SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NO.

2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NO.	5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE
NRC-41-10-017			41-09-006	09-04-2009

7. FOR SOLICITATION INFORMATION CALL:	a. NAME	b. TELEPHONE NO. (No Collect Calls)	8. OFFER DUE DATE/LOCAL TIME
	Adelis M. Rodriguez	301-492-3623	1:00 PM EST

9. ISSUED BY CODE 3100

U.S. Nuclear Regulatory Commission
Div. of Contracts - CMB3
Attn: Adelis M Rodriguez, 301-492-3623
Mail Stop: TWB-01-B10M
Washington, DC 20555

10. THIS ACQUISITION IS
[X] UNRESTRICTED OR [ ] SET ASIDE: % FOR:
[ ] SMALL BUSINESS [ ] EMERGING SMALL BUSINESS
[ ] HUBZONE SMALL BUSINESS
[ ] SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS [ ] 8(A)

NAICS: 541519
SIZE STANDARD:

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
N/A

14. METHOD OF SOLICITATION
[ ] RFQ [ ] IFB [X] RFP

15. DELIVER TO CODE

U.S. Nuclear Regulatory Commission

Washington DC 20555

16. ADMINISTERED BY CODE 3100

U.S. Nuclear Regulatory Commission
Div. of Contracts - CMB3
Mail Stop: TWB-01-B10M

Washington, DC 20555

17a. CONTRACTOR/OFFEROR CODE FACILITY CODE

LOCKHEED MARTIN SERVICES, INC.

700 N FREDERICK AVE

GAITHERSBURG MD 208793328
TELEPHONE NO. 703-916-9486

[ ] 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER

18a. PAYMENT WILL BE MADE BY CODE 3100

Department of Interior / NBC
NBCPayments@nbc.gov
Attn: Fiscal Services Branch - D2770
7301 W. Mansfield Avenue
Denver CO 80235-2230

18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED
[ ] SEE ADDENDUM

19. ITEM NO.	20. See CONTINUATION Page SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	Title: Integrated Source Management Portfolio Contract Type: Hybrid, a combination of FFP and T&M tasks as described in the price schedule Total contract value assuming all options are exercised: $77,439,634.37 Period of performance: One year from award date. Total exercised value: $6,932,538.80 Total obligated amount: $0.00 (the funds will be obligated directly to the task orders				

(Use Reverse and/or Attach Additional Sheets as Necessary)

25. ACCOUNTING AND APPROPRIATION DATA See CONTINUATION Page
Please see Block 20 above
DUNS: 305258373

26. TOTAL AWARD AMOUNT (For Govt. Use Only)

[ ] 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.

[X] 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA [X] ARE [ ] ARE NOT ATTACHED.

[X] 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 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
Patricia Jackson Prior

31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)

30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)
SENIOR CONTRACTS NEGOTIATOR

30c. DATE SIGNED 5/11/10

31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)
Stephen Pool
Contracting Officer

31c. DATE SIGNED 5/11/10

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV. 3/2005)
Prescribed by GSA - FAR (48 CFR) 53.212

SUNSI REVIEW COMPLETE

TEMPLATE - ADM001

MAY 18 2010

ADM002

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SECTION B - CONTINUATION BLOCK

B.1 PRICE/COST SCHEDULE

B.2 PROJECT TITLE

The title of this project is as follows:

The Integrated Source Management Portfolio (ISMP)

B.3 BRIEF DESCRIPTION OF WORK (MAR 1987)

The purpose of this proposed new contract is to provide contractor support for the planning, acquisition, system certification, development, deployment, hosting, and maintenance of NRC's Integrated Source Management Portfolio (ISMP) project.

B.4 CONTRACT TYPE

This is a hybrid indefinite delivery indefinite quantity contract containing Firm Fixed Price and Time and Materials type tasks.

Item #1 Establish Infrastructure - Time and materials (T&M)
Item #2 Develop LVS - Time and Materials (T&M)
Item #3 Develop WBL - Time and Materials (T&M)
Item #4 Hosting and Operational - Firm Fixed Price (FFP)
Item #5 Maintenance – Time and Materials (T&M)
Item #6 User/Help Desk - Firm Fixed Price (FFP)
Item #6a User/Help Desk – Time and Materials (T&M)
Optional Item #7 WBL V.1x (TAPIS) - Time and Materials (T&M)
Optional Item #8 WBL V.2x - Time and Materials (T&M)
Optional Item #9 WBL V.3x - Time and Materials (T&M)
Optional Item #10 NSTS Vx.x (CAT 3.5) - Time and Materials (T&M)
Optional Item #11 Data Entry – Firm Fixed Price (FFP)

B.5 CONSIDERATION AND OBLIGATION--TASK ORDERS (AUG 1989)

(a) The total estimated amount of this contract (ceiling) for the products/services ordered, delivered, and accepted under this contract is $6,932,538.80. The Contracting Officer may unilaterally increase this amount as necessary for orders to be placed with the contractor during the contract period provided such orders are within any maximum ordering limitation prescribed under this contract.

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

(c) A total estimated cost as well as any 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 52.232-20 - Limitation of Cost

for fully funded task orders and 52.232-22 - Limitation of Funds for incrementally funded task orders, issued hereunder.

SECTION C - CONTRACT CLAUSES

C.1 52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS (MAR 2009) ALTERNATE I (OCT 2008)

(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: [Insert any subcontracts for services to be excluded from the hourly rates prescribed in the schedule.]; 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-- Central Contractor Registration, or

52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), 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) Services accepted. Payment shall be made for services accepted by the Government that have been delivered to the delivery destination(s) set forth in this contract. 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 FAR 2.101, the price to be paid for such materials shall be 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: [Insert each element of other direct costs (e.g., travel, computer usage charges, etc. Insert "None" if no reimbursement for other direct costs will be provided. If this is an indefinite delivery contract, the Contracting Officer may insert "Each order must list separately the elements of other direct charge(s) for that order or, if no reimbursement for other direct costs will be provided, insert 'None".']

(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: [Insert a fixed amount for the indirect costs and payment schedule. Insert "$0" if no fixed price reimbursement for indirect costs will be provided. (If this is an indefinite delivery contract, the Contracting Officer may insert "Each order must list separately the fixed amount for the indirect costs and payment schedule or, if no reimbursement for indirect costs, insert 'None')."]

(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 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; Section 1553 of the American Recovery and Reinvestment Act of 2009 relating to whistleblower protections for contracts funded under that Act; 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, and Compliance with Laws Unique to Government Contracts 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

(9) The specification.

(t) Central Contractor Registration (CCR).

(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 CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR 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 CCR database to ensure it is current, accurate

and complete. Updating information in the CCR 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 CCR 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 CCR 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 CCR 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 CCR database. Information provided to the Contractor's CCR 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 the internet at http://www.ccr.gov or by calling 1-888-227-2423 or 269-961-5757.

C.2 ADDENDUM TO FAR 52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS

Clauses that are incorporated by reference (by Citation Number, Title, and Date), have the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

The following clauses are incorporated into 52.212-4 as an addendum to this contract:

C.3 PLACE OF DELIVERY--REPORTS (JUN 1988)

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

(a) Project Officer (1 copy)

(b) Contracting Officer (1 copy)

C.4 DURATION OF CONTRACT PERIOD (MAR 1987) ALTERNATE 2 (MAR 1987)

This contract shall commence on award date and will expire on one year after. The term of this contract may be extended at the option of the Government for an additional nine one-year period.

C.5 2052.215-71 PROJECT OFFICER AUTHORITY (NOVEMBER 2006)

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

Name: Menelik Yimam

Address: US NRC
Mail Stop: T8 A23
11545 Rockville Pike
Rockville MD 20852

Telephone Number: 301-415-0200

Email: menelik.yimam@nrc.gov

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

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

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

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

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

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

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

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

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

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

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

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

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

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

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

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

(7) For contracts for the design, development, maintenance or operation of Privacy Act Systems of Records, obtain from the contractor as part of closeout procedures, written certification that the contractor has returned to NRC, transferred to the successor contractor, or destroyed at the end of the contract in accordance with instructions provided by the NRC Systems Manager for Privacy Act Systems of Records, all records (electronic or paper) which were created, compiled, obtained or maintained under the contract.

C.6 2052.215-77 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999)

(a) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days before beginning travel.

(b) The contractor must receive written approval from the NRC Project Officer before taking travel that 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).

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

(d) It is the responsibility of the contractor to notify the contracting officer in accordance with the Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the estimated costs specified in the Schedule.

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

C.7 2052.204-71 BADGE REQUIREMENTS FOR UNESCORTED BUILDING ACCESS TO NRC FACILITIES (MAR 2006)

During the life of this contract, the rights of ingress and egress for contractor personnel must be made available, as required, provided that the individual has been approved for unescorted access after a favorable adjudication from the Security Branch, Division of Facilities and Security (SB/DFS).

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 NRC. The Project Officer shall assist the contractor in obtaining badges for the contractor personnel. All contractor personnel must present two forms of Identity Source Documents (I-9). One of the documents must be a valid picture ID issued by a state or by the Federal Government. Original I-9 documents must be presented in person for certification. A list of acceptable documents can be found at http://www.usdoj.gov/crt/recruit_employ/i9form.pdf. It is the sole responsibility of the contractor to ensure that each employee has a proper NRC-issued identification/badge at all times. All photo-identification badges must be immediately (no later than three days) delivered to SB/DFS for cancellation or disposition upon the termination of employment of any contractor personnel. Contractor personnel must display any NRC issued badge in clear view at all times 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 protection of any Government records or data that contractor personnel may come into contact with.

C.8 2052.215-70 KEY PERSONNEL (JAN 1993)

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

Key Personnel	Contract Labor Description
• - Help Desk Lead	Computer Tech Spt Analyst 4
• – Chief Technology	Comp System Architect 6
• d – Portfolio Integration	Data Base Engineer 5

	Comp Systems Architect 5
	Project Manager
	Comp Systems Architect
	Project Manager
	Computer Tech Spt Analyst 4
	Project Manager
	Program Manager
	Information Sys Anlst 5

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

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

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

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

C.9 COMPENSATION FOR ON-SITE CONTARCTOR 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 Project Officer before authorizing leave for 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 Project Officer's 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.

C.10 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY LEVEL I OR LEVEL II ACCESS APPROVAL (JUL 2007)

The proposer/Contractor must identify all individuals and propose the level of Information Technology (IT) approval for each, using the following guidance. The NRC sponsoring office shall make the final determination of the level, if any, of IT approval required for all individuals working under this contract. The Government shall have and exercise full and complete control and discretion over granting, denying, withholding, or terminating IT access approvals for individuals performing work under this contract.

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

(a) felony arrest in the last seven years; (b) alcohol related arrest within the last five years; (c) record of any military courts-martial convictions in the past ten 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 years; (e) delinquency on any federal debts or bankruptcy in the last seven 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 copies of the signed Contractor's pre-screening record or review will be supplied to FSB/DFS 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 IT access security applications required by this clause within ten business days of notification by FSB/DFS of initiation of the application process. Timely receipt of properly completed records of the pre-screening record and IT access security applications (submitted for candidates that have a reasonable probability of obtaining the level of security assurance 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.

SECURITY REQUIREMENTS FOR IT LEVEL I

Performance under this contract will involve prime Contractor personnel, subcontractors or others 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.

A Contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by FSB/DFS. Temporary IT access may be approved based on a favorable review or adjudication of their security forms and checks. Final IT access may be approved based on a favorably review or adjudication. 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 requiring IT access without the approval of FSB/DFS. Where temporary access authorization has been revoked or denied, the Contractor is responsible for assigning another individual to perform the necessary work under this contract without delay to the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. When an individual receives final IT access, the individual will be subject to a reinvestigation every ten years.

The Contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 85P (Questionnaire for Public Trust Positions), two copies of the Contractor's signed pre-screening record and two FD 258 fingerprint charts, through the PO to FSB/DFS for review and favorable adjudication, prior to the individual performing work under this contract. The Contractor shall assure that all forms are accurate, complete, and legible. Based on FSB/DFS review of the Contractor applicant's security forms and/or the receipt of adverse information by NRC, the individual may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made of his/her eligibility.

In accordance with NRCAR 2052.204 70 "Security," IT Level I Contractors shall be subject to the attached NRC Form 187 (See Section J for List of Attachments) and SF- 85P which furnishes the basis for providing security requirements to prime Contractors, subcontractors or others (e.g., bidders) who 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 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.

A Contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by FSB/DFS. Temporary access may be approved based on a favorable review of their security forms and checks. Final IT access may be approved based on a favorably adjudication. 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 requiring IT access without the approval of FSB/DFS. Where temporary access authorization has been revoked or denied, the Contractor is responsible for assigning another individual to perform the necessary work under this contract without delay to the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. When an individual receives final IT access, the individual will be subject to a review or reinvestigation every ten years.

The Contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 85P (Questionnaire for Public Trust Positions), two copies of the Contractor's signed pre-screening record and two FD 258

fingerprint charts, through the PO to FSB/DFS for review and favorable adjudication, prior to the individual performing work under this contract. The Contractor shall assure that all forms are accurate, complete, and legible. Based on FSB/DFS review of the Contractor applicant's security forms and/or the receipt of adverse information by NRC, the individual may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made of his/her eligibility.

In accordance with NRCAR 2052.204 70 "Security," IT Level II Contractors shall be subject to the attached NRC Form 187 (See Section J for List of Attachments), SF- 85P, and Contractor's record of the pre-screening which furnishes the basis for providing security requirements to prime Contractors, subcontractors or others (e.g. bidders) who 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 PO by telephone in order that he/she will immediately contact FSB/DFS so that the access review may be promptly discontinued. The notification shall contain the full name of the individual, and the date of the request. Telephone notifications must be promptly confirmed by the Contractor in writing to the PO who will forward the confirmation via email to FSB/DFS. Additionally, FSB/DFS must be immediately notified in writing when an individual no longer requires access to NRC sensitive automated information technology systems or data, including the voluntary or involuntary separation of employment of an individual who has been approved for or is being processed for IT access.

C.11 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY (JANUARY 2001)

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

1. The Radioactive Material License System (RADMAT)

(b) The above listed equipment/property is hereby transferred from contract/agreement with Ohio State DOH.

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

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

C.12 SEAT BELTS

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

C.13 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR 42.15, "Contractor Performance Information," normally at 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 (state time for annual evaluation). 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 Project Officer's 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. The contractor may concur without comment, submit additional information, or request a meeting to discuss the performance evaluation. The Contracting Officer may request the contractor's Project Manger to attend a meeting to discuss the performance evaluation.

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 "For Official Use Only," 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(a) and 42.1503(c). 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.

C.14 APPROPRIATE USE OF GOVERNMENT FURNISHED INFORMATION TECHNOLOGY (IT) EQUIPMENT AND/ OR IT SERVICES/ ACCESS (MARCH 2002)

As part of contract performance the NRC may provide the contractor with information technology (IT) equipment and IT services or IT access as identified in the solicitation or subsequently as identified in the contract or delivery order. Government furnished IT equipment, or IT services, or IT access may include but is not limited to computers, copiers, facsimile machines, printers, pagers, software, phones, Internet access and use, and email access and use. The contractor (including the contractor's employees, consultants and subcontractors) shall use the government furnished IT equipment, and / or IT provided services, and/ or IT access solely to perform the necessary efforts required under the contract. The contractor (including the contractor's employees, consultants and subcontractors) are prohibited from engaging or using the government IT equipment and government provided IT services or IT access for any personal use, misuse, abuses or any other unauthorized usage.

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

C.15 COMPLIANCE WITH U.S. IMMIGRATION LAWS AND REGULATIONS

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

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.

C.16 SAFETY ON-SITE CONTRACTOR PERSONEL

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 Project Officer 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 Project Officer 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.

C.17 NRC INFORMATION TECHNOLOGY SECURITY TRAINING (AUG 2003)

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, "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 2003 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.

C.18 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES (JULY 2006)

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

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

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

C.19 2052.204.70 SECURITY (MAR 2004)

(a) Contract Security and/or Classification Requirements (NRC Form 187). The policies, procedures, and criteria of the NRC Security Program, NRC Management Directive (MD) 12 (including MD 12.1, "NRC Facility Security Program;" MD 12.2, "NRC Classified Information Security Program;" MD 12.3, "NRC Personnel Security Program;" MD 12.4, "NRC Telecommunications Systems Security Program;" MD 12.5, "NRC Automated Information Systems Security Program;" and MD 12.6, "NRC Sensitive Unclassified Information Security Program"), apply to performance of this contract, subcontract or other activity. This MD is incorporated into this contract by reference as though fully set forth herein. The attached NRC Form 187 (See List of Attachments) furnishes the basis for providing security and classification requirements to prime contractors, subcontractors, or others (e.g., bidders) who have or may have an NRC contractual relationship that requires access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (e.g., Safeguards), access to sensitive Information Technology (IT) systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants.

(b) It is the contractor's duty to protect National Security Information, Restricted Data, and Formerly Restricted Data. The contractor shall, in accordance with the Commission's security regulations and requirements, be responsible for protecting National Security Information, Restricted Data, and Formerly Restricted Data, and for protecting against sabotage, espionage, loss, and theft, the classified documents and material in the contractor's possession in connection with the performance of work under this contract. Except as otherwise expressly provided in this contract, the contractor shall, upon completion or termination of this contract, transmit to the Commission any classified matter in the possession of the contractor or any person under the contractor's control in connection with performance of this contract. If retention by the contractor of any classified matter is required after the completion or termination of the contract and the retention is approved by the contracting officer, the contractor shall complete a certificate of possession to be furnished to the Commission specifying the classified matter to be retained. The certification must

identify the items and types or categories of matter retained, the conditions governing the retention of the matter and their period of retention, if known. If the retention is approved by the contracting officer, the security provisions of the contract continue to be applicable to the matter retained.

(c) In connection with the performance of the work under this contract, the contractor may be furnished, or may develop or acquire, safeguards information, or confidential or privileged technical, business, or financial information, including Commission plans, policies, reports, financial plans, internal data protected by the Privacy Act of 1974 (Pub. L. 93.579), or other information which has not been released to the public or has been determined by the Commission to be otherwise exempt from disclosure to the public. The contractor shall ensure that information protected from public disclosure is maintained as required by NRC regulations and policies, as cited in this contract or as otherwise provided by the NRC. The contractor will not directly or indirectly duplicate, disseminate, or disclose the information in whole or in part to any other person or organization except as may be necessary to perform the work under this contract. The contractor agrees to return the information to the Commission or otherwise dispose of it at the direction of the contracting officer. Failure to comply with this clause is grounds for termination of this contract.

(d) Regulations. The contractor agrees to conform to all security regulations and requirements of the Commission which are subject to change as directed by the NRC Division of Facilities and Security (DFS) and the Contracting Officer. These changes will be under the authority of the FAR Changes clause referenced in this document.

The contractor agrees to comply with the security requirements set forth in NRC Management Directive 12.1, NRC Facility Security Program which is incorporated into this contract by reference as though fully set forth herein. Attention is directed specifically to the section titled "Infractions and Violations," including "Administrative Actions" and "Reporting Infractions."

(e) Definition of National Security Information. The term National Security Information, as used in this clause, means information that has been determined pursuant to Executive Order 12958 or any predecessor order to require protection against unauthorized disclosure and that is so designated.

(f) Definition of Restricted Data. The term Restricted Data, as used in this clause, means all data concerning design, manufacture, or utilization of atomic weapons; the production of special nuclear material; or the use of special nuclear material in the production of energy, but does not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954, as amended.

(g) Definition of Formerly Restricted Data. The term Formerly Restricted Data, as used in this clause, means all data removed from the Restricted Data category under Section 142-d of the Atomic Energy Act of 1954, as amended.

(h) Definition of Safeguards Information. Sensitive unclassified information that specifically identifies the detailed security measures of a licensee or an applicant for the physical protection of special nuclear material; or security measures for the physical protection and location of certain plant equipment vital to the safety of production of utilization facilities. Protection of this information is required pursuant to Section 147 of the Atomic Energy Act of 1954, as amended.

(i) Security Clearance. The contractor may not permit any individual to have access to Restricted Data, Formerly Restricted Data, or other classified information, except in accordance with the Atomic Energy Act of 1954, as amended, and the Commission's regulations or requirements applicable to the particular type or category of classified information to which access is required. The contractor shall also execute a Standard Form 312, Classified Information Nondisclosure Agreement, when access to classified information is required.

(j) Criminal Liabilities. It is understood that disclosure of National Security Information, Restricted Data, and Formerly Restricted Data relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data, Formerly Restricted Data, or any other classified matter that may come to the contractor or any person under the contractor's control in connection with work under this contract, may subject the contractor, its agents, employees, or subcontractors to criminal liability under the laws of the United States. (See the

Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and Executive Order 12958.)

(k) Subcontracts and Purchase Orders. Except as otherwise authorized in writing by the contracting officer, the contractor shall insert provisions similar to the foregoing in all subcontracts and purchase orders under this contract.

(l) In performing the contract work, the contractor shall classify all documents, material, and equipment originated or generated by the contractor in accordance with guidance issued by the Commission. Every subcontract and purchase order issued hereunder involving the origination or generation of classified documents, material, and equipment must provide that the subcontractor or supplier assign classification to all documents, material, and equipment in accordance with guidance furnished by the contractor.

C.20 PROJECT SUPPORT CONTRACTORS

The Government may either award or have awarded management, engineering, technical, and other professional support service contracts (hereafter referred to as Project Support Contractors). Project Support Contractors may require access to proprietary and other data relating to technical matters (including cost and schedule) concerning this contract to the same degree such access is accorded Government personnel.

The Contractor shall cooperate with Project Support Contractors by engaging in technical discussions with Project Support Contractors' personnel, and permitting such personnel access to information and data relating to technical matters (including cost and schedule) concerning this contract to the same degree such access is accorded Government personnel.

Project Support Contractors shall agree to protect proprietary information of the Contractor in accordance with Federal Acquisition Regulation (FAR) 9.505-4, to not engage in the production of products (including software), and to otherwise abide by FAR Subpart 9.5, entitled "Organizational Conflicts of Interest." Project Support Contractors shall be required to directly execute nondisclosure, non-use agreements with the Contractor and subcontractors if so requested by the Contractor.

C.21 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE

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

NUMBER	TITLE	DATE
	FEDERAL ACQUISITION REGULATION (48 CFR Chapter 1)	
52.204-9	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL	SEP 2007
52.227-14	RIGHTS IN DATA--GENERAL	DEC 2007
52.249-14	EXCUSABLE DELAYS	APR 1984
52.227-17	RIGHTS IN DATA--SPECIAL WORKS	DEC 2007

C.22 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (FEB 2010)

(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)).

Alternate I (AUG 2007) of 52.222-50 (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:

[] (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sept 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 (DEC 2008)(Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

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

[] (4) 52.204-11, American Recovery and Reinvestment Act-Reporting Requirements (MAR 2009) (Pub. L. 111-5).

[] (5) 52.219-3, Notice of Total HUBZone Set-Aside (Jan 1999) (15 U.S.C. 657a).

[X] (6) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (July 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

[] (7) [Reserved]

[] (8)(i) 52.219-6, Notice of Total Small Business Set-Aside (June 2003) (15 U.S.C. 644).

[] (ii) Alternate I (Oct 1995) of 52.219-6.

[] (iii) Alternate II (Mar 2004) of 52.219-6.

[] (9)(i) 52.219-7, Notice of Partial Small Business Set-Aside (June 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] (10) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)).

[] (11)(i) 52.219-9, Small Business Subcontracting Plan (APR 2008) (15 U.S.C. 637(d)(4)).

[] (ii) Alternate I (Oct 2001) of 52.219-9.

[X] (iii) Alternate II (Oct 2001) of 52.219-9.

[] (12) 52.219-14, Limitations on Subcontracting (Dec 1996) (15 U.S.C. 637(a)(14)).

[] (13) 52.219-16, Liquidated Damages--Subcontracting Plan (Jan 1999) (15 U.S.C. 637(d)(4)(F)(i)).

[] (14)(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 (June 2003) of 52.219-23.

[X] (15) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (APR 2008) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

[X] (16) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

[] (17) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004) (15 U.S.C. 657 f).

[X] (18) 52.219-28, Post Award Small Business Program Representation (APR 2009) (15 U.S.C 632(a)(2)).

[X] (19) 52.222-3, Convict Labor (June 2003) (E.O. 11755).

[] (20) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (AUG 2009) (E.O. 13126).

[X] (21) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).

[X] (22) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

[X] (23) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).

[X] (24) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998) (29 U.S.C. 793).

[X] (25) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).

[X] (26) 52.222-54, Employment Eligibility Verification (Jan 2009). (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.)

[] (27)(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.)

[] (28) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007)(42 U.S.C. 8259b).

[X] (29)(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.

[] (30) 52.225-1, Buy American Act--Supplies (FEB 2009) (41 U.S.C. 10a-10d).

[] (31)(i) 52.225-3, Buy American Act--Free Trade Agreements-- Israeli Trade Act (JUN 2009) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C 3805 note, Pub. L. 108-77, 108-78, 108-286, 108-302, 109-53 and 109-169, 109-283, and 110-138).

[] (ii) Alternate I (Jan 2004) of 52.225-3.

[] (iii) Alternate II (Jan 2004) of 52.225-3.

[X] (32) 52.225-5, Trade Agreements (AUG 2009) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

[X] (33) 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).

[] (34) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

[] (35) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

[] (36) 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)).

[] (37) 52.232-30, Installment Payments for Commercial Items (Oct 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

[X] (38) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (Oct 2003) (31 U.S.C. 3332).

[] (39) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (May 1999) (31 U.S.C. 3332).

[] (40) 52.232-36, Payment by Third Party (FEB 2010) (31 U.S.C. 3332).

[] (41) 52.239-1, Privacy or Security Safeguards (Aug 1996) (5 U.S.C. 552a).

[] (42)(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:

[] (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) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009)(Pub. L. 110-247)

[] (8) 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) 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 (DEC 2008) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (May 2004) (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 $550,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) [Reserved]

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

(v) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(vii) [Removed and reserved]

(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, Employee Eligibility Verification (JAN 2009)

(xiii) 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.

(xiv) 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.

C.23 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 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days 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 ten (10) years.

C.24 52.232-7 PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR CONTRACTS (FEB 2007) ALTERNATE I (FEB 2007)

The Government will pay the Contractor as follows upon the submission of vouchers approved by the Contracting Officer or the authorized representative:

(a) Hourly rate.

(1) 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--

(i) Performed by the Contractor;

(ii) Performed by the subcontractors; or

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

(2) The amounts shall be computed by multiplying the appropriate hourly rates prescribed in the Schedule by the number of direct labor hours performed.

(3) The hourly 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 employees that do not meet the qualifications specified in the contract, unless specifically authorized by the Contracting Officer.

(4) The hourly rates shall include wages, indirect costs, general and administrative expense, and profit. Fractional parts of an hour shall be payable on a prorated basis.

(5) Vouchers may be submitted once each month (or at more frequent intervals, if approved by the Contracting Officer), to the Contracting Officer or authorized representative. The Contractor shall substantiate vouchers (including any subcontractor hours reimbursed at the hourly rate in the schedule) by evidence of actual payment and by--

(i) Individual daily job timekeeping records;

(ii) Records that verify the employees meet the qualifications for the labor categories specified in the contract; or

(iii) Other substantiation approved by the Contracting Officer.

(6) Promptly after receipt of each substantiated voucher, the Government shall, except as otherwise provided in this contract, and subject to the terms of paragraph (e) of this clause, pay the voucher as approved by the Contracting Officer or authorized representative.

(7) Unless otherwise prescribed in the Schedule, the Contracting Officer may unilaterally issue a contract modification requiring the Contractor to withhold amounts from its billings until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interests. The Contracting Officer may require a withhold of 5 percent of the amounts due under paragraph (a) of this clause, but the total amount withheld for the contract shall not exceed $50,000. The amounts withheld shall be retained until the Contractor executes and delivers the release required by paragraph (g) of this clause.

(8) 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. If no overtime rates are provided in the Schedule and overtime work is approved in advance by the Contracting Officer, overtime rates shall be negotiated. Failure to agree upon these overtime rates shall be treated as a dispute under the Disputes clause of this contract. 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.

(b) Materials.

(1) For the purposes of 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) 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.); and

(D) Applicable indirect costs.

(2) If the Contractor furnishes its own 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--

(i) Quantities being acquired; and

(ii) Actual cost of any modifications necessary because of contract requirements.

(3) Except as provided for in paragraph (b)(2) of this clause, the Government will reimburse the Contractor for allowable cost of materials provided the Contractor--

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

(ii) Ordinarily 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.

(4) Payment for materials is subject to the Allowable Cost and Payment clause of this contract. The Contracting Officer will determine allowable costs of materials in accordance with Subpart 31.2 of the Federal Acquisition Regulation (FAR) in effect on the date of this contract.

(5) The Contractor may include allocable indirect costs and other direct costs to the extent they are--

(i) Comprised only of costs that are clearly excluded from the hourly rate;

(ii) Allocated in accordance with the Contractor's written or established accounting practices; and

(iii) Indirect costs are not applied to subcontracts that are paid at the hourly rates.

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

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

(ii) Take all cash and trade discounts, rebates, allowances, credits, salvage, commissions, and other benefits. When unable to take advantage of the benefits, the Contractor shall promptly notify the Contracting Officer and give the reasons. The Contractor shall give credit to the Government for cash and trade discounts, rebates, scrap, commissions, and other amounts that have accrued to the benefit of the Contractor, or would have accrued except for the fault or neglect of the Contractor. The Contractor shall not deduct from gross costs the benefits lost without fault or neglect on the part of the Contractor, or lost through fault of the Government.

(7) Except as provided for in 31.205-26(e) and (f), the Government will not pay profit or fee to the prime Contractor on materials.

(c) If the Contractor enters into any subcontract that requires consent under the clause at 52.244-2, Subcontracts, without obtaining such consent, the Government is not required to reimburse the Contractor for any costs incurred

under the subcontract prior to the date the Contractor obtains the required consent. Any reimbursement of subcontract costs incurred prior to the date the consent was obtained shall be at the sole discretion of the Government.

(d) 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 performing 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 performing 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.

(e) 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.

(f) Audit. At any time before final payment under this contract, the Contracting Officer may request audit of the vouchers and supporting documentation. Each payment previously made shall be subject to reduction to the extent of amounts, on preceding vouchers, that are found by the Contracting Officer or authorized representative not to have been properly payable and shall also be subject to reduction for overpayments or to increase for underpayments. Upon receipt and approval of the voucher designated by the Contractor as the "completion voucher" and supporting documentation, and upon compliance by the Contractor with all terms of this contract (including, without limitation, terms relating to patents and the terms of paragraph (g) of this clause), the Government shall promptly pay any balance due the Contractor. The completion voucher, 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.

(g) Assignment and 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:

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

(2) 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.

(3) 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.

(h) Interim payments on contracts for other than services.

(1) Interim payments made prior to the final payment under the contract are contract financing payments. Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act.

(2) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(i) Interim payments on contracts for services. For interim payments made prior to the final payment under this contract, 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.

(j) The terms of this clause that govern reimbursement for materials furnished are considered to have been deleted.

C.25 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST (JAN 1993)

(a) Purpose. The primary purpose of this clause is to aid in ensuring that the contractor:

(1) Is not placed in a conflicting role because of current or planned interests (financial, contractual, organizational, or otherwise) which relate to the work under this contract; and

(2) Does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described apply to performance or participation by the contractor, as defined in 48 CFR 2009.570-2 in the activities covered by this clause.

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

(2) The contractor may not represent, assist, or otherwise support an NRC licensee or applicant undergoing an NRC audit, inspection, or review where the activities that are the subject of the audit, inspection, or review are the same as or substantially similar to the services within the scope of this contract (or task order as appropriate) except where the NRC licensee or applicant requires the contractor's support to explain or defend the contractor's prior work for the utility or other entity which NRC questions.

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

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

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

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

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

(d) Disclosure after award.

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

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

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants which comes within the scope of work of the underlying contract. Further, if this contract involves work at a licensee or applicant site, the contractor agrees to exercise diligence to discover and disclose any new work at that licensee or applicant site. This disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity and must be received by the NRC at least 15 days before the proposed award date in any event, unless a written justification demonstrating urgency and due diligence to discover and disclose is provided by the contractor and approved by the contracting officer. The disclosure must include the statement of work, the dollar value of the proposed contract, and any other documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when the work violates paragraphs (c)(2), (c)(3) or (c)(4) of this section.

(e) Access to and use of information.

