We need to specify which activities are certainly required under the requirement. Is this work part of the inspection program.?

SUB-ACTIVITY 1.5 COORDINATION AND WORKSHOPS

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in coordinating ongoing or planned activities with other involved entities. Such coordination could include (though not be necessarily limited to) representatives of other entities with the government of the United States (for example, the Departments of State, and Energy), representatives of entities within other governments (for example, the Russian Federal Nuclear and Radiation Safety Authority and the European Union) and representatives of international organizations (for example, the IAEA, AAEA, and FNRBA). The contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in fostering cooperation between national regulatory authorities.

Comment [AXP1414]: Need to define what coordinating means. What are the minimum activities expected as part of the coordination requirement?"?

Comment [AXP1415]: Define acronyms. Also, please explain what the contractor will do to foster communication.

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in the development and conduct of workshops and training activities, as appropriate. Such activities could include topical workshops at which representatives of several regulatory authorities attend, or workshops at which attendance is limited to one country. The Contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative by providing technical experts to support regulatory missions conducted by the IAEA and the NEA, as appropriate.

Comment [AXP1416]: Can we include specific activities that are certainly required? The activities included do not exhibit certainty to be a definite requirement therefore provides a basis for a "requirements contract" where when the actual need/requirement becomes certain we can provide a specific work requirement and request it via a delivery /task order. Spell out acronym for NEA.

ACTIVITY 2 EXISTING NUCLEAR POWER PLANTS

SUB-ACTIVITY 2.1 PROGRAM PLANNING AND MANAGEMENT

~~Contingent on the availability of funds,~~ the contractor shall assist the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, and their technical support organizations in the establishment of a country-specific long-term plan for performing effective regulatory oversight of existing nuclear power plants, as appropriate. The plan will prioritize areas of work and, define a detailed scope of work, the associated schedule, and level of effort. The contractor shall also participate in the periodic review and update of the long-term plan.

The contractor's project manager will periodically review and develop, in consultation with the ~~NRC project manager~~ NRC Contracting Officer Representative, the short-term objectives of ongoing or planned country-specific work. The short-term objectives and scope of work will depend on a number of factors, including achievements to date, immediate needs and funding availability. The contractor's project manager shall also prepare and periodically update and review with the ~~NRC project manager~~ NRC Contracting Officer Representative the short-term and long-term costs associated with executing the assistance program.

SUB-ACTIVITY 2.2 LEGAL AND REGULATORY BASES

~~Contingent on the availability of funds~~, the contractor shall provide assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides that define the nuclear regulatory body's responsibilities and authorities. Differences (strengths, weaknesses, omissions, etc.) between the country-specific laws, regulations, standards and guides currently used and those used internationally (including both IAEA and NRC) ~~should shall~~ be identified and recommendations for improvements made. A plan of prioritized activities for appropriately revising the existing country-specific legal bases should also be developed, as appropriate.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. The assistance effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 2.3 TECHNICAL BASES

~~Contingent on the availability of funds~~, the contractor shall provide technical assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides used in performing regulatory oversight of existing nuclear power plants. Topical areas such as safety assessment, emergency preparedness and response, operational oversight and inspection, enforcement and decommissioning ~~should shall~~ be included. Differences (strengths, weaknesses, omissions, etc.) between the country-specific law, regulations, standards and guides currently used and those used internationally ~~should shall~~ be identified and recommendations for improvements made. A plan of prioritized activities for revising the existing country-specific regulatory structure and for the introduction and adoption of new regulatory requirements should also be developed, as appropriate.

Comment [AXP1417]: Shall? (is it required to do so or not?) It seems these are minimum areas that shall be included therefore I suggest changing to shall.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. This effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 2.4 COORDINATION AND WORKSHOPS

The Contractor shall assist the ~~NRC Project Manager~~NRC Contracting Officer Representative in coordinating ongoing or planned activities with other involved entities. Such coordination could include (though not be necessarily limited to) representatives of other entities with the government of the United States (for example, the Departments of State, and Energy), representatives of entities within other governments (for example, the Russian Federal Nuclear and Radiation Safety Authority and the European Union) and representatives of international organizations (for example, the IAEA, AAEA, and FNRBA). The contractor shall also assist the ~~NRC Project Manager~~NRC Contracting Officer Representative in fostering cooperation between national regulatory authorities.

Comment [BJD218]: Please explain what the contractor will do to foster communication.

The Contractor shall assist the NRC Project ManagerNRC Contracting Officer Representative in the development and conduct of workshops and training activities, as appropriate. Such activities could include topical workshops at which representatives of several regulatory authorities attend, or workshops at which attendance is limited to one country. The Contractor shall also assist the NRC Project ManagerNRC Contracting Officer Representative by providing technical experts to support regulatory missions conducted by the IAEA and the NEA, as appropriate.

Comment [AXP1419]: Can we include specific activities that are certainly required? The activities included do not exhibit certainty to be a definite requirement therefore provides a basis for a "requirements contract" where when the actual need/requirement becomes certain we can provide a specific work requirement and request it via a delivery /task order.

ACTIVITY 3 NEW NUCLEAR POWER PLANTS

SUB-ACTIVITY 3.1 PROGRAM PLANNING AND MANAGEMENT

Contingent on the availability of funds, the contractor shall assist the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, and their technical support organizations in the establishment of a country-specific long-term plan for performing effective regulatory oversight of planned or potential new nuclear power plants, as appropriate. The plan will prioritize areas of work and, define a detailed scope of work, the associated schedule, and level of effort. The contractor shall also participate in the periodic review and update of the long-term plan.

The contractor's project manager will periodically review and develop, in consultation with the NRC project managerNRC Contracting Officer Representative, the short-term objectives of ongoing or planned country-specific work. The short-term objectives and scope of work will depend on a number of factors, including achievements to date, immediate needs and funding availability. The contractor's project manager shall also prepare and periodically update and review with the NRC project managerNRC Contracting Officer Representative the short-term and long-term costs associated with executing the assistance program.

SUB-ACTIVITY 3.2 LEGAL AND REGULATORY BASES

Contingent on the availability of funds, the contractor shall provide assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides that define the nuclear regulatory body's responsibilities and authorities. Differences (strengths, weaknesses, omissions, etc.) between the country-specific laws, regulations, standards and guides currently used and those used internationally (including both IAEA and NRC) shouldshall be identified and recommendations for improvements made. A plan of prioritized activities for appropriately revising the existing country-specific legal bases should also be developed, as appropriate.

Comment [AXP1420]: Suggest changing to shall.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. The assistance effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 3.3 TECHNICAL BASES

Contingent on the availability of funds, the contractor shall provide technical assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States,

the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides used in performing regulatory oversight of new nuclear power plants. Topical areas such as siting, construction, licensing, and commissioning ~~should~~ shall be included. Differences (strengths, weaknesses, omissions, etc.) between the country-specific law, regulations, standards and guides currently used and those used internationally ~~should~~ shall be identified and recommendations for improvements made. A plan of prioritized activities for revising the existing country-specific regulatory structure and for the introduction and adoption of new regulatory requirements should also be developed, as appropriate.

Comment [AXP1421]: It seems these are minimum areas that shall be included therefore I suggest changing to shall.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. This effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 3.4 COORDINATION AND WORKSHOPS

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in coordinating ongoing or planned activities with other involved entities. Such coordination could include (though not be necessarily limited to) representatives of other entities with the government of the United States (for example, the Departments of State, and Energy), representatives of entities within other governments (for example, the Russian Federal Nuclear and Radiation Safety Authority and the European Union) and representatives of international organizations (for example, the IAEA, AAEA, and FNRBA). The contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in fostering cooperation between national regulatory authorities.

Comment [BJD222]: Please explain what the contractor will do to foster communication.

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in the development and conduct of workshops and training activities, as appropriate. Such activities could include topical workshops at which representatives of several regulatory authorities attend, or workshops at which attendance is limited to one country. The Contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative by providing technical experts to support regulatory missions conducted by the IAEA and the NEA, as appropriate.

Comment [AXP1423]: Can we include specific activities that are certainly required? The activities included do not exhibit certainty to be a definite requirement therefore provides a basis for a "requirements contract" where when the actual need/requirement becomes certain we can provide a specific work requirement and request it via a delivery /task order.

ACTIVITY 4 NEW OR EXISTING RESEARCH REACTORS

SUB-ACTIVITY 4.1 PROGRAM PLANNING AND MANAGEMENT

~~Contingent on the availability of funds,~~ the contractor shall assist the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, and their technical support organizations in the establishment of a country-specific long-term plan for performing effective regulatory oversight of existing new or existing research reactors, as appropriate. The plan will prioritize areas of work and, define a detailed scope of work, the associated schedule, and level of effort. The contractor shall also participate in the periodic review and update of the long-term plan.

The contractor's project manager will periodically review and develop, in consultation with the ~~NRC project manager~~ NRC Contracting Officer Representative, the short-term objectives of ongoing or planned country-specific work. The short-term objectives and scope of work will

depend on a number of factors, including achievements to date, immediate needs and funding availability. The contractor's project manager shall also prepare and periodically update and review with the ~~NRC project manager~~ NRC Contracting Officer Representative the short-term and long-term costs associated with executing the assistance program.

SUB-ACTIVITY 4.2 LEGAL AND REGULATORY BASES

~~Contingent on the availability of funds,~~ the contractor shall provide assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides that define the nuclear regulatory body's responsibilities and authorities. Differences (strengths, weaknesses, omissions, etc.) between the country-specific laws, regulations, standards and guides currently used and those used internationally (including both IAEA and NRC) ~~should~~ shall be identified and recommendations for improvements made. A plan of prioritized activities for appropriately revising the existing country-specific legal bases should also be developed, as appropriate.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. The assistance effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 4.3 TECHNICAL BASES

~~Contingent on the availability of funds,~~ the contractor shall provide technical assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides used in performing regulatory oversight of new or existing research reactors. Topical areas such as siting, design, construction, safety assessment, operation, emergency preparedness and response, operational oversight and inspection, enforcement and decommissioning ~~should~~ shall be included. Differences (strengths, weaknesses, omissions, etc.) between the country-specific law, regulations, standards and guides currently used and those used internationally ~~should~~ shall be identified and recommendations for improvements made. A plan of prioritized activities for revising the existing country-specific regulatory structure and for the introduction and adoption of new regulatory requirements should also be developed, as appropriate.

Comment [AXP1424]: Shall? (is it required to do so or not?) It seems these are minimum areas that shall be included therefore I suggest changing to shall.

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. This effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 4.4 COORDINATION AND WORKSHOPS

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in coordinating ongoing or planned activities with other involved entities. Such coordination could include (though not be necessarily limited to) representatives of other entities with the government of the United States (for example, the Departments of State, and Energy),

representatives of entities within other governments (for example, the Russian Federal Nuclear and Radiation Safety Authority and the European Union) and representatives of international organizations (for example, the IAEA, AAEA, and FNRBA). The contractor shall also assist the NRC Project Manager/NRC Contracting Officer Representative in fostering cooperation between national regulatory authorities.

The Contractor shall assist the NRC Project Manager/NRC Contracting Officer Representative in the development and conduct of workshops and training activities, as appropriate. Such activities could include topical workshops at which representatives of several regulatory authorities attend, or workshops at which attendance is limited to one country. The Contractor shall also assist the NRC Project Manager/NRC Contracting Officer Representative by providing technical experts to support regulatory missions conducted by the IAEA and the NEA, as appropriate.

Comment [AXP1425]: Can we include specific activities that are certainly required? The activities included do not exhibit certainty to be a definite requirement therefore provides a basis for a "requirements contract" where when the actual need/requirement becomes certain we can provide a specific work requirement and request it via a delivery /task order.

ACTIVITY 5 URANIUM RECOVERY FACILITIES

SUB-ACTIVITY 5.1 PROGRAM PLANNING AND MANAGEMENT

Contingent on the availability of funds, the contractor shall assist the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, and their technical support organizations in the establishment of a country-specific long-term plan for performing effective regulatory oversight of uranium recovery facilities and activities, as appropriate. The plan will prioritize areas of work and, define a detailed scope of work, the associated schedule, and level of effort. The contractor shall also participate in the periodic review and update of the long-term plan.