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

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

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

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

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

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

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

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

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

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

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

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

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

C.26 DRUG FREE WORKPLACE TESTING: UNESCORTED ACCESS TO NUCLEAR FACILITIES, ACCESS TO CLASSIFIED INFORMATION OR SAFEGUARDS INFORMATION, OR PERFORMING IN SPECIALLY SENSITIVE POSITIONS (DEC 2008)

NRC's Headquarters Assistant Drug Program Coordinator (ADPC) shall be responsible for implementing and managing the collecting and testing portions of the NRC Contractor Drug Testing Program. The Headquarters ADPC function is carried out by the Drug Program Manager in the Division of Facilities and Security, Office of Administration. All sample collection, testing, and review of test results shall be conducted by the NRC "drug testing contractor." The NRC will reimburse the NRC "drug testing contractor" for these services.

All contractor employees, subcontractor employees, and consultants proposed for performance or performing under this contract shall be subject to the requirements of the clause if they meet one of the following criteria stated in the Plan: (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 pre-assignment, random, reasonable suspicion, and post-accident drug testing. The due process procedures applicable to NRC employees under NRC=s Drug Testing Program are not applicable to contractors, consultants, subcontractors and their employees. Rather, 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 in accordance with the Plan. The NRC will reimburse the NRC "drug testing contractor" for collecting, testing, and reviewing test results. 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

C.27 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.arnet.gov/far

C.28 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 date of award through expiration date of the contract.

(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.

C.29 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 $1,999,744.39, 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 combination of items in excess of $77,439,634.37; or

(2) A series of orders from the same ordering office within 1 days that together call for quantities exceeding the limitation in paragraph (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 5 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.

C.30 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 contract expiration..

C.31 52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR (APR 1984)

Funds are not presently available for performance under this contract beyond January 31, 2011. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond January 31, 2011, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

C.32 SECTION 508 COMPLIANCE

All electronic and information technology (EIT) procured through this contract must meet the applicable accessibility standards at 36 CFR 1194, unless an agency exception to this requirement exists. (36 CFR 1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at: http://www.access-board.gov/sec508/standards.htm)

The standards do not require the installation of specific accessibility-related software or the attachment of an assistive technology device, but merely require that the EIT be compatible with such software and devices so that it can be made accessible, without significant alteration, if so required by the NRC in the future.

Within five (5) days of product delivery, the Contractor shall denote, in a comprehensive specific list, all offered EIT products (supplies and services) that fully comply with Section 508, with full details and evidence or verification of compliance. The Contractor shall ensure that all EIT products that are less than fully compliant are offered pursuant to extensive market research, which ensures that they are the most compliant products and services available to satisfy this contract's requirements.

If the NRC determines any furnished product or service is not in compliance with the contract, the Contracting Officer (CO) will promptly inform the Contractor in writing. The Contractor shall, without charge to the NRC, repair or replace the non-compliant products or services within the period of time specified in writing by the CO. If such repair or replacement is not completed within the time specified, the NRC shall have the following recourses:

Cancellation of the contract, delivery or task order, purchase of line item without termination liabilities; or

In the case of custom EIT being developed for the NRC, the NRC shall have the right to have any necessary changes made or repairs performed, by the NRC or by another firm, and the Contractor shall reimburse the NRC for any expenses thereby incurred.

SECTION D - CONTRACT DOCUMENTS, EXHIBITS, OR ATTACHMENTS

ATTACHMENT NUMBER	TITLE
A	STATEMENT OF WORK/SPECIFICATION
B	BILLING INSTRUCTIONS FIXED PRICE
C	BILLING INSTRUCTIONS LABOR HOUR
D	NRC-35 DRUG TESTING PROGRAM RECORDS
E	NRC 187
F	PRICE SCHEDULE, SPENDING PLAN AND SUBCONTRACTOR PLAN

ATTACHMENT A:
STATEMENT OF WORK

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0 INTRODUCTION

0.1 BACKGROUND

The events of September 11, 2001, heightened the nation's concern regarding the use of radioactive materials for a malevolent act. The potential for such an attack has been of particular concern because of the widespread use of radioactive materials (often contained in sealed sources) in the United States and abroad by industry, hospitals, and academic institutions. A major impetus for this project is the need to control radioactive materials that could be used in a radiological dispersal device or "dirty bomb" – a conventional explosive that carries radioactive materials and releases them on detonation. The Nuclear Regulatory Commission (NRC) has been proactively working on material "real time" tracking capability since 2005.

In late 2006 and early 2007, the Government Accountability Office (GAO) conducted a test of the NRC controls governing the issuance of licenses for possessing certain types of radioactive materials and for enforcing possession limits on the quantities of those materials. Subsequently, GAO reported that they were able to obtain radioactive materials licenses for two fabricated companies, modify the licenses to raise the possession limits, and utilize the augmented licenses to receive quotes for purchasing radioactive materials from legitimate licensees.

At a July 12, 2007, Senate Committee on Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations (PSI) hearing following GAO's report, it was suggested that the NRC should consider establishing a web-based licensing (verification) system that would allow suppliers to validate purchaser licenses and the authorized quantity that a purchaser could obtain. GAO, NRC, and Congress deemed this as a necessary and urgent IT initiative to protect the nation from the threat of malevolent use of radioactive materials.

In an effort to better track radioactive materials, the NRC developed a comprehensive action plan outlining a number of specific steps to address the concerns raised by the GAO report and in the Senate Committee hearing. Part of this plan consists of establishing an Integrated Source Management Portfolio of automated tools for credential tracking (license and certificate), inspection tracking, item tracking (devices and sources), and license verification. The portfolio consists of three systems – (1) the National Source Tracking System (NSTS) which is in production, (2) the Web-Based Licensing (WBL) system which is in development, and (3) the License Verification System (LVS) which is in the planning phase. A description of each system is provided below.

0.1.1 NSTS

The NSTS which received an authority-to-operate (ATO) in December 2008, tracks the transfer of responsibility of sealed sources of radioactive materials. This tracking spans the life cycle of the source from manufacture through shipment receipt, decay and burial. It supports controlled authorizations and accountability for licensed suppliers and licensed recipients of sealed sources. The successful implementation of NSTS satisfies NRC's commitment to Congress to develop source tracking capabilities and satisfies the International Atomic Energy Agency's Code of Conduct's call for a national, central database of high-risk sources.

NSTS helps the NRC:

- monitor the location, possession and disposal of radioactive sources of concern throughout the country;

1.1

- improve accountability and give better information to decision makers;

1.2

- detect and act on tracking discrepancies;

1.3

- conduct inspections and investigations;

1.4

- communicate radioactive source information among Government agencies;

1.5

- respond in the event of an emergency;

1.6

- verify legitimate import, export, ownership, and use of radioactive sources; and

1.7

- further analyze hazards attributable to the possession and use of radioactive materials.

1.8

1.9 0.1.2 WBL

The WBL is envisioned as a NRC material licensing and inspection system. WBL manages the licensing life-cycle from initial application, license issuance, amendment, reporting, and de-licensing; it provides a computerized record of each specific license; and it tracks inspections related to the licenses. WBL is designed to maintain information on NRC material licensees but, in the future, will also include Agreement State licensing information. WBL shall replace two aging legacy systems, the licensing tracking system (LTS) and the inspection planning system (IPS).

Once WBL is established, it is envisioned that the NRC will use this modern licensing/ inspection platform to incorporate other types of materials 'license' tracking systems in the future. This would include systems such as:

- Reciprocity tracking system (RTS) – used to track Agreement State licensee requests for reciprocity.

- Transportation Approval Package Information System (TAPIS) – used to maintain information about NRC certified packages and quality assurance programs used by companies involved in transportation of radioactive material.

- BARTO System – used to track the proposed and actual schedules for spent fuel package reviews. (Note: TAPIS and BARTO combined are called the – Storage and Transportation Information Management System (STIMS)).

- National Sealed Source and Device Registry System (NSS&DRS) – used to maintain fundamental information about device and source certificates of registration.

- Import/Export Licensing process – used to track licenses issued for international import and export of radioactive material. (Note: See appendices AA-AE for description of the systems mentioned above).

WBL shall help the NRC:

- streamline the materials licensing processes for Licensees and NRC staff;

1.10

- support related licensing inspection activities;

1.11

- establish an information technology architecture that can support Web based communication with the licensees;

1.12

- provide a licensing information repository to support other related systems (e.g., NSTS, LVS);

1.13

- provide a modern framework that can be leveraged to incorporate other systems.

1.14

1.15 0.1.3 License Verification System (LVS)

The LVS is envisioned as a "national verification system" that would access NRC and Agreement State licensee information and be used for purposes of detecting and preventing unauthorized parties with malicious intent from obtaining radioactive materials. The LVS is planned to be an integrated service that shall broker information stored in WBL and NSTS to provide the validations to ensure that (a) a license is valid and accurate; (b) a licensee is authorized for acquiring quantities and types of radioactive materials; and (c) the current levels of licensee inventory tracked sources is within the possession limits. The LVS shall be designed to handle request transactions for validation functions. It shall work in much the same way as the approval process for a credit card purchase. When a merchant checks to verify a credit card the only information returned is whether or not the transaction is approved. LVS shall take in the validation request and, through examination of information available from both NSTS and WBL, will provide a response indicating whether or not a license is valid and a pending purchase is within the bounds of the possession limits and inventory.

LVS shall help the NRC:

- enable authorized licensees nationwide to confirm the validity of a licensee seeking to obtain radioactive material and to confirm the licensee's possession compliance;
- enable Government authorities to view specific information on Supplier and Receiver licensees as necessary to verify shipments of radioactive materials;
- prevent misrepresentation or fictitious claims by an entity of its authorization to possess and use radioactive materials.

0.2 OBJECTIVE

Within the U.S. NRC, the Office of Federal and State Materials and Environmental Management Programs (FSME) develops, implements and oversees the regulatory framework for industrial, commercial, and medical uses of radioactive materials, uranium recovery activities and the decommissioning of previously operating nuclear facilities and power plants. In addition, FSME conducts extensive environmental assessments in support of these regulatory functions. The NRC implements these regulatory programs in coordination with partners at other Federal agencies, the States, the NRC Regions, and Tribal Governments.

FSME has been charged with implementation of an Integrated Source Management Portfolio that supports the FSME mission in a manner that protects public health and safety, provides for the common defense and security, and protects the environment.

The objective is for the Contractor to:

- Establish the Infrastructure to Support the FSME systems (LVS, WBL, and NSTS)
- Develop and Deploy IT systems that support the FSME mission
- Provide System Hosting and Operational Support, Maintenance, and User and Help Desk Support

These tasks will support the new business practices needed to improve security for radioactive materials. The Contractor shall provide all personnel, materials, hardware, software, supplies, equipment, travel, and other direct costs necessary to accomplish the performance of the tasks described in Section 3.
1.16

0.3 SCOPE

0.3.1 Scope Included

This SOW includes development, testing, training, and deployment of the LVS and WBL systems; operational and maintenance support, user support, and hosting of LVS, WBL and NSTS. These tasks cover a broad range of activities including:

- system Infrastructure Setup
- system Development, Testing, and Deployment
- system Operational Support
- database and application hosting for the LVS, WBL, NSTS systems
- maintenance of all LVS, WBL and NSTS infrastructure that is external to the NRC headquarters campus
- database and application software maintenance for the LVS, WBL and NSTS
- help desk establishment to provide comprehensive user support for all systems

This SOW is comprised of the following 11 tasks:

1. Task 1: Establish Infrastructure to Support System Portfolio (LVS, WBL, and NSTS)
2. Task 2: Develop and Implement the License Verification System (LVS)
3. Task 3: Develop and Implement the WBL

4. Task 4: Hosting and Operational Support
5. Task 5: System Maintenance
6. Task 6: User Support / Help Desk
7. Task 7: WBL (v1.x) Development (optional)
8. Task 8: WBL (v2.x) Development (optional)
9. TASK 9: WBL (v3.x) Development (optional)
10. Task 10: NSTS (vx.x) Development (optional)
11. Task 11: WBL Agreement State License Data Entry Support (optional)

0.3.2 Scope Excluded

This SOW does not cover any Portfolio related costs or effort by NRC staff.

1 PORTFOLIO SYSTEM REQUIREMENTS

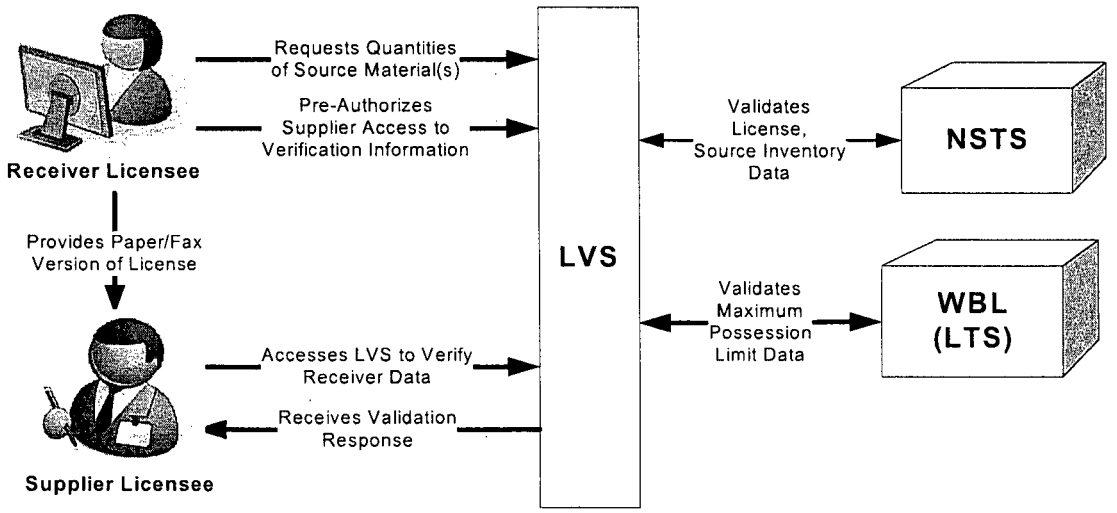
1.1 LVS SYSTEM REQUIREMENTS

The Section below summarizes the LVS high-level system requirements which are included as Appendix A of this SOW.

1.1.1 Overview/System Concept

The LVS shall provide a way for certain licensees nationwide to confirm the license validity and maximum possession limit compliance of other licensees seeking to obtain radioactive materials. LVS shall also allow authorized Government authorities to verify certain information about licensees authorized to supply or obtain radioactive materials. LVS shall enable the NRC to support its materials safety program functions in ensuring safety and security for the possession and use of radioactive source materials and it will address the security vulnerabilities identified by the GAO in the NRC's radioactive materials licensing process.

LVS is envisioned as a 'broker' that queries information stored in other existing NRC systems, such as the NSTS and the WBL. LVS itself shall not store licensing or source information and shall maintain 'read-only' access to these other NRC systems. LVS shall, however, track and store information about licensee relationships and verification requests.



The Context Diagram above shows the direct users of LVS (Receiver and Supplier Licensees) and describes how the users and automated systems will interface.

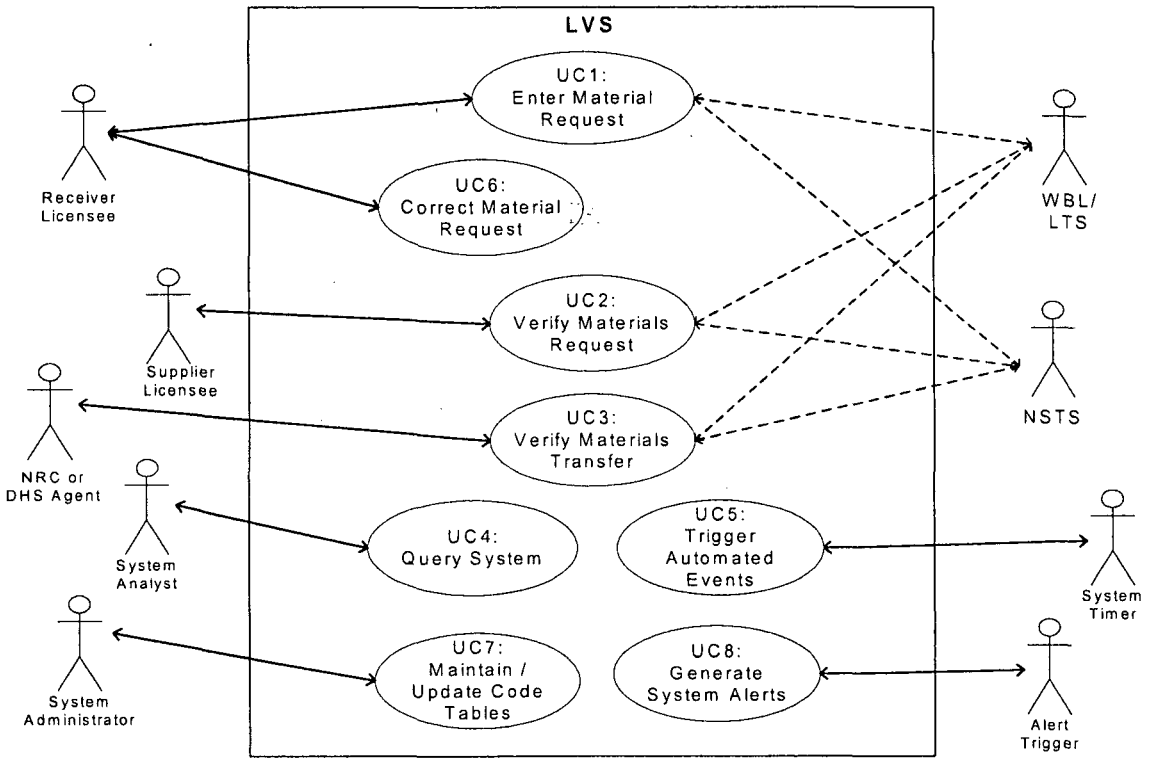
1.1.2 Assumptions

- WBL and NSTS shall provide the data necessary for LVS to verify license and maximum possession limits (licensing information stored in LTS shall be used until WBL is deployed).
- WBL shall be expanded to become a national system containing license data for both NRC and Agreement State licensees.
- Maximum possession limit data will be stored in WBL in a standardized format as much as possible to facilitate verification calculations.
- Source inventory data will be stored in NSTS in a standardized format as much as possible so that this data can be easily compared with the maximum possession limits from WBL.
- LVS shall only provide source inventory verifications on category levels supported by NSTS.
- LVS, WBL, and NSTS shall be hosted at the same data center. These systems will leverage shared resources at the data center as appropriate.
- LVS shall support various user roles to provide different functionality for licensee users and Government agency users.

1.1.3 Functional Requirements

The functional requirements define the intended behavior of the system from the NRC business point of view. They describe what actions and processes will exist in the system and how they will behave. The LVS functional requirements have been documented using the 'use-case technique' which is a way of describing the behavior of a system from the viewpoint of the users that interact with the system. The LVS Use Case (UC) Model below displays the LVS high-level Use Cases (ovals) and how the Use Case Actors, both human and automated, (shown as stick figures) will interact with LVS.

LVS requirement details are provided in Appendix A of this SOW – LVS High Level Requirements.



1.1.4 Non-Functional Requirements

Non-Functional Requirements define the non-behavioral attributes of the system. These include characteristics such as workload, response time, data integrity, data capacity, reliability, backup and recovery, maintainability, expandability, hosting facility capabilities, human factors (usability), record keeping requirements, and special requirements (e.g., Section 508 compliance). LVS shall operate under the same non-functional requirements as WBL. For details on the Non-Functional requirements, refer to the WBL system requirements which are included as an appendix to this SOW and the Infrastructure and Operational Requirements in Section 3.3. LVS has a maximum user count of: 55,000 users (2,500 concurrent).

1.1.5 Conceptual Data Structure

LVS has limited data that it tracks. LVS is essentially a 'broker' that communicates with WBL and NSTS in order to verify license and source inventory information. LVS does not itself store the license or source inventory information.

The key data that LVS does store and track is the Radioactive Materials Requests that a Receiver Licensee initiates. LVS also stores the status and resolution of these requests. The table below shows the data structure of the Radioactive Materials Request table.

Sample Radioactive Materials Request Table

Request ID#	Receiver #	Supplier #	Qty	Units	Isotope	Time/ Date	Status	Notes/ Text Field- Opt]	Calc Factor?	Use Address (1st 4 char)	Zip Code	Temp. Job Site Usage Flag
LVS0001	NR 001	MD-050	40	Ci	Co60	01 12 08 2:11:00 p.m.	Pending		N	1401	10011	N
LVS0002	NR 001	MD-050	20	Ci	Cs137	03 27 08 1:13:07 p.m.	Passed	Okay	Y	1401	10011	Y
LVS0003	NR 001	SC-003	40	Ci	Be237	05 17 08 8:30:00 a.m.	Reject	Does Not Match License	N	1401	10011	Y
LVS0004	NR 002	MD-050	30	Ci	Co60	11 12 08 2:23:00 p.m.	Pending		N	4733	50508	N
LVS0005	NR 002	SC-003	70	Ci	Co60	11 27 08 5:03:10 p.m.	Passed	Okay	Y	4733	50508	N

1.1.6 Security Requirements

Refer to Section 4.2.1 of this SOW for LVS security requirements.

1.2 WBL SYSTEM REQUIREMENTS

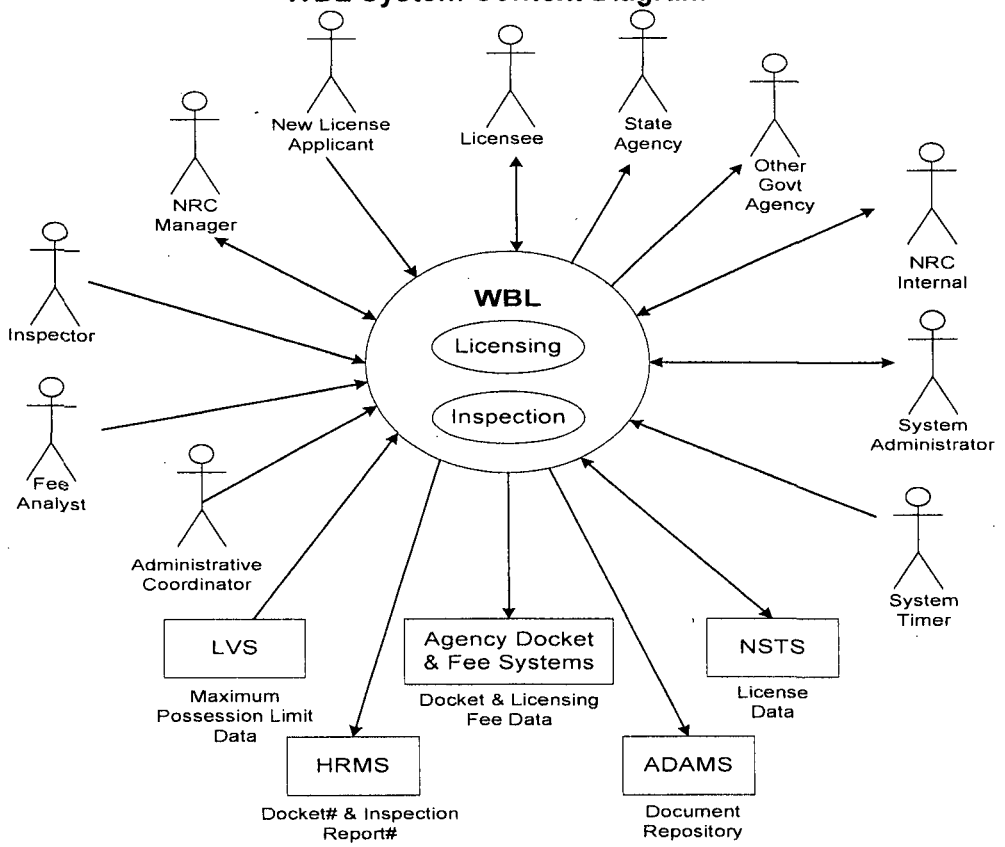
The Section below summarizes the WBL system requirements which are included as Appendix B of this SOW.

1.2.1 Overview / System Concept

The WBL system will leverage modern web technologies to support the NRC's licensing and inspection processes by tracking the license application processes (new licenses, renewals, amendments, and terminations); providing computerized records of each specific license; and planning and tracking inspection activities. WBL shall also support e-Gov by allowing licensees to submit and track the progress of license actions through a web interface. WBL* will replace two legacy mainframe systems -LTS for its licensing tracking capability and the IPS for its inspection planning and tracking capability.

The Context Diagram below shows the major classes of users and the system interfaces that form the context for WBL.

WBL System Context Diagram



1.2.2 Assumptions

- WBL shall be built by adapting a product called the Radioactive Material License System (RADMAT). The NRC has obtained unlimited rights to this product through a license agreement executed with the State of Ohio's Department of Health.
- Initially, WBL shall only store NRC license information. The WBL shall be designed to be scalable to accommodate the addition of license and maximum possession limit information from Agreement States.
- Maximum possession limit data will be stored in WBL in a standardized format as much as possible to facilitate verification calculations.
- The user base for WBL shall include authorized NRC staff, Licensees, and partner Government Agencies. The maximum user count is 10,000 users (200 concurrent).
- LVS, WBL, and NSTS shall be hosted at the same data center. These systems will leverage shared resources at the data center as described in Section 2 – Consolidated Hosting Environment Requirements.

1.2.3 Functional Requirements

The functional requirements define the intended behavior of the system from the NRC business point of view. They describe what actions and processes will exist in the system and how they will behave. The WBL functional requirements have been documented using the 'use-case technique' which is a way of describing the behavior of a system from the viewpoint of the users that interact with the system.

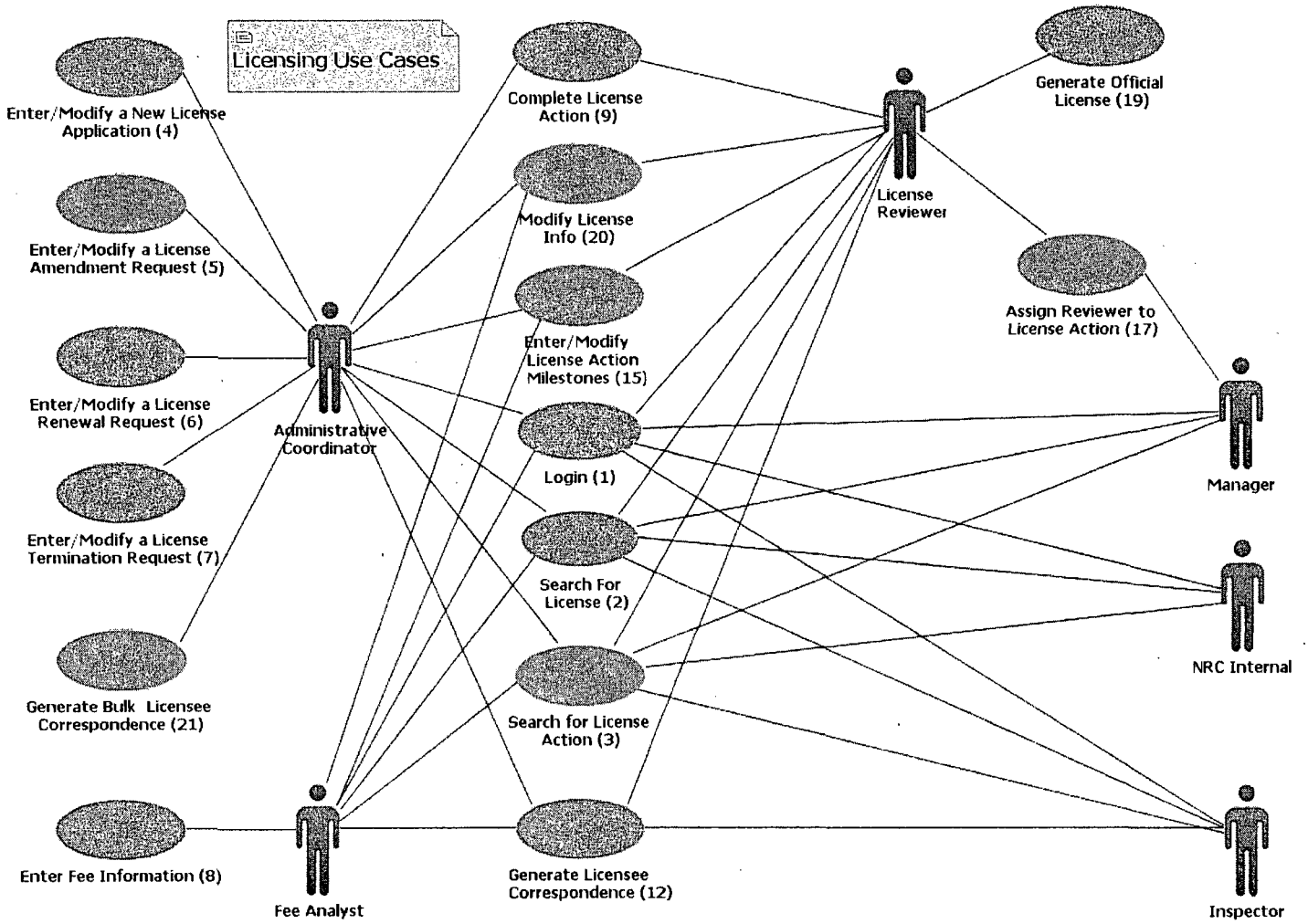
The WBL Use Case Models shown on the following pages display the WBL Use Cases (ovals) and how the Use Case Actors, both human and automated, (shown as stick figures) will interact with WBL.

The use cases diagrams are grouped into the following categories:

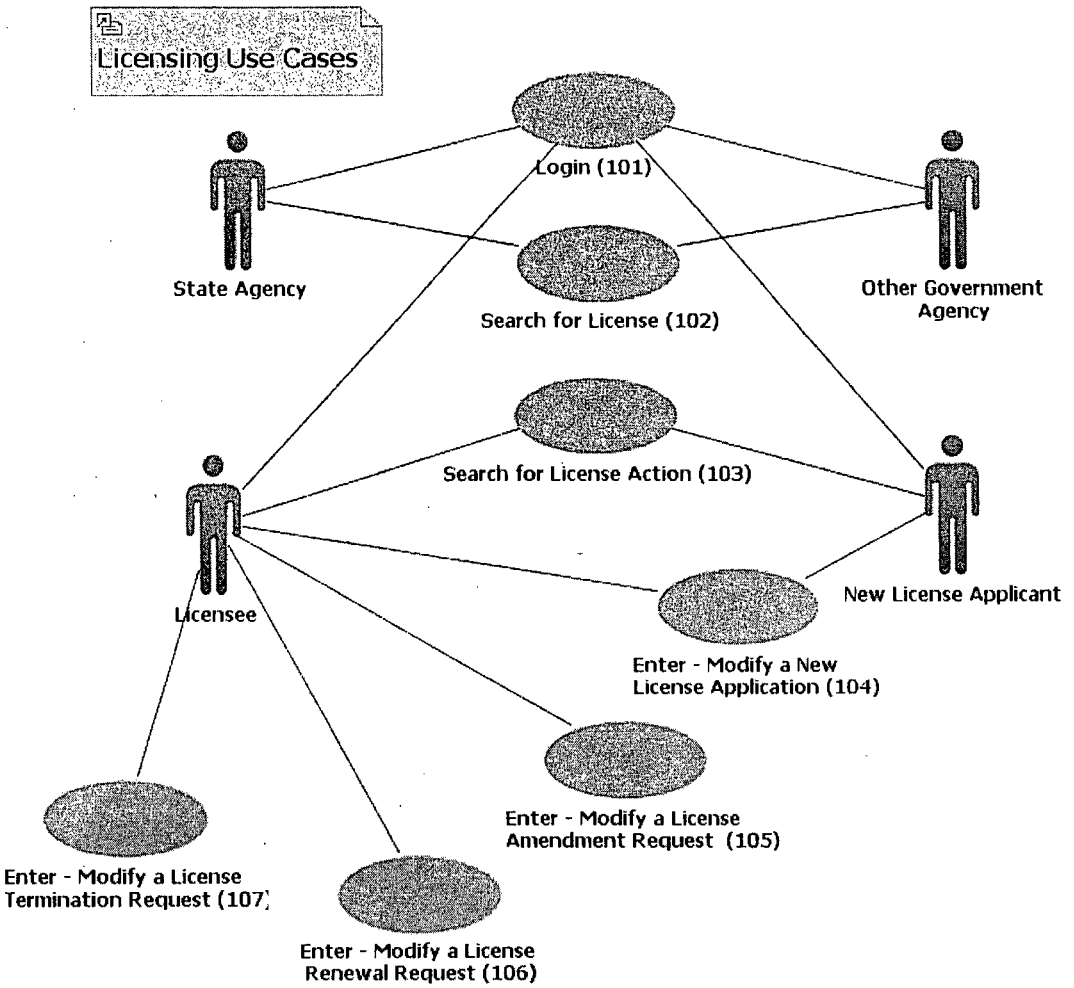
- Licensing Use Cases – Internal: This functional group contains use cases that are used by internal WBL users (e.g., NRC staff) to enter, track, and modify licensing related information.
- Inspection Use Cases – Internal: This functional group contains use cases that are used by internal WBL users (e.g., NRC staff) to enter, track, and modify inspection related information.
- Licensing Use Cases – External: This functional group contains use cases that are used by external WBL users (e.g., Licensees, State Agencies, Other Government Agencies) to enter, track, and modify licensing related information.
- System Administrator and Reporting: This functional group contains use cases that are used for system administration and reporting purposes.