The contractor's project manager will periodically review and develop, in consultation with the NRC project manager/NRC Contracting Officer Representative, the short-term objectives of ongoing or planned country-specific work. The short-term objectives and scope of work will depend on a number of factors, including achievements to date, immediate needs and funding availability. The contractor's project manager shall also prepare and periodically update and review with the NRC project manager/NRC Contracting Officer Representative the short-term and long-term costs associated with executing the assistance program.

SUB-ACTIVITY 5.2 LEGAL AND REGULATORY BASES

Contingent on the availability of funds, the contractor shall provide assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides that define the nuclear regulatory body's responsibilities and authorities. Differences (strengths, weaknesses, omissions, etc.) between the country-specific laws, regulations, standards and guides currently used and those used internationally (including both IAEA and NRC) should shall be identified and recommendations for improvements made. A plan of prioritized activities for appropriately revising the existing country-specific legal bases should also be developed, as appropriate.

Comment [AXP1426]: Shall? (is it required to do so or not?)

Comment [AXP1427]: Shall? (is it required to do so or not?)

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. The assistance effort

may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 5.3 TECHNICAL BASES

~~Contingent on the availability of funds~~, the contractor shall provide technical assistance to the nuclear regulatory authorities in select countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia, in reviewing country-specific laws, regulations, standards and guides used in performing regulatory oversight of uranium recovery facilities and activities. Topical areas such as site characterization, safeguards, safety assessment, operational oversight and inspection, and enforcement and decommissioning ~~should~~ shall be included. Differences (strengths, weaknesses, omissions, etc.) between the country-specific law, regulations, standards and guides currently used and those used internationally ~~should~~ shall be identified and recommendations for improvements made. A plan of prioritized activities for revising the existing country-specific regulatory structure and for the introduction and adoption of new regulatory requirements ~~should~~ also be developed, as appropriate.

Comment [AXP1428]: Shall? (is it required to do so or not?) It seems these are minimum areas that shall be included therefore I suggest changing to shall.

Comment [AXP1429]: Shall? (is it required to do so or not?)

The Contractor shall provide assistance to the national regulatory authority in modifying nuclear-related laws, regulations, standards and guides to incorporate recommendations made as a result of the aforementioned review, as appropriate. This effort will be performed in cooperation with both the national regulatory authority and other in-country experts. This effort may, in some cases, also involve experts from other national regulatory authorities.

SUB-ACTIVITY 5.4 COORDINATION AND WORKSHOPS

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in coordinating ongoing or planned activities with other involved entities. Such coordination could include (though not be necessarily limited to) representatives of other entities with the government of the United States (for example, the Departments of State, and Energy), representatives of entities within other governments (for example, the Russian Federal Nuclear and Radiation Safety Authority and the European Union) and representatives of international organizations (for example, the IAEA, AAEA, and FNRBA). The contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in fostering cooperation between national regulatory authorities.

The Contractor shall assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative in the development and conduct of workshops and training activities, as appropriate. Such activities ~~could~~ include topical workshops at which representatives of several regulatory authorities attend, or workshops at which attendance is limited to one country. The Contractor shall also assist the ~~NRC Project Manager~~ NRC Contracting Officer Representative by providing technical experts to support regulatory missions conducted by the IAEA and the NEA, as appropriate.

Comment [AXP1430]: Can we include specific activities that are certainly required? The activities included do not exhibit certainty to be a definite requirement therefore provides a basis for a "requirements contract" where when the actual need/requirement becomes certain we can provide a specific work requirement and request it via a delivery /task order.

ACTIVITY 6 PARTICIPANT TRAVEL AND CONFERENCES

SUB-ACTIVITY 6.1 PARTICIPANT TRAVEL

The contractor shall make and pay for travel-related expenses for NRC-invited travelers (often from international locations). This includes, but is not limited to, making and paying for airline, train, bus, etc. reservations, making and paying for hotel reservations and providing NRC-invited

Comment [AXP1431]: Define.

travelers with funds to cover meals and incidental expenses. The contractor will be responsible for ensuring that the NRC-invited travelers receive, at no cost to the traveler, their airline, train, bus, etc. tickets no later than three business days before travel starts. The contractor will be responsible for paying, no later than the date travel starts, lodging costs for each NRC staff and/or NRC-invited traveler (including lodging outside of the United States) directly to the hotel, by providing sufficient funds to the traveler to cover such costs or by other appropriate means. The contractor will also be responsible for providing, no later than the date travel starts, each NRC-invited traveler with funds to cover meals and incidental expenses. In some instances, it may be necessary for contractor personnel to also travel (both domestically and internationally) as part of this effort, in order to ensure and oversee the proper management of the travel and associated events. The contractor can expect to support, on average, two to three NRC-invited travelers per month.

Comment [AXP1432]: Provide the authority that gives the NRC the right to spend appropriated funds in this type of activities for people that aren't federal employees.

The contractor shall ensure that all travel-related arrangements and payments are performed consistent with both the Federal Travel Regulations (as outlined in 41 Code of Federal Regulations (CFR), Chapters 300 through 304) and USNRC's travel regulations (as outlined in NRC Management Directive 14.1 "Official Temporary Duty Travel"), as appropriate.

Comment [AXP1433]: Do we have the locations from-to travel is going to occur and the estimated timeframe the travel will last? Was this information considered in the development of the IGCE? How will the request will be communicated to the contractor? Who is going to communicate it (COR)? When is it going to be communicated (how far in advance)?

The contractor will be responsible for developing and maintaining detailed instructions that describe the process of how NRC-invited travelers will receive these support functions. These instructions shall include, but not be limited to: identification of the information the contractor needs from each NRC-invited, creation of a form for easy submittal of this information, description of how airline, train, bus, etc. reservations will be made and paid for, description of how lodging arrangements will be made and paid for, description of how funds for meals and incidental expenses will be provided for, and identification of appropriate points of contact for each task. These detailed instructions should be provided to each NRC-invited traveler within two business days after NRC identifies the traveler to the contractor.

Comment [BJD234]: Will the contractor submit the instructions to the COR for approval prior to use?

The contractor will be responsible for developing and maintaining detailed procedures and records for tracking and accounting for all incurred expenses. Records shall be sufficiently detailed to allow periodic review and/or audit by USNRC.

Comment [BJD235]: Will the contractor submit the procedures to the COR for approval prior to use?

SUB-ACTIVITY 6.2 CONFERENCES

The contractor shall make and pay for conference-related expenses for NRC-sponsored international conferences (including conferences held both inside and outside the United States). This includes, but is not limited to, making and paying for meeting rooms, ground transportation services and translation and interpretation services, as appropriate. In some instances, it may be necessary for contractor personnel to also travel (both domestically and internationally) as part of this effort.

Comment [AXP1436]: How will the requirements will be communicated to the contractor? Who is going to communicate them and when (how far in advance)? This seems to be very general therefore I understand that delivery orders will be issued to provide the specific requirements when the need is more clear to define.

The contractor shall ensure that all conference-related arrangements and payments are performed consistent with all applicable laws, rules and regulations (including those of the General Services Administration, for example).

Comment [BJD237]: The solicitation will include the link to the GSA website where the contractor will be able to search.

The contractor will also be called upon to support NRC-invited international travelers (as outlined above) traveling to NRC-sponsored international conferences. The contractor shall be available to support all associated logistics by working closely with NRC staff and NRC-invited travelers, in both domestic and international locations. Travel shall be placed in accordance with relevant Federal travel regulations. The contractor can expect to support four to five

conferences per year with an average of 25 participants per conference.

The contractor will be responsible for developing and maintaining detailed procedures and records for tracking and accounting for all incurred expenses. Records shall be sufficiently detailed to allow periodic review and/or audit by USNRC.

5 KEY OUTCOMES AND MILESTONES

Comment [AXP1438]: Whose outcomes? Is the contractor accountable for all these outcomes and milestones?

ACTIVITY 1 RADIOACTIVE SOURCES

SUB-ACTIVITY 1.2 LEGISLATIVE AND TECHNICAL BASES

The key anticipated outcome for sub-activity 1.2 above is for each national regulatory authority to enact nuclear-related laws, rules and regulations that are consistent with international standards. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment; the start and completion of the assessment; the start and completion of drafting proposed revisions to existing laws, rules and regulations; submission of the revised laws, rules and regulations to the appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.); and the adoption and promulgation of the revised laws, rules and regulations. Actual completion dates will be developed on a country-specific basis.

Comment [AXP1439]: Is there a list of the specific countries for which the work will be done and expected time frames it shall be commenced-finished?

SUB-ACTIVITY 1.3 NATIONAL REGISTRY

The key outcome for sub-activity 1.3 above is for each national regulatory authority to have an effective country-specific national registry of radioactive sources. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to develop such a registry, the actual start of inventorization efforts (data gathering), data entry into an appropriate computer database, and completion and adoption of a national registry. Actual completion dates will be developed on a country-specific basis.

SUB-ACTIVITY 1.4 OPERATIONAL OVERSIGHT

The key outcome for sub-activity 1.4 above is for each national regulatory authority to have effective day-to-day oversight of radioactive sources within their respective country. Key milestones needed to achieve this outcome include starting and completing an assessment of whether effective oversight can be accomplished from a central office or whether regional offices are needed, developing a plan and schedule for updating physical and technical infrastructure at the central office and/or regional office(s) and initiation and completion of physical and technical infrastructure upgrades. Actual completion dates will be developed on a country-specific basis.

ACTIVITY 2 EXISTING NUCLEAR POWER PLANTS

SUB-ACTIVITY 2.2 LEGAL AND REGULATORY BASES

The key outcome for sub-activity 2.2 above is for each national regulatory authority to have the legal authority needed to exercise effective, independent oversight of existing nuclear power plants consistent with international standards. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific

assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing laws, rules and regulations, submission of the revised laws, rules and regulations to the appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised laws, rules and regulations. Actual completion dates will be developed on a country-specific basis.

SUB-ACTIVITY 2.3 TECHNICAL BASES

The key outcome for sub-activity 2.3 above is for each national regulatory authority to have technical requirements consistent with international standards covering safety assessment, emergency preparedness and response, operational oversight and inspection, enforcement and decommissioning for existing nuclear power plants. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing technical requirements, submission of the revised requirements to appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised technical requirements. Actual completion dates will be developed on a country-specific basis.

ACTIVITY 3 NEW NUCLEAR POWER PLANTS

SUB-ACTIVITY 3.2 LEGAL AND REGULATORY BASES

The key outcome for sub-activity 3.2 above is for each national regulatory authority to have the legal authority needed to exercise effective, independent oversight of the design, construction and initial operation of new nuclear power plants consistent with international standards. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing laws, rules and regulations, submission of the revised laws, rules and regulations to the appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised laws, rules and regulations. Actual completion dates will be developed on a country-specific basis.

SUB-ACTIVITY 3.3 TECHNICAL BASES

The key outcome for sub-activity 3.3 above is for each national regulatory authority to have technical requirements consistent with international standards covering the design, safety assessment, construction, licensing and initial operation of new nuclear power plants. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing technical requirements, submission of the revised requirements to appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised technical requirements. Actual completion dates will be developed on a country-specific basis.

ACTIVITY 4 NEW OR EXISTING RESEARCH REACTORS

SUB-ACTIVITY 4.2 LEGAL AND REGULATORY BASES

The key outcome for sub-activity 4.2 above is for each national regulatory authority to have the legal authority needed to exercise effective, independent oversight of new or existing research reactors consistent with international standards. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing laws, rules and regulations, submission of the revised laws, rules and regulations to the appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised laws, rules and regulations. Actual completion dates will be developed on a country-specific basis.

SUB-ACTIVITY 4.3 TECHNICAL BASES

The key outcome for sub-activity 4.3 above is for each national regulatory authority to have technical requirements consistent with international standards covering the design, safety assessment, construction, licensing, inspection, and operation of new or existing research reactors. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing technical requirements, submission of the revised requirements to appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised technical requirements. Actual completion dates will be developed on a country-specific basis.

ACTIVITY 5 URANIUM RECOVERY FACILITIES

SUB-ACTIVITY 5.2 LEGAL AND REGULATORY BASES

The key outcome for sub-activity 5.2 above is for each national regulatory authority to have the legal authority needed to exercise effective, independent oversight of uranium recovery facilities and activities consistent with international standards. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing laws, rules and regulations, submission of the revised laws, rules and regulations to the appropriate entity(ies) for review (regulatory authority for rules and regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised laws, rules and regulations. Actual completion dates will be developed on a country-specific basis.