WBL requirement details are provided in Appendix B of this SOW – WBL System Requirements Specifications.

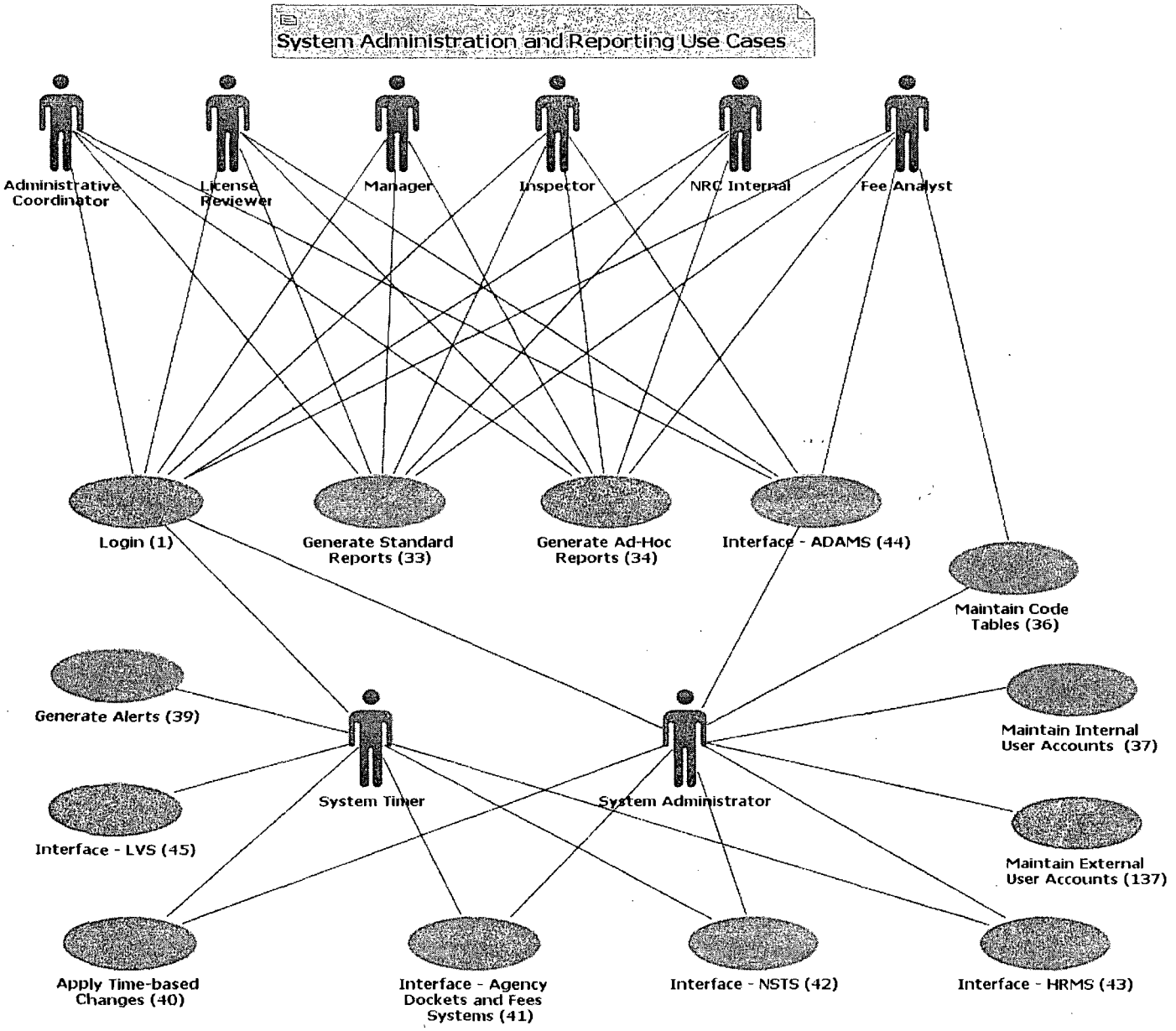
WBL Licensing Use Cases – Internal



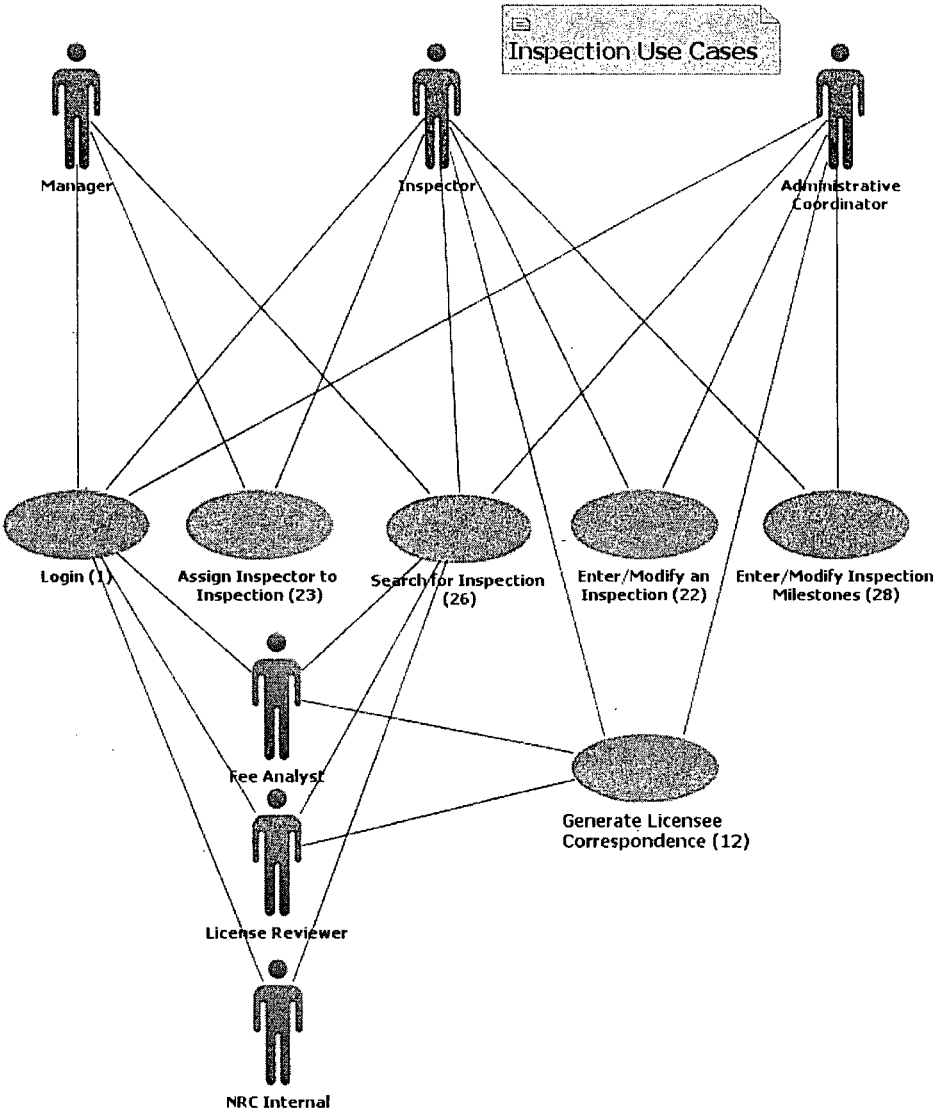
WBL Licensing Use Cases – External



WBL System Administrator and Reporting Use Cases



WBL Inspection Use Cases – Internal



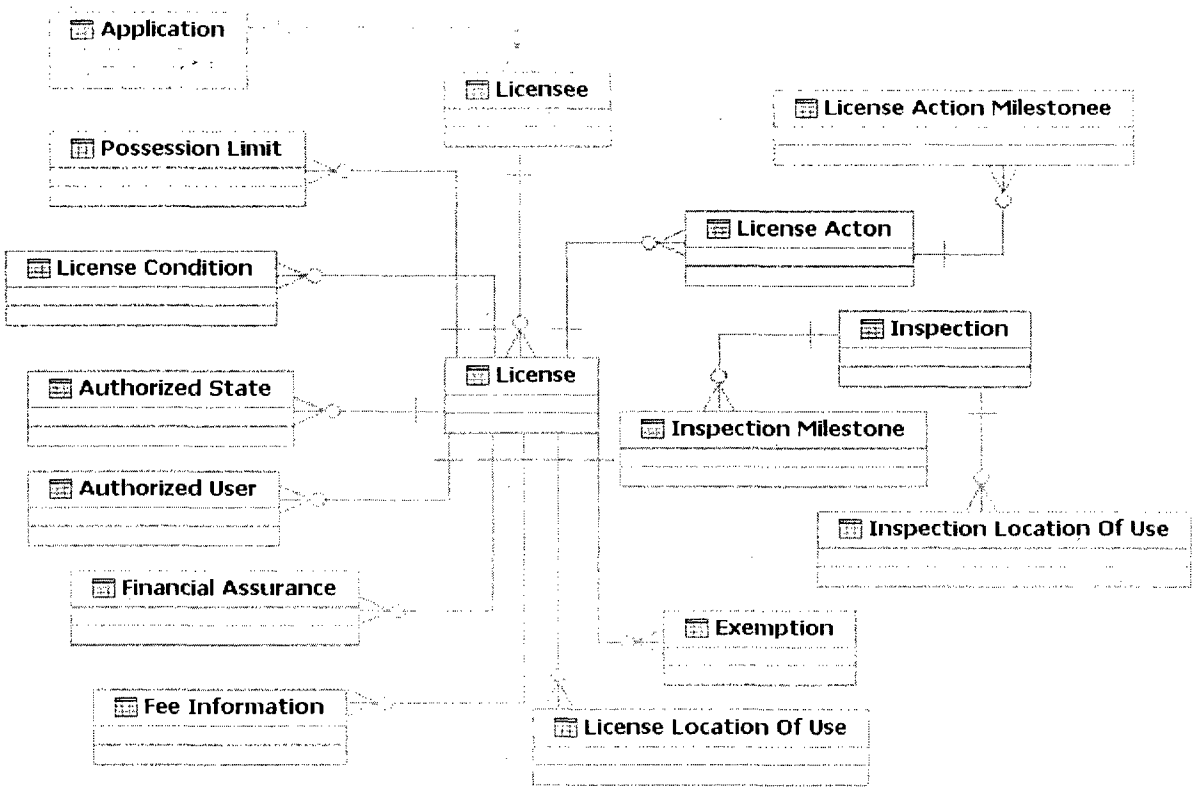
1.2.4 Non-Functional Requirements

Non-Functional Requirements define the non-behavioral attributes of the system. These include characteristics such as workload, response time, data integrity, data capacity, reliability, backup and recovery, maintainability, expandability, hosting facility capabilities, human factors (usability), record keeping requirements, and special requirements (e.g. Section 508 compliance). For details on the Non-Functional requirements, refer to the WBL system requirements which are included as an appendix to this SOW and the Infrastructure and Operational Requirements in Section 3.3.

1.2.5 Conceptual Data Structure

Below is a conceptual data model that shows the major data entities of WBL as well as the associations / relationships between the data entities.

WBL Conceptual Data Model



1.2.6 Security Requirements

Refer to Section 4.2.1 of this SOW for WBL security requirements.

1.3 NSTS SYSTEM REQUIREMENTS

The Section below summarizes the NSTS system requirements which are included as Appendix C of this SOW. The NSTS has been built according to these requirements.

1.3.1 Overview / System Concept

The NSTS tracks the manufacture, possession and transfer of individual radioactive sealed sources by U.S. radioactive materials and import/export licensees. It tracks the sources throughout their entire life-cycle. The major functions provided by NSTS include:

- the ability to record information about individual sealed sources including important source characteristics such as: make, model, serial #, isotopes, activity, activity date, and status;

1.17

- the ability to record the list of individual sources that are currently associated with each license (an inventory);

1.18

- the ability to track the transfer of possession of an individual source from one licensee to another and from one status to another (e.g., 'active' to 'lost');

1.19

- the ability to see a full history of transfers and status changes for an individual source;

1.20

- the ability for the licensing agencies (NRC, Agreement State agencies, and DOE) to maintain the license information of their respective jurisdictions, including the ability to record source such incidents: e.g., lost, stolen, destroyed, irretrievable, and found sources;

1.21

- the ability to import data files submitted by licensees and other stakeholders;

1.22

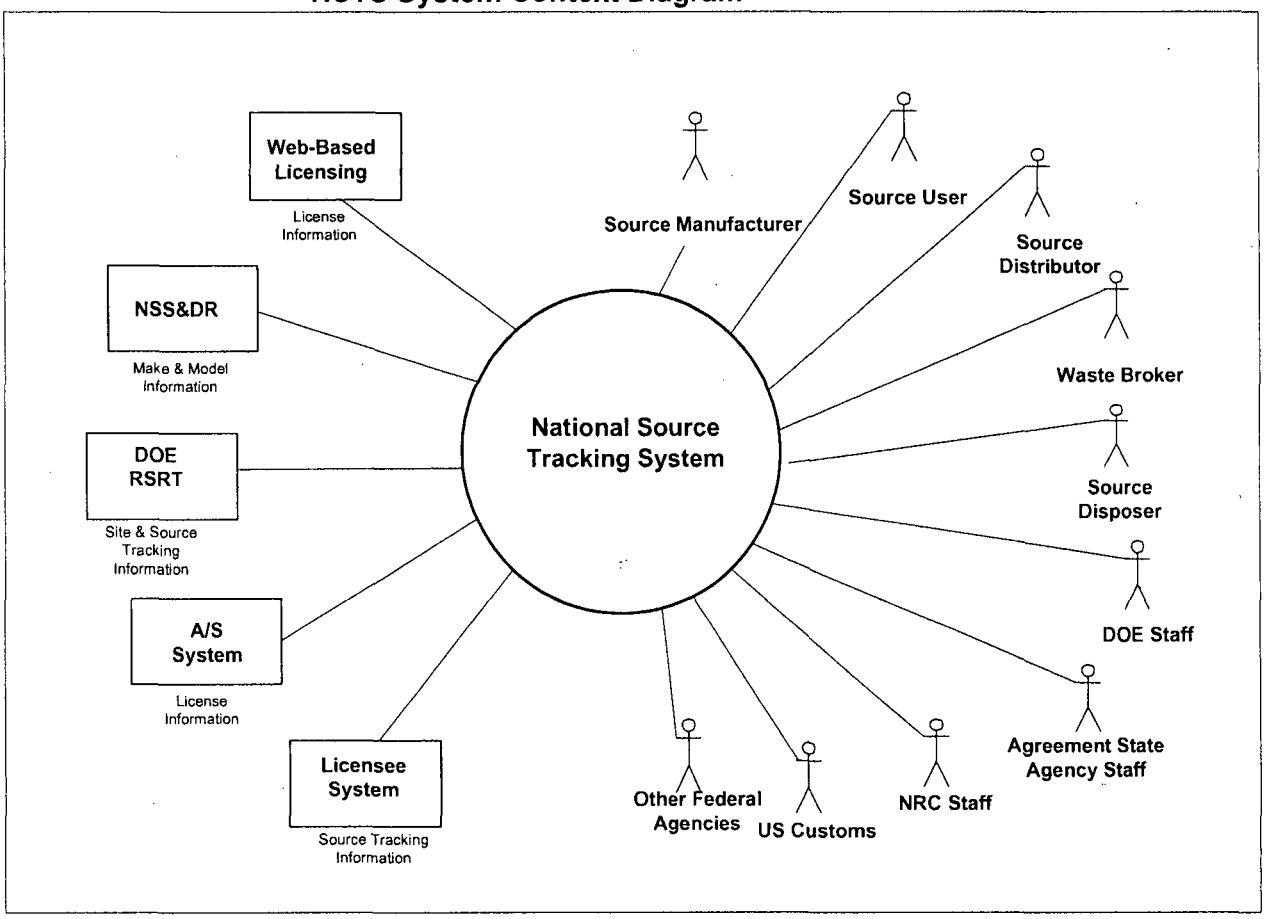
- the ability to schedule and generate both pre-programmed and ad-hoc reports, to upload electronic files of source and license information from external systems, and to extract source information for use by other federal agencies; and

1.23

- the ability to provide event monitoring and alert notifications to enhance the timely reporting and monitoring of NSTS data integrity.

1.24

NSTS System Context Diagram



1.25

1.3.2 Assumptions

- Source inventory data will be stored in NSTS in a standardized format as much as possible so that this data can be easily compared with the maximum possession limits from WBL.
- NSTS currently tracks category 1 and 2 sources. In the future, NSTS may track additional source category types. NSTS' current scalable design can accommodate tracking additional sources that fall within lower category levels.
- The user base for NSTS includes NRC staff, licensees, and Government agencies. The maximum user count is 20,500 users (1,000 concurrent).

- LVS, WBL, and NSTS shall be hosted at the same data center. These systems will leverage shared resources as described in Section 2 – Consolidated Hosting Environment Requirements.

1.3.3 Functional Requirements

The functional requirements define the intended behavior of the system from the NRC business point of view. They describe what actions and processes will exist in the system and how they will behave. The NSTS functional requirements have been documented using the 'use-case technique' which is a way of describing the behavior of a system from the viewpoint of the users that interact with the system.

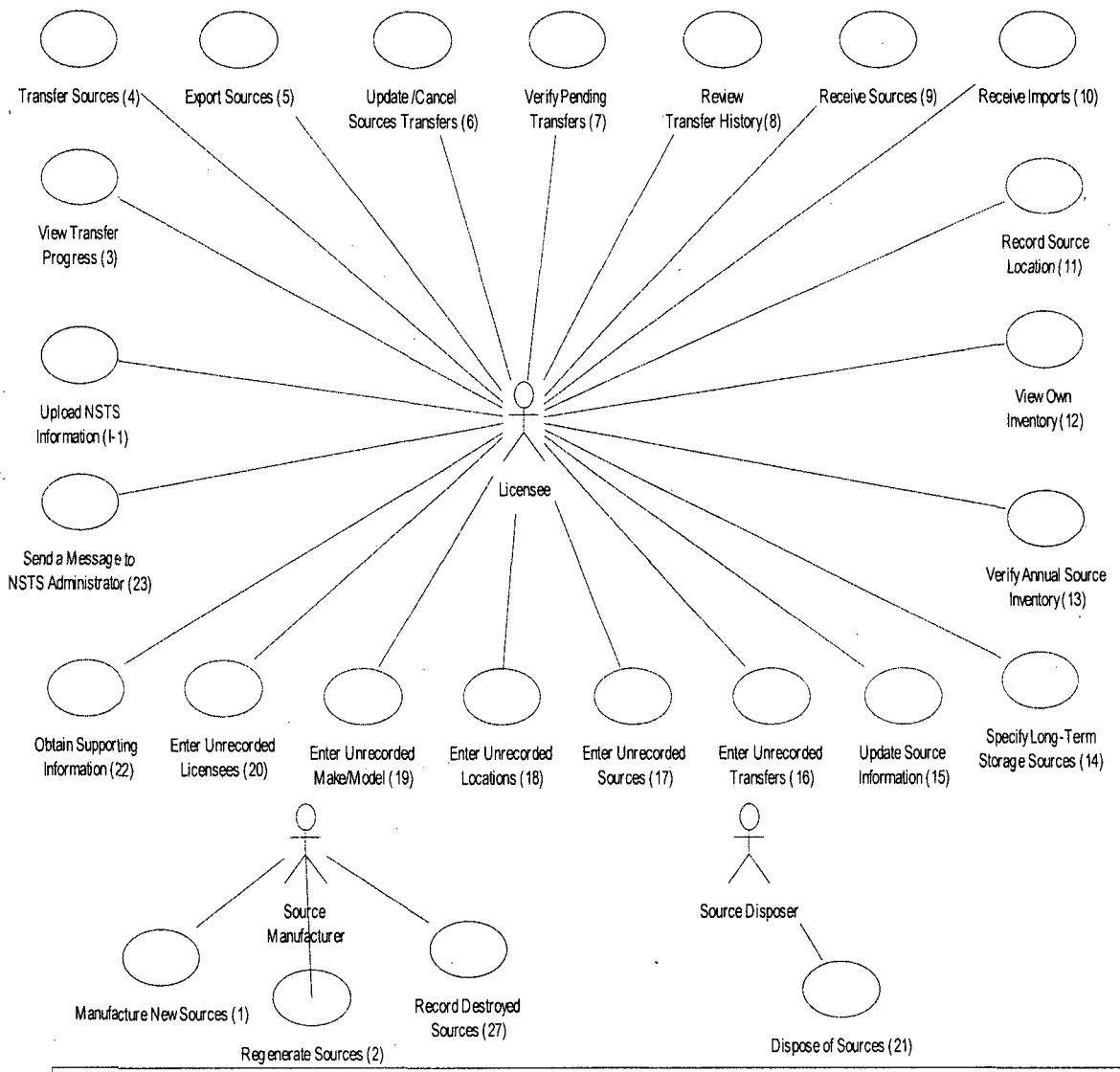
The NSTS Use Case Models shown on the following pages display the NSTS Use Cases (ovals) and how the Use Case Actors (both human and automated, shown as stick figures) will interact with NSTS.

The use cases diagrams are grouped into the following categories:

- Licensee Use Cases: This functional group contains use cases that are used by licensees to enter, track, and modify source and source transfer information.
- Licensing Agency Use Cases: This functional group contains use cases that are used by licensing agency users to enter, track, and modify source and source transfer information.
- System Administrator and Timer Use Cases: This functional group contains use cases that are used for system administration, automated alerts, and interfacing purposes.

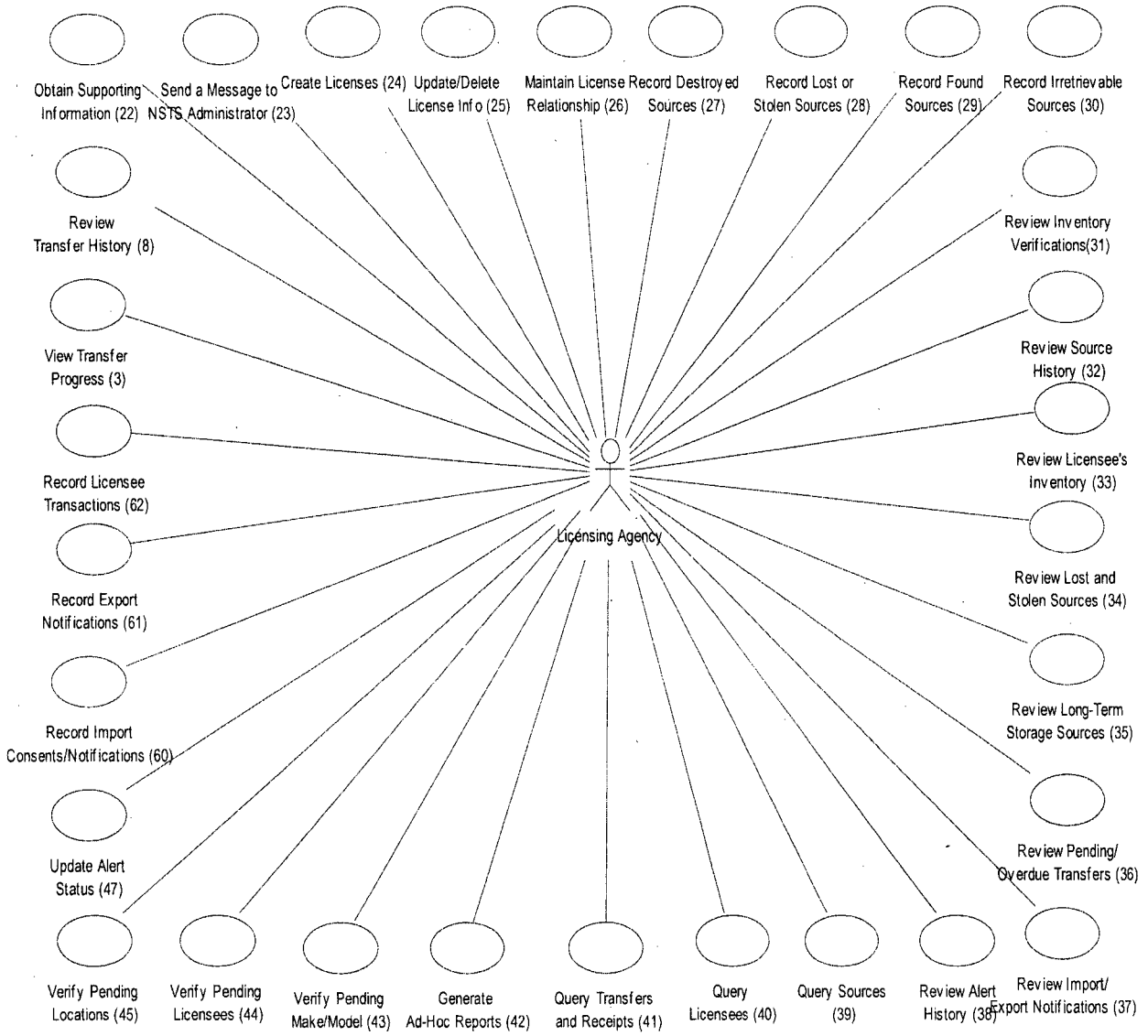
NSTS requirement details are provided in Appendix C of this SOW – NSTS System Requirements Specifications.

NSTS Licensee Use Cases



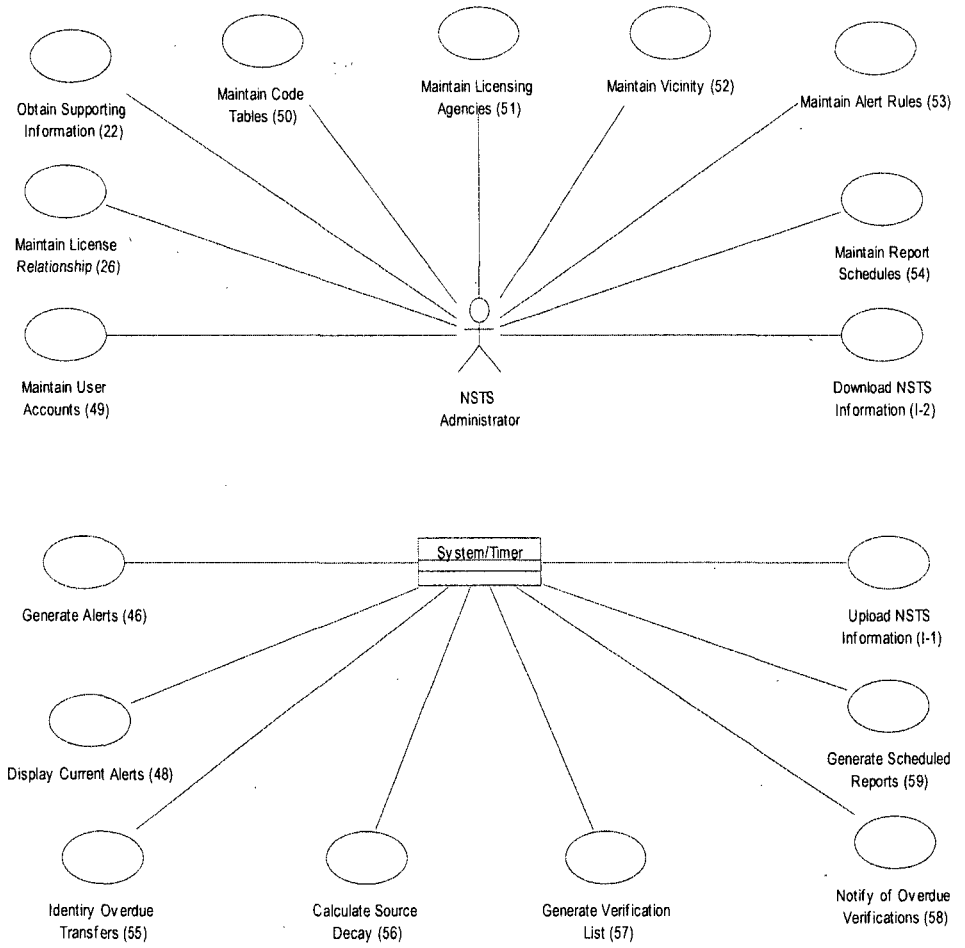
Licensees Include:
- **Source User and Source Distributor: can perform all of the basic Licensee functions.**
- **Source Manufacturer: can perform all of the basic Licensee functions, plus Create New Sources, Re-Generate Sources, and Record Destroyed Sources.**
- **Source Disposer: can perform all of the basic Licensee functions except for Export Sources, and Specify Unwanted Sources. A Source Disposer can also perform "Dispose of Sources ".**
- **Waste Broker: can pefrom same functions of the Source Disposer except for "Dispose of Sources".**

NSTS Licensing Agency Use Cases



- NRC and DOE only Functions: Record Import Consents/Notifications, Record Export Notifications
- The NSTS Analyst will be able to review, generate reports, query data accross agencies, and act as a Licensing Agency
- Other Federal agencies are indirect users of some use cases
- Master Material Licensees can perform these functions for its own licenses: Create Licensees, Update/Delete Licensee information

NSTS System Administrator and Timer Use Cases

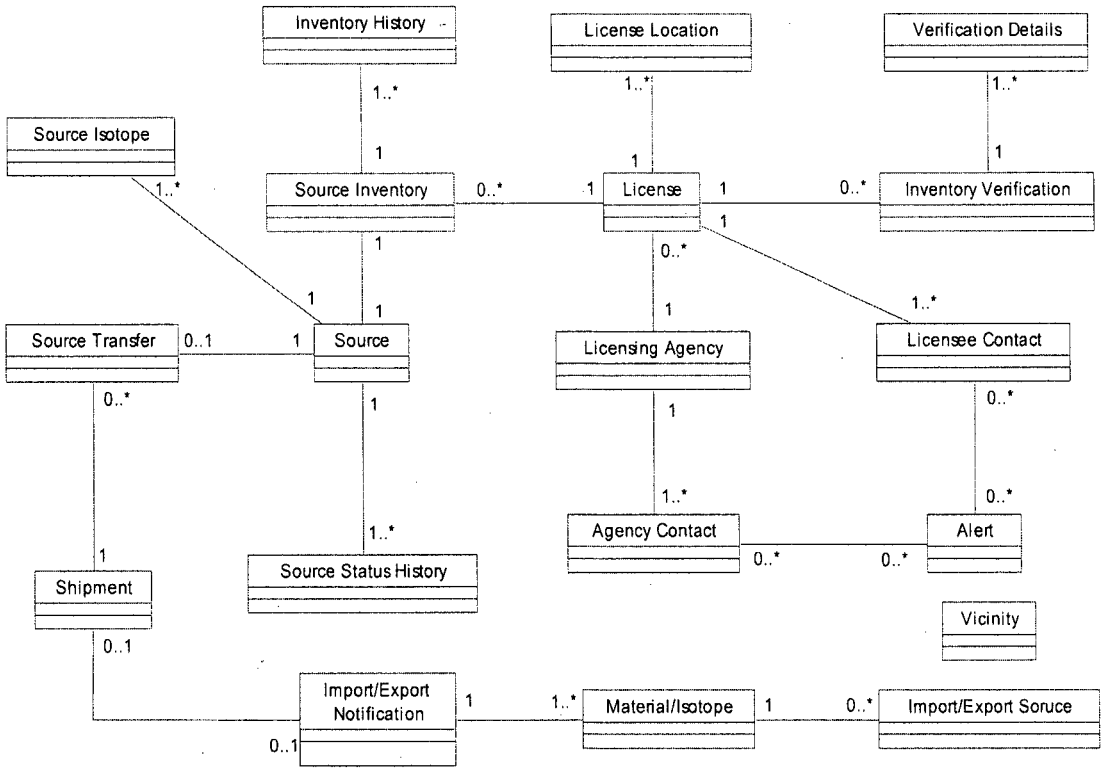


1.3.4 Non-Functional Requirements

Non-Functional Requirements define the non-behavioral attributes of the system. These include characteristics such as workload, response time, data integrity, data capacity, reliability, backup and recovery, maintainability, expandability, hosting facility capabilities, human factors (usability), record keeping requirements, and special requirements (e.g., Section 508 compliance). For details on the non-functional requirements, refer to the NSTS system requirements which are included as an appendix to this SOW and the Infrastructure and Operational Requirements in Section 3.3.

1.3.5 High Level NSTS Data Structure

Below is a high-level data model that shows the major data entities of NSTS as well as the associations / relationships between the data entities.



- Attributes do not include fields needed for audit purpose.
- Logical Model does not reflect necessary table normalization.