SUB-ACTIVITY 5.3 TECHNICAL BASES

The key outcome for sub-activity 5.3 above is for each national regulatory authority to have technical requirements consistent with international standards covering site characterization, safeguards, safety assessment, operational oversight and inspection, enforcement and decommissioning of uranium recovery facilities and activities. Key milestones needed to achieve this outcome include agreement with the national regulatory authority to conduct a detailed country-specific assessment, the start and completion of the assessment, the start and completion of drafting proposed revisions to existing technical requirements, submission of the revised requirements to appropriate entity(ies) for review (regulatory authority for rules and

regulations, Parliament for laws, etc.) and the adoption and promulgation of the revised technical requirements. Actual completion dates will be developed on a country-specific basis.

6. ANTICIPATED SCHEDULE AND DELIVERABLES

The contractor shall prepare and submit a quarterly status report to the NRC project manager~~NRC Contracting Officer Representative~~. This report shall contain such information as:

Comment [AXP1440]: Explain the reason it is not being required in a monthly basis.

Financial Status

- Total Estimated Contract Amount;
- Total Funds Obligated to Date;
- Total Costs Incurred in the Reporting Period;
- Detailed Costs Incurred During the Reporting Period;
- Balance of Obligations Remaining; and
- Balance of Funds Needed to Complete Contract/Task Order.

Technical Progress

- Efforts Completed/Schedule Milestone Information;
- Work Performed During the Reporting Period;
- Plans for Next Reporting Period; and
- Anticipated Problem Areas.

ACTIVITY 1 RADIOACTIVE SOURCES

The contractor shall begin efforts as specified in sub-activities 1.2, 1.3, 1.4 and 1.5 for each regulatory authority specifically designated by NRC within 60 days after acceptance of this task. The regulatory authorities of Guatemala, Costa Rica, Panama, Colombia, Bolivia, Paraguay, Uruguay, Zambia, Uganda, Jordan, Egypt, Mauritius, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan shall be considered the initial regulatory authorities for provision of support by this task. However, the NRC project manager~~NRC Contracting Officer Representative~~ may both designate additional regulatory authorities for provision of support by this task and/or remove regulatory authorities for provision of support by this task. Provision of support to any additional regulatory authorities designated by the NRC project manager~~NRC Contracting Officer Representative~~ shall commence within 60 days after designation by the NRC project manager~~NRC Contracting Officer Representative~~. Termination of support to any regulatory authority designated by the NRC project manager~~NRC Contracting Officer Representative~~ shall be complete within 60 days after designation by the NRC project manager~~NRC Contracting Officer Representative~~.

The contractor's project manager shall also provide the NRC project manager~~NRC Contracting Officer Representative~~ with copies of any reports, assessments, laws, regulations and/or analyses developed while performing sub-activities 1.2, 1.3, 1.4 and 1.5. These reports, assessments, laws, regulations and/or analyses shall be considered deliverables under this task. This information shall be provided within 30 days after acceptance by the contractor.

Comment [AXP1441]: How is acceptance going to be documented in order to determine the compliance of this requirement? (by issuance of task order?)

ACTIVITY 2 EXISTING NUCLEAR POWER PLANTS

The contractor shall begin efforts as specified in sub-activities 2.2 and 2.3 for each regulatory authority specifically designated by NRC within 60 days after acceptance of this task. The

regulatory authorities of Armenia, Ukraine, Japan, China and South Africa shall be considered the initial regulatory authorities for provision of support by this task. However, the NRC project managerNRC Contracting Officer Representative may both designate additional regulatory authorities for provision of support by this task and/or remove regulatory authorities for provision of support by this task. Provision of support to any additional regulatory authorities designated by the NRC project managerNRC Contracting Officer Representative shall commence within 60 days after designation by the NRC project managerNRC Contracting Officer Representative. Termination of support to any regulatory authority designated by the NRC project managerNRC Contracting Officer Representative shall be complete within 60 days after designation by the NRC project managerNRC Contracting Officer Representative.

The contractor's project manager shall also provide the NRC project managerNRC Contracting Officer Representative with copies of any reports, assessments, laws, regulations and/or analyses developed while performing sub-activities 2.2 and 2.3. These reports, assessments, laws, regulations and/or analyses shall be considered deliverables under this task. **This information shall be provided within 30 days after acceptance by the contractor.**

Comment [AXP1442]: How is acceptance going to be documented in order to determine the compliance of this requirement? (by issuance of task order?)

ACTIVITY 3 NEW NUCLEAR POWER PLANTS

The contractor shall begin efforts as specified in sub-activities 3.2 and 3.3 for each regulatory authority specifically designated by NRC within 60 days after acceptance of this task. The regulatory authorities of Armenia, South Africa, Chile, Egypt, Jordan, Thailand, Vietnam, Philippines, Indonesia, Malaysia, Poland and Bangladesh shall be considered the initial regulatory authorities for provision of support by this task. However, the NRC project managerNRC Contracting Officer Representative may both designate additional regulatory authorities for provision of support by this task and/or remove regulatory authorities for provision of support by this task. Provision of support to any additional regulatory authorities designated by the NRC project managerNRC Contracting Officer Representative shall commence within 60 days after designation by the NRC project managerNRC Contracting Officer Representative. Termination of support to any regulatory authority designated by the NRC project managerNRC Contracting Officer Representative shall be complete within 60 days after designation by the NRC project managerNRC Contracting Officer Representative.

The contractor's project manager shall also provide the NRC project managerNRC Contracting Officer Representative with copies of any reports, assessments, laws, regulations and/or analyses developed while performing sub-activities 3.2 and 3.3. These reports, assessments, laws, regulations and/or analyses shall be considered deliverables under this task. **This information shall be provided within 30 days after acceptance by the contractor.**

Comment [AXP1443]: How is acceptance going to be documented in order to determine the compliance of this requirement? (by issuance of task order?)

ACTIVITY 4 NEW OR EXISTING RESEARCH REACTORS

The contractor shall begin efforts as specified in sub-activities 4.2 and 4.3 for each regulatory authority specifically designated by NRC within 60 days after acceptance of this task. The regulatory authorities of Jordan, Thailand, Vietnam, Philippines, Indonesia, Malaysia, and Bangladesh shall be considered the initial regulatory authorities for provision of support by this task. However, the NRC project managerNRC Contracting Officer Representative may both designate additional regulatory authorities for provision of support by this task and/or remove regulatory authorities for provision of support by this task. Provision of support to any additional regulatory authorities designated by the NRC project managerNRC Contracting Officer Representative shall commence within 60 days after designation by the NRC project

~~manager~~NRC Contracting Officer Representative. Termination of support to any regulatory authority designated by the ~~NRC project manager~~NRC Contracting Officer Representative shall be complete within 60 days after designation by the ~~NRC project manager~~NRC Contracting Officer Representative.

The contractor's project manager shall also provide the ~~NRC project manager~~NRC Contracting Officer Representative with copies of any reports, assessments, laws, regulations and/or analyses developed while performing sub-activities 4.2 and 4.3. These reports, assessments, laws, regulations and/or analyses shall be considered deliverables under this task. This information shall be provided within 30 days after acceptance by the contractor.

Comment [AXP1444]: How is acceptance going to be documented in order to determine the compliance of this requirement? (by issuance of task order?)

ACTIVITY 5 URANIUM RECOVERY FACILITIES

The contractor shall begin efforts as specified in sub-activities 5.2 and 5.3 for each regulatory authority specifically designated by NRC within 60 days after acceptance of this task. The regulatory authorities of Mongolia, Kazakhstan, Uzbekistan, Denmark and Namibia shall be considered the initial regulatory authorities for provision of support by this task. However, the ~~NRC project manager~~NRC Contracting Officer Representative may both designate additional regulatory authorities for provision of support by this task and/or remove regulatory authorities for provision of support by this task. Provision of support to any additional regulatory authorities designated by the ~~NRC project manager~~NRC Contracting Officer Representative shall commence within 60 days after designation by the ~~NRC project manager~~NRC Contracting Officer Representative. Termination of support to any regulatory authority designated by the ~~NRC project manager~~NRC Contracting Officer Representative shall be complete within 60 days after designation by the ~~NRC project manager~~NRC Contracting Officer Representative.

The contractor's project manager shall also provide the ~~NRC project manager~~NRC Contracting Officer Representative with copies of any reports, assessments, laws, regulations and/or analyses developed while performing sub-activities 5.2 and 5.3. These reports, assessments, laws, regulations and/or analyses shall be considered deliverables under this task. This information shall be provided within 30 days after acceptance by the contractor.

Comment [AXP1445]: How is acceptance going to be documented in order to determine the compliance of this requirement? (by issuance of task order?)

7. ANTICIPATED CONTRACTOR MEETINGS AND TRAVEL

The contractor shall maintain effective communication with both the ~~NRC project manager~~NRC Contracting Officer Representative and the national regulatory authority project managers. Coordination meetings between the contractor, the ~~NRC project manager~~NRC Contracting Officer Representative and national regulatory authority project managers throughout the duration of this task order are anticipated. Meetings will primarily be held at NRC offices in Rockville, Maryland, and at corresponding designated regulatory authority counterpart offices. Meetings will be scheduled on an as needed basis. For planning purposes, it should be assumed that two contractor staff participate in bilateral project review meetings two times per year for each country receiving assistance from NRC, that contractor staff support six expert missions per year conducted by IAEA or NEA and that contractor staff conduct six workshops and training activities per year. In addition, the ~~NRC project manager~~NRC Contracting Officer Representative and the national regulatory authority project managers may choose to periodically meet at the contractor's facility to review progress and to provide input into the project.

Comment [BJD246]: Will the COR provide the contractor with a list of the national regulatory authority project managers?

8. NRC FURNISHED MATERIAL

Materials under this task order will be provided on an as needed basis per mutual agreement.

Comment [AXP1447]: What type of materials?

9. CONTRACTOR ACQUIRED MATERIAL

Materials under this task order will be acquired on an as needed basis.

Comment [AXP1448]: What type of materials do we anticipate may be require for performance?

10. PERSONNEL QUALIFICATIONS REQUIRED

Personnel performing work under this contract shall have pertinent technical experience in one or more of the following areas: nuclear, mechanical, civil, electrical or chemical engineering, regulation of nuclear facilities or activities, health physics, and project management. Personnel should also have expertise relative to nuclear technology and nuclear and/or radioactive materials commonly utilized in countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia.

Comment [AXP1449]: Is this definitively required? If yes, change to shall.

Comment [BJD250]: Are there any minimum years of experience required?

Comment [AXP1451]: Are any minimum requirements to meet (e.g. education)?

The contractor shall provide a project manager and technical team members as appropriate for the performance of each task order issued under this contract. Technical team members must possess the capability to address highly complex technical issues related to nuclear safety and security and have a thorough knowledge of NRC's approach to performing safety and security reviews and evaluations. Team members must be available to stay for extended periods in countries of the Commonwealth of Independent States, the Middle East, Europe, Africa and Asia to work with indigenous technical specialists. It is desirable for some technical team members to be fluent (both spoken and written) in languages commonly used in countries of the Commonwealth of Independent States, the Middle East, Europe, Africa, Latin America and Asia.

11. SUBCONTRACT SUPPORT

In the event that specific tasks will be subcontracted or outsourced to in-country technical support organizations or individual experts, the contractor's project manager shall establish a mechanism that (1) ensures that any subcontracted, in-country tasks are focused on specific objectives to be accomplished, (2) identifies problems with established schedules, costs and overall budget, (3) provides updates and impacts to the contractor spending plan, (4) ensures the quality of deliverables so that all information and data are accurate and complete and (5) shall provide a plan/procedure that ensures all foreign subcontractor support costs are contracted at a fair and reasonable price. This plan/procedure shall be approved by the NRC program manager and contracting officer. Non-travel subcontract work and costs, of greater than \$3,000 (three thousand dollars), must be approved by the NRC project manager, NRC Contracting Officer Representative and contractor officer before the subcontract is awarded. If deemed necessary for specific in-country locations, the contractor's project manager may subcontract specific project management tasks. The contractor's project manager shall also review and approve any data, documentation, or reports generated by subcontracted tasks prior to inclusion in final contract deliverables to be provided to the NRC project manager, NRC Contracting Officer Representative.