1.3.6 Security Requirements

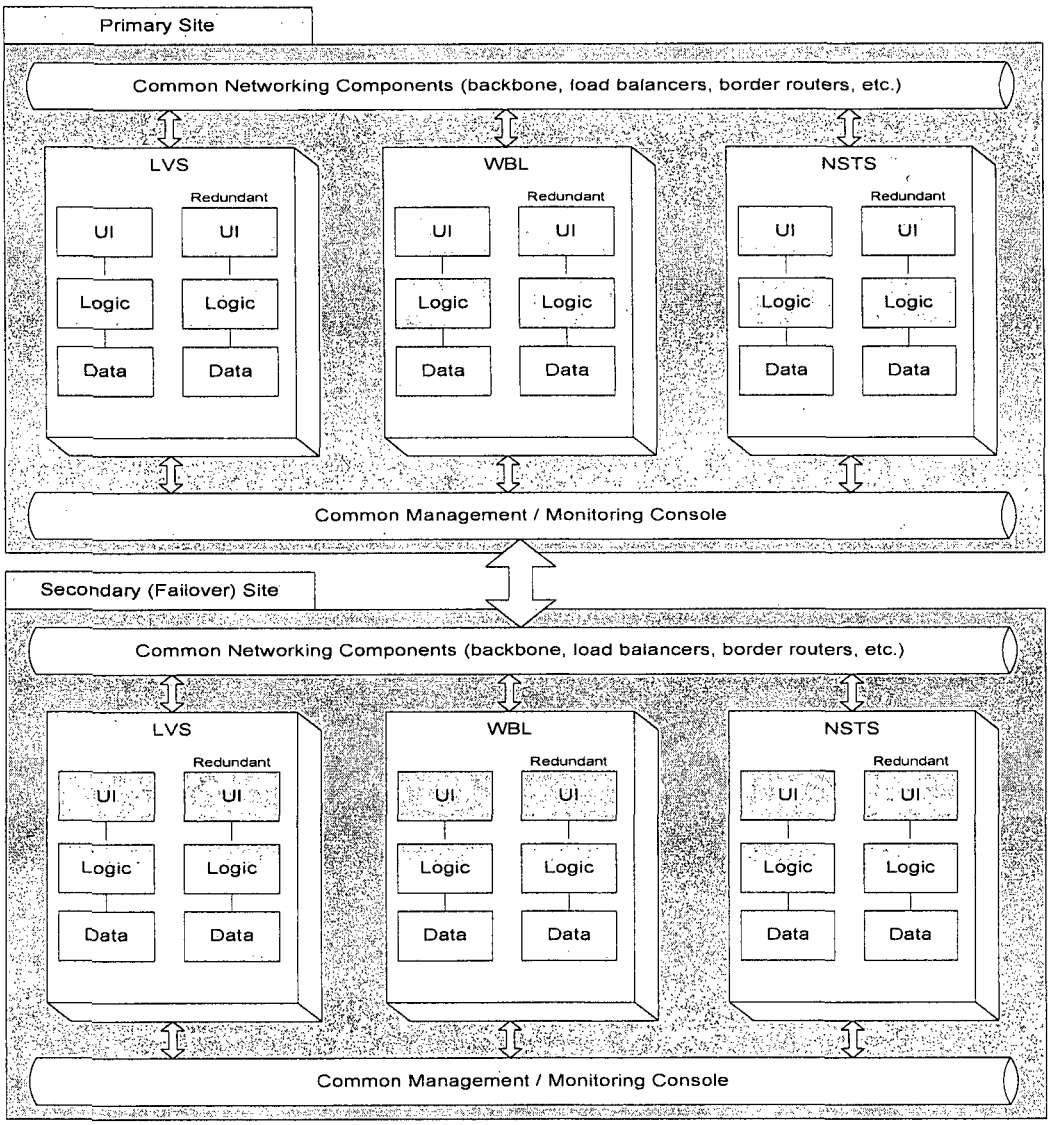
Refer to Section 4.2.1 of this SOW for NSTS security requirements.

2 CONSOLIDATED HOSTING ENVIRONMENT REQUIREMENTS (LVS, WBL, NSTS)

2.1 Overview/System Concept

The consolidated hosting environment will house LVS, WBL and NSTS and is expected to include both a primary site and a secondary (failover) site each with redundant components within its site. It is also expected that the three systems will share several components of the hosting environment. This includes: physical facility hosting, common networking components, telecommunication lines between sites, hosting services support staff, etc. However, each

system will have its own protected region within the consolidated hosting environment as well. The diagram below shows a conceptual representation of the consolidated hosting environment.



The Contractor shall use a portion of the secondary site infrastructure as a staging area used for formal user acceptance testing prior to promoting a release to production.

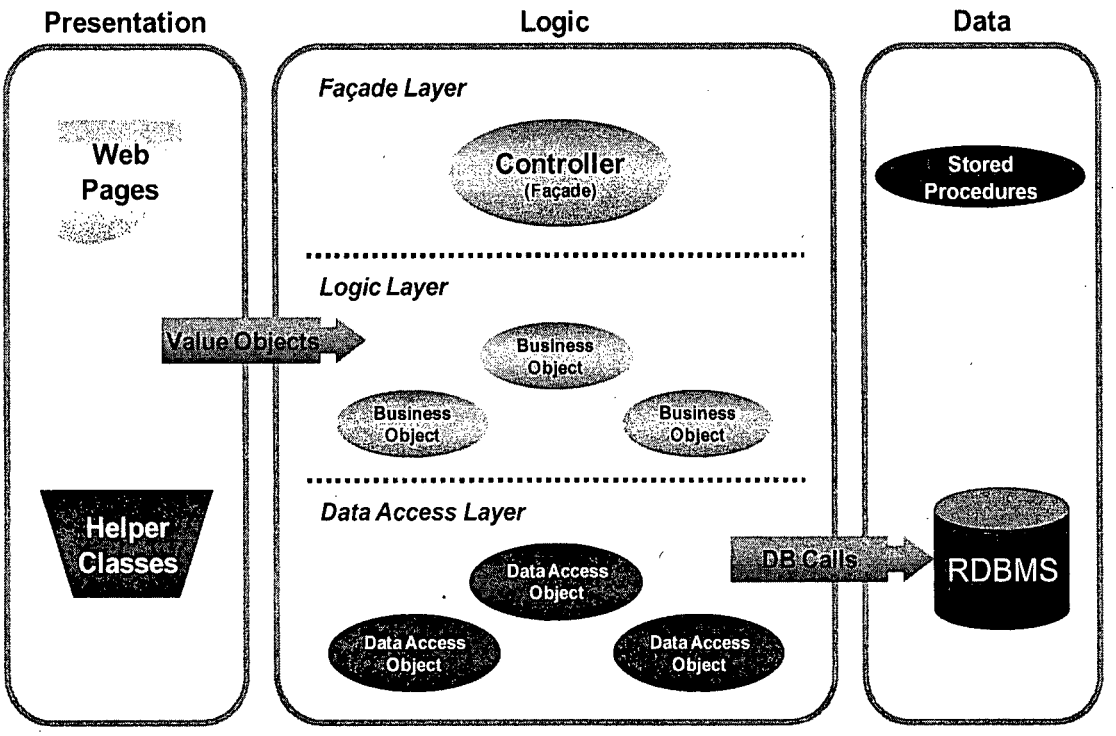
The Contractor shall provide development and testing environments. These environments do not necessarily need to be housed within the consolidated hosting environment.
The Contractor shall implement the infrastructure such that it is scalable to accommodate for inclusion of optional license types such as RTS, STIMS (TAPIS, BARTO), NSSDRS, GLTS, and Import export licenses.

2.2 Technical Architecture

This Section describes the high-level architectural design that the Contractor must implement. It also describes specific technologies that LVS and WBL are expected to use and specific technologies that NSTS currently uses.

2.2.1 High-Level Architectural View

Although each of the three systems' specific technologies may differ, they must all use a multi-tiered web architecture that logically separates the three classic partitions of an information system – Presentation (User Interface), Logic, and Data.



The diagram above shows a conceptual high-level architectural view of a properly designed multi-tiered Web application. It illustrates an information system divided into the three classic partitions – the Presentation (User Interface), Logic, and Data layers. These layers ensure that each of the main architectural areas of the application remain distinct from each other. That is, each of these partitions has its own domain in which specific aspects of functionality are addressed. The diagram above is provided for your information.

- Presentation Layer
  The Presentation layer (sometimes referred to as the User Interface layer) is comprised mainly of visual components that make up the user-interface and defines how a user interacts with the system. The user interface must be clear and concise, leveraging the best practices of visual design to create an intuitive environment for the user. The presentation layer is the one most directly responsible for Section 508 compliance.

- Logic Layer

The Logic layer is where the business rules of the application reside. The business logic of the system is encapsulated in multiple well-defined discrete business objects (components) that work together under the direction of one or more controller objects which determine the order in which the business objects are called. The Logic layer also contains multiple special-purpose business objects called 'data access objects' that are responsible for actually performing operations on the data itself.

- Data Layer
  The Data layer is where the application's data resides. This layer is responsible for the long-term storage of data collected or generated by the system. The relational database management system's (RDBMS) data integrity and transactional capabilities are used to ensure data integrity. This includes referential integrity features (e.g., primary key / foreign key relationship constraints) and logical unit-of-work features (e.g., atomic rollback or commit).

2.2.2 Physical High-Level Architectural View

In Production, these logical layers are implemented physically for each system as separate clusters that are protected and controlled via firewalls, routers, switches and security appliances. The high-level physical architectural components include:

- Border Routers and Global Traffic Manager – These components are the entry point for the users. They are a shared component of the consolidated hosting environment that examines the user request to determine which system (LVS, WBL, NSTS) to route the request to. The Global Traffic Manager serves as an SSL Accelerator, load balancer, and traffic monitor.

- Perimeter firewall – This firewall provides a gateway to the system's Demilitarized Zone (DMZ). The users will access the system's Web Server through this firewall. This configuration will isolate the external users from the back-office system.

- Web Server Cluster – The web servers provide web content to the end-users.

- Application Zone firewall – This firewall provides a gateway from the DMZ to the back-office systems. Access to users of the back-office systems is granted via a secure connection and is restricted to only users with authorized access permissions.

- Application Server Cluster - The application servers are used to process user requests. They contain the logic engine that receives user requests, calls the database layer, applies business rules, and sends the results back to the web cluster for display to the user.

- Data Zone firewall – This firewall provides a gateway from the application servers to the database servers. Access to the database servers is granted via a secure connection and is restricted to only users with authorized access permissions.

- Database Server Cluster – This cluster consists of multiple database servers and a shared SAN storage grid. It houses and protects the application data, enforces data layer integrity rules, and provides data level logic via stored procedures and triggers.

Below is a list of hardware components that are part of the existing NSTS hosting environment.

NRC expects that these components would be shared by LVS, WBL, and NSTS in a consolidated hosting environment. The list below is provided here to show the Contractor what's currently being used. However, the Contractor would be allowed to propose comparable hardware and software.

Specific Shared Hardware

Description	Sample Model	Primary Site Quantity	Secondary Site Quantity
Border Router	Cisco 3845 Router	2	2
Global Traffic Manager	F5 BIG IP GTM	1	1
Network Access Control for system administrators	Cisco Secure Access Control Server	1	1
Management Server	Dell PowerEdge 1950 [2CPU]	2	2
Network Administrator Laptop	Dell Latitude D630 Laptop	1	1
Vulnerability scanning Laptop	Dell Latitude D630 Laptop	1	1
Security/Audit Administrator Workstation	Dell OptiPlex 740 Minitower	1	1
System Administrator Workstation	Dell OptiPlex 740 Minitower	1	1
Database Administrator Workstation	Dell OptiPlex 740 Minitower	1	1
Network Administrator	Dell OptiPlex 740 Minitower	1	1
SCAP Imaging Machine	Dell OptiPlex 740 Minitower	1	1

2.2.3 LVS Technical Architecture

LVS is currently in a planning phase and the application itself will be developed as part of this Integrated Source Management Portfolio SOW. LVS shall use the established technologies that NSTS uses currently. This includes: Linux servers, Oracle application and database servers, and Java web development tools.

Below is a more specific list of hardware and software that may be used for LVS. It is provided here to show what's currently being considered. The Contractor is allowed to propose comparable hardware and software.

Development / Test Hardware

Description	Sample Model	Development / Test Qty
Web/Application Zone		
Web / Application Server	Dell PowerEdge 1950 [1CPU]	2 (1 dev, 1 test)
Data Zone		
Database Server	Dell PowerEdge 1950 [2CPU]	1
Active SAN switch for Database	Cisco MDS 9020 SAN Switch	1

Shared Storage for Database	NetApp FAS270C	1
All Zones		
Management Server	Dell PowerEdge 1950 [1CPU]	1

Production Hardware

Description	Sample Model	Primary Site Quantity	Secondary Site Quantity
Web Zone			
Perimeter Firewall	Juniper SSG 520M	2	2
DMZ Router	Cisco 2811 Router	2	2
SSL Accelerator and Load Balancer	F5 BIG IP LTM 6400	2	2
Web Server	Dell PowerEdge 1950 [1CPU]	2	2
Application Zone			
Application Zone Firewall	Cisco ASA 5520	2	2
Application Zone Switch	Cisco 3750G-24 Switch	2	2
Application Server	Dell PowerEdge 1950 [1CPU]	2	2
Data Zone			
Data Zone Firewall	Cisco ASA 5520	2	2
Data Zone Switch	Cisco 3750G-24 Switch	2	2
Database Server	Dell PowerEdge 1950 [2CPU]	2	2
Active SAN switch for Database	Cisco MDS 9124 SAN Switch	2	2
Shared Storage for Database	NetApp FAS2050C	1	1
All Zones			
Network IPS	Fortigate 800	2	2
Router for Primary/Secondary Connection	Cisco 3845 Router	1	1

Development / Test Software

Product	Notes	Development / Test Qty
Oracle Application Server, SE		2
Oracle Database Standard Edition	Priced per CPU	2
Red Hat Linux Enterprise v5	Server Operating System	3
VMWare ESX 3.0	Virtualization	3
McAfee LinuxShield	Security	10
Rational Application Developer	Java Development Software	5

Production Software

Product	Notes	Primary Site Quantity	Secondary Site Quantity
Oracle Application Server, SE		2	2
Oracle Database Enterprise Edition	Priced per CPU	4	4
Oracle Real Application Clusters	Priced per CPU	4	4
Oracle Active Data Guard	Priced per CPU	4	4
Red Hat Linux Enterprise v5	Server Operating System	6	6
Tripwire Enterprise/Server License	IT Configuration Control	6	6
Intellitactics	Security Mgmt and Logging; Single License for entire environment	1	
NetApp SnapLock	SAN Management	2	2
RSA Authentication Manager	Security Authentication	2	2
Numara Footprints	Help Desk Software	1	1

2.2.4 WBL Technical Architecture

The RADMAT system is currently being adopted for internal NRC use by migrating the LTS data to the RADMAT environment and by minimally adapting the system to initially serve as a replacement for LTS. It is expected that this Integrated Source Management Portfolio contract will further adapt RADMAT in order to provide all the WBL functionality.

WBL shall use the established technologies that RADMAT uses currently. This includes Windows servers, Microsoft Internet Information Services (IIS) web/application servers, Microsoft SQL Server database servers, and .NET web development tools.

Below is a more specific list of hardware and software that may be used for RADMAT. This list is provided to show what's currently being considered, however, the Contractor is allowed to propose comparable hardware and software.

Development/Test Hardware

Description	Sample Model	Development / Test Qty
Web/Application Zone		
Web / Application Server	Dell PowerEdge 1950 [1CPU]	2 (1 dev, 1 test)
Data Zone		
Database Server	Dell PowerEdge 1950 [2CPU]	1
Active SAN switch for Database	Cisco MDS 9020 SAN Switch	1
Shared Storage for Database	NetApp FAS270C	1
All Zones		
Management Server	Dell PowerEdge 1950 [1CPU]	1

Production Hardware

Description	Sample Model	Primary Site Quantity	Secondary Site Quantity
Web Zone			
Perimeter Firewall	Juniper SSG 520M	2	2
DMZ Router	Cisco 2811 Router	2	2
SSL Accelerator and Load Balancer	F5 BIG IP LTM 6400	2	2
Web Server	Dell PowerEdge 1950 [1CPU]	2	2
Application Zone			
Application Zone Firewall	Cisco ASA 5520	2	2
Application Zone Switch	Cisco 3750G-24 Switch	2	2
Application Server	Dell PowerEdge 1950 [1CPU]	2	2
Data Zone			
Data Zone Firewall	Cisco ASA 5520	2	2
Data Zone Switch	Cisco 3750G-24 Switch	2	2
Database Server	Dell PowerEdge 1950 [2CPU]	2	2
Active SAN switch for Database	Cisco MDS 9124 SAN Switch	2	2
Shared Storage for Database	NetApp FAS2050C	1	1
All Zones			
Network IPS	Fortigate 800	2	2
Router for Primary/Secondary Connection	Cisco 3845 Router	1	1

Development/Test Software

Product	Notes	Development / Test Qty
Microsoft IIS	Web/Application Server	2
SQL Server 2008 Standard Edition	Priced per CPU	2
Windows Server 2008 Standard Edition	Server Operating System	3
VMWare ESX 3.0	Virtualization	3
McAfee LinuxShield	Security	10
Visual Studio Team System 2008 Development Edition	.NET Development Software	5

Production Software

Product	Notes	Primary Site Quantity	Secondary Site Quantity
Microsoft IIS	Web/Application Server	2	2
SQL Server 2008 Enterprise Edition	Priced per CPU	4	2
Windows Server 2008, Enterprise Edition	Server Operating System	6	6
Tripwire Enterprise/Server License	IT Configuration Control	6	6
Intellitactics	Security Mgmt and Logging; Single License for entire environment	1	
NetApp SnapLock	SAN Management	2	2
RSA Authentication Manager	Security Authentication	2	2
Numara Footprints	Help Desk Software	1	1

2.2.5 NSTS Technical Architecture

NSTS is currently in use. Ongoing operations and maintenance of NSTS shall be performed as part of this Integrated Source Management Portfolio SOW. Currently, NSTS uses Linux servers, Oracle application and database servers, and Java web development tools.

Below is a more specific list of hardware and software that is currently used for NSTS. This list is to show what's currently being used. The Contractor is allowed to propose comparable hardware and software.

Development/Test Hardware

Description	Sample Model	Development / Test Qty
Web/Application Zone		
Web / Application Server	Dell PowerEdge 1950 [1CPU]	2 (1 dev, 1 test)
Data Zone		
Database Server	Dell PowerEdge 1950 [2CPU]	1
Active SAN switch for Database	Cisco MDS 9020 SAN Switch	1
Shared Storage for Database	NetApp FAS270C	1
All Zones		
Management Server	Dell PowerEdge 1950 [1CPU]	1

Production Hardware

Description	Sample Model	Primary Site Quantity	Secondary Site Quantity
Web Zone			
Perimeter Firewall	Juniper SSG 520M	2	2
DMZ Router	Cisco 2811 Router	2	2
SSL Accelerator and Load Balancer	F5 BIG IP LTM 6400	2	2
Web Server	Dell PowerEdge 1950 [1CPU]	2	2
Application Zone			
Application Zone Firewall	Cisco ASA 5520	2	2
Application Zone Switch	Cisco 3750G-24 Switch	2	2
Application Server	Dell PowerEdge 1950 [1CPU]	2	2
Data Zone			
Data Zone Firewall	Cisco ASA 5520	2	2
Data Zone Switch	Cisco 3750G-24 Switch	2	2
Database Server	Dell PowerEdge 1950 [2CPU]	2	2
Active SAN switch for Database	Cisco MDS 9124 SAN Switch	2	2
Shared Storage for Database	NetApp FAS2050C	1	1
All Zones			
Network IPS	Fortigate 800	2	2
Router for Primary/Secondary Connection	Cisco 3845 Router	1	1

Development/Test Software

Product	Notes	Development / Test Qty
Oracle Application Server, SE		2
Oracle Database Standard Edition	Priced per CPU	2
Red Hat Linux Enterprise v5	Server Operating System	3
VMWare ESX 3.0	Virtualization	3
McAfee LinuxShield	Security	10
Rational Application Developer	Java Development Software	5

Production Software

Product	Notes	Primary Site Quantity	Secondary Site Quantity
Oracle Application Server, SE		2	2
Oracle Database Enterprise Edition	Priced per CPU	4	4
Oracle Real Application Clusters	Priced per CPU	4	4
Oracle Active Data Guard	Priced per CPU	4	4
Red Hat Linux Enterprise v5	Server Operating System	6	6
Tripwire Enterprise/Server License	IT Configuration Control	6	6
Intellitactics	Security Mgmt and Logging; Single License for entire environment	1	
NetApp SnapLock	SAN Management	2	2
RSA Authentication Manager	Security Authentication	2	2
Numara Footprints	Help Desk Software	1	1

2.3 Infrastructure Performance and Operational Requirements

2.3.1 Performance Requirements

The Performance Requirements define non-behavioral attributes of the systems that cover overall performance and robustness. This includes characteristics such as workloads, response time, data integrity, data capacity, reliability, maintainability, and expandability.

2.3.1.1 External Workloads

The infrastructure must provide enough storage, processing, and memory resources to accommodate periodic batch data loads as described in the WBL and NSTS requirements documentation (see Appendices B and C).

2.3.1.2 Throughput, Response Times, and Internal Function Workload

The infrastructure must provide acceptable response times for all functions of the systems. In particular: the systems must present screens to the user within 5 seconds of the user request; the systems must complete sort operations within 5 seconds of the sort and save request; the systems must save data to the database within 5 seconds of the save request; the systems must display the results of a search operation within 30 seconds of the search request; and the systems must present the user with a measurable indication of progress if there is more than a 10 second processing delay. These response times apply to the expected number of concurrent users as described in each system's requirements (see Section 2 – Portfolio System Requirements). (See appendix A, B, C)

2.3.1.3 Data Quality, Integrity, and Accuracy

The infrastructure must fully utilize the data integrity, logging, and transaction management capabilities available in the Oracle and MS SQL Server database software to ensure data integrity. This includes referential integrity features (e.g., primary key / foreign key relationship constraints) and logical unit-of-work features (e.g., atomic rollback or commit). Each system must also provide the ability to generate a unique identifier for a record created in the system. Through system and database constraints, the Contractor shall ensure that the generated identifier may not be altered by any user at any time.

2.3.1.4 Data Retention, System Capacity, and Communications Capacity

The operational infrastructure must retain all operational and historical data for the life of the systems. Additional storage space will be added to the infrastructure as needed to meet growth requirements. The infrastructure must provide a minimum of 3 megabit/second network bandwidth for NRC users. Note: The data retention, system capacity, and communications capacity requirements are for the Operational/Production environment only.

2.3.1.5 Reliability, Maintainability, and Availability

The operational infrastructure must be available 99.9 percent of the time 24 hours a day / 7 days a week except during regularly scheduled maintenance. Regularly scheduled maintenance must not be performed during the core business hours of 6AM to 10PM EST Monday through Friday and must not last for more than 3 hours in any 24-hour period without a waiver from the Government. The system shall not be down more than 43.2 minutes during core business hours at any given month. The Contractor shall notify the NRC in advance of any regularly scheduled maintenance. The infrastructure must employ an architecture that utilizes multiple types of redundancy to ensure automatic failover (e.g., hardware component redundancy, server clusters, data mirroring, load balancing, uninterruptible power supplies, etc.). The infrastructure must provide the ability to monitor for software and hardware component failures and be able to automatically transition to a redundant system or set of sub-components within 30 minutes.

The Contractor shall include under planning documents and the technical proposal for each task described herein a plan by which the Contractor shall ensure timely and orderly renewal of certificates for servers and web sites under their control, that are part of the development, testing, hosting, and user support environments. The Contractor proposal shall clearly state assumptions regarding their expectations about whom will pay for initial certificates and renewal of certificates. These concerns are limited to server and site certificates and not to individual user authentication credentials.

2.3.1.6 Growth, Flexibility, and Expandability

The infrastructure must provide a scalable architecture that is properly separated into conceptual layers and physical clusters as described in Section 2.2 – Technical Architecture.

The architecture must allow system resources to be easily added as needed. This includes providing the ability to share the processing duties across clusters of servers in order to provide load balancing and high availability advanced features. This also includes providing 'hot-swap' features that enable easy replacement or upgrade of entire system servers or their hardware sub-components without interrupting overall system operation.

2.3.2 Operational Requirements

The Operational Requirements define the operational environment of the system. This includes characteristics such as physical environment standards, configuration control practices, security needs, and documentation deliverables.

2.3.2.1 Facilities, Environment, Safety, System Monitoring, and Hosting Support Capabilities

The infrastructure will host the LVS, WBL, and NSTS production systems. These systems must be hosted in a computer data center environment. The servers must be maintained in a properly climate-controlled facility and there must be sufficient production control support staff available to proactively monitor the system for potential problems and bottlenecks.

The Development and Testing environments do not necessarily need to be housed within the consolidated hosting environment.

The infrastructure must support the technologies listed in Section 2.2 – Technical Architecture.

The infrastructure services will include system administrator, networking specialist, and database administrator support as specified in the Performance Requirements Section (24/7).

The infrastructure services will include periodic installation and upgrade of the needed operating system, database, and application software.

The infrastructure must support the inclusion of Crystal Reports for ad-hoc reporting (e.g., via data extraction).

2.3.2.2 Backup and Recovery

The infrastructure must provide backup and recovery capabilities. This includes performing an online backup without requiring system down time, storing backups at an off-site storage facility, and restoring from a full backup within one hour. The infrastructure must provide the ability to perform full and incremental backups on a scheduled basis. Full backups will be performed at least weekly and incremental backups will be performed at least daily. During acceptance testing, the contactor shall demonstrate this capability.

2.3.2.3 Configuration Control

The production infrastructure team must employ formal change management and version control practices via automated configuration control software to track changes to the infrastructure as described in Section 4.1 of this SOW.

2.3.2.4 Security

The facility and infrastructure must undergo a certification and accreditation process (C&A) that results in the issuance of an ATO. The facility and infrastructure must meet the assurance requirements and protective measures specified in NIST SP 800-53 *Recommended Security Controls for Federal Information Systems* for a system with 'high' sensitivity of information for NSTS and 'moderate' sensitivity of information for WBL and LVS.

The NRC Computer Security Office (CSO) will conduct an inspection of the facility and infrastructure based on the NIST SP 800-53 security controls. The NRC will coordinate with the Contractor to schedule the inspection. The NRC will document any findings and deficiencies discovered during the inspection and will provide them to the Contractor. The NRC will prioritize the discrepancies and coordinate with the Contractor to develop timeframes for resolving each discrepancy. The Contractor shall resolve the discrepancies according to the agreed upon timeframes.

The infrastructure must be able to securely communicate with NRC's MPKI system for authentication to ensure that only authorized users have access to the systems. (See Appendix Z for more information about interacting with NRC's MPKI solution).

The infrastructure shall provide the capability to perform audit tracking on modifications to system data. This includes automatically recording the date/time, the data changed, and the user that changed the data as part of the history record. This also includes providing the NRC with the ability to specify which tables and associated data elements should be audited and what types of changes should cause a history record to be created (e.g., insert, update, and delete). The historical data must be formatted in a way that facilitates the simple visual comparison of current data to historical data. The ability to configure or view audit records will be restricted by user role. It is particularly important that there be an audit history of changes to all changes of security permissions for users and roles. Audit features of the system should be developed such that they will be compatible with any current or future audit gathering and reporting system employed by NRC.

The infrastructure will provide server hardening and routine security scanning services (e.g., firewall protection, intrusion detection, etc.).

The infrastructure shall provide the ability to encrypt data in transit according to Federal Information Processing Standards Publication (FIPS PUB) 140-2 to prevent eavesdropping. For new systems development, FIPS 140-1 product development is not allowed. For legacy systems FIPS 140-1 validated products can be deployed.

2.3.2.5 Documentation

The infrastructure must include a full set of electronic and hard-copy documentation that describes all aspects of the operation and maintenance of the systems. This includes: architectural documentation; deployment documentation; administrative documentation for the technical staff that describes system administration and configuration; and security documentation that describes the security aspects and controls of the system. This documentation should be labeled per NRC SUNSI requirements. Documentation deliverables are described in Sections 3.3.11, 3.4.31, 3.5.31 of this SOW.

3 CONTRACTOR PERFORMANCE REQUIREMENTS

3.1 Overview

The Contractor shall perform the development tasks for LVS and WBL; provide operational support, maintenance, and user/help desk support for the three systems; consolidate hosting, maintenance, and help desk activities for the system portfolio of LVS, WBL, and NSTS; and perform secondary and tertiary development tasks for the systems. This Section describes each of the tasks in this contract:

Task Type (Mandatory/ Optional)	Task #	Task Name	Revised Proposals #Years	Revised Period Year
Mandatory	1	Establish Infrastructure To Support System Portfolio (LVS, WBL, NSTS)	*1*	2010
Mandatory	2	Develop and Implement License Verification System (LVS)	*1*	2010
Mandatory	3	Develop and Implement WBL	*1*	2010
	4	Hosting and Operational Support:		
Mandatory	4.1	Hosting and Operational Support for LVS, WBL and NSTS- *Base*	*1*	2010
Optional	4.2	Hosting and Operational Support for LVS, WBL and NSTS- Option Period 1	*1*	2011
Optional	4.3	Hosting and Operational Support for LVS, WBL and NSTS- Option Period 2	*1*	2012
Optional	4.4	Hosting and Operational Support for LVS, WBL and NSTS- Option Period 3	*1*	2013
	4.5	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 4*	*1*	2014
	4.6	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 5*	*1*	2015
	4.7	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 6*	*1*	2016
	4.8	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 7*	*1*	2017
	4.9	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 8*	*1*	2018
	4.10	*Hosting and Operational Support for LVS, WBL and NSTS- Option Period 9*	*1*	2019
	5	Maintenance:		
Mandatory	5.1	System Maintenance for LVS, WBL and NSTS- *Base*	*1*	2010
Optional	5.2	Maintenance for LVS, WBL and NSTS- Option	*1*	2011

		Period 1		
Optional	5.3	Maintenance for LVS, WBL and NSTS- Option Period 2	*1*	2012
Optional	5.4	Maintenance for LVS, WBL and NSTS- Option Period 3	*1*	2013
	5.5	*Maintenance for LVS, WBL and NSTS- Option Period 4*	*1*	2014
	5.6	*Maintenance for LVS, WBL and NSTS- Option Period 5*	*1*	2015
	5.7	*Maintenance for LVS, WBL and NSTS- Option Period 6*	*1*	2016
	5.8	*Maintenance for LVS, WBL and NSTS- Option Period 7*	*1*	2017
	5.9	*Maintenance for LVS, WBL and NSTS- Option Period 8*	*1*	2018
	5.10	*Maintenance for LVS, WBL and NSTS- Option Period 9*	*1*	2019
	6	User Support Desk:		
Mandatory	6.1	User Support/Help desk for LVS, WBL and NSTS- *Base*	*1*	2010
Optional	6.2	User Support/Help desk for LVS, WBL and NSTS- Option Period 1	*1*	2011
Optional	6.3	User Support/Help desk for LVS, WBL and NSTS- Option Period 2	*1*	2012
Optional	6.4	User Support/Help desk for LVS, WBL and NSTS- Option Period 3	*1*	2013
	6.5	*User Support/Help desk for LVS, WBL and NSTS- Option Period 4*	*1*	2014
	6.6	*User Support/Help desk for LVS, WBL and NSTS- Option Period 5*	*1*	2015
	6.7	*User Support/Help desk for LVS, WBL and NSTS- Option Period 6*	*1*	2016
	6.8	*User Support/Help desk for LVS, WBL and NSTS- Option Period 7*	*1*	2017
	6.9	*User Support/Help desk for LVS, WBL and NSTS- Option Period 8*	*1*	2018
	6.10	*User Support/Help desk for LVS, WBL and NSTS- Option Period 9*	*1*	2019
		Future Development Releases:		
Optional	7	WBL (v1.x) Development – start in Option Period 1 until completed (est. duration 2 years)	*1*	2011
Optional	8	WBL (v2.x) Development – start in Option Period 3 until completed (est. duration 3 years)	*3*	2012

Optional	9	WBL (v3.x) Development – start in Option Period 7 until completed (est. duration 2 years)	7	2017
Optional	10	NSTS (vx.x) Development – start in Option Period 1 until completed (est. duration 2 years)	*1*	2011
Optional	11	WBL Agreement State License Data Entry Support	*ALL*	

3.2 Methodology Compliance

The NRC requires that all Contractors who are either developing or maintaining NRC information systems comply with the prevailing agency methodology and procedural requirements for such efforts. The NRC's methodology for software development projects is called the Project Management Methodology (PMM), a complete copy of the document will be available to the Contractor once the contract is awarded. Once the Contractor has been cleared it can also access the document at http://www.internal.nrc.gov/pmm. Since the Contractor would not have access to this document until after award, we have included several PMM templates that the Contractor shall use to develop project artifact deliverables. The templates are available as appendices J thru S of this SOW. The NRC PMM is based on the Rational Unified Process (RUP), augmented to address broader issues of federal IT projects. PMM artifacts are drawn from RUP, with tailoring to better fit the NRC context. Of main concern to the Contractor are the products and artifacts that they must provide for compliance with the PMM. In addition to the PMM, the Contractor shall also comply with supplementary FSME standards such as those governing design modeling and automated software testing. These supplementary FSME standards have been attached as Appendices T, U, V, W, and X.

The Contractor shall ensure that all activities are conducted and all products delivered in accordance with the NRC Project Management Methodology (PMM) processes as defined on the NRC internal web site. Several PMM templates have been attached as appendices to this SOW. In addition, upon award, the NRC will provide the Contractor with access to the PMM internal web site.

3.3 Task 1: Establish Infrastructure to Support System Portfolio (LVS, WBL, and NSTS)

3.3.1 Scope of Work

The Contractor shall establish a secure infrastructure for the hosting of LVS, WBL, and NSTS. This task encompasses establishing a secure infrastructure for each of the following environments.

1. System Development
2. System Testing
3. Staging/ User Acceptance Testing (UAT)
4. Primary Production
5. Secondary Production (Failover)

The Contractor shall design/ propose all facilities needed to host the environments listed above. It is not required that the system development and system testing environments be located at the same data center as production. The Contractor's design for each environment must

include all components needed for hosting (e.g. software, hardware, telecommunications, etc.). The Contractor shall obtain NRC's approval before purchasing any hardware, software, telecommunication components to establish the infrastructure.

Each proposed facility will be part of the system C&A process that results in the system being granted an ATO by the NRC. Note that LVS, WBL, and NSTS are categorized as Moderate, Moderate, and High respectively. These security categorizations are described in FIPS-199 entitled, "Standards for Security Categorization for Federal Information and Information Systems (http://csrc.nist.gov/publications/fips/fips199/FIPS-PUB-199-final.pdf)."

In establishing the hosting site infrastructure, the Contractor shall comply with the security requirements specified in the requirements Section of this SOW and referenced in the "References" Section. The Contractor shall refer to the LVS, WBL, and NSTS System Architecture documents in the appendices for more detailed infrastructure requirements.

3.3.2 Schedule and Task Description

The Task 1 schedule is presented in Appendix G. Detailed task descriptions are provided below.

3.3.3 Task 1.1 Support Facility Certification and Accreditation

The Contractor shall provide all personnel, materials, hardware, software, labor, supplies, equipment, travel and other direct costs necessary to support the NRC in the development of all requisite facilities C&A, and supporting business documentation such that all Contractor facilities utilized in the information systems and information systems development, testing, and processing obtain an ATO consistent with FISMA Compliance Program C&A, NIST, NRC Management Directive 12.5 prior to processing NRC information at the Contractor location.

Additionally, the Contractor shall:

Perform C&A of the facilities on a regular basis as mandated by federal regulations in accordance with the highest level of information sensitivity processed or stored by information systems located at the facility. For systems with moderate sensitivity, FISMA requires C&A every 3 years.

Perform an initial facility C&A within 100 calendar days after contract award, and submit all C&A artifacts to the NRC. Artifacts related to the information systems part of the facility C&A can be located at http://www.internal.nrc.gov/pmm/Publish-PMM-Security-C&A/index.htm. (If access to the site is not available, the NRC will provide a hard copy.). The Government shall furnish available information (e.g., Standard Operational Procedures, regulations, manuals, texts, briefs and the other materials associated with this project), as well as access to the Rational Suite Enterprise Tools located and maintained on the NRC network infrastructure. All information, regardless of media, provided by the Government and/or generated for the Government in the performance of this contract are Government property and shall be maintained and disposed by the Government. At the time of disposition, the Contractor shall box, label contents, and deliver as directed by the Contracting Officer. Additionally, any findings from the C&A shall be addressed within 30 calendar days of the report at no cost to the Government. The NRC ISSO will be available to advice on lessons learned as part of the transition.

The Contractor shall encrypt all network communications in accordance with National Institute of Standards (NIST) Federal Information Processing Standard (FIPS) 140-2.

The Contractor shall provide a secure client solution that support AES 256 encryption algorithms and be NIST FIPS 140-2 validated and shall be configured and operated in NIST FIPS 140-2 mode.

The Contractor shall provide connectivity between NRC and Contractor facilities and the Internet. This connectivity shall only be accomplished via the NRC gateway; no other Internet connectivity is authorized. All telecommunications shall be consistent with NRC MD 12.4, "NRC Telecommunications Systems Security Program."

The Contractor shall conduct Annual Security Control Testing in accordance with NRC CSO guidance.

3.3.4 Task 1.2 Obtain Infrastructure Purchase Approval

The tasks described below are required to complete the acquisition of equipment needed to install each of the environments on Section 3.3.8 of the SOW. The tasks ensure that all necessary hardware and software (HW/SW) for these tasks is appropriately procured.

The Contractor shall develop a comprehensive list of needed software and hardware by identifying all known software, hardware, and equipment requirements. At a minimum, the Contractor shall include in the comprehensive list all special configuration requirements, potential manufacturers/vendors, and costs estimates for acquisition. The Contractor shall include in the comprehensive list only licensed software; optionally, the Contractor may develop a secondary list of proposed public domain, shareware, or freeware software. Because of security risks, this secondary list must be reviewed and approved (in writing) by the NRC designated approving authority (DAA) before item may be considered for acquisition. Proof of software licensing is a concern for Government use and must be factored into the procurement planning. The Contractor will include in the comprehensive list all software, hardware, and equipment, such as servers, networking equipment (switches, wireless controllers, encryption devises, etc.), backup system equipment for COOP, users desktop and Kiosk equipment (terminals, Smartcard readers, KVM, peripheral devises, etc.), Operating System and other software, and all required use licenses.

All hardware and software shall be upgraded / refreshed to ensure appropriate maintainability and IT security controls. Hardware and software should not be allowed to become unsupported or insecure.

The Contractor shall provide a comprehensive list of equipment for procurement to the NRC Project Officer for review and approval (written approval). The NRC Project Officer will develop the request for action, attach the approved comprehensive list for procurement, and submit to the OIS for their approval before the procurement process is initiated. Under the guidance of the NRC Project Officer, the Contractor shall make any needed updates or revisions to the comprehensive list for procurement based on the OIS review and follow-up discussions.

The Contractor shall procure all the software, hardware, equipment, tools, services listed on the approved comprehensive list for procurement. The Contractor shall coordinate with the NRC Project Officer to execute the procurements based on the revised Project Implementation Plan and Schedule.

The Contractor shall manage the entire procurement process from requesting competitive quotations from at least three approved sources and placing orders to the vendors to delivery, reception, and deployment of the equipment. All HW/SW purchases by the Contractor are subject to prior written approval by the NRC Project Officer and the NRC Contracting Officer. The NRC/ADM Division of Contracts will provide the necessary assistance and guidance to the Contractor on the acquisition. This task includes management of the entire procurement process from requesting competitive quotations from at least three (or sole-source justifications and price reasonableness) GSA FSS approved sources and placing orders to the vendors to delivery, reception and deployment of the equipment. All equipment procurement orders by the Contractor are subject to prior written approval of the NRC Project Officer and the NRC Contracting Officer. The NRC DC will provide the necessary assistance and guidance to the Contractor on the acquisition.

The Contractor shall conduct quality inspection of delivered equipment to ensure completeness and quality of equipment, including reconciliation against the comprehensive list for acquisition. The Contractor shall provide the NRC Project Officer a Validation Report which confirms receipt of individual components in working condition. The Contractor shall review with the NRC Project Officer any problems or faults in equipment delivered; with approval of the NRC Project Officer, the Contractor shall return faulty equipment and coordinate replacement by the vendor.

3.3.5 Task 1.3 Install Infrastructure for Development Environment

Following NRC approval under Task 1.1 and Task 1.2, the Contractor shall purchase, install, and set up the NRC-approved development environment at the Contractor's site or another approved location so that system development activities can commence. As part of the setup activity, the Contractor shall perform any NRC-specific software configuration needed, as well as establishing connectivity and preparing the servers (e.g., hardening) to meet the external hosting requirements.

The Contractor shall host all system server hardening activities at Contractor facilities. The Contractor shall provide support as required in NRC development of hardening guidance related to software or hardware technologies to be utilized in the system architecture. The Contractor shall harden all system architecture components to meet NRC standards and shall support all independent NRC hardening verification reviews. The Contractor shall conduct ongoing hardening activities related to timely application of software patches. The Contractor shall conduct monthly hardening verification scans and provide to the NRC scan results and reports summarizing issues identified and resolution status for each issue.

3.3.6 Task 1.4 Install Infrastructure for System Testing Environment

The Contractor shall install the infrastructure for the System Testing Environment. This environment shall be physically separate from the Development Environment but will have identical configurations. Guidelines for this environment can be found in Appendices D, E, and F - "License Verification System, System Architecture Document (SAD)" and "WBL" and "NSTS."

3.3.7 Task 1.5 Install Infrastructure for Primary Production Environment

The Contractor shall install the infrastructure for the Primary Production Environment. Guidelines for this environment can be found in Appendices D, E, and F - "License Verification System, System Architecture Document (SAD)" and "WBL" and "NSTS."

3.3.8 Task 1.6 Install Infrastructure for Secondary Production and Staging Environments

The Contractor shall install the infrastructure for the Staging Environment. The Staging Environment is used for staging new releases once the application passes User Acceptance Testing (UAT) and Load Testing and before it is moved to production. Guidelines for this environment can be found in Appendices D, E, and F - "License Verification System, System Architecture Document (SAD)" and "WBL" and "NSTS."

3.3.9 Task 1.7 Transition Approach

A key goal of this portfolio of systems is to leverage one data center environment for hosting the three major systems – LVS, WBL, NSTS. As previously mentioned, NSTS is currently in production at an existing data center that is housed external to the NRC. Note also that optional Tasks describe some systems that may become part of the WBL data center component mentioned above.

The Contractor must develop a transition plan that describes its approach for hosting all three systems in a single data center and describes any transition activities that may be needed under that approach.

The Contractor is free to suggest a format for the Transition Plan document. At minimum the document must:

- describe the characteristics of the new data center and show how the meet the needs of the portfolio of systems
- describe how the Contractor shall transition the existing NSTS system from the incumbent's data center to another proposed data center
- describe the Contractor's approach for knowledge transfer from the incumbent
- describe the approach for transitioning the Hardware architecture, operations, and transition baseline documentation
- describe the approach for transitioning configuration management history – both version controlled code and project documents / artifacts
- describe how the Contractor shall inventory all items of Government Furnished Equipment (GFE) and be prepared to accept the GFE

The transition plan document must include a Gantt chart schedule showing a proposed timeline for expeditiously implementing the transition plan.

3.3.10 Task 1.8 Portfolio Enrollment Module

The Contractor shall develop an Enrollment Module (EM) that will enable users to register for access to one or more applications in the portfolio – see Appendix Z for a description of the Enrollment Module capabilities. The Contractor shall create the following artifacts as part of the EM development:

1. Software Development Plan (SDP) - The Contractor shall develop and deliver to the NRC a SDP using the prevailing PMM template (see Appendix J).
2. Requirements Summary of Findings - The Contractor shall conduct an effort to validate the EM requirements to ensure their understanding of the requirements. Following requirements validation, the Contractor shall submit to the NRC a report summarizing the findings of the validation effort.
3. Supplemental Design Document – The Contractor shall develop and deliver to the NRC a Supplemental Design Document that describes how the EM will be designed and used. This must include: a data model, screen mockups, a technical architecture diagram of the solution, and narrative describing the EM design.
4. System Test Plan and Scripts –The Contractor shall develop a System Test Plan (STP) for EM functionality in accordance with the NRC Test Plan PMM template (Appendix R). System test documentation shall consist of the System Test Plan per Appendix R and the Rational Test Manager test cases and test scripts.
5. Test Evaluation Summary –The Contractor shall develop a Test Evaluation Summary report that shows the results of the EM system testing. The report must be documented in accordance with the PMM template attached in Appendix S.
6. Deployment Plan - The Contractor shall develop and deliver to the NRC a Deployment Plan, compliant with the PMM template (see Appendix L).

Note: The EM is not 'stand-alone' and can only be used in conjunction with other systems in the portfolio. The EM must be included as a component of each portfolio system and must be included in each portfolio system's security and architecture reviews and integration test planning.

3.3.11 Deliverables and Milestones

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 contract, the Contractor shall comply with the directions of the NRC regarding the contents of the report, summaries, data and related documents to include correcting, deleting, editing, revising, modify, formatting, and supplementing any of the information contained therein at no additional cost to the NRC. Performance under the contract will not be deemed accepted or completed until the NRC's directions are complied with. The reports, summaries, data and related documents will be considered draft until approved by the NRC. The Contractor agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data and related documents created under this contract remains solely within the discretion of the NRC.

Publication of Results: Prior to any dissemination, display, publication or release of articles, reports, summaries, data or related documents developed under the contract, the Contractor shall submit for review and approval by the NRC 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 by the NRC 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. The Contractor agrees and grants a royalty free, nonexclusive, irrevocable world-wide 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, for any governmental purpose and to have or authorize others to do so.

Identification/ Marking of Sensitive and Safeguards Information: 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. In performing the contract, the Contractor shall clearly mark sensitive unclassified non-safeguards information (SUNSI), sensitive, and safeguards information to include for example Official Use Only and Safeguards 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 forms (e.g. NRC Form 461 Safeguards Information and NRC Form 190B Official Use Only) in maintaining these records and documents. The Contractor will ensure that sensitive and safeguards information 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), and NRC Management Directive and Handbook 12.6.

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.2.3.1	1.7	Transition Plan Draft	Task 1 (T1) + 20
1.2.4.1	1.8	Software Development Plan – Enrollment Module Draft	T1 + 20
1.2.3.4	1.7	Transition Plan Final	T1 + 35
1.2.4.4	1.8	Software Development Plan – Enrollment Module Final	T1 + 35
1.3.4.1	1.2	Obtain Dev/Test Infrastructure Purchase Approval	T1 + 55
1.3.4.2	1.2	Obtain Production Infrastructure Purchase Approval	T1 + 55
1.3.2.3	1.8	Requirements Summary Findings - Enrollment Module	T1 + 67
1.3.3.1	1.8	Supplemental Design Document– Enrollment Module Draft	T1 + 72
1.3.3.4	1.8	Supplemental Design Document– Enrollment Module Final	T1 + 90
1.4.2.1	1.3	Development Environment Infrastructure Installation	T1 + 107
1.4.2.1	1.4	System Testing Environment Infrastructure Installation	T1 + 107
1.4.6.1.1	1.8	System Test Plan - Enrollment Module Draft	T1 + 122
1.4.6.1.4	1.8	System Test Plan - Enrollment Module Final	T1 + 135
1.4.5.1.1	1.8	Implement Components - Enrollment Module Build	T1 + 150

1.4.6.4.1	1.8	Execute System Tests - Enrollment Module	T1 + 154
1.4.6.4.2	1.8	Develop Test Evaluation Summary Report - Enrollment Module	T1 + 157
1.4.3.2	1.5	Primary Production Environment Infrastructure Installation	T1 + 205
1.4.3.3	1.6	Secondary Staging & Production Environment Infrastructure Installation	T1 + 228
1.4.4	1.1	Production Environment Approved	T1 + 248
1.5.1	1.8	Portfolio Enrollment Module Installation	T1 + 258
1.4.1	1.1	Support Facility C&A	Throughout

3.3.12 Acceptance Criteria

The NRC will assess the Contractor's infrastructure upon successful installation to ensure that it contains the components approved in Task 1.2 and is consistent with the environments described in each system's SAD. Furthermore, the NRC will conduct a security assessment to ensure that the infrastructure is free of security vulnerabilities. The NRC will document any findings and deficiencies discovered during the assessment and will provide them to the Contractor. The NRC will prioritize the discrepancies and coordinate with the Contractor to develop timeframes for resolving each discrepancy. The Contractor shall resolve the discrepancies according to the agreed upon timeframes.

3.4 Task 2: Develop and Implement the LVS

3.4.1 Scope of Work

This SOW includes the development and deployment of the initial Release of the LVS (V1).

This version will provide the basic Web-based functionality needed to meet NRC's license verification requirements as described in Appendix A. It will be accessible to limited NRC staff, agreement state (A/S) staff, licensee personnel, and other Government staff.

3.4.2 Schedule and Detailed Task Descriptions

The Task 2 schedule is presented in Appendix H. Detailed task descriptions are provided below.

3.4.3 Task 2.1 Develop Software Development Plan

The Contractor shall develop and deliver to the NRC a Software Development Plan (SDP), using the prevailing PMM template. The current SDP template is attached in Appendix J. The SDP is in effect the project management plan from the Contractor's perspective. In this plan, the Contractor shall expand upon the basic plan submitted in the Contractor's written portion of the proposal. In particular, the Contractor shall highlight in the SDP any significant changes or deviations from the technical approach described in the contract proposal, citing the NRC approval of each change or deviation. The Contractor shall include in the SDP any proposal for delivery of interim system builds to expedite NRC review and provide timely compliance feedback.

While all SDP content is required, the NRC needs more detailed information. To fulfill this need, the Contractor shall address, in Section 4.2 of the SDP, how it will manage the project to minimize disruptions in NRC business activities. In SDP Sections 4.2.5.1 and 4.5 (Risk Management Plan), the Contractor shall further describe the approach to retain key staff, and address potential technical or schedule issues.

3.4.4 Task 2.2 Develop Quality Assurance Plan

The Contractor shall develop and deliver to the NRC a comprehensive Quality Assurance Plan (QAP), using the prevailing PMM template. The current QAP template is attached in Appendix K.

3.4.5 Task 2.3 Validate Requirements

The Contractor shall conduct an effort to validate the LVS requirements to ensure their understanding of the requirements. In this effort, the Contractor shall hold workshops, conduct interviews, and otherwise obtain requirement specification concurrence representative of all stakeholders groups identified by NRC, such as NRC program offices and licensees. The foundation for this effort is Appendix A, LVS High-Level System Requirements. Following requirements validation, the Contractor shall submit to the NRC proposed revisions to requirements documentation, in particular the baseline use cases. The Contractor shall also deliver to the NRC a report summarizing the findings of the validation effort. The Contractor shall submit proposed revisions to requirements in the form of marked-up Use Case documents. Following revision, the Contractor shall place the revised Use Cases in an NRC shared storage location pending NRC review.

3.4.6 Task 2.4 Develop Deployment Plan

The Contractor shall develop and deliver to the NRC a Deployment Plan, compliant with the PMM template found in Appendix L.

In the Deployment Plan, the Contractor shall also identify the steps and procedures which the Contractor shall employ to deploy the LVS to NRC users, including plans for training, and to support licensees as they start using the system. The Deployment Plan shall address any issues regarding labor and other resources, timing, sequence and schedules, and any other contingencies.

3.4.7 Task 2.5 Develop Configuration Management Plan

The Contractor shall develop a Configuration Management Plan (CMP) compliant with the PMM template found in Appendix M. The CMP must address all project artifacts, even those that are implemented in other tasks. For example, it must cover how the Contractor shall establish and maintain configurations of system settings and scripts within the hosting environment (e.g., for routers and traffic manager devices); database structures and logic, including stored procedures, triggers, etc; and CM of software testing scripts. In this plan, the Contractor shall also propose the necessary NRC-funded hardware and software to host a rational clear case CM server at the Contractor development site. The Contractor shall propose and provide costs for Configuration Management (CM) coordination with the NRC-controlled central CM repository system. The Contractor shall propose an approach for periodically transmitting project artifacts to the NRC CM repository, as directed by the NRC.

In CM and other affected proposal areas, the Contractor shall address the NRC intent to provide periodic IV&V oversight. Program code and other project artifacts must be accessible from NRC headquarters for inspection by the IV&V team.

3.4.8 Task 2.6 Develop Detailed Design

The Contractor shall develop and document the detailed LVS design using UML models, supporting reports, and a Supplemental Design Document. In developing design models and documentation, the Contractor shall comply with specifications found in Appendix T, Detailed Design Standards.

3.4.9 Task 2.7 Develop System Architecture Document

In the NRC PMM, the System Architecture Document (SAD) is used to express all aspects of the logical and physical system design at a high level, mainly for use by NRC enterprise architects. The Contractor shall begin with the NRC-provided SAD, reflecting preliminary design information. The Contractor shall update the SAD and deliver versions at discrete milestones in the system development. These milestones include: after the initial design, after requirements validation, and after the final design prior to proceeding with system development. In these iterations, the Contractor shall accommodate NRC review and provide revised products addressing NRC concerns. The Contractor shall also repeat the cycle of revision and NRC review should the design change prior to NRC acceptance of Task 2 software for production deployment. In developing the SAD, the Contractor shall use the PMM template attached in Appendix N.

3.4.10 Task 2.8 Conduct Design Review

The Contractor shall develop and deliver a comprehensive design review presentation for NRC's senior management and LVS stakeholders that cover the entire system capability.

3.4.11 Task 2.9 Develop System

The Contractor shall construct system components that are needed to implement required Task 2 system functionality in accordance with the approved system design and validated requirements. In accordance with the NRC Project Management Methodology (PMM), the Contractor shall deliver for NRC inspection interim builds, reflecting iterative inclusion of LVS Release 1 content.

The Contractor shall isolate development of LVS V1 software components affected by security access controls. To enable optimal schedule compression and development progress during security architecture analyses, the Contractor shall only pursue development of software modules not directly affected by security access controls.

3.4.12 Task 2.10 Perform System Security Risk Assessment

The Contractor shall perform a risk assessment of the LVS and shall develop a strategy to address all identified LVS security risks. The assessment of risk and the development of system security plans are two important activities in an agency's information security program that directly support security accreditation and are required by the Federal Information Security Management Act (FISMA) and OMB Circular A-130, Appendix III. Risk assessments influence the development of the security controls for information systems and generate much of the information needed for the associated system security plans. The risk assessment shall characterize the information processed by the LVS using FIPS 199, Standards for Security Categorization of Federal Information and Information Systems and NIST Special Publication (SP) 800-60, Guide for Mapping Types of Information and Information Systems to Security Categories. The risk assessment shall follow NIST SP 800-30 Risk Management Guide for Information Technology Systems, and include the following:

- Identification of LVS user types and associated roles and responsibilities
- Identification of risk assessment team members and their associations
- A description of the risk assessment approach and techniques, where the techniques include documentation review, interviews, observation, and hands-on system assessment
- A description of the risk scale used, including at a minimum, the potential impact as defined in FIPS 199, and likelihood as defined in NIST SP 800-30, Risk Management Guide for Information Technology Systems
- A list of potential system vulnerabilities
- A list of potential threat-sources applicable to the system, including natural, human, and environmental threat-sources
- A table of vulnerability and threat-source pairs and observations about each
- Detailed findings for each vulnerability and threat-source pair discussing the possible outcome if the pair is exploited; existing controls to mitigate the pair; the likelihood determination as high, moderate, or low; the impact determination expressed as high, moderate, or low; the overall risk rating based upon the risk scale; and the recommended controls to mitigate the risk
- A summary that includes the number of high, moderate, and low findings and provides a list of prioritized action items based upon the findings.

In performing the risk assessment, the Contractor shall ensure comprehensive consideration of system development, maintenance, testing, training, production/operating, and user support environments. Additionally, the Contractor shall ensure that less conventional risk domains are also thoroughly considered. These include, but are not limited to any risks associated with transmission and storage of information regarding user support help desk requests and subsequent issue tracking. Additionally, the Contractor shall ensure that the risk assessment addresses information exchanged with system users while pursuing closure of support requests. This information may include data or other potentially sensitive material. The risk assessment

must also address vulnerabilities related to any indirect, shared or leased licensing and hosting of Commercial Off-The-Shelf (COTS) products used to support development, testing, training, operational or help desk functions. The assessment shall be documented in a report that follows the NRC Template for Risk Assessment Report found in Appendix O. The report shall be delivered in draft form and then in final form after NRC comments are incorporated.
The Contractor shall track any residual risk in the Plan Of Action and Milestones (POA&M). The Contractor shall document the results of the process. This shall include documenting the risk number, a description of each risk, the type of risk (i.e., impacting the confidentiality, integrity, or availability), the level of risk (i.e., low, moderate, or high), the associated controls, and the action(s) required or actually performed to eliminate or minimize each risk. The goal is for NRC and Contractor personnel to remediate all high and moderate security findings, and track the remaining security findings in the POA&M.

3.4.13 Task 2.11 Develop System Security Plan

The Contractor shall develop a System Security Plan (SSP) for LVS. The LVS security plan shall be developed in accordance with NIST SP 800-18 Guide for Developing Security Plans for Federal Information Systems, NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems, and the NRC IT System Security Plan Template found in Appendix P The Contractor shall identify within the SSP the necessary security controls required to protect the LVS, citing the security controls that are in place, those that are planned, and those that are not applicable. Where the LVS relies upon a control that is provided by another system (e.g., the NRC LAN/WAN), the specific control being relied upon shall be noted along with the name of the system providing that control. The Contractor shall trace the security controls to specific documented guidance, NRC policy (e.g., Management Directives), infrastructure policy or procedures, or LVS-specific policy or procedures.

The SSP shall be documented in a report that follows the NRC Template for System Security Plan. The report shall be delivered in draft form and then in pre-System Security Test and Evaluation (ST&E) form after NRC comments are incorporated. The ST&E must be conducted by an independent party. NRC will have the ST&E conducted by a separate IV&V Contractor who will provide the ST&E report. The NRC IT Security staff review of the draft is required to ensure compliance. The Contractor shall update the system security plan as final after completion of the ST&E test report to reflect validated in-place and planned controls. The NRC Senior IT Security Officer must approve the final to enable system accreditation.

The Contractor shall ensure that the System Security Plan provides comprehensive coverage of the system development, maintenance, testing, training, production/operating, and user support environments.

3.4.14 Task 2.12 Develop IT Contingency Plan and Perform Testing

The Contractor shall develop a contingency plan for the LVS. The LVS contingency plan shall be developed in accordance with NIST SP 800-34 Contingency Planning (CP) Guide for Information Technology Systems, NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems, and the NRC CP Template found in Appendix Q. The Contractor shall provide detailed procedures for the notification and activation phase, recovery operations, and return to normal operations. The procedures shall contain sufficient detail that a technically trained individual not familiar with the system can successfully follow the procedures. The system contingency plan shall also contain sufficient personnel contact information to enable contact at all times, vendor contact information to enable contact at all

times, equipment (hardware and software) and specification information to enable reconstitution of the system from scratch, all service level agreements and memoranda of understanding, the

IT standard operating procedures for the system, identification of any systems that this system is dependent upon along with references for the applicable contingency plans, references to the emergency management plan and occupant evacuation plan, and references to the appropriate continuity of operations plan.

The system contingency plan shall be documented in a report that follows the NRC Template for System CP. The report shall be delivered in draft form and then in pre-test form after NRC comments are incorporated. The NRC IT Security staff review of the draft is required to ensure compliance. The Contractor shall update the system contingency plan after completion of the contingency plan test report to reflect validated information. The NRC Senior IT Security Officer must approve the final to enable system accreditation.

Prior to LVS deployment, the Contractor shall perform system contingency testing in compliance with the NRC-approved test plan and will record the results of the testing in the Contingency Test Report following the applicable PMM template.

3.4.15 Task 2.13 Develop System Test Plan and Testing Scripts

The Contractor shall develop a System Test Plan (STP) for LVS functionality in accordance with the NRC Test Plan PMM template (Appendix R). Within the STP, the Contractor shall clearly detail the approach for ensuring independence of testing from the development team, in particular mitigating the risk of members of the development team introducing biases into the Quality Control (QC) process. System test documentation shall consist of the System Test Plan per Appendix R and the Rational Test Manager test cases and test scripts.

3.4.16 Task 2.14 Conduct System Test

Prior to delivery for NRC acceptance, the Contractor shall successfully complete system testing of LVS functionality and deliver to the NRC a Test Evaluation Summary, following the PMM template attached in Appendix S. As with other Contractor activities, the NRC reserves the right to have NRC personnel and the NRC IV&V teams observe system testing. The Contractor shall provide any hardware tokens needed to perform Contractor and NRC testing prior to production deployment.

3.4.17 Task 2.15 Develop Workshop Materials

Prior to implementation of the initial LVS, the NRC will offer a total of six four-hour licensee workshops and Agreement State-focused presentations in various parts of the country to discuss the LVS regulations and demonstrate use of the system. The Contractor shall prepare all software and other needed materials and deliver system demonstrations and presentations about the system during these workshops.

3.4.18 Task 2.16 Develop User Guide and Training Materials

The Contractor shall develop materials suitable for providing 2-day training on License Verification for approximately 50 staff. Those trained will include NRC staff and other individuals who will be the primary users of the system. These materials shall include a LVS User Guide. In addition, the Contractor shall create, maintain, and update computer based training (CBT) modules for use by new NRC staff and external users needing to learn about their LVS role after the initial training sessions have ended.

In the role-based CBT modules, the Contractor shall address the functions of the Licensee and Government user communities as outlined in the use cases (Appendix A – LVS High-Level System Requirements). While not included in the CBT portfolio, the Contractor shall provide detailed user manuals to cover training needs of the System Administrator user functions. The Contractor shall ensure that both a CBT module and training materials for user training workshops explicitly cover the user registration process including obtaining and using authentication credentials.

The Contractor shall submit all training plans and materials to the Government for review and approval. The Contractor shall address all NRC comments to the satisfaction of the NRC Project Officer in producing the final version of the training plans, materials, and CBT modules.

While most external users of the system (e.g., other federal agencies, licensees, and A/S agencies who access the system via the Web interface) will not receive formal training, the Contractor shall ensure that the LVS Web interface includes user-friendly navigation tools, online system help, and online reference to relevant LVS regulatory material.

3.4.19 Task 2.17 Install Acceptance Test System at Application Service Provider (ASP)

After System Test in the development environment, the Contractor shall install the system at the ASP for use in acceptance testing and training. The Contractor shall also work with the NRC staff to ensure that any needed NRC network system installation activities are accomplished in order for NRC staff to access the system at the ASP. If NRC network or desktop software is required, the Contractor shall provide system installation instructions and other information to Government staff, as only NRC Office of Information Services (OIS) representatives are permitted to install such software.

3.4.20 Task 2.18 Support Acceptance Testing

The NRC will perform acceptance testing of LVS functionality, using NRC personnel and members of the IV&V team. The acceptance test plan and test cases will test Contractor-provided software, using data comparable to LVS production data. The Contractor shall be prepared to host acceptance testing at the Contractor facility and to provide all technical support required to set up and run acceptance tests using the rational test tool suite. In particular, the Contractor shall also support definition of all user accounts to support role-based NRC tests. The Contractor shall also be prepared to provide system demonstrations and/or informal training of personnel who are to be involved in the acceptance testing.

3.4.21 Task 2.19 Conduct Engineering Review

The Contractor shall prepare and deliver a comprehensive engineering review for senior NRC management and system portfolio stakeholders that fully describe the system development and integration activities which the Contractor has completed.

3.4.22 Task 2.20 Conduct Workshops

The Contractor shall deliver system demonstrations and/or presentations about LVS during six four-hour licensee workshops and agreement state-focused presentations in various parts of the country. The Contractor shall provide at least two Web-enabled computers at each workshop and ensure that participants are able to access appropriate LVS functions using these computers. The Contractor should assume two people traveling to each of the six workshop locations. The NRC must approve all Contractor-proposed workshop locations. The Contractor proposal shall include all costs of hosting the workshops (e.g., conference facility and equipment rental).

3.4.23 Task 2.21 Support Development of System Accreditation Documentation

The Contractor shall support the NRC staff and other Contractors tasked to develop a System C&A Report for the LVS in accordance with the FISMA, Office of Management and Budget Circular A-130, Appendix III, Security of Federal Automated Information Resources; NIST Special Publication 800-37, Guide for the Security C&A of Federal Information Systems; and NRC MD 12.5. The NRC security Contractor having performed the System Test & Evaluation (ST&E) will coordinate development of the System Accreditation documentation package. The Contractor shall provide the support required to ensure that all documentation is adequate to ensure that the NRC receives full certification and accreditation. The Contractor shall be required to deliver briefings (as needed) to the NRC.

System certification is the declaration by the system owner and information owner that the system has a current risk assessment, system security plan, system security test and evaluation plan, system security test and evaluation report, system CP, system contingency plan test report, and a plan to resolve issues raised during system certification; and that the security controls listed in the system security plan have been assessed using the assessment methods and procedures described in the system security test and evaluation report and the contingency plan report to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for the system.

The plan to resolve issues raised during system certification describes the corrective measures that have been implemented or are planned to address any deficiencies in the security controls for the information system and to reduce or eliminate known vulnerabilities.