Comment [AXP1452]: Define. Did you meant Contracting Officer (CO)?

12. PERIOD OF PERFORMANCE

The period of performance for the work specified in this SOW shall commence on the date of contract award and shall continue for 3 years. There shall be one 2-year option period for a total contract length of 5 years.

SECTION J – ATTACHMENT 2

Appendix A: Acronyms

Abbreviation	Definition/Formal Name
ADAMS	Agency-wide Documents Access and Management System
API	Application Programming Interface
ASP	Active Server Pages
C&A	Certification and Accreditation
CCB	Configuration Control Board
CI	Configuration Item
CIO	Chief Information Officer
CISO	Chief Information Security Officer
CM	Configuration/Change Management
CMDB	Configuration Management Data Base
CMP	Configuration Management Plan
CNSS	Committee on National Security Systems
COTB	Computer Operations and Telecommunications Branch
COTS	Commercial-off-the-shelf
CR	Change Request
CSO	Computer Security Office
CTF	Consolidated Test Facility
DAA	Designated Approving Authority
EA	Enterprise Architecture
ECCB	Environmental Configuration Control Board
ET	Eastern Time
FA1	Centralized Environment Support Functional Area
FA2	M&O of Legacy Systems Functional Area
FA3	Requirements and Design Functional Area
FA4	Legacy Modernization and New Development Functional Area
FA5	M&O of Modernized Systems Functional Area
FAR	Federal Acquisition Regulation
FIPS	Federal Information Processing Standards
FISMA	Federal Information Security Management Act of 2002
GB	Gigabyte
GFE	Government Furnished Equipment
GSA	U.S. General Services Administration
HLD	High Level Design
HQ	Headquarters
HR	Human Resources
HTML	HyperText Markup Language
HW	Hardware
I/O	Input/Output
ICOD	Infrastructure Computer Operations Division

SECTION J – ATTACHMENT 2

Abbreviation	Definition/Formal Name
IDIQ	Indefinite-Delivery, Indefinite-Quantity
ISA	Internet Security and Acceleration
ISO	International Organization for Standardization
ISSO	Information System Security Officer
IT	Information Technology
IP	Interface Protocol
ISSO	Information System Security Officer
KEDB	Known Error Database
KVM	Keyboard Video Monitor
LAN	Local Area Network
LLD	Low Level Design
Mb	Megabyte
MD	Management Directive
M&O	Maintenance and Operations
MOM	Maintenance, Operation, and Modernization
MPKI	Managed Private Key Infrastructure
MS	Microsoft
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
OCR	Optical Character Recognition
OIG	Office of the Inspector General
OIS	Office of Information Services
OMB	Office of Management and Budget
PC	Personal Computer
PMM	Project Management Methodology
PO	Project Officer
POA&M	Plan of Action and Milestones
POE	Production Operating Environment
PPM	Principal Period of maintenance
QAP	Quality Assurance Program
RAM	Random Access Memory
RDBMS	Relational Database Management System
RUP	Rational Unified Process
SIG	Safegaurds Information
SITSO	Senior Information Security Technology Officer
SLA	Service Level Agreement
SLR	Service Level Requirement
SOW	Statement of Work
SP	Service Provider
SPMS	Space and Property Management System

SECTION J – ATTACHMENT 2

Abbreviation	Definition/Formal Name
SSP	Shared Services Provider
ST&E	Security Test and Evaluation
SUNSI	Sensitive Unclassified Non-Safeguards Information
SW	Software
T&E	Test and Evaluation
TAC	Technology Assessment Center
TCP	Transmission Control Protocol
TEM	Telecom Expense Management
TIC	Trusted Internet Connection
TSC	Telecommunications Service Center
TT	Telecommunications Team
UAT	User Acceptance Testing
VOB	Versioned Object Base
VPN	Virtual Private Network
VTC	Video Tele Conference
WAN	Wide Area Network
WAPS	Wireless Access Points

SECTION J – ATTACHMENT 2
Appendix B: RESERVED

SECTION J – ATTACHMENT 2

Appendix C: Constraints

Rules, Regulations, Constraints, Laws, Standards, Procedures, and Guidelines

#	Abbreviation	Full Name
1	CRS Guide	"OIS Application Change Request System Guide using Rational ClearQuest", http://www.internal.nrc.gov/pmm/PMM%20Methodology/guidances/supportingmaterials/resources/OISApplicationChangeRequestSystemGuide.doc
2	MCMP	"NRC Master Configuration Management Plan", http://www.internal.nrc.gov/pmm/PMM%20Methodology/guidances/supportingmaterials/resources/Master%20NRC%20CM%20Plan.doc
3	MD 2.3	NRC Management Directive 2.3, "Telecommunications", http://www.nrc.gov/reading-rm/collections/management-directives/
4	MD 2.6	NRC Management Directive 2.6, "Information Technology Infrastructure", http://www.nrc.gov/reading-rm/collections/management-directives/
5	MD 2.7	NRC Management Directive 2.7, "Personal Use of Information Technology", http://www.nrc.gov/reading-rm/collections/management-directives/
6	MD 2.8	NRC Management Directive 2.8, "Project Management Methodology," http://www.nrc.gov/reading-rm/collections/management-directives/
7	MD 12.1	NRC Management Directive 12.1, "NRC Facility Security Program", http://www.nrc.gov/reading-rm/collections/management-directives/
8	MD 12.3	NRC Management Directive 12.3, "NRC Personnel Security Program", http://www.nrc.gov/reading-rm/collections/management-directives/
9	MD 12.4	NRC Management Directive 12.4, "NRC Telecommunications Systems Security Program", http://www.nrc.gov/reading-rm/doc-collections/management-directives/
10	MD 12.5	NRC Management Directive 12.5, "NRC Automated Information Security Program", http://www.nrc.gov/reading-rm/doc-collections/management-directives/
11	MD 12.7	NRC Management Directive 12.7, "NRC Safeguards Information Security Program", http://www.nrc.gov/reading-rm/doc-collections/management-directives/
12	NIST SP 800-37	National Institute of Standards and Technology Special Publication 800-37 Revision 1, "Risk Management Framework for Information Systems: A Security Life Cycle Approach", http://csrc.nist.gov/publications/index.html
13	NIST 800-53	National Institute of Standards and Technology Special Publication 800-53, "Recommended Practice for Security and Privacy Controls for Information Systems Organizations"

SECTION J – ATTACHMENT 2

#	Abbreviation	Full Name
		Federal Information Systems and Organizations” http://csrc.nist.gov/publications/index.html
14	NIST 800-53A	National Institute of Standards and Technology Special Publication 800-53A, “Guide for Controls in Federal Information Systems” http://csrc.nist.gov/publications/index.html
15	NIST 800-60	National Institute of Standards and Technology Special Publication 800-60, “Guide for Information and Information Systems to Security Categories” http://csrc.nist.gov/publications/index.html
16	FIPS 140-2	Federal Information Processing 140-2, “Security Requirements for Cryptographic Modules” http://csrc.nist.gov/publications/PubsFIPS.html
17	FIPS 199	Federal Information Processing 199, “Standards for Security Categorization of Federal Information Systems”, http://csrc.nist.gov/publications/PubsFIPS.html
18	FIPS 200	Federal Information Processing 200, “Minimum Security Requirements for Federal Information Systems”, http://csrc.nist.gov/publications/PubsFIPS.html
19	RUP 7.0	IBM Rational Unified Process Version 7.0 - http://www.ibm.com/software/awdtools/rup/
20	PMM	NRC Project Management Methodology (MD 2.8) - http://www.internal.nrc.gov/pmm

SECTION J – ATTACHMENT 2

Appendix D: RESERVED

SECTION J – ATTACHMENT 2

Appendix E: Application List

Applications include, but are not limited to the following.

Acronym	Name	Platform	Technology 1	Technology 2	Technology 3	Technology 4	Existing Databases
AAMS	Automated Acquisition Management System	Web-based	SQL Reporting Service	IIS			SQL Ser
ACCESS	Automated Access Control and Computer Enhanced Security System	Key-Card System					
ACMIS	GSA Acquisition Career Management Info System		Externally Hosted				
ACRS-ADMS	ACRS/ACNW Zylmage		ZyFind Zylmage				
ACS	Authentication and Credentialing Service	Client Server	Verisign MPKI	Sun Identity Manager	Intercede MyID		SQL Ser
AD	Allegations Database						
ADAMS	Agencywide Document Access and Management System	Client Server	Visual Basic 6.0	IBM Content Services (FileNet)	Visual Studio 2005 .NET		SQL Ser
ADAMS-P8	ADAMS P8	Web	FileNet	WebSphere	Workstation XT		SQL Ser
AFAS	Archival Facility Activity System	Client Server	Visual Basic 6.0	ZyFind Zylmage			
AFPS	Allowance and Financial Plan System	PC-LAN	MS Office Suite				
AITS	Action Item Tracking System	See EDATS					

SECTION J – ATTACHMENT 2

AMS	Allegation Management System	Client Server	PowerBuilder 10.2				Sybase ASE 15
ASAP	Automated Standard Application for Payment System		Externally Hosted				
ASPDB	Accident Sequence Precursor Database	Web-based	ColdFusion				
ATMIS	Action Tracking Management Information System	Client Server	Outlook 2007 Interface	To be replaced by EDATS			MS Acco
BASS	Business Application Support System	This is a Dev, Test, and Hosting Environment for nine systems using PowerBuilder, Coldfusion and S technologies.					
BCD	Business Card Database						
BFS	Budget Formulation System	Client Server					Oracle Hyperion Planning
BWS	Babcock & Wilcox Simulator	This is a Simulator. Environment is size of an auditorium.					
CAS	Cost Accounting System	Pentium IV	This is an umbrella system, made up of different platforms. Scheduled to be replaced I				
CAS	Cost Accounting System	Sparc					
CCFDB	Commmon Cause Failure Database	PC-LAN	Delphi Pascal				Sage
CES	Combustion Engineering Simulator	This is a Simulator. Environment is size of an auditorium.					
CHC	Criminal History Check System	Finger printing					
CMMS	Computerized Management Maintenance Service						

SECTION J – ATTACHMENT 2

CMS (NSIR)	Crisis Management System	This is a Top Secret Communication System connected to The Defense Information Services Network Communications System. This is a Sensitive Compartmented Information Facility (SCIF).					
CMSW	Case Management System - Web	CMS is an umbrella title that encompasses the following subsystems. Enforcement Action Tracking & Management System (AMS), and Office of Investigations Management Information System (OIMIS).					
COMEDO	Commission EDO/IG Budget Tracking System	PC/LAN SHARED	Clipper 5.x				Dbase 3
CPS (Excel)	Capitalized Property System (Excel)		Excel Application				
CSDS	Control Scenarios Development System	The Control Scenarios Development System will comprise three subsystems acquired from vendors Power, Westinghouse, and Invensys-Triconex. Each of these subsystems has been approved by the NRC. The purpose of the Control Scenarios Development System (CSDS) is to evaluate functions built into NRC.					
CSST	Customer Support Service Tracking	ITI System	BMC Service Desk Express	MS IIS			MS SQL
CSTS	Complex Sites Tracking System	Web based	ColdFusion				MS Acc
DCS	Data Center Services	ITI System	The Data Center provides system tape backups and backup management, system and management, system hardware and software monitoring, and hardware and software maintenance for all non-seat managed systems.				
DCS	Data Center Services	ITI System					
DDMS	Digital Data Management System	Web based	Plumtree	Crystal Reports			
DNMS AITS	Actions Item Tracking Database						
DOLLS	EDO Document Logging and Location System	PC/LAN SHARED					DBase
DOPD	DWMEP Operating Plan Database	PC/LAN SHARED					MS Acc
DRMA AITS	Actions Item Tracking Database						
DRP AITS	Actions Item Tracking Database						