The security certification package documents the results of the security certification and provides the authorizing official with the essential information needed to make a credible risk-based decision on whether to authorize operation of the information system. All required documentation must be provided to the IT security office in both hard copy and electronically in MS Word. The program office will place the documents into ADAMS. The security certification package contains the following documents:

C&A Security Deliverables	General Support System (GSS)	Major Application (MA)	Listed Network	Listed Stand Alone SGI	Other
Privacy Impact Assessment	X	X	X	X	X
Information System Security Officer (ISSO) Appointment Letter	X	X	X	X	N/A
System Security Categorization	X	X	X	N/A	X
Risk Assessment Report	X	X	Includes 800-53 controls status	N/A	N/A
System Security Plan (SSP) and Supporting Documents* Low Moderate High	X	X	X	X	N/A
Memorandum of Understanding (MOU) for Interfacing Systems	X	X	SLA between any MA or GSS (ML0735511390) http://www.internal.nrc.gov/CSO/documents/SLA-MAorGSS.doc	N/A	X
Interconnection Security Agreement (ISA) for Interfacing Systems	X	X	X	N/A	X
Security Test and Evaluation (ST&E) Plan Report-Moderate	X	X	N/A	N/A	N/A
Security Assessment Report (SAR)	X	X	N/A	N/A	N/A
Vulnerability Assessment Report (VAR)	X	X	X	N/A	N/A
Plan of Action and Milestones (POA&M)	X	X	X	X	N/A

C&A Security Deliverables	General Support System (GSS)	Major Application (MA)	Listed Network	Listed Stand Alone SGI	Other
Deviation Request	X	X	X	X	N/A
Certification Memo GSS/MA Laptop Listed	X	X	X	X	N/A
Business Impact Analysis (BIA)	X	X	N/A	N/A	N/A
Contingency Plan	X	X	Appendix Q	N/A	

3.4.24 Task 2.22 Support Roll-out Planning

The Contractor shall support NRC staff and Contractors tasked with planning roll-out to NRC and to other system users who are licensees. This will include support for development of roll-out plans, training logistics, desk procedures, and correspondence with licensees.

3.4.25 Task 2.23 Conduct Readiness Review Demonstration

After NRC acceptance testing has been completed and required changes have been addressed and re-tested, the Contractor shall conduct a readiness review session with NRC and present the results of all activities, findings, and products developed during the engineering phase. The Readiness Review Demonstration shall group topics as logically as possible to facilitate comprehensive yet succinct issue coverage. Upon successful readiness review, the NRC Project Officer will provide a Go decision. If the result of the readiness review is not successful, the NRC Project Officer will provide a no-go decision and will provide the Contractor with issues that must be addressed. The Contractor shall resolve the issues from the readiness review and conduct an additional readiness review to present the issue resolutions to the NRC.

3.4.26 Task 2.24 Roll-out System to NRC (Includes Production Install and Training)

The Contractor shall perform all activities required to roll-out the initial LVS to the NRC user community. The Contractor shall install and test LVS in its production environment at the ASP, and work with NRC staff to facilitate smooth and efficient installation or configuration of any components needed on the NRC network or user workstations.

The Contractor shall provide one-day training on how use the LVS to approximately 25 staff. The Contractor shall fulfill these training requirements through at least three separate training events.

Those trained will include NRC and other individuals who will be the primary users of the system. Training shall be conducted at times and dates acceptable to the NRC project officer.

The Contractor shall conduct all training to ensure that users and stakeholders are trained "just in time" to ensure there is no loss of time between completion of the training and availability of the system.

3.4.27 Task 2.25 Support Licensee Start-up

The NRC will correspond with parties who will be required to report to receive digital certificate credentials and are prepared to access the system. The Contractor shall provide all technical support required to facilitate smooth and efficient use of the system by this licensee group. This includes developing and distributing a guide for formatting and submission of electronic data files, defining user accounts, and performing trouble-shooting. The Contractor shall also develop an operational support guide.

The purpose of the Operational Support Guide is to document system usage and procedures for operations under routine and exceptional conditions. Within the operational support guide, the Contractor shall address procedures for:

- System installation and configuration;
- Rules of conduct, including common operations such as opening and closing user accounts;
- System monitoring and reporting; and
- System archiving and relocation

3.4.28 Task 2.26 Develop System Refinement Recommendations

The Contractor shall provide a report containing its recommendations for changes to be made to the LVS infrastructure, focusing in particular on the production system.

3.4.29 Task 2.27 Support Lessons Learned Study

In compliance with the Clinger-Cohen Act, the NRC will conduct an independent lessons learned study of this project.

The Contractor shall be interviewed by the NRC lessons learned study authors. The Contractor shall be asked to offer recommendations and comments on a broad range of project aspects, including, but not limited to the feedback from the users and stakeholders; roll-out experiences; security enhancements suggested by independent evaluation.

3.4.30 Task 2.28 Support Security Architecture Analysis

The Contractor shall support NRC efforts to ensure optimal LVS system security. In response to emergent security risks and development of new security technologies, the Contractor shall conduct market research and perform analyses to identify products that may strengthen the LVS security architecture. The Contractor shall provide recommendations and the NRC will decide whether to implement them. Upon receipt of NRC direction, the Contractor shall revise all LVS artifacts wherein the pertinent security architecture elements are reflected.

3.4.31 Deliverables and Milestones

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 contract, the Contractor shall comply with the directions of the NRC regarding the contents of the report, summaries, data and related documents to include correcting, deleting, editing, revising, modify, formatting, and supplementing any of the information contained therein at no additional cost to the NRC. Performance under the contract will not be deemed accepted or completed until the NRC's directions are complied with. The reports, summaries, data and related documents will be considered draft until approved by the NRC. The Contractor agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data and related documents created under this contract remains solely within the discretion of the NRC.

Publication of Results: Prior to any dissemination, display, publication or release of articles, reports, summaries, data or related documents developed under the contract, the Contractor shall submit for review and approval by the NRC 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 by the NRC 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. The Contractor agrees and grants a royalty free, nonexclusive, irrevocable world-wide 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, for any governmental purpose and to have or authorize others to do so.

Identification/ Marking of Sensitive and Safeguards Information: 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. In performing the contract, the Contractor shall clearly mark sensitive unclassified non-safeguards information (SUNSI), sensitive, and safeguards information to include for example Official Use Only and Safeguards 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 forms (e.g. NRC Form 461 Safeguards Information and NRC Form 190B Official Use Only) in maintaining these records and documents. The Contractor will ensure that sensitive and safeguards information 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), and NRC Management Directive and Handbook 12.6.

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.3.1.1.3	2.3	Requirements Validation Summary Findings - V1.0 FINAL	Task 2 (T2) + 23
1.3.1.2.1	2.3	Proposed Requirement Changes - V1.0 Draft	T2 +25
1.3.5.1.1	2.11	System Security Plan - V1.0 Draft	T2 +30
1.3.5.2.2	2.10	System Security Risk Assessment - V1.0 Draft	T2 +30

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.3.1.2.4	2.3	Proposed Requirements Changes - V1.0 FINAL	T2 +35
1.3.6.1.1	2.2	Quality Assurance Plan - V1.0 Draft	T2 +44
1.3.6.2.1	2.5	Configuration Management Plan - V1.0 Draft	T2 +44
1.3.5.1.4	2.11	System Security Plan - V1.0 FINAL	T2 +43
1.3.5.2.4	2.10	System Security Risk Assessment - V1.0 FINAL	T2 +43
1.3.6.3.1	2.1	Develop Project Risk Management Plan - V1.0 Draft	T2 +51
1.3.6.4.1	2.1	Software Development Plan - V1.0 Draft	T2 +51
1.3.2.2.1	2.6	Design Model - Database - V1.0 Draft	T2 +57
1.3.2.3.1	2.6	Design Model - User Interface - V1.0 Draft	T2 +57
1.3.6.1.4	2.2	Quality Assurance Plan - V1.0 FINAL	T2 +58
1.3.6.2.4	2.5	Configuration Management Plan - V1.0 FINAL	T2 +58
1.3.2.4.1	2.6	Design Model - UML - V1.0 Draft	T2 +62
1.3.4.1.1	2.13	System Test Plan - V1.0 Draft	T2 +62
1.3.2.2.4	2.6	Design Model - Database - V1.0 FINAL	T2 +67
1.3.2.3.4	2.6	Design Model - User Interface - V1.0 FINAL	T2 +67
1.3.6.3.4	2.1	Develop Project Risk Management Plan - V1.0 FINAL	T2 +70
1.3.6.4.4	2.1	Software Development Plan - V1.0 FINAL	T2 +70
1.3.2.4.1	2.6	Design Model - UML - V1.0 FINAL	T2 +79
1.3.2.5.1	2.7	Update SAD V1.1	T2 +87
1.3.4.1.4	2.13	System Test Plan - V1.0 FINAL	T2 +87
1.3.2.5.4	2.7	Finalize SAD V1.1	T2 +95
1.3.6.5.1	2.4	Deployment Plan - V1.0 Draft	T2 +97
1.3.5.4.1	2.12	Contingency Plan - V1.0 Draft	T2 +104
1.3.5.4.4	2.12	Contingency Plan - V1.0 FINAL	T2 +115
1.3.6.5.4	2.4	Deployment Plan - V1.0 FINAL	T2 +116
1.3.8	2.8	Conduct Design Review	T2 +120
1.4.1.1.1	2.6	Design Model - Database - V2.0 Draft	T2 +123
1.4.1.2.1	2.6	Design Model - User Interface - V2.0 Draft	T2 +123
1.4.1.3.1	2.6	Design Model - UML - V2.0 Draft	T2 +123
1.4.1.4.1	2.7	Update SAD V2.0	T2 +123
1.4.9.2.1	2.1	Software Development Plan - V2.0 Draft	T2 +129
1.4.9.3.1	2.4	Deployment Plan - V2.0 Draft	T2 +129
1.4.1.1.4	2.6	Design Model - Database - V2.0 FINAL	T2 +131
1.4.1.2.4	2.6	Design Model - User Interface - V2.0 FINAL	T2 +131
1.4.1.3.4	2.6	Design Model - UML - V2.0 FINAL	T2 +131
1.4.1.4.4	2.7	Finalize SAD V2.0	T2 +131
1.4.5.1.1	2.13	System Test Plan - V2.0 Draft	T2 +143
1.4.7.3.1	2.25	Operational Support Materials - V1.0 Draft	T2 +143
1.4.9.2.4	2.1	Software Development Plan - V2.0 FINAL	T2 +144
1.4.9.3.4	2.4	Deployment Plan - V1.0 FINAL	T2 +144
1.4.8.1.1	2.10	System Security Risk Assessment - V2.0 Draft	T2 +148
1.4.3.1.1	2.9	Implement Components - Feature Set 1	T2 +149

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.4.7.1.1	2.16	User Support Materials - V1.0 Draft	T2 +153
1.4.5.2.1	2.13	System Test Scripts - FS#1 Draft	T2 +158
1.4.7.3.4	2.25	Operational Support Materials - V1.0 FINAL	T2 +160
1.4.5.1.4	2.13	System Test Plan - V2.0 FINAL	T2 +161
1.4.8.1.4	2.10	System Security Risk Assessment - V2.0 FINAL	T2 +166
1.4.7.1.4	2.16	User Support Materials - V1.0 FINAL	T2 +170
1.4.5.3.1	2.13	System Test Scripts - FS#2 Draft	T2 +173
1.4.7.2.1	2.16	Training Materials - V1.0 Draft	T2 +173
1.4.7.2.1	2.15	Workshop Materials - V1.0 Draft	T2 +173
1.4.5.2.4	2.13	System Test Scripts - FS#1 FINAL	T2 +175
1.4.8.2.1	2.11	System Security Plan - V2.0 Draft	T2 +184
1.4.4.1.1	2.9	Implement Components Feature Set 2	T2 +189
1.4.5.3.4	2.13	System Test Scripts - FS#2 FINAL	T2 +190
1.4.7.2.4	2.16	Training Materials - V1.0 FINAL	T2 +192
1.4.7.2.4	2.15	Workshop Materials - V1.0 FINAL	T2 +192
1.4.8.2.4	2.11	System Security Plan - V2.0 FINAL	T2 +202
1.4.5.4.2	2.14	Execute System Tests - Test system components	T2 +208
1.4.8.4.1	2.12	Contingency Plan - V2.0 Draft	T2 +212
1.5.4.3.1	2.25	Operational Support Materials - V2.0 Draft	T2 +217
1.4.5.5.1	2.14	System Test Evaluation Summary - V1.0 Draft	T2 +219
1.5.4.1.1	2.16	User Support Materials - V2.0 Draft	T2 +221
1.4.8.4.4	2.12	Contingency Plan - V2.0 FINAL	T2 +225
1.5.4.3.4	2.25	Operational Support Materials - V2.0 FINAL	T2 +225
1.4.5.5.4	2.14	System Test Evaluation Summary - V1.0 FINAL	T2 +230
1.4.6.1	2.9	Implement Components - Resolve System Test Issues	T2 +231
1.5.4.1.4	2.16	User Support Materials - V2.0 FINAL	T2 +234
1.4.11	2.19	Conduct Engineering Review	T2 +241
1.5.1.1	2.17	Install UAT Release in Test Environment	T2 +242
1.5.4.2.1	2.16	Training Materials - V2.0 Draft	T2 +242
1.5.4.2.4	2.16	Training Materials - V2.0 FINAL	T2 +250
1.5.1.3	2.18	Support User Acceptance Test	T2 +267
1.5.5.1	2.20	Conduct Workshops	T2 +272
1.5.5.1	2.24	Conduct System Training	T2 +272
1.5.3.1	2.9	Implement Components - Resolve User Acceptance Test Issues	T2 +284
1.5.6.3.1	2.12	Perform Contingency Test	T2 +300
1.5.6.1.2	2.21	Support ST&E Execution	T2 +310
1.5.6.4.1	2.12	Contingency Test Report - V1.0 Draft	T2 +310
1.5.6.4.4	2.12	Contingency Test Report - V1.0 FINAL	T2 +323
1.5.7.1	2.22	Support Roll-Out Planning	T2 +346
1.5.6.6.2	2.21	Support System Accreditation	T2 +351
1.5.7.3	2.23	Conduct Readiness Review	T2 +351

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.5.7.2	2.24	Install Software in Staging Area	T2 +351
1.5.7.3	2.24	Promote Final System Release to Production	T2 +352
1.6.1	2.27	Support Lessons Learned	T2 +422
1.6.2	2.26	System Refinement Recommendations	T2 +422
--	2.28	Support Security Architecture Analysis	Throughout

3.4.32 Acceptance Criteria

NRC will utilize a comprehensive approach to assist in determining the acceptance of artifacts generated by the LVS project. This approach includes:

- The use of Independent Verification and Validation (IV&V), to verify and validate application functionality and performance throughout the entire LVS development process. This includes review of LVS project artifacts, review of software interim builds (both software code and system functionality), User Acceptance Testing (UAT) testing, and on-going independent IT technical analysis and support.

- Periodic system demonstrations permitting NRC management to verify the feature set functionality.

- NRC review of Contractor functional and stress test logs to verify the system will perform according to specifications.

- Successful UAT results. UAT testers will include Agreement State and industry representatives.

- NRC review of Contractor performance against contractual requirements.

3.5 Task 3: Develop and Implement the WBL

3.5.1 Scope of Work

The base product for WBL is currently being implemented by adapting the RADMAT product as a replacement for the LTS. The NRC has obtained unlimited rights to this product through a license agreement executed with the State of Ohio's Department of Health. This SOW includes enhancing the LTS replacement by further adapting the RADMAT product.

The Contractor shall build upon the initial version of the LTS replacement to develop and implement WBL This version will provide additional licensing and inspection features to assist the NRC in managing licensing information for businesses using radioactive materials. This includes the radioactive materials licensing life-cycle from initial application, license issuance, amendment, reporting, through de-licensing. In addition to supporting licenses managed by the NRC, WBL shall be developed to include licensing information from the agreement states which support and manage their own material licenses.

3.5.2 Schedule and Detailed Task Descriptions

The Task 3 schedule is presented in Appendix I. Detailed task descriptions are provided below.

3.5.3 Task 3.1 Develop Software Development Plan (SDP)

The Contractor shall develop and deliver to the NRC a Software Development Plan (SDP), using the prevailing PMM template. The current SDP template is attached in Appendix J. The SDP is in effect the project management plan from the Contractor's perspective. In this plan, the Contractor shall expand upon the basic plan submitted in the Contractor's written portion of the proposal. In particular, the Contractor shall highlight in the SDP any significant changes or deviations from the technical approach described in the contract proposal, citing the NRC approval of each change or deviation. The Contractor shall include in the SDP any proposal for delivery of interim system builds to expedite NRC review and provide timely compliance feedback.

While all SDP content is required, the NRC needs more detailed information. To fulfill this need, the Contractor shall address, in Section 4.2 of the SDP, how it will manage the project to minimize disruptions in NRC business activities. In SDP Sections 4.2.5.1 and 4.5 (Risk Management Plan), the Contractor shall further describe the approach to retain key staff, and address potential technical or schedule issues.

3.5.4 Task 3.2 Develop Quality Assurance Plan (QAP)

The Contractor shall develop and deliver to the NRC a comprehensive Quality Assurance Plan (QAP), using the prevailing PMM template. The current QAP template is attached in Appendix K.

3.5.5 Task 3.3 Validate Requirements

The Contractor shall conduct an effort to validate the WBL requirements to ensure their understanding of the requirements. In this effort, the Contractor shall hold workshops, conduct interviews, and otherwise obtain requirement specification concurrence representative of all stakeholders groups identified by NRC. The foundation for this effort is Appendix B, WBL System Requirements. Following requirements validation, the Contractor shall submit to the NRC proposed revisions to requirements documentation, in particular the baseline use cases. The Contractor shall also deliver to the NRC a report summarizing the findings of the validation effort. The Contractor shall submit proposed revisions to requirements in the form of marked-up Use Case documents. Following revision, the Contractor shall place the revised Use Cases in an NRC shared storage location pending NRC review.

3.5.6 Task 3.4 Develop Deployment Plan

The Contractor shall develop and deliver to the NRC a deployment plan, compliant with the PMM template found in Appendix L. Although optional Tasks 7, 8, 9 may not be pursued, within the SDP, the Contractor shall describe the approach addressing the complexities of possibly working concurrently on Task 3, 7, 8, and 9.

In the deployment plan, the Contractor shall also identify the steps and procedures which the Contractor shall employ to deploy the WBL to NRC users, including plans for training, and to support licensees as they start using the system. The deployment plan shall address any

issues regarding labor and other resources, timing, sequence and schedules, and any other contingencies.

3.5.7 Task 3.5 Develop Configuration Management Plan (CMP)

The Contractor shall develop a CMP compliant with the PMM template found in Appendix M. The CMP must address all project artifacts, even those that are implemented in other tasks. For example, it must cover how the Contractor shall establish and maintain configurations of system settings and scripts within the hosting environment (e.g., for routers and traffic manager devices); database structures and logic, including stored procedures, triggers, etc; and CM of software testing scripts. In this plan, the Contractor shall also propose the necessary NRC-funded hardware and software to host a rational clear case CM server at the Contractor development site. The Contractor shall propose and provide costs for CM coordination with the NRC-controlled central CM repository system. The Contractor shall propose an approach for periodically transmitting project artifacts to the NRC CM repository, as directed by the NRC.

In CM and other affected proposal areas, the Contractor shall address the NRC intent to provide periodic IV&V oversight. Program code and other project artifacts must be accessible from NRC headquarters for inspection by the IV&V team.

3.5.8 Task 3.6 Develop Detailed Design

The Contractor shall develop and document the detailed WBL design using UML models, supporting reports, and a Supplemental Design Document. In developing design models and documentation, the Contractor shall comply with specifications found in Appendix T, Detailed Design Standards.

3.5.9 Task 3.7 Develop System Architecture Document (SAD)

In the NRC PMM, the SAD is used to express all aspects of the logical and physical system design at a high level, mainly for use by NRC enterprise architects. The Contractor shall begin with the NRC-provided SAD, reflecting preliminary design information. The Contractor will update the SAD and deliver versions at discrete milestones in the system development. These milestones include: after the initial design, after requirements validation, and after the final design prior to proceeding with system development. In these iterations, the Contractor shall accommodate NRC review and provide revised products addressing NRC concerns. The Contractor shall also repeat the cycle of revision and NRC review should the design change prior to NRC acceptance of Task 3 software for production deployment. In developing the SAD, the Contractor shall use the PMM template attached in Appendix N.

3.5.10 Task 3.8 Conduct Design Review

The Contractor shall develop and deliver a comprehensive design review presentation for NRC's senior management and WBL stakeholders that covers the entire system capability, including any known requirements to be implemented in Tasks 9 and 10. References to Tasks 9 and 10 functionality will be at a high level.

3.5.11 Task 3.9 Develop System

The Contractor shall construct system components that are needed to implement required Task 3 system functionality in accordance with the approved system design and validated

requirements. In accordance with the NRC Project Management Methodology (PMM), the Contractor shall deliver for NRC inspection interim builds, reflecting iterative inclusion of WBL Release 2 content.
The Contractor shall isolate development of WBL V2 software components affected by security access controls. To enable optimal schedule compression and development progress during security architecture analyses, the Contractor shall only pursue development of software modules not directly affected by security access controls.

3.5.12 Task 3.10 Update System Security Risk Assessment

The Contractor shall update the existing WBL Security Risk Assessment document. The assessment of risk and the development of system security plans are two important activities in an agency's information security program that directly support security accreditation and are required by the Federal Information Security Management Act (FISMA) and OMB Circular A-130, Appendix III. Risk assessments influence the development of the security controls for information systems and generate much of the information needed for the associated system security plans. The risk assessment shall characterize the information processed by the WBL using FIPS 199, Standards for Security Categorization of Federal Information and Information Systems and NIST Special Publication (SP) 800-60, Guide for Mapping Types of Information and Information Systems to Security Categories. The risk assessment shall follow NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems, and include the following:

- Identification of WBL user types and associated roles and responsibilities
- Identification of risk assessment team members and their associations
- A description of the risk assessment approach and techniques, where the techniques include documentation review, interviews, observation, and hands-on system assessment
- A description of the risk scale used, including at a minimum, the potential impact as defined in FIPS 199, and likelihood as defined in NIST SP 800-30, Risk Management Guide for Information Technology Systems
- A list of potential system vulnerabilities
- A list of potential threat-sources applicable to the system, including natural, human, and environmental threat-sources
- A table of vulnerability and threat-source pairs and observations about each
- Detailed findings for each vulnerability and threat-source pair discussing the possible outcome if the pair is exploited; existing controls to mitigate the pair; the likelihood determination as high, moderate, or low; the impact determination expressed as high, moderate, or low; the overall risk rating based upon the risk scale; and the recommended controls to mitigate the risk.

- A summary that includes the number of high, moderate, and low findings and provides a list of prioritized action items based upon the findings.

The assessment shall be documented in a report that follows the NRC Template for Risk Assessment Report found in Appendix O. The report shall be delivered in draft form and then in final form after NRC comments are incorporated.

In updating the risk assessment, the Contractor shall ensure that comprehensive consideration of system development, maintenance, testing, training, production/operating, and user support environments. Additionally, the Contractor shall ensure that less conventional risk domains are also thoroughly considered. These include, but are not limited to any risks associated with transmission and storage of information regarding user support help desk requests and subsequent issue tracking. Additionally, the Contractor shall ensure that the risk assessment addresses information exchanged with system users while pursuing closure of support requests. This information may include data or other potentially sensitive material. The risk assessment must also address vulnerabilities related to any indirect, shared or leased licensing and hosting of Commercial Off-The-Shelf (COTS) products used to support development, testing, training, operational or help desk functions.

The Contractor shall track any residual risk in the Plan of Action and Milestones (POA&M). The Contractor shall document the results of the process. This shall include documenting the risk number, a description of each risk, the type of risk (i.e., impacting the confidentiality, integrity, or availability), the level of risk (i.e., low, moderate, or high), the associated controls, and the action(s) required or actually performed to eliminate or minimize each risk. The goal is for NRC and Contractor personnel to remediate all high and moderate security findings, and track the remaining security findings in the POA&M.

3.5.13 Task 3.11 Update System Security Plan

The Contractor shall update the existing System Security Plan (SSP) for WBL. The WBL security plan shall be developed in accordance with NIST SP 800-53 Recommended Security Controls for Federal Information Systems, NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems, and the NRC IT System Security Plan Template found in Appendix P. The Contractor shall identify within the SSP the necessary security controls required to protect the WBL, citing the security controls that are in place, those that are planned, and those that are not applicable. Where the WBL relies upon a control that is provided by another system (e.g., the NRC LAN/WAN), the specific control being relied upon shall be noted along with the name of the system providing that control. The Contractor shall trace the security controls to specific documented guidance, NRC policy (e.g., Management Directives), infrastructure policy or procedures, or WBL-specific policy or procedures. \

The Contractor shall ensure that the System Security Plan provides comprehensive coverage of the system development, maintenance, testing, training, production/operating, and user support environments.

The SSP shall be documented in a report that follows the NRC Template for System Security Plan. The report shall be delivered in draft form and then in pre-System Security Test and Evaluation (ST&E) form after NRC comments are incorporated. The ST&E must be conducted by an independent party. NRC will have the ST&E conducted by a separate IV&V Contractor who will provide the ST&E report. The NRC IT Security staff review of the draft is required to

ensure compliance. The Contractor shall update the system security plan as final after completion of the ST&E test report to reflect validated in-place and planned controls. The NRC Senior IT Security Officer must approve the final to enable system accreditation.

3.5.14 Task 3.12 Update IT Contingency Plan and Perform Testing

The Contractor shall update the existing contingency plan for the WBL. The WBL contingency plan shall be developed in accordance with NIST SP 800-34 Contingency Planning Guide for Information Technology Systems, NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems, and the NRC Contingency Plan (CP) Template found in Appendix Q. The Contractor shall provide detailed procedures for the notification and activation phase, recovery operations, and return to normal operations. The procedures shall contain sufficient detail that a technically trained individual not familiar with the system can successfully follow the procedures. The system contingency plan shall also contain sufficient personnel contact information to enable contact at all times, vendor contact information to enable contact at all times, equipment (hardware and software) and specification information to enable reconstitution of the system from scratch, all service level agreements and memoranda of understanding, the IT standard operating procedures for the system, identification of any systems that this system is dependent upon along with references for the applicable contingency plans, references to the emergency management plan and occupant evacuation plan, and references to the appropriate continuity of operations plan.

The system contingency plan shall be documented in a report that follows the NRC Template for System Contingency Plan. The report shall be delivered in draft form and then in pre-test form after NRC comments are incorporated. The NRC IT Security staff review of the draft is required to ensure compliance. The Contractor shall update the system contingency plan after completion of the contingency plan test report to reflect validated information. The NRC Senior IT Security Officer must approve the final to enable system accreditation.

Prior to WBL deployment, the Contractor shall perform system contingency testing in compliance with the NRC-approved test plan and will record the results of the testing in the Contingency Test Report following the applicable PMM template.

3.5.15 Task 3.13 Develop STP and Testing Scripts

The Contractor shall develop a System Test Plan (STP) for WBL functionality in accordance with the NRC Test Plan PMM template (Appendix R). Within the STP, the Contractor shall clearly detail the approach for ensuring independence of testing from the development team, in particular mitigating the risk of members of the development team introducing biases into the QC process. System test documentation shall consist of the STP per Appendix R and the Rational Test Manager test cases and scripts.

3.5.16 Task 3.14 Conduct System Test

Prior to delivery for NRC acceptance, the Contractor shall successfully complete system testing of WBL functionality and deliver to the NRC a Test Evaluation Summary, following the PMM template attached in Appendix S. As with other Contractor activities, the NRC reserves the right to have NRC personnel and the NRC IV&V teams observe system testing. The Contractor shall provide any hardware tokens needed to perform Contractor and NRC testing prior to production deployment.

3.5.17 Task 3.15 Develop Workshop Materials

Prior to implementation of the WBL, the NRC will offer a total of six 4-hour licensee workshops and agreement state-focused presentations in various parts of the country to discuss the WBL regulations and demonstrate use of the system. The Contractor shall prepare all software and other needed materials and deliver system demonstrations and presentations about the system during these workshops.

3.5.18 Task 3.16 Develop User Guide and Training Materials

The Contractor shall develop materials suitable for providing 2-day training on Licensing for approximately 50 staff; 4-hour training on import/export notification functions for 15 staff; and 4-hour overview training for 100 staff. Those trained will include NRC staff and other individuals who will be the primary users of the system. These materials shall include a WBL User Guide. In addition, the Contractor shall create, maintain, and update CBT modules for use by new NRC staff and external users needing to learn about their WBL role after the initial training sessions have ended.

In the role-based CBT modules, the Contractor shall address the functions of the Licensee and Agency user communities as outlined in the use cases (Appendix B – WBL System Requirements). While not included in the CBT portfolio, the Contractor shall provide detailed user manuals to cover training needs of the System Administrator user functions. The Contractor shall ensure that both a CBT module and training materials for user training workshops explicitly cover the user registration process including obtaining and using authentication credentials.

The Contractor shall submit all training plans and materials to the Government for review and approval. The Contractor shall address all NRC comments to the satisfaction of the NRC Project Officer in producing the final version of the training plans, materials, and CBT modules.

The Contractor shall ensure that the WBL Web interface includes user-friendly navigation tools, online system help, and online reference to relevant WBL regulatory material.

3.5.19 Task 3.17 Install Acceptance Test System at Application Service Provider (ASP)

After System Test in the development environment, the Contractor shall install the system at the ASP for use in acceptance testing and training. The Contractor shall also work with the NRC staff to ensure that any needed NRC network system installation activities are accomplished in order for NRC staff to access the system at the ASP. If NRC network or desktop software is required, the Contractor shall provide system installation instructions and other information to Government staff, as only NRC OIS representatives are permitted to install such software.

3.5.20 Task 3.18 Support Acceptance Testing

The NRC will perform acceptance testing of WBL functionality, using NRC personnel and members of the IV&V team. The acceptance test plan and test cases will test Contractor-provided software, using data comparable to WBL production data. The Contractor shall be prepared to host acceptance testing at the Contractor facility and to provide all technical support required to set up and run acceptance tests using the rational test tool suite. In particular, the Contractor shall also support definition of all user accounts to support role-based NRC tests. The Contractor shall also be prepared to provide system demonstrations and/or informal training of personnel who are to be involved in the acceptance testing.

3.5.21 Task 3.19 Conduct Engineering Review

The Contractor shall prepare and deliver a comprehensive engineering review for senior NRC management and system portfolio stakeholders that fully describe the system development and integration activities which the Contractor has completed.

3.5.22 Task 3.20 Conduct Workshops

The Contractor shall deliver system demonstrations and/or presentations about WBL during six 4-hour licensee workshops and agreement state-focused presentations in various parts of the country. The Contractor shall provide at least two web-enabled computers at each workshop and ensure that participants are able to access appropriate WBL functions using these computers. The Contractor should assume two people traveling to each of the six workshop locations. The NRC must approve all Contractor-proposed workshop locations. The Contractor proposal shall include all costs of hosting the workshops (e.g., conference facility and equipment rental).

3.5.23 Task 3.21 Support Development of System Accreditation Documentation

The Contractor shall support the NRC staff and other Contractors tasked to develop a System Certification and Accreditation Report for the WBL in accordance with FISMA, Office of Management and Budget Circular A-130, Appendix III, Security of Federal Automated Information Resources; NIST Special Publication 800-37, Guide for the Security Certification and Accreditation of Federal Information Systems; and NRC MD 12.5. The NRC Security Contractor having performed the System Test & Evaluation (ST&E) will coordinate development of the System Accreditation documentation package. The Contractor shall provide the support required to ensure that all documentation is adequate to ensure that the NRC receives full certification and accreditation. The Contractor shall be required to deliver briefings (as needed) to the NRC.

System certification is the declaration by the system owner and information owner that the system has a current risk assessment, system security plan, system security test and evaluation plan, system security test and evaluation report, system contingency plan, system contingency plan test report, and a plan to resolve issues raised during system certification; and that the security controls listed in the system security plan have been assessed using the assessment methods and procedures described in the system security test and evaluation report and the contingency plan report to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for the system.

The plan to resolve issues raised during system certification describes the corrective measures that have been implemented or are planned to address any deficiencies in the security controls for the information system and to reduce or eliminate known vulnerabilities.