SECTION J – ATTACHMENT 2

DRS AITS	Actions Item Tracking Database						
DRS R L T D	DRS Report Log Tracking Database						
E-FOIA	FOIAXpress	eFOIA COTS based on .NET technology.					
e-QIP	Elec Questionaire for Investigations Processing						
E-Travel	Electronic Travel (GSA)						
EATS	Enforcement Action Tracking System	Client Server	PowerBuilder 10.2				Sybase ASE 15
EDATS	Electronic Document and Action Tracking System (EDATS)	secure terminal services solution	Handysoft Bizflow		TomCat		MSSQL
EDOLS	EDO Label System	PC-LAN	DOS based Apps				
EDOWITS	EDO Work Item Tracking System						
EHRI	Enterprise Human Resources Integration						
EIE	Electronic Information Exchange System	Web Server and Database Server	C++ 6.0	Verisign MPKI	IBM Workplace Forms 2.5		SQL Sei 2000
EIE	Electronic Information Exchange System	Web Server and Database Server	Java 1.5	Adobe Forms 8 & 9	IBM Lotus Forms 3.0		SQL Sei 2005
EIG	Enterprise Interface Gateway	Enterprise Service Bus	MS Biztalk	Visual Studio			SQL Sei 2008R2

SECTION J – ATTACHMENT 2

EMAIL	Electronic Mail System		Externally Hosted				
EPM	Enterprise Project Management	Enterprise COTS	Sharepoint 2007/2010	K2 Blackpearl	Microsoft Project Server 2007/2010	Business Objects, Crystal Reports, MS SSRS	SQL Ser 2008R2
ERDS	Emergency Response Data System	Client Server	Sharepoint 2007/2010	MSDE			SQL Ser
ERTD	Emergency Response Training Database	Web					
ESPA	Enterprise Staffing Plan Application	.Net web application	.Net				SQL Ser
FACANN	Facilities Annuals System	Web Application					MS Acc
FACFEES	Facilities Inspection Fees System	PC/LAN SHARED	Clipper 5.x				Dbase 3
FAIMIS	Financial Accounting and Integrated Mgmt Info Sys		Externally Hosted				
FEES	Fees Systems	MAINFRAME	COBOL/390 v2.2	JCL 2.8	ISPF 5.9	QMF 9.1	DB2 8.1
FEESSET	FEES Yearly Setup		Externally Hosted				
FEESFTP	Fees File Transfer Process	PC/LAN SHARED	Clipper 5.x	Delphi			Dbase 3
FEESLBS	Fees License Billing System	PC/LAN SHARED	Clipper 5.x				Dbase 3
FES	Funds Execution System	Web	ColdFusion 7.02 MX				Sybase ASE 15
FFS	Federal Financial System		Externally Hosted				
FPDS-NG	Federal Procurement Data Systems-Next		Externally Hosted				

SECTION J – ATTACHMENT 2

	Generation (GSA)						
FPPS	Federal Personnel & Payroll System		Externally Hosted				
FTE-Access	Full Time Equivalence (Access)	PC/LAN SHARED	MSWord 2007	WIN Batch	Adobe Acrobat Pro		MS Acc
FUNDS	Funds Control Database	Web based		ColdFusion			
GES	General Electric BWR/4 Simulator	This is a Simulator. Environment is size of an auditorium.					
GLTS	General License Tracking System	Client Server	PowerBuilder 10.2				Sybase ASE 15
GTS	Guard Hours Tracking System	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
HFIS	Human Factor Information System	Client Server	PowerBuilder 10.2				Sybase ASE 15
HOTSPOT	HOTSPOT		HOTSPOT, which is a set of health physics computer codes that provides an approximation associated with the short duration (less than a few hours) release of radioactive materi				
HPAC	Hazard Prediction and Assessment Capability		A copy of HPAC5 is installed on one Op Center Computer. This program is developed Agency (DTRA). The program was made available to us after applying to DTRA. This used for comparison, contrast, and development of our RASCAL program. Information found online.				
HPCC	High Performance Computing Center		Place holder for future development and research of High Performance Computing tec				

SECTION J – ATTACHMENT 2

HPCS - CDS/CFD	High Performance Computing System		DUPLICATE SYSTEM: SYS ABBR: CFD; SYSTEM #20060031; HPCS has two comp				
HRFCS	HR On-line Financial Control System	Web based		ColdFusion			Sybase
HRProperty	HR Property Management System	Web based		ColdFusion			Sybase
HSDN	Homeland Security Data Network		Externally Hosted				
HSPD-12	Homeland Security Presidential Directive 12		Externally Hosted				
IAS	Information Assurance System	Client Server	Cenzic	.Net			
IATS	Individual Action Tracking System						
ILS	Voyager Integrated Library System	Solaris					
INFORMS	Informs by WordPerfect/Novell	Novell Informs					
IPS	Inspection Planning System		Externally Hosted				
IPSS	Integrated Personnel Security System	Web	Java 1.5	ColdFusion 7.02 MX	BEA Weblogic		Sybase ASE 15
IronPort	IronPort v4		Externally Hosted				
ISI-DB	Inservice Inspection Relief Requests Database						
ISMP	Integrated Source Management Portfolio		Third Party				
ITI	Information Technology Infrastructure						

SECTION J – ATTACHMENT 2

ITP	Industry Trends Program						
LEES	Labor Relations Ethics and EEO Complain	Solaris					Sybase
LER Search	Licensee Event Reporting (LER) Search	Web	Coldfusion				
LMS	Learning Management System		Third Party				
LR	Labor Relations						
LSN	Licensing Support Network	Intel Xeon Server	Autonomy	Third Party			
LTS	License Tracking System	Web	ASP.NET	RADMAT			SQL Ser 2005
LVS	License Verification System		Third Party				
MARPLOT	Mapping Application for Response and Planning of Local Operational Tasks	Marplot is part of the suite Cameo/Aloha/Marplot					
MATANN (Externally Hosted)	Materials Annual Fees System	MAINFRAME	COBOL/390 v2.2	JCL 2.8	ISPF 5.9	QMF 9.1	DB2 8.1
MATREV	Materials Revenue System	PC/LAN SHARED	Clipper 5.x				
MATSYS	Materials Licenses Fee System	PC/LAN SHARED	Clipper 5.x				Dbase 3
MBA	MessageBlast Application						
MD715	MD 715 Reporting Database	PC/LAN SHARED					MS Accr

SECTION J – ATTACHMENT 2

METROCH EK	Metrocheck	PC STANDAL ONE	Delphi 3 upgrading to 2009				Access !
MPS	Manpower System						
NBGS	NRC Business Gateway System	Web-based					
NEWS	Nuclear Engineering Works	This is a Simulator. Environment is size of an auditorium.					
NKC	NRC Knowledge Center	Web	Tomoye Ecco				
NMED	Nuclear Material Event Database		Externally Hosted				
NMSSS	Nuclear Materials Management and Safeguards System		Externally Hosted				
NMSSS	Nuclear Materials Management and Safeguards System		Externally Hosted				
NRCAREE RS	NRC Careers System		Third Party				
NSICD	NRC System Information Control Database	Pentium 4	Server	Rational ClearQuest			
NSIR Ticket Tracker	NSIR Ticket Tracker	PC/LAN SHARED					Access Databas
NSSDRS	National Sealed Source and Device Registry System	Client Server	PowerBuilder 10.2				Sybase ASE 15
NSTS	National Source Tracking System	Web	Java 1.6				Oracle 1
NUREGS	Nuclear Regulatory Commission Report Processing System		MS Access Database				

SECTION J – ATTACHMENT 2

OCIMS	Operations Center Information Management System						
OCIOTTS	OCIO Ticket Tracking System	(See EDATS)	EDATS				
OEID	OIP Export/Import Database						
OGC-IR	OGC Information Repository	Client Server	ZyFind Zylmage	.Net			SQL Ser 2005
OIGMIS	Office of the Inspector General Management Information System	Client Server	Lotus Notes				Notes/D no
OIMIS	Office of Investigations Mgmt Information System	Client Server	PowerBuilder 10.2				Sybase ASE 15
OLTS	Operator Licensing Tracking System	Client Server	PowerBuilder 10.2				Sybase ASE 15
OPSM	Official Presence Social Media	Is a 3rd party cloud service – Wordpress.com					
ORA AITS	Actions Item Tracking Database						
OVS	Media Streaming						
PC MATANN	PC Materials Annual Fee System	PC/LAN SHARED	Clipper 5.x				Dbase 3
PHDB	Payroll Historical Database	PC/LAN SHARED	Cognos Impromptu				

SECTION J – ATTACHMENT 2

			Admin				
PITA	Plant Information Tracking Application	Web-based					
PMA	Payroll Modelling Application	Client Server					SQL Sei
PMNS	Public Meeting Notice System	PC/LAN SHARED	ColdFusion 7.02 MX				SQL Sei 2000
PPDTS	Printing, Publications, Distribution Tracking System						
ProSight	ProSight Portfolios	Web	Oracle Primavera Portfolio Manager				
PWS	Protected WEB Server		Java 1.5				Oracle 9
RADXR	Radiography Cross Ref Program						
RCA	Record Classification Actions System	Web	Delphi 3 upgrading to 2009				Access !
REIRS	Radiation Exposure Information Reporting System	Client Server	IBM x 3650	Powersoft InfoMaker	Oracle Enterprise manager	MS Access	Oracle
RIC	Regulatory Information Conference Registration Database		Third Party				
RIISGIAIS	Region II SGI Automated Inventory System	PC/LAN SHARED					

SECTION J – ATTACHMENT 2

RIMS	Research Information Management System	PC/LAN SHARED	Clipper 5.x				Dbase 3
RISGIAIS	Region I SGI Automated Inventory System	PC/LAN SHARED					
RITS-OSP (RCA)	Record Classification Actions						
RIVSGIAIS	Region IV SGI Automated Inventory System						
ROE	Reactor Operating Events	Client Server	PowerBuilder	Moving to BASS	Prod Data on RPS5		Sybase
ROMA	Research Operations Management Application	PC-LAN Shared	Info Path				MS Acc
RPS	Reactor Program System	Client Server	PowerBuilder 10.2				Sybase ASE 15
RRD	RIC Registration Database	Web-based					
RTS	Reciprocity Tracking System	PC/LAN SHARED	Clipper 5.x				Dbase 3
RVID	Reactor Vessel Integrity DB						MS Acc
SAD	Staff Availability Database						
SARDB	Simulator Action Request DB	This is a Simulator. Environment is size of an auditorium.					

SECTION J – ATTACHMENT 2

SFST TSCAP	Transportation and Storage Computational Analysis Platform System	HP/C System	RHEL 5	ANSYS	FLUENT	STAR LSTC LS-Dyna	CCM+SR-CD
SLES	Secure Local Area Network/Electronic Safe	Client Server	Documentum 5.3 SP	Actividentity SmartCard			
SPDB	Staffing Plan Database	Stand-alone PC					MS Access
SPELLS	Sharepoint Process EDO Lessons Learned System	Web-based	.NET Framework	MOSS 2007	BizFlow		SQL Server
SPMS	Space Property Management System	Archibus	AutoCAD				
SPOC	Single Point of Contact		Sharepoint 2007/2010				
SRS	Administrative Services Request System	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-AVP	SRS - Audiovisual/Photo Services	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-DOS	SRS - Dosimeter Badges	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-FURN	SRS - Furniture Repair	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-KEYS	SRS - Keys	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-LABOR	SRS - Labor Services Requests	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-LOCKSMITH	SRS - Locksmith services	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !

SECTION J – ATTACHMENT 2

SRS-MAIL-SVCS	SRS - Mail Services	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-SER	SRS - Small Equipment Repair	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-SIGNAGE	SRS - Signage	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-UDRIVEIT	SRS - UDrivelt	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
SRS-VTC	SRS - Video Teleconferencing System	PC/LAN SHARED	Delphi 3 upgrading to 2009				Access !
STARS	SECY Tracking Reporting System	Client Server	Delphi 3 upgrading to 2009	DOCS OPEN	Access 2003		Sybase
STPP FSME P	Office State and Tribal Programs Phonebook	Desktop Image hosted by ORNL					
SWP	Strategic Workforce Planning	Web-based	ColdFusion				Sybase
TACS	Technical Assignment Control System	Client Server	PowerBuilder 10.2				Sybase ASE 15
TAPIS	Transport Approval Package Information System	MAINFRAME	COBOL/390 v2.2	JCL 2.8	ISPF 5.9	QMF 9.1	DB2 8.1
TAPNM (Externally Hosted)	Technical Assistance Program for Nuclear Materials	MAINFRAME	COBOL/390 v2.2	JCL 2.8	ISPF 5.9	QMF 9.1	DB2 8.1
TELECOM	Telecommunications Voice, Voice Mail & Fax Service						
TLL	Time and Labor Legacy (HRMS)	Sparc Solaris	Unix				

SECTION J – ATTACHMENT 2

TLM	Time and Labor Modernization		PeopleSoft				
TLTS	Terminated License Tracking System			Externally Hosted			
TOPO	TOPO	PC/LAN SHARED	Application				
TTD	Training Tracking Database - dBase II						
TTS	NMSS Web-Based Ticket Tracking System	Web based					Sybase
TTS	Ticket Tracking System	Using EDATS					
USAccess	Personal Identity Verification (PIV) Identity Management System (IDMS)		Externally Hosted				
VMS	Virtual Meeting Space						
WBL	Web Based Licensing		Third Party				
WCMS	Web Content Management Solution						
WDTS	FSME Waste Disposal Tracking System	Web-based					Sybase
WebACTS	Web Advisory Committees Tracking System	Web-based	Sharepoint 2007/2010	Visual Studio			
WITS-OGC	OGC Work Item Tracking System			Visual Basic			

SECTION J – ATTACHMENT 2

Appendix F: Enterprise Architecture Requirements and Technology Standards

Modernization/New Development Alternatives Analysis:

For FA3 requirements, the contractor shall conduct alternatives analysis and present findings to the PO for their review and approval. Alternative analysis must include and consider the following minimum alternatives. Other alternatives, such as custom development, may also be included.

Use of a popular/common cloud alternative, where NRC is a consumer of a cloud alternative (e-gov applications, government cloud, or public cloud), as required by OMB's cloud first strategy

Use or extension of a currently supported NRC application or service, to support reuse of existing assets

Use of a popular/common COTS solution

Enterprise Architecture Requirements:

NRC has an architecture objective to reduce the number of disparate technologies and silo information systems that must be funded, maintained and supported over time. This objective will be achieved through consolidation and use of common technology standards, solutions, platforms, and approaches. Through realization of the objective, NRC will be able to make more efficient and effective use of available resources to accomplish its mission.

Solutions proposed must, where applicable:

consider cloud solutions first

be web based to support NRC's mobile and distributed workforce

be easily upgraded to work with the latest agency approved Microsoft Internet Explorer Web browser

be compatible with the NRC mobile strategy

be compatible with IPV4 and IPV6

allow use of PIV card access

leverage common NRC services/solutions for controlling security where available, such as identity and access management, and audit logging

support open standards to allow better integration and portability

conform to NRC platform and technology standards to optimize use of common and mainstream technologies

and ensure efficient and cost effective operations and maintenance

obtain pre-approval for deviations to NRC technology standards prior to use

make use of common/shared NRC services/infrastructure

conform to Government mandated technology standards for integration, security, and accessibility (e.g. National Information Exchange Model (NIEM)), Security (FISMA), accessibility (Section 508))

leverage cloud computing offerings where feasible and cost effective

conform to the NRC MD 2.8 throughout the application implementation and sustainment lifecycle

use NRC software development methodology

use Unified Modeling Language (UML) to describe solution requirements (use cases) and designs

COTS solutions must:

SECTION J – ATTACHMENT 2

not be customized in a manner that will inhibit or prevent upgrades to future vendor product versions
 be compatible with standard NRC platforms and technologies
 leverage common NRC services/solutions for controlling security where feasible, such as identity and access management, and audit logging

NRC Technical Reference Model (TRM):

NRC is maintaining a TRM that documents the technologies and commercial products as service standards for modernization of the agency’s legacy information technology (IT) systems. Versions supported will normally include the latest vendor major version and the prior vendor major version. Vendors providing technology services must have the capabilities to implement and maintain technology solutions that are in alignment with the TRM and the agency’s IT modernization vision and strategy. The TRM is expected to change over time as new technology capabilities are implemented to address agency needs. Vendors providing technology services are expected to use the latest TRM version in evaluating and selecting technologies for their solutions. The agency’s TRM and IT modernization strategy includes the following preferred and strategic technologies (use of technologies outside of this list must be pre-approved):

System Runtime Technologies

			Implementation Platforms			
			Hosting Hardware	Hosting Operating Systems	Virtualization Software	Applications Software
System Stack	Client	VIC es Desktop	Intel Core based Laptops and Desktops	Microsoft Windows Professional	Citrix XenApp Desktop	Microsoft Internet Explorer Java Runtime Environment Microsoft .Net Framework and Windows Communication Framework Adobe Air Adobe Flash Player Microsoft Windows Media Player Apple QuickTime Player RealPlayer Enterprise, Adobe Acrobat ieSpell Microsoft Office Suite
			RIM Mobile	RIM Blackberry	Citrix Receiver	PED Web browser

SECTION J – ATTACHMENT 2

		Implementation Platforms			
		Hosting Hardware	Hosting Operating Systems	Virtualization Software	Applications Software
Delivery & Integration	Thin Client Presentation Servers	Devices Apple Mobile Devices Android Mobile Devices	OS, Apple iOS Google Android		Adobe Air Adobe Flash Player
		Intel Core based Servers Intel Core based Blade Servers	Microsoft Windows Server Red Hat Enterprise Linux	Citrix XenServer VMWare	Apache Web Server Microsoft Office SharePoint Server Microsoft Internet Information Services Java Runtime Environment Microsoft .Net Framework and Windows Communication Framework
	Business Transaction & Process Automation	Intel Core based Servers Intel Core based Blade Servers	Microsoft Windows Server Red Hat Enterprise Linux	VMWare	K2 BlackPearl (.Net based BPM) IBM Websphere (J2EE application server), IBM Filenet P8 Platform (BPM) Java Runtime Environment .Net Framework and Windows Communication Framework Microsoft Exchange Microsoft Windows SharePoint Services Microsoft InfoPath Form Services Telerik JSpell
		Intel Core based Servers	Microsoft Windows Server	VMWare	Microsoft Business Intelligence

SECTION J – ATTACHMENT 2

		Implementation Platforms			
		Hosting Hardware	Hosting Operating Systems	Virtualization Software	Applications Software
Operation Monitoring & Support Management		Intel Core based Blade Servers	Red Hat Enterprise Linux		Enterprise SAP Business Objects Enterprise IBM FileNet P8 Platform JDBC Microsoft ODBC Microsoft Data Access Objects and .Net Data Services Microsoft BizTalk RIM Blackberry Enterprise Server
	Data & Content Management	Intel Core based Servers Intel Core based Blade Servers SAN Storage Devices StorageTek Data Backup Device Google Search Appliance	Microsoft Windows Server Red Hat Enterprise Linux	n/a	Microsoft SQL Server RDBMS for moderate transaction throughput IBM DB2 for high transaction throughput
	Operation Monitoring & Support Management	Intel Core based Servers Intel Core based Blade Servers	Microsoft Windows Server Red Hat Enterprise Linux	Citrix XenServer VMWare	BMC Remedy Microsoft System Center Configuration Manager (SCCM) RIM Blackberry Enterprise Server
	Identity & Access Management	Intel Core based Servers Intel Core based Blade Servers	Microsoft Windows Server Red Hat Enterprise Linux	Citrix Access Gateway VMWare	Microsoft Active Directory CA SiteMinder LDAP Server Intercede PIV Card Management PIV reader RIM Blackberry Enterprise Server

SECTION J – ATTACHMENT 2

Technology Standards and Open Source

.Net Framework and Windows Communication Framework, Java and Java 2 Enterprise Edition (J2EE), Asynchronous JavaScript and XML (AJAX), JavaScript Object Notation (JSON), Representational State Transfer (REST) Framework, RSS, ATOM, W3C XML Specifications, XML-based Languages such as SOAP and HTML, Oasis Web Services Specifications, Semantic Web and Resource Description Framework.

Software Solution Implementation Support Tools

Adobe Flex, Adobe AIR, Adobe Flash Builder, Adobe Dreamweaver, Code profiling tools (e.g. JProbe for Eclipse and Visual Studio Profiler), Eclipse Based IDE, IBM WebSphere Studio, IBM Rational Software Quality Management Suite, IBM Rational Team Concert, IBM Rational Rose, IBM Rational Requirements Composer, IBM Rational Quality Manager, and other Rational Tools based on the Jazz Platform, Java Software Development Kit (SDK), Java Script, Microsoft Visual Studio Integrated Development Environment (IDE), Jetico BCWipe, K2 Designer for Visual Studio, Microsoft .Net ASP, Microsoft .Net C#, Microsoft Project Server and Project Web Access, Microsoft SDelete, Microsoft SharePoint Designer, Microsoft Visio and plug-ins for K2, Python Runtime Environment, Report builder/creation tools (e.g. SQL Report Builder and Business Objects/Crystal Report Designer), SQL, Toad

Standard Microsoft Office Suite

Used for productivity purposes and should not be used to develop applications to manage systems of record information (e.g. financial) or as a data store for PII information. Applications of this nature require appropriate controls to be implemented for security, reliability, and performance.

Other Technologies and Tools by Special Requests

These tools are used for formal software development activities and as such, must be installed and used in a suitable development environment. Suitable development environment can be any development workstation that is not connected directly to the POE (e.g. a virtual development desktop image, a standalone workstation, or separate/isolated network).

Java open source or Javascript libraries (e.g. JQuery, etc.)

Any programming SDK or API such as JSpell

Eclipse plugins

Other Integrated Development Environments (IDE's) or code editor (e.g. jEdit)

Other desktop script-based runtime environments

Other language compilers such as C, C++, and Fortran

SECTION J – ATTACHMENT 3 – APPENDIX H – COI GUIDELINES

NRCAR 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 new work 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.

SECTION J - ATTACHMENT 4

BILLING INSTRUCTIONS FOR FIXED-PRICE TYPE CONTRACTS (MAY 2013)

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

The contractor shall prepare invoices/vouchers for 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.

Standard Forms: Payment requests for completed work, in accordance with the contract, shall be submitted on the payee's letterhead, invoice/voucher, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal--Continuation Sheet."

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

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

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

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

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

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

Frequency: The contractor shall submit invoices/vouchers for payment once each month, unless otherwise authorized by the Contracting Officer.

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

SECTION J - ATTACHMENT 4

BILLING INSTRUCTIONS FOR FIXED-PRICE TYPE CONTRACTS (MAY 2013)

instructions for preparation and itemization of the invoice/voucher are included with the sample form.

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

Final vouchers/invoices 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 Fixed-Price Type Contracts (July 2011).

SECTION J - ATTACHMENT 4

BILLING INSTRUCTIONS FOR FIXED-PRICE TYPE CONTRACTS (MAY 2013)

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

1. Official Agency Billing Office

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

2. Invoice/Voucher Information

- a. Payee's DUNS Number or DUNS+4. The Payee shall include the Payee's Data Universal Number (DUNS) or DUNS+4 number that identifies the Payee's name and address. The DUNS+4 number is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the Payee to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.
- b. Taxpayer Identification Number. The Payee shall include the Payee's taxpayer identification number (TIN) used by the Internal Revenue Service (IRS) in the administration of tax laws. (See IRS Web site: [http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Employer-ID-Numbers-\(EINs\)](http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Employer-ID-Numbers-(EINs))).
- c. Payee's Name and Address. Show the name of the Payee as it appears in the contract and its correct address. Where the Payee is authorized to assign the proceeds of this contract in accordance with the clause at FAR 52.232-23, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the System for Award Management (SAM) database at <http://sam.gov> and shall be paid by EFT in accordance with the terms of this contract. See Federal Acquisition Regulation (FAR) 52.232-33(g) Payment by Electronic Funds Transfer - Central Contractor Registration (October 2003).
- d. Contract Number. Insert the NRC contract number (including Enterprise-wide Contract (EWC)), GSA Federal Supply Schedule (FSS), Governmentwide Agency Contract (GWAC) number, or Multiple Agency Contract (MAC) number, as applicable.
- e. Task Order Number. Insert the task/delivery order number (If Applicable). **Do not include more than one task order per invoice or the invoice may be rejected as improper.**
- f. Invoice/Voucher. The appropriate sequential number of the invoice/voucher, beginning with 001 should be designated. Contractors may also include an individual internal accounting number, if desired, in addition to the 3-digit sequential number.