The security certification package documents the results of the security certification and provides the authorizing official with the essential information needed to make a credible risk-based decision on whether to authorize operation of the information system. All required documentation must be provided to the IT security office in both hard copy and electronically in MS Word 2003 or later versions. FSME will place the documents into ADAMS. The security certification package contains the following documents:

CandA Security Deliverables	**General Support System**	**Major Application**	**Listed Network**	**Listed Stand Alone SGI**	**Other**
Privacy Impact Assessment	X	X	X	X	X
Information System Security Officer Appointment Letter	X	X	X	X	N/A
System Security Categorization	X	X	X	N/A	X
Risk Assessment Report	X	X	Includes 800-53 controls status	N/A	N/A
System Security Plan (SSP) and Supporting Documents* Low Moderate High	X	X	X	X	N/A
CandA Security Deliverables	General Support System (GSS)	Major Application (MA)	Listed Network	Listed Stand Alone SGI	Other
CandA Security Deliverables	General Support System	Major Application	Listed Network	Listed Stand Alone SGI	Other
Memorandum of Understanding for Interfacing Systems	X	X	SLA between any MA or GSS (ML0735511390) SLA between any MA or GSS (ML0735511390) http://www.internal.nrc.gov/CSO/documents/SLA-MAorGSS.doc	N/A	X

CandA Security Deliverables	General Support System	Major Application	Listed Network	Listed Stand Alone SGI	Other
Interconnection Security Agreement for Interfacing Systems	X	X	X	N/A	X
Security Test and Evaluation Plan	X	X	N/A	N/A	N/A
Report-Moderate					
Security Assessment Report	X	X	N/A	N/A	N/A
Vulnerability Assessment Report	X	X	X	N/A	N/A
Plan of Action and Milestones	X	X	X	X	N/A
Deviation Request	X	X	X	X	N/A
Certification Memo	X	X	X	X	N/A
GSS/MA Laptop Listed					
Business Impact Analysis	X	X	N/A	N/A	N/A
Contingency Plan	X	X	Appendix Q	N/A	

3.5.24 Task 3.22 Support Roll-out Planning

The Contractor shall support NRC staff and Contractors tasked with planning roll-out to NRC and to other system users who are licensees. This will include support for development of roll-out plans, training logistics, desk procedures, and correspondence with licensees.

3.5.25 Task 3.23 Conduct Readiness Review Demonstration

After NRC acceptance testing has been completed and required changes have been addressed and re-tested, the Contractor shall conduct a readiness review session with NRC and present the results of all activities, findings, and products developed during the engineering phase. The Readiness Review Demonstration shall group topics as logically as possible to facilitate comprehensive yet succinct issue coverage.

3.5.26 Task 3.24 Roll-out System to NRC (Includes Production Install & Training)

The Contractor shall perform all activities required to roll-out the WBL to the NRC user community. The Contractor shall install and test WBL in its production environment at the ASP, and work with NRC staff to facilitate smooth and efficient installation or configuration of any components needed on the NRC network or user workstations.

The Contractor shall provide one-day training on how use the WBL to approximately 25 staff. The Contractor shall fulfill these training requirements through at least 3 separate training events.

Those trained will include NRC and other individuals who will be the primary users of the system. Training shall be conducted at times and dates acceptable to the NRC project officer.

The Contractor shall conduct all training to ensure that users and stakeholders are trained "just in time" to ensure there is no loss of time between completion of the training and availability of the system.

3.5.27 Task 3.25 Support Licensee Start-up

The NRC will correspond with parties who will be required to report to receive digital certificate credentials and are prepared to access the system. The Contractor shall provide all technical support required to facilitate smooth and efficient use of the system by this licensee group. This includes developing and distributing a guide for formatting and submission of electronic data files, defining user accounts, and performing trouble-shooting. The Contractor shall also develop an operational support guide.

The purpose of the operational support guide is to document system usage and procedures for operations under routine and exceptional conditions. Within the operational support guide, the Contractor shall address procedures for:

- System installation and configuration;
- Rules of conduct, including common operations such as opening and closing user accounts;
- System monitoring and reporting; and
- System archiving and relocation

3.5.28 Task 3.26 Develop System Refinement Recommendations

The Contractor shall provide a report containing its recommendations for changes to be made to the WBL infrastructure, focusing in particular on the production system.

3.5.29 Task 3.27 Support Lessons Learned Study

In compliance with the Clinger-Cohen Act, the NRC will conduct an independent lessons learned study of this project. As the WBL project will potentially involve three production system deployments (Task 3, Tasks 7-9), the initial lessons learned study will be later amended as appropriate.

The Contractor shall be interviewed by the NRC lessons learned study authors. The Contractor shall be asked to offer recommendations and comments on a broad range of project aspects, including, but not limited to the feedback from the users and stakeholders; roll-out experiences; security enhancements suggested by independent evaluation.

3.5.30 Task 3.28 Support Security Architecture Analysis

The Contractor shall support NRC efforts to ensure optimal WBL system security. In response to emergent security risks and development of new security technologies, the Contractor shall conduct market research and perform analyses to identify products that may strengthen the WBL security architecture. The Contractor shall provide recommendations and the NRC will decide whether to implement them. Upon receipt of NRC direction, the Contractor shall revise all WBL artifacts wherein the pertinent security architecture elements are reflected.

3.5.31 Deliverables and Milestones

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 contract, the Contractor shall comply with the directions of the NRC regarding the contents of the report, summaries, data and related documents to include correcting, deleting, editing, revising, modify, formatting, and supplementing any of the information contained therein at no additional cost to the NRC. Performance under the contract will not be deemed accepted or completed until the NRC's directions are complied with. The reports, summaries, data and related documents will be considered draft until approved by the NRC. The Contractor agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data and related documents created under this contract remains solely within the discretion of the NRC.

Publication of Results: Prior to any dissemination, display, publication or release of articles, reports, summaries, data or related documents developed under the contract, the Contractor shall submit for review and approval by the NRC 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 by the NRC 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. The Contractor agrees and grants a royalty free, nonexclusive, irrevocable world-wide 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, for any governmental purpose and to have or authorize others to do so.

Identification/ Marking of Sensitive and Safeguards Information: 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. In performing the contract, the Contractor shall clearly mark sensitive unclassified non-safeguards information (SUNSI), sensitive, and safeguards information to include for example Official Use Only and Safeguards 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 forms (e.g. NRC Form 461 Safeguards Information and NRC Form 190B Official Use Only) in maintaining these records and documents. The Contractor will ensure that sensitive

and safeguards information 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), and NRC Management Directive and Handbook 12.6.

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.3.1.1.3	3.3	Requirements Validation Summary Findings - V1.0 FINAL	Task 3 (T3) + 23
1.3.5.1.1	3.11	System Security Plan - V1.0 Draft	T3 +12
1.3.1.2.1	3.3	Proposed Requirement Changes - V1.0 Draft	T3 +25
1.3.5.1.4	3.11	System Security Plan - V1.0 FINAL	T3 +25
1.3.5.2.1	3.1	System Security Risk Assessment - V1.0 Draft	T3 +30
1.3.1.2.4	3.3	Proposed Requirements Changes - V1.0 FINAL	T3 +35
1.3.6.1.1	3.2	Quality Assurance Plan - V1.0 Draft	T3 +37
1.3.6.2.1	3.5	Configuration Management Plan - V1.0 Draft	T3 +37
1.3.6.4.1	3.1	Software Development Plan - V1.0 Draft	T3+42
1.3.5.2.4	3.1	System Security Risk Assessment - V1.0 FINAL	T3 +43
1.3.6.3.1	3.1	Develop Project Risk Management Plan - V1.0 Draft	T3 +45
1.3.6.1.4	3.2	Quality Assurance Plan - V1.0 FINAL	T3 +48
1.3.6.2.4	3.5	Configuration Management Plan - V1.0 FINAL	T3 +48
1.3.2.2.1	3.6	Design Model - Database - V1.0 Draft	T3 +54
1.3.2.3.1	3.6	Design Model - User Interface - V1.0 Draft	T3 +54
1.3.2.4.1	3.6	Design Model - UML - V1.0 Draft	T3 +54
1.3.6.4.4	3.1	Software Development Plan - V1.0 FINAL	T3 +54
1.3.4.1.1	3.13	System Test Plan - V1.0 Draft	T3 +56
1.3.6.3.4	3.1	Develop Project Risk Management Plan - V1.0 FINAL	T3 +58
1.3.2.4.4	3.6	Design Model - UML - V1.0 FINAL	T3 +66
1.3.2.2.4	3.6	Design Model - Database - V1.0 FINAL	T3 +67
1.3.4.1.4	3.13	System Test Plan - V1.0 FINAL	T3 +73
1.3.2.3.4	3.6	Design Model - User Interface - V1.0 FINAL	T3 +68
1.3.2.6.1	3.7	Update SAD V1.1	T3 +95
1.3.6.5.1	3.4	Deployment Plan - V1.0 Draft	T3 +105
1.3.2.6.4	3.7	Finalize SAD V1.1	T3 +106
1.3.5.4.1	3.12	Contingency Plan - V1.0 Draft	T3 +118
1.3.6.5.4	3.4	Deployment Plan - V1.0 FINAL	T3 +119
1.3.5.4.4	3.12	Contingency Plan - V1.0 FINAL	T3 +129
1.3.8	3.8	Conduct Design Review	T3 +132
1.4.9.2.1	3.1	Software Development Plan - V2.0 Draft	T3 +136
1.4.9.3.1	3.4	Deployment Plan - V2.0 Draft	T3 +136
1.4.1.1.1	3.6	Design Model - Database - V2.0 Draft	T3 +138
1.4.1.2.1	3.6	Design Model - User Interface - V2.0 Draft	T3 +138
1.4.1.3.1	3.6	Design Model - UML - V2.0 Draft	T3 +138
1.4.1.5.1	3.7	Update SAD V2.0	T3 +139

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.4.9.2.4	3.1	Software Development Plan - V2.0 FINAL	T3 +146
1.4.9.3.4	3.4	Deployment Plan - V1.0 FINAL	T3 +146
1.4.1.1.4	3.6	Design Model - Database - V2.0 FINAL	T3 +148
1.4.1.2.4	3.6	Design Model - User Interface - V2.0 FINAL	T3 +148
1.4.1.3.4	3.6	Design Model - UML - V2.0 FINAL	T3 +148
1.4.7.1.1	3.16	User Support Materials - V1.0 Draft	T3 +148
1.4.1.5.4	3.7	Finalize SAD V2.0	T3 +149
1.4.8.1.1	3.1	System Security Risk Assessment - V2.0 Draft	T3 +161
1.4.3.1.1	3.9	Implement Components - Feature Set 1	T3 +161
1.4.7.3.1	3.25	Operational Support Materials - V1.0 Draft	T3 +166
1.4.5.1.1	3.13	System Test Plan - V2.0 Draft	T3 +170
1.4.8.1.4	3.1	System Security Risk Assessment - V2.0 FINAL	T3 +174
1.4.7.2.1	3.16	Training Materials - V1.0 Draft	T3 +174
1.4.7.2.1	3.15	Workshop Materials - V1.0 Draft	T3 +174
1.4.7.1.4	3.16	User Support Materials - V1.0 FINAL	T3 +177
1.4.7.3.4	3.25	Operational Support Materials - V1.0 FINAL	T3 +180
1.4.5.1.4	3.13	System Test Plan - V2.0 FINAL	T3 +180
1.4.7.2.4	3.16	Training Materials - V1.0 FINAL	T3 +187
1.4.7.2.4	3.15	Workshop Materials - V1.0 FINAL	T3 +187
1.4.4.1.1	3.9	Implement Components Feature Set 2	T3 +191
1.4.8.2.1	3.11	System Security Plan - V2.0 Draft	T3 +192
1.4.5.2.1	3.13	System Test Scripts - FS#1 Draft	T3 +194
1.4.5.3.4	3.13	System Test Scripts - FS#2 FINAL	T3 +219
1.4.5.3.1	3.13	System Test Scripts - FS#2 Draft	T3 +206
1.4.5.2.4	3.13	System Test Scripts - FS#1 FINAL	T3 +207
1.4.8.2.4	3.11	System Security Plan - V2.0 FINAL	T3 +207
1.4.8.4.1	3.12	Contingency Plan - V2.0 Draft	T3 +212
1.4.8.4.4	3.12	Contingency Plan - V2.0 FINAL	T3 +223
1.4.5.4.2	3.14	Execute System Tests - Test system components	T3 +234
1.5.6.3.1	3.25	Operational Support Materials - V2.0 Draft	T3 +243
1.5.6.1.1	3.16	User Support Materials - V2.0 Draft	T3 +243
1.4.5.5.1	3.14	System Test Evaluation Summary - V1.0 Draft	T3 +245
1.5.6.3.4	3.25	Operational Support Materials - V2.0 FINAL	T3 +251
1.5.6.1.4	3.16	User Support Materials - V2.0 FINAL	T3 +251
1.4.5.5.4	3.14	System Test Evaluation Summary - V1.0 FINAL	T3 +255
1.5.6.2.1	3.16	Training Materials - V2.0 Draft	T3 +259
1.4.6.1	3.9	Implement Components - Resolve System Test Issues	T3 +260
1.5.6.2.4	3.16	Training Materials - V2.0 FINAL	T3 +267
1.4.11	3.19	Conduct Engineering Review	T3 +269
1.5.2.1	3.17	Install UAT Release in Test Environment	T3 +288
1.5.2.3	3.18	Support User Acceptance Test	T3 +313

WBS	Task No.	Deliverables / Milestones	Number Work Days
1.5.4.1	3.9	Implement Components - Resolve User Acceptance Test Issues	T3 +327
1.5.8.3.1	3.12	Perform Contingency Test	T3 +342
1.5.8.4.1	3.12	Contingency Test Report - V1.0 Draft	T3 +347
1.5.8.1.2	3.21	Support ST&E Execution	T3 +354
1.5.8.4.4	3.12	Contingency Test Report - V1.0 FINAL	T3 +358
1.5.9.1	3.22	Support Roll-Out Planning	T3 +388
1.5.8.6.2	3.21	Support System Accreditation	T3 +393
1.5.9.4	3.23	Conduct Readiness Review	T3 +393
1.5.9.3	3.24	Install Software in Staging Area	T3 +393
1.5.7.1	3.24	Conduct System Training	T3 +381
1.5.7.1	3.2	Conduct Workshops	T3 +381
1.5.9.5	3.24	Promote Final System Release to Production	T3 +409
1.6.1	3.27	Support Lessons Learned	T3 +479
1.6.2	3.26	System Refinement Recommendations	T3 +479
--	3.28	Support Security Architecture Analysis	Throughout

3.5.32 Acceptance Criteria

NRC will utilize a comprehensive approach to assist in determining the acceptance of artifacts generated by the WBL project. This approach includes:

- The use of Independent Verification and Validation (IV&V), to verify and validate application functionality and performance throughout the entire WBL development process. This includes review of WBL project artifacts, review of software interim builds (both software code and system functionality), User Acceptance Testing (UAT) testing, and on-going independent IT technical analysis and support.
- Periodic system demonstrations permitting NRC management to verify the feature set functionality.
- NRC review of Contractor functional and stress test logs to verify the system will perform according to specifications.
- Successful UAT results. UAT testers will include Agreement State and industry representatives.
- NRC review of Contractor performance against contractual requirements.

3.6 Task 4 Hosting and Operational Support

The Contractor shall provide Hosting and Operational Support for LVS, WBL, and NSTS.

3.6.1 Task 4.1 Hosting & Operational Support for LVS, WBL, NSTS

The Contractor shall propose a schedule for beginning operational support for WBL and LVS and for taking over operational support for NSTS. In this schedule, the Contractor shall ensure

availability of the production platform and infrastructure for NRC acceptance testing of LVS and WBL. The Contractor shall also minimize costs to the NRC due to premature commencing of operational support. NRC will review the proposed schedule. Once the NRC has approved the schedule, the Contractor shall work in compliance with the NRC-approved schedule, activating all hosting facilities and providing comprehensive LVS, WBL and NSTS operational support services.

Within the scope of this task, the Contractor shall provide comprehensive disaster recovery support, including routine system and data backups, off-site storage of backup media, disaster recovery rollover accommodations at a geographically disparate hosting facility. The Contractor disaster recovery strategy shall ensure that disaster recovery sites are located a sufficient distance from the primary hosting site so as to mitigate the effect of regional events (e.g., a partial power grid failure, or natural disaster). The Contractor shall propose a schedule for periodic testing of the disaster recovery plan, applying representative scenarios of different levels of service disruption.

All hosting and disaster recovery sites shall be located within the continental United States. The Contractor shall ensure that all hosting and disaster recovery sites comply with NRC security requirements as governed by the relative data sensitivity and system availability needs.

The Contractor shall provide NRC personnel and their Contractors' access to all Contractor facilities, systems, and hardware to permit security accreditation testing, evaluation, and general review of compliance with contract requirements. The primary purpose of these visits will be to support system security certification in accordance with related NIST guidance and other applicable security guidance. The Contractor shall also provide all support needed for NRC inspection, documentation, and testing of facilities and systems related with security certification.

3.6.1.1 Hosting and Operational Requirements

The Contractor must support the Technical Architecture described in Section 2.2 of this SOW and the Infrastructure Performance and Operational Requirements described in Section 3.3.

Should the Contractor obtain these services through a partnering arrangement, the Contractor shall present to the NRC evidence of supporting service level agreement (SLA) between the Contractor and their related partner(s).

3.6.1.2 Access

General LVS, WBL, and NSTS users will access the system through a web interface using common web browser technologies. NRC users will access advanced functions using Virtual Private Network (VPN) technology to connect NRC facilities to the hosting site. VPNs specified by the Contractor shall support either extended network or user-based sessions, as required by the NRC.

3.6.1.3 Detailed Operational Support Requirements

In providing operational support under this task, the Contractor shall:

- obtain, provide, and manage the ASP and all other telecommunication infrastructure and services needed to support access to LVS, WBL, and NSTS;
- provide all needed support for connectivity to NRC facilities and DOE headquarters;
- provide system availability support and troubleshooting support between the hours of 7:30 a.m. and 5:30 p.m. Eastern Time, except weekends and US federal holidays;
- obtain all telecommunication services to allow users to obtain user support over the internet and by US toll-free telephone number(s);
- ensure support of all performance and operational requirements of LVS, WBL, and NSTS as detailed in Section 3;
- provide comprehensive support for the Oracle and Microsoft SQL Server databases and Application Server software, including backup/recovery services, performance monitoring, and version upgrades;
- log in the NRC ClearQuest change management system all reports of potential problems with LVS, WBL, and NSTS software as well as any user requested changes/enhancements reported to the operational support staff;
- investigate all user reports of apparent inaccessibility of the systems;
- report to the NRC Project Officer any user-reported issue that cannot be resolved within four business hours and is diminishing or preventing access to and use of all system functions; and
- perform all operational support tasks in accordance with the configuration management plan.

The Contractor shall ensure that the LVS, WBL, and NSTS infrastructure and applications are reliable and available to users on a continuous basis. The Contractor shall monitor availability of all parts of the production system and report up time statistics to the NRC Contracting Officer on a monthly basis. Should any part of the production system experience unacceptable down time as defined in Section 2.3.1.5, the Contractor shall report this to the NRC Project Officer within one business day, including a proposed plan to prevent recurrence of the problem. Upon NRC acceptance, the Contractor shall implement necessary actions to address the cause of the down time. The Contractor shall incur all costs related to addressing issues of unacceptable down time.

In addition to general system availability, the Contractor shall ensure that all security aspects of the system are monitored. The Contractor shall complete the Security Self-Assessment (Appendix A of NIST Special Publication 800-26, "Self-Assessment Guide for Information Technology Systems") for LVS, WBL, and NSTS. The Contractor shall review the LVS, WBL, and NSTS Risk Assessment Reports and System Security Plans, other related documentation, and interview two to five NRC employees, as directed by the NRC Project Officer, to determine the status of each of the control topic areas. The Contractor shall also determine the status of each control by quantifying the level of maturity of the control in one of the following categories:

Level 1 - Control objective documented in a security policy
Level 2 - Security controls documented as procedures
Level 3 - Procedures have been implemented

Level 4 - Procedures and security controls are tested and reviewed
Level 5 - Procedures and security controls are fully integrated into a comprehensive program

The Contractor shall use the GAO Federal Information Systems Control Audit Methodology (FISCAM) as a guide when categorizing each of the controls into the appropriate maturity level. The Contractor shall analyze the results of the self assessment and document action plans that management can then use to remediate all controls that are categorized below Level 5.

3.6.1.4 Earned Value Reporting

The Contractor shall track and report all operational support and hosting costs separately. In reporting these costs, the Contractor shall comply with all requirements described in Appendix W - Earned Value Reporting Technical Guide. Additionally, the Contractor shall ensure that each WBS, as represented in Microsoft Project, is decomposed to a sufficiently detailed level such that no task (work package) requires more than 80 or fewer than 8 staff hours.

3.7 Task 5 Maintenance

The Contractor shall provide Maintenance support for LVS, WBL, and NSTS.

3.7.1 Task 5.1 System Maintenance for LVS, WBL, NSTS

The Contractor shall be prepared to provide the following maintenance for LVS, WBL, and NSTS. The Contractor should coordinate with the NRC and the current NSTS Contractor to ensure a smooth transition. Once the transition is over the Contractor should take over maintenance on NSTS. The current NSTS contract is expected to expire during FY2010. Maintenance for LVS shall begin upon NRC acceptance of LVS. Maintenance for WBL shall begin upon NRC acceptance of WBL.

In providing maintenance, the Contractor shall comply with the prevailing NRC software change process. Documentation for the change process is included in the Appendix X, OIS Application Change Request System Guide. The Contractor shall not work on any change that is not logged and requested through the NRC ClearQuest tool. The Contractor shall not proceed with work on any change request unless directed by the NRC Project Officer, as expressed in ClearQuest state transitions.

In performing maintenance, the Contractor shall comply with prevailing NRC CM requirements, in particular check-out/check-in procedures.

The NRC embraces release-based software maintenance. In support of this, the Contractor shall ensure that each maintenance system build has accompanying test plans, test evaluation summaries, and system documentation update activities as detailed under the LVS (Task2) and WBL (Task 3) development tasks.

The Contractor shall ensure that all maintenance staff have demonstrated skill, experience, and vendor certifications related to their role. The Contractor shall also ensure that all maintenance staff are trained and experienced in all rational tools applicable to their role in software maintenance.

During maintenance, the Contractor shall be responsive to the NRC IV&V team and shall support IV&V visits to the Contractor site and review of any Contractor products throughout the maintenance process. The Contractor shall support any testing that the NRC elects to perform in the Consolidated Testing Facility (CTF), within the NRC headquarters.

3.8 Task 6 User/Help Desk Support

The Contractor shall provide User Support and Help Desk services for LVS, WBL, and NSTS. See appendix Y

3.8.1 Task 6.1 User/Help Desk Support for LVS, WBL, NSTS

The Contractor shall activate all facilities and telecommunication services needed to provide comprehensive support to the user community, which will include NRC headquarters, NRC regional offices, DOE headquarters, NRC Agreement States agencies, NRC and Agreement State licensees, and other concerned parties.

Telecommunication infrastructure provided by the Contractor under this task shall include:

- at least two toll-free phone lines with roll-over to an answering system;
- broadband internet connectivity allowing the Contractor to access to the NRC ClearQuest software change request system; and
- any communication lines or infrastructure to allow the Contractor to access the LVS to simulate user-provided scenarios and to provide support such as access control changes.

The Contractor shall specify, acquire, and support installation of any communication lines required for connection to an NRC facility.

In providing user support under this task, the Contractor shall:

- assist all users in obtaining user accounts and maintaining those accounts;
- assist users in understanding and use of the system;
- directing users to appropriate NRC personnel for clarification or interpretation of NRC reporting regulations;
- provide data entry support for users who choose not to use the system and who provide data by hard copy, fax or other means;
- provide a system for marking mail with the date received and for tracking data entry tasks to ensure timely completion;

- revise report parameters and run system reports as directed by the NRC;
- investigate and resolve discrepancies in data submitted by users (e.g., when a licensee enters a source receipt for which there is no transfer);
- report to the NRC notification of lost, stolen, or recovered sources;
- log in the NRC ClearQuest change management system all reports of potential problems with the system as well as any user requested changes/enhancements reported to the user support staff;
- report to the NRC and investigate all user reports of apparent inaccessibility of the system;
- provide help desk support to users in all aspects of obtaining and using authentication credentials (e.g., digital certificates) and hardware token devices;
- interact with the NRC authentication credential Contractor to resolve all user support requests related to these credentials or hardware tokens; and
- monitor assistance requests related to authentication credentials and hardware tokens, reporting monthly to the NRC the number and percentage of these calls that resulted in contact with the NRC authentication credential Contractor.

The Contractor shall provide and use Commercial Off-The-Shelf (COTS) help desk task tracking software. This software shall provide for reporting of support request data including: requester user group (e.g., Agreement State licensee, NRC licensee, other Government agency, etc.), request reason (e.g., system use assistance, authentication credentials, or reporting a problem), and system module or function requiring explanation. The Contractor shall provide support tracking data to the NRC as requested in a format compatible with Microsoft Access and Crystal Reports. The Contractor shall also provide to the NRC support tracking reports on a monthly basis. The Contractor shall provide these reports with content and in a format acceptable to the NRC. NRC does not expect any customization of the COTS product to meet these needs.

In the Contractor training plan for user support staff, the Contractor shall specifically address ongoing training in authentication credentials and hardware tokens. The Contractor shall identify to the NRC no more than six key support personnel to be trained in these technologies. Through the NRC authentication credential Contractor, the NRC shall provide "train the trainer" training to these key support staff. This one-time training will be approximately two days in length. The Contractor shall ensure knowledge capture and a sustainable strategy to passing this training information to all appropriate user support staff.

The Contractor shall propose sufficient user support staff to provide coverage from 6:00 a.m. – 10:00 p.m. Eastern time. The Contractor shall also ensure sufficient support staff to address the anticipated surge in support needs in the first 6 months following system deployment. Should the NRC later choose to reduce the support hours, the Contractor shall reduce staffing appropriately (See Appendix Y).

The Contractor shall ensure that any call recorded on the user support answering system is returned within two business hours of receipt. Call returns and return attempts shall be logged in the support tracking system and associated with the initial call or message. The Contractor shall log user support phone messages such that the time of message recording is tracked.

3.9 Task 7: WBL (v1.x) Development (Optional - 1 Yr)

The Contractor shall provide analysis, design, development, and testing resources for an additional year to implement a WBL major release. This release involves migrating the following systems into the WBL Platform:

- TAPIS – used to maintain information about NRC certified packages and quality assurance programs used by companies involved in transportation of radioactive material.

- BARTO System – used to track the proposed and actual schedules for spent fuel package reviews.

TAPIS and BARTO support different aspects of NRC's regulatory business process for the storage and transportation of nuclear material. The two systems combined are called the Storage and Transportation Information Management System (STIMS). The High Level Requirements for STIMS is included in Appendix AA of this SOW.

Note that this major release would be performed in parallel to WBL ongoing maintenance.

3.10 Task 8: WBL (v2.x) development (Optional - 1 Yr)

The Contractor shall provide analysis design, development, and testing resources for an additional year to implement a WBL major release. This release involves migrating the following systems into the WBL Platform:

- Import/Export Licensing process – used to track licenses issued for international import and export of radioactive material.

- Reciprocity Tracking System (RTS) – used to track agreement state licensee requests for reciprocity.

- National Sealed Source and Device Registry System (NSS&DRS) – used to maintain fundamental information about device and source certificates of registration.

Functional descriptions of each of these systems are included in Appendices AB through AD of this SOW.

Note that this major release would be performed in parallel to WBL ongoing maintenance.

3.11 Task 9: WBL (v3.x) development (Optional - 1 Yr)

The Contractor shall provide analysis design, development, and testing resources for an additional year to implement a WBL major release. This release involves migrating the following systems into the WBL Platform:

- General License Tracking System (GLTS) – used to track devices that contain certain radioactive material that have been authorized under a 'general license' (note: this is different than the 'specific licenses' that are tracked via WBL and NSTS). GLTS tracks these devices to ensure that they have not been mishandled or disposed of improperly.

A functional description of this system is included in Appendix AE of this SOW.

Note that this major release would be performed in parallel to WBL ongoing maintenance.

3.12 Task 10: NSTS (vx.x) development (Optional - 1 Yr)

The Contractor shall provide analysis, design, development, and testing resources for an additional year to implement a NSTS major release. This release involves:

- Enhancing NSTS to accommodate the inclusion the Category 3 sources.
- Incorporating additional major enhancements to further improve source tracking capabilities.

Note that this major release would be performed in parallel to NSTS ongoing maintenance.

3.13 Task 11: WBL Agreement State License data entry support (Optional)

WBL shall be expanded to include key licensing information from Agreement States for nationwide license verification purposes. In order for WBL to support License Verification, standardized license data from NRC and Agreement state Licensees will be loaded into the WBL database.

This SOW will include a one time data cleansing, formatting and image matching support effort. This applies to approximately 3000 NRC license data records and monthly data cleansing, formatting and loading support for approximately 554 Agreement State Licenses. Specifically, this task will include the following services:

1. Standardize and load approximately 3,000 NRC licenses in such a way that possession limit information can effectively be discerned
2. Associate approximately 3,000 NRC licenses with the image of the most recently issued license
3. Receive approximately 554 license data records from agreement states on monthly basis (in text file, paper format). Cleanse and load the information into the WBL database. It is expected that approximately 227 licenses will require major updates and 227 will require minor updates prior to loading.

The Contractor shall provide the staff needed to provide the functions listed above. This service shall not require a separate facility.

4 DESIGN AND IMPLEMENTATION CONTROLS

4.1 General Design and Implementation Controls

During the detailed design phase of the project, the Contractor shall adhere to the PMM. The Contractor shall take direction on any methodology interpretation solely from the NRC Project Officer.

The Contractor shall use the Rational Suite Enterprise which is currently used by the NRC to support and manage all phases of software development. In particular, the following rational point products are used:

- Requisite Pro - used for requirements definition and management
- ClearQuest - used for change management of requirements and change requests.
- ClearCase - used for all Contractor Configuration Management / Version Control activities throughout the project
- TestManager - used to define test plans and test cases to indicate the relation of test cases to test scripts and requirements; also used to manage testing effort and record results
- Functional Tester and Manual Test - used implement each test case as either an automated test (preferred by the NRC where practical – required for system testing) or electronically managed manual test script
- Rational Software Architect - UML modeling tool used for use case refinement, data modeling, component design, and all other design activities
- SoDA - the primary reporting tool within the Rational suite; used to produce both standard and customized reports as required on this project

The Contractor shall establish a configuration management (CM) capability (e.g., software/ procedures) capable of managing both project documents and software assets throughout the project. This approach must address the need for the NRC IV&V team to dynamically review Contractor products throughout the project. The Contractor shall also provide any support needed by NRC CM staff in reviewing and processing deliverables. The Contractor shall provide an optional pre-costed plan for active replication of the ClearCase repository between the Contractor ClearCase server and the central NRC CM server.

4.2 Detailed Design and Implementation Controls for Security

4.2.1 System Security Requirements

The NRC has performed privacy and security analyses on LVS, WBL, and NSTS to determine the appropriate security requirements for the Integrated Source Management Portfolio (ISMP) as described below.

License Verification System (LVS)

LVS Privacy and Security Analyses Results	
Privacy	LVS does not handle privacy data
Security Categorization	Moderate
e-Authentication Levels	Level 2 – for non-sensitive data transactions Level 3 – for sensitive data transactions

As shown above LVS does not process, read, store, or transmit sensitive information, personally identifiable information (PPI) or any privacy data and LVS has a security category of 'Moderate'. Its e-authentication level has been determined on a per-transaction basis which means it is permissible for lower-risk transactions to be performed using a lower level of authentication than the levels required for higher-risk transactions. Accordingly, LVS has a Level 2 e-Authentication level for transactions utilizing non-sensitive data, and Level 3 for transactions utilizing Sensitive Unclassified Non-Safeguards Information (SUNSI) and/or confidential business data.

WBL:

WBL Privacy and Security Analyses Results	
Privacy	WBL does not handle privacy data
Security Categorization	Moderate
e-Authentication Levels	Level 3 – for data transactions

As shown above WBL does not process, read, store, or transmit sensitive information, PPI or any privacy data; WBL has a security category of 'Moderate'; and a Level 3 e-authentication level for its transactions.

NSTS:

NSTS Privacy and Security Analyses Results	
Privacy	NSTS does not handle privacy data
Security Categorization	High
e-Authentication Levels	Level 4 – for data transactions

As shown above NSTS does not process, read, store, or transmit sensitive information, PPI or any privacy data; NSTS has a security category of 'High'; and a Level 4 e-authentication level for its transactions.

This Section lists NRC CSO guidelines for the information security activities related to IT projects. The Contractor shall be fully compliant with the following guidelines:

- LVS, WBL, NSTS shall share a common 'portfolio-level' Lightweight Directory Access Protocol (LDAP) and NRC Managed Public Key Infrastructure (MPKI).

- Each system must meet the security control baseline appropriate for its respective security categorization. The security control baseline is specified in the NIST SP 800-53, Revision 2, Recommended Security Controls for Federal Information Systems and in the NRC MD 12.5.