SECTION J - ATTACHMENT 4

BILLING INSTRUCTIONS FOR FIXED-PRICE TYPE CONTRACTS (MAY 2013)

- g. Date of Invoice/Voucher. Insert the date the invoice/voucher is prepared.
- h. Billing Period. Insert the beginning and ending dates (day, month, year) of the period during which deliverables were completed and for which payment is requested.
- i. Description of Deliverables. Provide a brief description of supplies or services, quantity, unit price, and total price.
- j. Work Completed. Provide a general summary description of the services performed or products submitted for the invoice period and specify the section or Contract Line Item Number (CLIN) or SubCLIN in the contract pertaining to the specified contract deliverable(s).
- k. Shipping. Insert weight and zone of shipment, if shipped by parcel post.
- l. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.
- m. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.
- n. For Indefinite Delivery contracts, the final invoice/voucher shall be marked "FINAL INVOICE" or "FINAL VOUCHER".
- o. Total Amount Billed. Insert columns for total amounts for the current and cumulative periods.
- p. Adjustments. Insert columns for any adjustments, including outstanding suspensions for deficient or defective products or nonconforming services, for the current and cumulative periods.
- q. Grand Totals.

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

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

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

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

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

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

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

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

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

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

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

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

SECTION J - ATTACHMENT 5

BILLING INSTRUCTIONS FOR TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)

instructions for preparation and itemization of the invoice/voucher are included with the sample form.

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

Billing of Costs after Expiration of Contract: If costs are incurred during the contract period and claimed 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 Time-and-Materials/Labor-Hour Type Contracts (July 2011).

SECTION J - ATTACHMENT 5

BILLING INSTRUCTIONS FOR TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)

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

1. Official Agency Billing Office

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

2. Invoice/Voucher Information

- a. Payee's DUNS Number or DUNS+4. The Payee shall include the Payee's Data Universal Number (DUNS) or DUNS+4 number that identifies the Payee's name and address. The DUNS+4 number is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the Payee to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.
- b. Payee's Name and Address. Show the name of the Payee as it appears in the contract and its correct address. If the Payee assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the SAM database at <http://www.sam.gov> and shall be paid by EFT in accordance with the terms of this contract. See Federal Acquisition Regulation (FAR) 52.232-33(g) Payment by Electronic Funds Transfer - System for Award Management (July 2013).
- c. Taxpayer Identification Number. The Payee shall include the Payee's taxpayer identification number (TIN) used by the Internal Revenue Service (IRS) in the administration of tax laws. (See IRS Web site:
1. [http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Employer-ID-Numbers-\(EINs\)](http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Employer-ID-Numbers-(EINs))).
- d. Contract Number. Insert the NRC contract number (including Enterprise-wide Contract (EWC)), GSA Federal Supply Schedule (FSS), Governmentwide Agency Contract (GWAC) number, or Multiple Agency Contract (MAC) number, as applicable.
- e. Task Order Number. Insert the task/delivery order number (If Applicable). **Do not include more than one task order per invoice or the invoice may be rejected as improper.**
- f. Invoice/Voucher. The appropriate sequential number of the invoice/voucher, beginning with 001 should be designated. Contractors may also include an individual internal accounting number, if desired, in addition to the 3-digit sequential number.

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

- g. Date of Invoice/Voucher. Insert the date the invoice/voucher is prepared.
- h. Billing period. Insert the beginning and ending dates (day, month, year) of the period during which costs were incurred and for which reimbursement is requested.
- i. Labor Hours Expended. Provide a general summary description of the services performed and associated labor hours utilized during the invoice period. Specify the Contract Line Item Number (CLIN) or SubCLIN, as applicable, and information pertaining to the contract's labor categories/positions, and corresponding authorized hours.
- j. Property. For contractor acquired property, list each item with an initial acquisition cost of \$50,000 or more and provide: (1) an item description, (2) manufacturer, (3) model number, (4) serial number, (5) acquisition cost, (6) date of purchase, and (7) a copy of the purchasing document.
- k. Shipping. Insert weight and zone of shipment, if shipped by parcel post.
- l. Charges for freight or express shipments. Attach prepaid bill if shipped by freight or express.
- m. Instructions. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.
- n. For Indefinite Delivery contracts, the final invoice/voucher shall be marked "FINAL INVOICE" or "FINAL VOUCHER".
- o. Direct Costs. Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period).

(1) Direct (Burdened) Labor. This consists of salaries and wages paid (or aSAMued) for direct performance of the contract itemized, including a burden (or load) for indirect costs (i.e., fringe, overhead, General and Administrative, as applicable), and profit component, as follows:

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Burdened Hourly Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
-----------------------	---------------------	-----------------------------	--------------	--------------------------------

(2) 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.

(3) Contractor-acquired property (under \$50,000), Materials, and Supplies. These are equipment other than that described in (2) above, plus consumable materials and

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

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.

(4) **Materials Handling Fee.** Indirect costs allocated to direct materials in accordance the contractor's usual accounting procedures.

(5) **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).

(6) **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.)

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

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

q. **Adjustments.** Insert columns for any adjustments, including outstanding suspensions for unsupported or unauthorized hours or costs, for the current and cumulative periods.

r. **Grand Totals.**

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

3. Sample Invoice/Voucher Information

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

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

		<u>Amount Billed</u>	
		<u>Current Period</u>	<u>Cumulative</u>
(a)	<u>Direct Costs</u>		
(1)	Direct burdened labor	\$ _____	\$ _____
(2)	Government property (\$50,000 or more)	\$ _____	\$ _____
(3)	Government property, Materials, and Supplies (under \$50,000 per item)	\$ _____	\$ _____
(4)	Materials Handling Fee	\$ _____	\$ _____
(5)	Consultants Fee	\$ _____	\$ _____
(6)	Travel	\$ _____	\$ _____
(7)	Subcontracts	\$ _____	\$ _____
	Total Direct Costs:	\$ _____	\$ _____
(b)	Total Amount Billed	\$ _____	\$ _____
(c)	Adjustments (+/-)	\$ _____	\$ _____
(d)	Grand Total	\$ _____	\$ _____

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

SAMPLE SUPPORTING INFORMATION

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

Cost Elements:

1) Direct Burdened Labor - \$4,800

<u>Labor Category</u>	<u>Hours Billed</u>	<u>Burdened Rate</u>	<u>Total</u>	<u>Cumulative Hours Billed</u>
Senior Engineer I	100	\$28.00	\$2,800	975
Engineer	50	\$20.00	\$1,000	465
Computer Analyst	100	\$10.00	<u>\$1,000</u>	<u>320</u>
			<u>\$4,800</u>	1,760 hrs.

Burdened labor rates must come directly from the contract.

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

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

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

- 3) 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 = \$ 900
\$2,000

- 4) Materials Handling Fee - \$40

(2% of \$2,000 in item #3)

- 5) Consultants' Fee - \$100

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

- 6) 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

- 7) Subcontracting - \$30,000

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

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

Total Amount Billed \$99,580
Adjustments (+/-) - 0
Grand Total \$99,580

4. Definitions

Material handling costs. When included as part of material costs, material handling costs shall include only costs clearly excluded from the labor-hour rate. Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the contractor's usual accounting procedures.

SECTION J - ATTACHMENT 5

**BILLING INSTRUCTIONS FOR
TIME-AND-MATERIALS/LABOR-HOUR TYPE CONTRACTS (MAY 2013)**

Section J – ATTACHMENT 6

MOM FA4 Task Order Request for Proposal Information, Submission Instructions, Evaluation Factors for Award and Related Information

The contracting officer will prepare a written task order request for proposal (TORFP) and, unless an exception to fair opportunity in FAR 16.505(b) applies, will transmit it to all MOM FA4 IDIQ contractors. If an exception to fair opportunity in FAR 16.505(b) applies, then the contracting officer would transmit the TORFP only to the relevant MOM FA4 IDIQ contractor(s).

MOM FA4 IDIQ contractor(s) shall review each TORFP that they receive and then submit any questions that they have regarding that TORFP to the contracting officer by email within three business days (unless a longer period of time is authorized in the TORFP) of MOM FA4 IDIQ contractor receipt of that TORFP. The Government will review those questions and will provide written responses to the MOM FA4 IDIQ contractors by the 10th business day (sooner, if possible) after TORFP release. Unless otherwise specified in the TORFP, Task order proposals will be due by the 20th business day after TORFP release, and shall be submitted to MOMContract.Resource@nrc.gov with a courtesy copy to joseph.widdup@nrc.gov. The task order proposal file(s) shall be submitted in format(s) that are readable in Adobe .pdf format, Microsoft Word format, and/or Microsoft Excel format. If the task order proposal files collectively exceed 10MB, then the contractor shall submit its task order proposal by more than one email so that no individual email exceeds 10MB.

Unless otherwise specified in the task order request for proposal, each MOM FA4 task order proposal shall include:

1. Proposed technical approach to satisfy TORFP requirements, to include how the work is proposed to be done (please ensure that the approach is consistent with IDIQ contract requirements (e.g., use of Management Directive 2.8 (Project Management Methodology) and use of the IBM Rational tools), a breakdown of IDIQ labor categories per work element and an estimated number of hours per work element, and the person's name that is proposed to perform each of the identified labor categories per work element. The technical approach shall not exceed 15 pages, excluding proposal cover page(s) and charts/tables. Any pages beyond the 15 page limit will not be evaluated
2. Cost/price based on MOM FA4 IDIQ contract labor categories and associated fixed hourly rates. For any proposed travel costs, they shall be very specific (include when trips would occur, when, how, names of the person(s) that would travel, and then-current Federal Travel Regulation rates for lodging, meals and incidental expenses). Travel costs shall be proposed as a separate line item and would be reimbursed in accordance with FAR 31.205-46, including any applicable indirect cost burden but excluding profit/fee.

NRC prefers firm-fixed-price to be used to the maximum extent practicable for the labor portion of the task order proposal. Labor-hour contract type may be proposed only as deemed appropriate (for example, communication with COR and other MOM contractor(s)). For any labor-hour pricing, describe how hours worked will be closely monitored by the contractor to ensure efficient utilization.

By submission of a task order proposal and acceptance of the resultant task order, the MOM FA4 IDIQ contractor agrees that in performance of the task order that at least 50 percent of the cost/price of task order performance incurred for personnel shall be expended for employees of the MOM FA4 IDIQ contractor.

Section J – ATTACHMENT 6

The Government does not intend to incorporate the successful task order proposal by reference into the resultant task order.

MOM FA4 TORFP Evaluation Factors for Award

Unless otherwise specified in the task order request for proposal, the following evaluation factors will be used to evaluate each MOM FA4 task order proposal and select the task order awardee.

The Government will award a FA4 task order to the responsible MOM FA4 IDIQ contractor whose task order proposal represents the best value to the Government, cost/price and other factors considered. Evaluation factors will include:

1. Soundness and efficacy of proposed technical approach to satisfy task order RFP requirements. A task order proposal that merely indicates that it will follow requirements in the IDIQ contract or essentially reiterates terminology in the IDIQ contract may be deemed technically unacceptable; and
2. Cost/price. The Government reserves the right to perform cost realism on any labor-hour portion(s) of the task order proposal and to consider that assessment to derive the evaluated cost/price for source selection purposes.

Factors 1 and 2 are approximately equal in importance.

AUTHORITY
The policies, procedures, and criteria of the NRC Security Program, NRCMD 12, apply to performance of this contract, subcontract or other activity.

CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

COMPLETE CLASSIFIED ITEMS BY SEPARATE CORRESPONDENCE

1. CONTRACTOR NAME AND ADDRESS
LIST INNOVATIVE SOLUTIONS, INC.
13921 PARK CENTER RD STE 500
HERNDON, VA 20171-3236

A. CONTRACT NUMBER FOR COMMERCIAL CONTRACTS OR JOB CODE FOR DOE PROJECTS (Prime contract number must be shown for all subcontracts.)

NRC-HQ-10-14-E-0003

B. PROJECTED START DATE

12/18/2013

C. PROJECTED COMPLETION DATE

09/25/2021

2. TYPE OF SUBMISSION

- A. ORIGINAL
- B. REVISED (Supersedes all previous submissions)
- C. OTHER (Specify)

3. FOR FOLLOW-ON CONTRACT, ENTER PRECEDING CONTRACT NUMBER AND PROJECTED COMPLETION DATE

A. DOES NOT APPLY

B. CONTRACT NUMBER

DATE

4. PROJECT TITLE AND OTHER IDENTIFYING INFORMATION

"MAINTENANCE, OPERATION, AND MODERNIZATION SUPPORT FOR NRC APPLICATION SYSTEMS AND ENVIRONMENT (MOM) ACQUISITION - FUNCTIONAL AREA 4 - LEGACY MODERNIZATION AND NEW SOFTWARE APPLICATION DEVELOPMENT AND M&O OF MODERNIZED SYSTEMS"

5. PERFORMANCE WILL REQUIRE

A. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION

- YES (If "YES," answer 1-7 below)
- NO (If "NO," proceed to 5.C.)

NOT APPLICABLE

NATIONAL SECURITY

RESTRICTED DATA

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

1. ACCESS TO FOREIGN INTELLIGENCE INFORMATION

2. RECEIPT, STORAGE, OR OTHER SAFEGUARDING OF CLASSIFIED MATTER. (See 5.B.)

3. GENERATION OF CLASSIFIED MATTER.

4. ACCESS TO CRYPTOGRAPHIC MATERIAL OR OTHER CLASSIFIED COMSEC INFORMATIONS.

5. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION PROCESSED BY ANOTHER AGENCY.

6. CLASSIFIED USE OF AN INFORMATION TECHNOLOGY PROCESSING SYSTEM.

7. OTHER (Specify)

B. IS FACILITY CLEARANCE REQUIRED? YES NO

C. UNESCORTED ACCESS IS REQUIRED TO NUCLEAR POWER PLANTS.

G. REQUIRE OPERATION OF GOVERNMENT VEHICLES OR TRANSPORT PASSENGERS FOR THE NRC.

D. ACCESS IS REQUIRED TO UNCLASSIFIED SAFEGUARDS INFORMATION.

H. WILL OPERATE HAZARDOUS EQUIPMENT AT NRC FACILITIES.

E. ACCESS IS REQUIRED TO SENSITIVE IT SYSTEMS AND DATA.

I. REQUIRED TO CARRY FIREARMS.

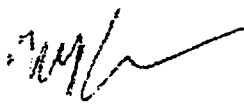
F. UNESCORTED ACCESS TO NRC HEADQUARTERS BUILDING.

J. FOUND TO USE OR ADMIT TO USE OF ILLEGAL DRUGS.

FOR PROCEDURES AND REQUIREMENTS ON PROVIDING TEMPORARY AND FINAL APPROVAL FOR UNESCORTED ACCESS, REFER TO NRCMD 12.

NOTE: IMMEDIATELY NOTIFY DRUG PROGRAM STAFF IF BOX 5 A, C, D, G, H, I, OR J IS CHECKED.

6. INFORMATION PERTAINING TO THESE REQUIREMENTS OR THIS PROJECT, EVEN THOUGH SUCH INFORMATION IS CONSIDERED UNCLASSIFIED, SHALL NOT BE RELEASED FOR DISSEMINATION EXCEPT AS APPROVED BY:

NAME AND TITLE Myron Kemerer, Chief, CPASB/BPLAD/OIS	SIGNATURE 	DATE 5/12/10
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7. CLASSIFICATION GUIDANCE

NATURE OF CLASSIFIED GUIDANCE IDENTIFICATION OF CLASSIFICATION GUIDES

N/A

8. CLASSIFIED REVIEW OF CONTRACTOR / SUBCONTRACTOR REPORT(S) AND OTHER DOCUMENTS WILL BE CONDUCTED BY:

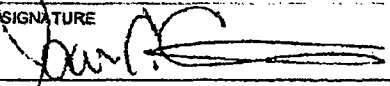

- AUTHORIZED CLASSIFIER (Name and Title) DIVISION OF FACILITIES AND SECURITY

9. REQUIRED DISTRIBUTION OF NRC FORM 187 Check appropriate box(es)

- SPONSORING NRC OFFICE OR DIVISION (Item 10A) DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT
 DIVISION OF FACILITIES AND SECURITY (Item 10B) CONTRACTOR (Item 1)
 SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

10. APPROVALS

SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

NAME (Print or type)	SIGNATURE	DATE
A. DIRECTOR, OFFICE OR DIVISION James C. Corbett, OIS/BPLAD	SIGNATURE 	DATE 5/12/10
B. DIRECTOR, DIVISION OF FACILITIES AND SECURITY Robert Webber	SIGNATURE 	DATE
C. DIRECTOR, DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT (Not applicable to DOE agreements) Phyllis Bower	SIGNATURE	DATE

REMARKS

SECTION J – ATTACHMENT 8

AWARD TERM PLAN

1.0 INTRODUCTION

This Award Term Plan (“Plan”) identifies responsibilities and methods used to monitor and evaluate MOM Contractor performance for the purpose of awarding additional periods of performance (award term extensions). The NRC requires top-level performance to meet program requirements. This Plan is designed to provide incentive to the Contractor for outstanding performance which benefits the NRC. The NRC recognizes that establishing an effective relationship between the contractor and Government is an essential prerequisite of outstanding performance. To facilitate an effective relationship, the Government and Contractor will cooperate in developing the essential elements of this Plan.

The Offeror shall propose a Performance Measurement Metric (PMM) Plan to be submitted with individual task orders. The Offeror shall propose a satisfactory level with each metric in the PMM. The Government and the successful Offeror will negotiate the elements and performance levels contained in the offeror’s PMM, and the PMM will be incorporated into the resulting Task Order. In addition to the elements contained in the PMM, the Government and the Contractor will negotiate achieving Small Business Subcontracting Plan goals, cost control, responsiveness and business relationship, the performance of which shall be used as part of this Plan.

The intent of this Plan is to establish procedures for the evaluation of Contractor performance under the IDIQ contract by furnishing guidelines and procedures for: (1) evaluating the Contractor's performance during each IDIQ contract year; and (2) furnishing sufficient data to enable the Award Term Approving Official to determine whether an award term will be granted.

2.0 GENERAL

Through this Plan, NRC seeks to provide incentives for the Contractor to perform at a level NRC considers better than satisfactory. An Award Term may only be exercised in accordance with clause B.4 in the solicitation.

3.0 PERFORMANCE AWARD TERM REVIEW TEAM

3.1 Organization

The organization of the Team is described in the following paragraphs.

3.1.1 Award Term Approving Official. The Award Term Approving Official is a Deputy Director of the NRC Office of Information Services (OIS). The Deputy Director may appoint another individual to perform this function for their organization.

3.1.2 Performance Award Term Review Team. The Award Term Approving Official will appoint an Award Term Review Team (“Team”) to evaluate the Contractor's IDIQ contract performance during the then-current IDIQ contract year. The Award Term Approving

SECTION J – ATTACHMENT 8

Official may appoint a Chairman to the Team or the Award Term Approving Official may serve as the Chairman. The team members will ensure a fair and accurate assessment of the contractor's performance for the period being evaluated. The Team Chairman may also use non-voting advisors as necessary.

3.2 Duties of the Team.

The duties of the Team are as follows:

3.2.1 Implement the plan and propose timely modifications to the Plan if required, throughout the period of contract performance.

3.2.2 Evaluate contractor performance for each performance evaluation.

3.2.3 Prepare and submit to the Award Term Approving Official a written evaluation of the Contractor's performance for a given evaluation period.

3.3 Responsibilities.

3.3.1 Award Term Approving Official. Approves the Plan and the evaluation factors and scoring methodology. Approves the composition of the Team. Determines the Contractor performance rating for a given IDIQ contract year and whether an Award Term period will be granted based on the factors of the plan.

3.3.2 Team Chairman. Structures the Team membership to provide representation that reflects all appropriate aspects of contract performance and provides membership to adequately assess contractor performance for the period being evaluated. Conducts the evaluation under this Plan. Schedules Team meetings and serves as a recorder at these meetings. Leads the Team in developing a consensus evaluation and in resolving significant differences in ratings. Provides brief summary documentation for the Award Term Approving Official. May provide feedback to the Contractor, through the Contracting Officer, in order to focus the Contractor on areas that would lead to improved performance in subsequent periods.

3.3.3 Performance Award Term Review Team. Monitors and evaluates Contractor performance for the period under consideration, utilizing the factors set forth in the Plan. Makes written evaluations, completes the evaluation worksheets and formulates award term recommendations. Briefs the Award Term Approving Official on evaluations, when requested, and provides supporting data/documentation to support the assessment of performance. Prepares the evaluation report and accompanying narrative justification. Identifies potential improvement areas and areas of emphasis for the next succeeding evaluation period to the Team Chairman for later Contractor debriefing.

3.3.4 Contracting Officer. Prepares and distributes contract modifications awarding the Award Term authorized by the Award Term Approving Official. Maintains NRC documentation relating to this Plan as part of the official contract file. Documents the basis for

SECTION J – ATTACHMENT 8

the Award Term decision rendered by the Award Term Approving Official in the contract file. Informs the Contractor in writing of annual Award Term evaluation results and Award Term decision.

4.0 PROCEDURES FOR AWARD TERM EVALUATION PERIODS

4.1 Procedures for Award Term Evaluation Periods

Step 1. The Contractor may submit a brief written self-evaluation of its performance within 10 days after the end of the evaluation period. The self-evaluation report shall not exceed 7 pages, and will be considered in the Award Term Review Board's (ATRB's) (or Term Determining Official's) evaluation of the Contractor's performance during this period.

Step 2. Team members shall individually initiate their evaluation worksheets (Award Term Evaluation Form) within 3 days after the end of each evaluation period. Informational sessions will be conducted at the end of year-one of the base year. The first official Award Term evaluation for eligibility will be conducted at the end of year-two of the base year and again at the end of the Option Period. Evaluations will be completed within 10 days after the end of each evaluation period and completed worksheets will be submitted to the Team Chairman (if one is appointed) or Award Term Approving Official. Team members shall be prepared to brief their evaluations to the Chairman if necessary.

Step 3. The Team will develop a consensus evaluation of Contractor performance in the appropriate areas for the then-current IDIQ contract period, using the factors set forth in the plan. The Team shall review all evaluation material along with supporting documentation and may call additional technical and management advisors to provide supporting information as required.

Recommendations of the Team, together with Contractor self evaluation and other supporting justifications, shall be presented to the Award Term Approving Official for final decision no later than 20 days from the end of each evaluation period. Evaluation activities need to be completed at a point no later than 30 days after the end of each evaluation period to ensure that the Award Term Approving Official's decision is announced no later than 90 days after the period being evaluated.

Step 4. No later than 30 days after the Award Term Approving Official receives the Team's recommendations, the Award Term Approving Official shall make a determination of the Contractor's evaluation rating for the applicable evaluation period. A brief summary narrative report highlighting Contractor strengths and weaknesses shall be prepared. The written announcement to the Contracting Officer of Award Term Approving Official's decision will be made no later than 60 days after the end of each evaluation period.

Step 5. Within 30 days after receiving the Award Term Approving Official decision, the Contracting Officer shall forward to the Contractor the evaluation results. The Contracting Officer shall forward the notice to the contractor not later 90 days after the end of the applicable evaluation period and the modification adding the award term entitlement will follow as soon as practicable following the notification.

SECTION J – ATTACHMENT 8

Step 6. Prior to Contractor commencement of work under an Award Term period, the Contracting Officer will issue a modification to the IDIQ contract to authorize the Award Term then negotiate and award task order(s), if any are required and funding is available.

5.0 OPPORTUNITY TO ADJUST PERFORMANCE METRICS

5.1. Adjusting Performance Rating

Bilateral changes may be made to the award term plan at any time. It is possible that actual performance will reveal that the negotiated levels are either too easy or too difficult to attain. The Contractor and Contracting Officer will negotiate the satisfactory and higher levels of performance ratings. The values may be renegotiated at the request of either party. If an agreement cannot be made within 60 days, the Government reserves the right to set the values unilaterally in the event an agreement is not reached.

5.2. Modification of Performance Measurement Metrics

The Contractor's PMM is a living document. The parties recognize that performance elements may be added or deleted during the life of the contract. New or revised performance elements will be considered to be incorporated into this Plan when the elements are incorporated into the Contractor's PMM.