- Each system must provide e-authentication capabilities that meet its respective e-authentication level(s). E-Authentication capabilities are specified in the NIST SP 800-63, Electronic Authentication Guideline and in the NRC MD 12.5.

- Separation of duties for the systems must be enforced by the system through assigned access authorizations.

- The information system shall provide only essential capabilities and specifically prohibit and/or restrict the use of specified functions, ports, protocols, and/or services.

- 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.

- The Contractor shall only use licensed software and in-house developed authorized code (including Government and Contractor developed) on the system and for processing Government information. Public domain, shareware, or freeware shall only be installed after prior written approval is obtained from the NRC Project Officer. The Contractor shall provide proof of licensing upon request of the NRC Project Officer.

- All development and testing of the systems shall be performed on a network separate and isolated from the NRC operational network that is protected at the high sensitivity level.

- All system computers must be properly configured and hardened, and comply with all NRC security policies and procedures for a high sensitivity system.

- User accounts that have system-level or administrative privileges must have a unique password from all other accounts held by that user.

- The Contractor shall not hardcode any passwords.

- All sensitive data being transmitted over a network by the system shall use FIPS 140-2 validated encryption.

- The NRC Information System Security Officer (ISSO) is responsible for the security posture of the each system. Any changes to the system security posture must be approved by the DAA. In addition, any possible change to the security posture of other NRC systems, including the infrastructure or other agency systems must go through a formal change process that includes concurrence by the owners of the systems affected and the DAA. The Contractor shall not have the ability to make changes to the system's security posture without the appropriate involvement and approval.

- Any proposed changes to the system must be approved by the NRC. The Contractor shall not have the authority to modify and deploy a change to the system on its own. Also, any changes to the system that affect other systems, interfaces to the system, or services being provided by NRC OIS must be coordinated with the appropriate system owners, service providers, and the DAA.

4.2.2 Additional Security Considerations

Secure Web-based Administration

The NRC anticipates that the proposed systems will reside on servers housed at a location remote to the NRC which is maintained by a commercial ASP. Understanding that some application and system administration functions will be the responsibility of the system owner (NRC), Identification and Authentication controls, Auditing and Access controls shall apply. The Contractor shall propose connectivity for this purpose via a high speed, secure link and be prepared to provide and implement a communication capability managed by a Government approved security software solution (for example, SSH).

Per NRC MD 12.5, written management authorization shall be obtained from the NRC before establishing a connection between the NRC IT infrastructure and any other system that is not NRC controlled. Depending upon the Contractor's proposed solution such authorization may be necessary before any connection can be established. This effort shall be coordinated with the NRC Project Officer.

Other Security Considerations and Requirements

Implementation of the systems shall include an appropriate Warning Banner, a User Responsibilities (Terms and Conditions) link and a Privacy Policy link. NRC will work with the Contractor to develop the content for these items.

4.3 Detailed Controls for Engineering, Development and Testing

The three systems (LVS, WBL, NSTS) will use Configuration Control Boards (CCB) consisting of representatives from the system business sponsor as well as NRC information technology specialists.

The NRC uses central configuration management (CM) for all systems under development or maintenance. This function is currently supported by Rational ClearCase and ClearQuest with replicated servers.

The Contractor shall:

- perform software and system engineering required to address and comply with all documented NRC requirements and specifications;
- deliver pre-production release versions of all system builds and deployment packages until the conditions of the NRC Acceptance Test Plan are satisfied;
- support and be responsive to an Independent Verification & Validation (IV&V) project support Contractor in its assessment of requirements compliance, design review, product testing and evaluation;
- utilize the Rational Suite Enterprise point products as required by the NRC Project Officer and in compliance with the prevailing NRC PMM;
- provide to all Contractor staff training required to ensure effective use of all Rational Suite products that the Contractor is to use, as directed by the NRC Project Officer;
- document in Rational ClearQuest all requirement revisions proposed during the requirements validation process and all functional CRs during maintenance;
- support an NRC-provided server that will host the Contractor-site replicated ClearCase databases and provide capable staff to manage the server and ClearCase databases;
- provide a connectivity strategy, acceptable to the NRC, for supporting ClearCase replication;
- provide support, as needed, for NRC testing;
- provide all required system documentation.

4.4 Engineering the Solution

During the software engineering phase of each task, the Contractor shall refine and continuously update and maintain a Software Development Plan (SDP). The SDP will detail the activities and schedules for designing, coding, integrating, and testing for each module of the systems. Any design updates or changes require approval from the system Configuration Control Board (CCB).

The Contractor shall provide briefings to the CCB as needed for presentation of recommended design specifications or changes. In requesting concurrence with design specifications or permission for changes, the Contractor shall address impacts to the system, in terms of changes to the schedule, operational effectiveness, and maintainability. The Contractor shall also provide detailed descriptive materials for NRC review when proposing any design specifications or changes (e.g., UML diagrams and screen prototypes).

Based on the updated SDP, the design documents, and the results of the walk through sessions, the Contractor shall design the system engineering solution that integrates the operational capabilities. The preferable engineering solution will:

- utilize the database and application servers; and
- employ object oriented development process and tools for the presentation layer. The Contractor shall provide detailed information on all Contractor in-house methodologies and

standards to be employed during development and integration of the proposed solution, documenting how these will support and not conflict with the NRC PMM and RUP.

Throughout the process of design refinement, the Contractor shall perform revisions to the Rational Rose detailed design model as often as directed by the NRC Project Officer. The intent is that the design model will always be current within a margin of three business days.

Additionally, the Contractor shall revise the SDP or otherwise provide documentation of system engineering decisions in a format acceptable to the NRC Project Officer. The NRC goal is that all design decisions be documented within the Rational detailed design model, using descriptive text where needed. As the primary outputs of this phase, the Contractor shall deliver:

- a detailed design model that will be developed and maintained by the Contractor for NRC review; and
- comprehensive documentation, in Rational RequisitePro, ClearQuest, and Rational Software Architect, of all design specifications and clarifications to NRC requirements identified during this task.

Development

Using the design materials noted above, the Contractor shall establish a system that satisfies the design specifications.

The Contractor shall be responsible for all activities associated with system development including, but not limited to, building the database structures, associated tables, validation routines, data dictionaries, and software units. The Contractor shall be responsible for all integration activities including, but not limited to, the integration of software units into software modules, integrating modules into subsystems and systems, and integrating those systems.

Unit and Integration Testing (White Box Testing)

In responding to this solicitation, the Contractor shall provide detailed descriptive information on their methodology for unit and integration testing. This descriptive information shall describe but not be limited to how the proposed methodology ensures independence of testing from development personnel and activities. Any automated testing shall be conducted using the rational functional tester and test manager tools and all scripts and test logs shall be delivered to the NRC upon request from the NRC Project Officer. With approval from the NRC Project Officer, the Contractor may use the rational manual test tool to develop scripts where automated testing is deemed impractical. Testing shall be performed by the Contractor following an established software quality assurance methodology of the Contractor's choosing, contingent on NRC's approval of the recommended methodology. The Government may audit tests as part of its own Test and Acceptance Program.

Working with the NRC to obtain necessary example data, the Contractor shall develop a standard test dataset for use in all levels of system testing. The Contractor shall also deliver and maintain under NRC central CM all scripts needed to create and refresh the testing database. The output products and deliverables are unit and integration test plans, related test result reports, and scripts for creation and refreshing of the standard testing database. The

Contractor shall ensure that all test plans, test logs, and test result reports are entered into the project CM library for transmittal to the NRC CM repository as directed.

System Testing (Black Box Testing)

The Contractor shall develop draft and final versions of the STP for each production system build. In these comprehensive plans, the Contractor shall provide explicit test cases for demonstration of the correct and complete fulfillment of all requirements and design specifications. In addition to common user functions, the STP shall address testing of operational functions such as the backup and recovery capabilities under at least two scenarios: a partial recovery and a complete rebuild/recovery. The Contractor shall ensure that the STP is developed and organized from the perspective of each Actor described in the requirements use cases. Development of the STP will require integration between Rational RequisitePro, Rational Software Architect, and TestManager.

The Contractor shall implement each STP as a Rational TestManager test plan, TestManager test cases, and a suite of scripts using Rational Functional Tester and ManualTest (if approved). Any scripts created by the Contractor shall comply with the FSME system testing standards found in Appendix U. If the Contractor does not have access to the necessary rational software, the Contractor shall arrange to have staff perform test script development work at NRC Headquarters. At the discretion of the NRC Project Office, the NRC may provide Rational testing software for use at the Contractor site.

The Contractor shall demonstrate full use of STP test cases and scripts. The Contractor shall provide both draft and final deliveries of the STP, with time allowed for NRC review and comment. In the final draft, the Contractor shall address all draft comments to the satisfaction of the NRC Project Officer.

During the Development Phase, the Contractor shall implement the STP. The Government will audit these tests as part of its own test and acceptance program. Testing should be iterative with scheduled Pre-final and Final Testing. The purposes of these two separate test periods is to allow time for the Contractor to make corrections identified during the Pre-final Test and incorporate all necessary changes prior to completing the Final Testing. The Contractor shall run the entire system test suite against each new system build that is created.
The NRC will subject the completed system to its acceptance test PMM process prior to accepting delivery of the product. All hardware and software components will be tested against the defined functional requirements and design specifications. The Government will implement detailed code review against developed code, scripts, CGIs, etc. The detailed code review will not be routinely performed against the "out-of-the-box" functionality of packaged software (operating system, RDBMS, etc.) unless customization (previously identified by the Contractor and approved by the Government at the design review) is performed by the Contractor on the software packages.

The Certification and Accreditation Report must result in accreditation before the system will be accepted. NRC MD 12.5 provides guidelines for accomplishing the Certification and Accreditation. After NRC pre-final acceptance testing has been completed and required changes have been addressed by the Contractor and sufficiently tested in the Final Test, the Contractor shall conduct a readiness review session with NRC and present the results of all activities, findings, and products developed during the engineering phase. The Readiness Review Demonstration shall be scheduled immediately upon completion of the Engineering phase. The Readiness Review Demonstration shall group topics as logically as possible to

facilitate comprehensive yet succinct issue coverage, as this will be the first major checkpoint in the system development life cycle. Based on a successful review, NRC will issue a go/no go decision on deployment of the systems.

Contractor's Test Report

For each system module, the Contractor shall develop and deliver a Test Evaluation Summary (TES). While the NRC reserves the right to review all Contractor unit and integration testing reports, the Contractor shall deliver a TES for the final unit and integration testing of each build. The Contractor shall deliver a separate TES regarding the system testing of each build. For the system testing and any other testing using automated tools, the Contractor shall deliver the electronic test log files and script databases and include hard copy of these logs, including verification point comparator screen images, in the TES. The Contractor shall also include in the TES Sections covering test result analysis, remediation, workarounds, unresolved issues, and enhancements recommended for future releases. The Contractor shall also enter into ClearQuest any unresolved issues and recommended enhancements.

The output products and deliverables of this task are fully tested software modules and subsystems which are stored in the NRC central CM library, including the TES, and electronic files containing all test scripts and logs.

4.5 Detailed Controls for Training

Training Plan

The Contractor shall develop and implement comprehensive training and support plans that address all user roles relating to the software products provided under the task. Specifically, the Contractor plan should address the training needs of the following user groups:

- external users such as Licensees and Agreement State personnel, who will enter data into the systems;
- other external users who might be permitted to query the database through a web interface;
- NRC and agency users who will analyze transactions, alerts, and discrepancies; and
- NRC users who will perform administration and configuration of the systems.

The Contractor shall ensure that all files and program code related to training modules are maintained using the same configuration management guidance described for system artifacts.

The deliverables related to training are:

- draft and final versions of all Training Plans
- electronic versions of all training materials for use in the hands-on training sessions (including the guide for formatting and submission of electronic data files)

- all files and program code and materials related to CBT, both portable (CD/DVD) and web-based training modules

On-Line Help System and Tutorials

The Contractor shall:

- ensure that all modules of the systems have online help available through a consistent interface
- provide all support needed to add NRC-specific information to online help screens
- ensure that all online help files and program code are maintained using the same configuration management guidance described for system artifacts

4.6 Detailed Controls for Ongoing Support

The Contractor shall be responsible for providing ongoing operations and maintenance support for the LVS, WBL, and NSTS systems. Activities shall include:

- refreshing all servers at least every five years, with models that employ current technology;
- providing access to and support for DBMS and any licensing of other system modules;
- providing continuous infrastructure services (server hosting, dedicated and Internet connectivity, backup and recovery, intrusion detection etc.);
- providing data base administration services; and
- providing training as needed to ensure that NRC personnel and licensees can effectively use new releases of the systems.

5 OTHER TERMS AND CONDITIONS

5.1 Government Furnished Equipment

The NRC will be responsible for the following resources related to performance of work described within this SOW:

- providing support needed within the NRC to cooperate with Contractor efforts to establish connectivity to Contractor and Application Service Provider sites;
- Providing Contractor access for installing any client components of the systems on NRC desktops;
- providing space at NRC sites to conduct training sessions for NRC staff (the Contractor shall propose costs for hosting licensee workshops and training sessions);
- Providing broadband access to Rational Suite licenses (limited to use of RequisitePro, ClearQuest, and SoDA).; and
- Providing licenses to rational products for use at the Contractor site.

Development servers and any additional software required will also be considered "Government furnished equipment" even though the NRC will authorize the Contractor to procure such hardware and software components on behalf of the Government. The NRC further expects that the operational support task ASP support will provide leasing of licenses for the Oracle database and application server software. However, if the proposed technical approach requires NRC purchase of any Oracle product licenses, the contract shall explicitly state this and include detailed product specifications with the proposal.

5.2 Performance Requirements

The deliverables required under this order must conform to the standards contained, or referenced, in the Statement of Work. All deliverables required under this order must be delivered to the NRC in electronic format (Word) and ADOBE Acrobat Portable Document Format (PDF). At the same time, the Contractor shall provide 3 printed copies of each deliverable to the NRC Project Officer, and any Rational Suite files, if applicable. The Contractor shall deliver draft versions of all deliverables required under this order.

5.3 Travel

Travel includes Local Travel as well as travel to other parts of the U.S. to conduct workshop sessions, presentations, and training.

5.4 Reporting Requirements

5.4.1 Weekly reports and meetings

The Contractor shall provide weekly Activity Reports to include any exceptions or changes from the existing plans to the NRC Project Officer. The weekly report will be delivered by close of business each Monday. The weekly report will include a proposed agenda for the meeting to cover management issues and any technical issues that would impact schedule, cost, or technical risk.

5.4.2 Project Management Plan

The Contractor shall submit a detailed Project Management Plan. The plans will show tasking and sub-tasking, milestones, labor categories and/or staff assigned and the projected number of hours estimated to complete each task/subtask by staff member. For each task, the Contractor shall maintain a schedule in Microsoft Project® format, with detailed data sufficient to meet the earned value reporting requirements described in Appendix W. In addition, the Contractor shall ensure that the WBS, as represented in Microsoft Project is decomposed to a sufficiently detailed level such that no task (work package) requires more than 80 or fewer than eight staff hours. Each plan and schedule will be maintained at the above level of detail on a monthly basis for the duration of the task. The Contractor shall provide the NRC with its Contractor spending plan. The Contractor shall maintain all Microsoft Project schedules and any other files needed for earned value reporting in an electronic file in their original application formats and deliver to the NRC Project Officer on a weekly basis. The detailed procedures used for reporting will be finalized after the award and the integrated project schedule is established.

5.4.3 Monthly reports and meetings

The Contractor shall provide a Monthly Status Report to the NRC Project Officer and the contracting officer by the 10th of each month. Each monthly report will include updates to the Project Management Plan and schedule (Work Breakdown Schedule), listing the reasons for changes, proposed adjustments and justification, cost and schedule impacts.

The Contractor shall maintain each Project Management Plan with the latest hours/costs and submitted as part of the monthly report. All phases and tasks in the Work Breakdown Schedule must be updated with % completion statistics at a sufficient level to allow the Contractor to report the "Earned Value" Statistics for the overall project. If at any time the project deviates by 5 percent or more in cost or schedule from the project management plan, the Contractor shall schedule an update with the NRC Project Officer immediately.

The Contractor shall attend a monthly status meeting in conjunction with the next regularly scheduled weekly meeting and review the project status for the prior month. The Contractor shall plan to attend the initial meeting and every other monthly meeting in person, and the remaining meetings via telephone conference unless the Project Officer requests in-person meetings.

5.4.4 Provide data for earned value management reporting

The Contractor shall track project tasks, milestones, and resources in Microsoft Project, performing at least weekly updates to the Microsoft Project data. The Contractor shall ensure

that the Microsoft Project files are set up to support NRC Earned Value (EV) reporting. The Contractor shall provide EV data to the NRC monthly, on a schedule acceptable to the NRC Project Officer. The Contractor shall ensure that all EV tracking and data deliveries comply with the FSME Project Schedule Implementation Procedures which is found in Appendix V.

6 REFERENCES

Computer Security Act of 1987

Department of Commerce (DOC) Abbreviated Certification Methodology Worksheets 1 through 6

Federal Information Processing Standards Publication (FIPS PUB) 102, Guidelines for Computer Security Certification and Accreditation.

FIPS PUB 140-2, Security Requirements for Cryptographic Modules;

FIPS PUB 199, Standards for Security Categorization of Federal Information and Information Systems;

FIPS PUB 200, Minimum Security Requirements for Federal Information and Information Systems

Federal Information Security Management Act of 2002 (FISMA),

Government Accountability Office (GAO) Federal Information Systems Control Audit Methodology (FISCAM)

National Institute of Standards and Technology (NIST) Special Publication (SP) 800-18, "Guide for Developing Security Plans for Information Technology Systems.

NIST SP 800-30, Risk Management Guide for Information Technology Systems.

NIST SP 800-34, Contingency Planning Guide for Information Technology Systems.

NIST SP 800-37, Guide for the Security Certification and Accreditation of Federal Information Technology Systems.

NIST SP 800-47, Security Guide for Interconnecting Information Technology Systems.

NIST SP 800-53, Recommended Security Controls for Federal Information Systems
NIST SP 800-53a, Guide for Assessing the Security Controls in Federal Information Systems: Building Effective Security Assessment Plans,

NIST SP 800-60, Guide for Mapping Types of Information and Information Systems to Security Categories, Volume I and Volume II

NIST SP 800-63, Electronic Authentication Guideline

NRC Management Directive (MD) 12.1, NRC Facility Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

NRC MD 12.2, Classified Information Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

NRC MD 12.3, NRC Personnel Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

NRC MD 12.4, Telecommunications Systems Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

NRC MD 12.5, Automated Information Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

NRC MD 12.6, Sensitive Unclassified Information Security Program, available at: http://www.nrc.gov/reading-rm/doc-collections/management-directives/

Office of Management and Budget (OMB) Circular A-130, Appendix III, Security of Federal Automated Information Resources

OMB E-Authentication Guidance

7 LIST OF ACRONYMS

ATO	Authority-To-Operate
C&A	Certification and Accreditation
CMP	Configuration Management Plan
CSO	NRC Computer Security Office
DAA	Designated Approving Authority
FIPS PUB	Federal Information Processing Standards Publication
FISCAM	Federal Information Systems Control Audit Methodology
FISMA	Federal Information Security Management Act of 2002
FSME	Office of Federal and State Materials and Environmental Management Programs
GAO	U.S. Government Accountability Office
IAEA	International Atomic Energy Agency's
IPS	Inspection Planning System
ISSO	Information System Security Officer
IT	Information Technology
IV&V	Independent Verification and Validation
LTS	Licensing Tracking System
LVS	License Verification System
MD	Management Directive
MPKI	Managed Public Key Infrastructure
NIST	National Institute of Standards and Technology
NRC	U.S. Nuclear Regulatory Commission
NSS&DRS	National Sealed Source And Device Registry System
NSTS	National Source Tracking System
OMB	U.S. Office of Management and Budget
PKI	Public Key Infrastructure
PO	NRC Project Officer
PPI	Personally Identifiable Information
PSI	Senate Committee on Homeland Security and Governmental Affairs, Permanent Subcommittee on Investigations (PSI)
RDD	Radiological Dispersal Device
RTS	Reciprocity Tracking System
SAD	System Architecture Document
SITSO	Senior Information Technology Security Officer
SP	Special Publication
STIMS	Storage and Transportation Information Management System
SOW	Statement of Work
SUNSI	Sensitive Unclassified Non-Safeguards Information
TAPIS	Transportation Approval Package Information System
UC	Use Case
VPN	Virtual Private Network
WBL	Web-Based Licensing

8 Appendices List

A	LVS High Level System Requirements
B	WBL System Requirements
C	NSTS System Requirements
D	LVS System Architecture Document
E	WBL System Architecture Document
F	NSTS System Architecture Document
G	Establish Portfolio Infrastructure Schedule
H	LVS Project Schedule
I	WBL Project Schedule
J	PMM Template - Software Development Plan
K	PMM Template - Quality Assurance Plan
L	PMM Template - Deployment Plan
M	PMM Template - Configuration Management Plan
N	PMM Template - System Architecture Document
O	PMM Template - Risk Assessment Report
P	PMM Template - System Security Plan
Q	PMM Template - Contingency Plan
R	PMM Template - System Test Plan
S	PMM Template - Test Evaluation Summary
T	FSME Detailed Design Standards
U	FSME System Testing Standards
V	FSME Project Schedule Implementation Procedures
W	Earned Value Requirements
X	OIS Application Change Request System Guide
Y	Contractor Performance Measures
Z	Portfolio Enrollment Module
AA	High Level Requirements for the Storage and Transportation Information Management System (STIMS)
AB	Functional description of Import/Export Licensing Process
AC	Functional description of Reciprocity Tracking System (RTS)
AD	Functional description of National Sealed Source And Device Registry System (NSS&DRS)
AE	Functional description of General License Tracking System (GLTS)

ATTACHMENT B

BILLING INSTRUCTIONS FOR
FIXED PRICE CONTRACTS (JUNE 2008)

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

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

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

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

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

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

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

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

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

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

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED

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

Frequency: The contractor shall submit a voucher/invoice only after the NRC's final acceptance of services rendered or products delivered in performance of the contract unless otherwise specified in the contract.

ATTACHMENT B

BILLING INSTRUCTIONS FOR
FIXED PRICE CONTRACTS (JUNE 2008)

Preparation and Itemization of the Voucher/Invoice: The voucher/invoice shall be prepared in ink or by typewriter (without strike-overs). Corrections or erasures must be initialed. To be considered a proper voucher/invoice, all of the following elements must be included:

1. Contractor's Data Universal Number (DUNS) or DUNS+4 number that identifies the contractor'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 contractor to identify alternative Electronic Funds Transfer (EFT) accounts for the same parent concern.

(a) Contract number.

3. Sequential voucher/invoice number.

4. Date of voucher/invoice.

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

6. A description of articles or services, quantity, unit price, and total amount.

7. 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.

8. Weight and zone of shipment, if shipped by parcel post.

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

10. Instructions to consignee to notify the Contracting Officer of receipt of shipment.

11. For Indefinite Delivery contracts or contracts under which progress payments are authorized, the final voucher/invoice shall be marked "FINAL VOUCHER" OR "FINAL INVOICE."

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

Supersession: These instructions supersede any previous billing instructions.

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ATTACHMENT C

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

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

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

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

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

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

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

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

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

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

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

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED

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

ATTACHMENT C

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

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

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

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

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

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

Supersession: These instructions supersede any previous billing instructions.

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ATTACHMENT C

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

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

1. Official Agency Billing Office

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

2. Voucher Information

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

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

c. Contract Number. Insert the NRC contract number.

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

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

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

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

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

total of each cost, billed to date by activity.

3. Definitions

a. Non-capitalized Equipment, Materials, and Supplies. These are equipment other than that described in number (4) below, plus consumable materials, supplies. List by category. List items valued at $1,000 or more separately. Provide the item number for each piece of equipment valued at $1,000 or more.

b. Capitalized Non Expendable Equipment. List each item costing $50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) the item number for the specific piece of equipment listed in the property schedule of the contract; or (b) the Contracting Officer's approval letter if the equipment is not covered by the property schedule.

c. Material handling costs. When included as part of material costs, material handling costs shall include only costs clearly excluded from the labor-hour rate. Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the Contractor's usual accounting procedures.

Sample Voucher Information (Supporting Documentation must be attached)

This voucher/invoice represents reimbursable costs for the billing period
from_____through_____.

	Amount Billed	
	Current Period	Cumulative
(f) Direct Costs:		
(1) Direct Labor	$_____	$_____
(2) Travel	$_____	$_____
(3) Materials	$_____	$_____
(4) Equipment	$_____	$_____
(5) Materials Handling Fee	$_____	$_____
(6) Consultants	$_____	$_____
(7) Subcontract	$_____	$_____
Total Direct Costs:	$_____	$_____

NRC-35

SYSTEM NAME:
Drug Testing Program Records—NRC.

SYSTEM LOCATION:
Primary system—Division of Facilities and Security, Office of Administration, NRC, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland.
Duplicate system—Duplicate systems exist in part at the NRC Regional office locations listed in Addendum I, Part 2 (for a temporary period of time); and at the current Contractor testing laboratories, collection/evaluation facilities.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:
Persons including NRC employees, applicants, consultants, licensees, and Contractors.

CATEGORIES OF RECORDS IN THE SYSTEM:
These records contain information regarding the drug testing program; requests for and results of initial, confirmatory and follow-up testing, if appropriate; additional information supplied by NRC employees, employment applicants, consultants,
licensees, or Contractors in challenge to positive test results; and written statements or medical evaluations of attending physicians and/or information regarding prescription or nonprescription drugs.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:
5 U.S.C 7301 (note); 42 U.S.C. 290dd–2; Executive Order 12564; Pub. L. 100–71, Title V Sec. 503; Pub. L. 100–440,
Title VI Sec. 628; Executive Order 9397.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND
THE PURPOSES OF SUCH USES:
In addition to the disclosures permitted under subsection (b) of the Privacy Act, the NRC may disclose information contained in this system of records without the consent of the subject individual if the disclosure is compatible with the purpose for which the record was collected under the following routine uses:
a. To identify substance abusers within the agency;
b. To initiate counseling and/or rehabilitation programs;
c. To take personnel actions;
d. To take personnel security actions;
e. For statistical reporting purposes. Statistical reporting will not include personally identifiable information; and
f. For the routine uses specified in paragraphs number 6 and 7 of the Prefatory Statement of General Routine Uses.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:
STORAGE:
Records are maintained on paper and computer media. Specimens are maintained in appropriate environments.

RETRIEVABILITY:
Records are indexed and accessed by name, social security number, testing position number, specimen number, drug testing laboratory accession number, or a combination thereof.

SAFEGUARDS:
Records in use are protected to ensure that access is limited to those persons whose official duties require such access. Unattended records are maintained in NRC-controlled space in locked offices, locked desk drawers, or locked file cabinets. Stand-alone and network processing systems are password protected and removable media is stored in locked offices, locked desk drawers, or locked file cabinets when unattended. Network processing systems have roles and responsibilities protection and system security plans. Records at laboratory, collection, and evaluation facilities are stored with appropriate security measures to control and limit access to those persons whose official duties require such access.

RETENTION AND DISPOSAL:
Records are retained and disposed of in accordance with the National Archives and Records Administration (NARA) approved disposition schedules which can be found in the NRC Comprehensive Records Disposition Schedule, NUREG–0910, NARA's General Records Schedules, as well as in recently approved Requests for Records Disposition Authorities. NRC records disposition schedules are accessible through the NRC's Web site at *http://www.nrc.gov/reading-rm/recordsmgmt/disposition.html*. Records that do not have an approved disposition schedule will be retained until
disposition authority is obtained from NARA in accordance with 36 CFR 1220.38(b), Disposition of Records.

SYSTEM MANAGER(S) AND ADDRESS:
Director, Division of Facilities and Security, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

NOTIFICATION PROCEDURE:
Individuals seeking to determine whether this system of records contains information about them should write to the Freedom of Information Act and Privacy Act Officer, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and comply with the procedures contained in NRC's Privacy Act regulations, 10 CFR part 9.

RECORD ACCESS PROCEDURE:
Same as "Notification procedure."

CONTESTING RECORD PROCEDURE:
Same as "Notification procedure."

RECORD SOURCE CATEGORIES:
NRC employees, employment applicants, consultants, licensees, and Contractors who have been identified for drug testing who have been tested; physicians making statements regarding medical evaluations and/or authorized prescriptions for drugs; NRC Contractors for processing including, but not limited to, specimen collection, laboratories for analysis, and medical evaluations; and NRC staff administering the drug testing program to ensure the achievement of a drug-free workplace.

EXEMPTIONS CLAIMED FOR THE SYSTEM:
Pursuant to 5 U.S.C. 552a(k)(5), the Commission has exempted portions of this system of records from 5 U.S.C. 552a(c)(3), (d), (e)(1), (e)(4)(G), (H), and (I), and (f).

NRC FORM 187
(7-2008)
NRCMD 12

U.S. NUCLEAR REGULATORY COMMISSION

CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

AUTHORITY
The policies, procedures, and criteria of the NRC Security Program, NRCMD 12, apply to performance of this contract, subcontract or other activity.

COMPLETE CLASSIFIED ITEMS BY SEPARATE CORRESPONDENCE

1. CONTRACTOR NAME AND ADDRESS

TBD

A. CONTRACT NUMBER FOR COMMERCIAL CONTRACTS OR JOB CODE FOR DOE PROJECTS (Prime contract number must be shown for all subcontracts.)

NRC-41-09-008

B. PROJECTED START DATE	C. PROJECTED COMPLETION DATE
12/28/2009	12/27/2019

2. TYPE OF SUBMISSION

- [x] 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
[x]		

4. PROJECT TITLE AND OTHER IDENTIFYING INFORMATION

Integrated Source Management Portfolio (ISMP; consists of the National Source Tracking System, Web-based Licensing System, and License Verification System). The ISMP will support the NRC mission in a manner that protects public health and safety, provides common defense and security, and protects the environment by establishing the infrastructure to support the FSME systems; develop/deploy IT systems that support the FSME mission; and provide system hosting, operational support, maintenance, and user & help desk support.

5. PERFORMANCE WILL REQUIRE

A. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION

- [ ] YES (If "YES," answer 1-7 below)
- [x] 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 INFORMATION.	[ ]	[ ]	[ ]	[ ]	[ ]
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 [x] NO

C. [ ] UNESCORTED ACCESS IS REQUIRED TO NUCLEAR POWER PLANTS.

D. [ ] ACCESS IS REQUIRED TO UNCLASSIFIED SAFEGUARDS INFORMATION.

E. [x] ACCESS IS REQUIRED TO SENSITIVE IT SYSTEMS AND DATA.

F. [x] UNESCORTED ACCESS TO NRC HEADQUARTERS BUILDING.

G. [ ] REQUIRE OPERATION OF GOVERNMENT VEHICLES OR TRANSPORT PASSENGERS FOR THE NRC.

H. [ ] WILL OPERATE HAZARDOUS EQUIPMENT AT NRC FACILITIES.

I. [ ] REQUIRED TO CARRY FIREARMS.

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	SIGNATURE	DATE
Carolyn Boyle, Administrative Project Officer FSME/PBPA/FMB	Carolyn Boyle	9/16/09

7. CLASSIFICATION GUIDANCE

NATURE OF CLASSIFIED GUIDANCE IDENTIFICATION OF CLASSIFICATION GUIDES

NRC Management Directive 12, to include:
-12.1, NRC Facility Security Program
-12.2, NRC Classified Information Security Program
-12.3, NRC Personnel Security Program
-12.4, NRC Telecommunications Systems Security Program
-12.5, NRC Automated Information Systems Security Program, and
-12.6, NRC Sensitive Unclassified Information Security Program

8. CLASSIFIED REVIEW OF CONTRACTOR / SUBCONTRACTOR REPORT(S) AND OTHER DOCUMENTS WILL BE CONDUCTED BY:

- [ ] AUTHORIZED CLASSIFIER (Name and Title)
- [x] DIVISION OF FACILITIES AND SECURITY

9. REQUIRED DISTRIBUTION OF NRC FORM 187 ***Check appropriate box(es)***

- [x] SPONSORING NRC OFFICE OR DIVISION (Item 10A)
- [x] DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT
- [x] DIVISION OF FACILITIES AND SECURITY (Item 10B)
- [x] CONTRACTOR (Item 1)
- [x] 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 Jennifer M. Golder, Director, PBPA, FSME	SIGNATURE	DATE 9/16/09
B. DIRECTOR, DIVISION OF FACILITIES AND SECURITY Robert Webber, Director, DFS, ADM	SIGNATURE Cheryl Bunaster for	DATE 9/16/09
C. DIRECTOR, DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT (Not applicable to DOE agreements) Phyllis Bower, Director, DC, ADM	SIGNATURE Adelia Rodriguez for	DATE 9/17/09

REMARKS