| | èr | | ORDE | R FOR SUPPLIES OF | R SERVICE | S | | | | PAGE OF | PAGES |
|-------------------------------|---|---|---|--|---|----------------------|------------------------------------|-----------------|--|------------------------|--------------------------|
| | | ckages and papers with con | | | BPA NO. | | | | | | |
| 1. DATE OF | | M 9 6 7006 | 2. CONTRACT NO. GS35F0125 | (Many) S | | | E. SHIP | ro: | | | |
| 3. ORDER | | MODIFICATION NO. | 4. REQUISITION/RE NMS-06-00 | FERENCE NO. dtd 6/12/06 9/5006R056 | j. | clear Re | gulatory Com | | | | |
| 5. ISSUING U.S. | OFFICE (Addr Nuclear | ess correspondence to) Regulatory Commis | sion | | b. STREET ADD | | | | | | |
| Attn | | lie) Colón, Jr. | | | c. CITY | | | | d. STATE | le.ZIP C | ODE |
| | Stop T-7 ington, D | | | | Washing | ton | | | DC | 1 | 555 |
| | | 7, | ro: | | f. SHIP VIA | | | | | | |
| | CONTRACTO | | | | | | 8. TYPE OF C | RDER | | | |
| b. COMPAN | IY NAME | | | | | | 0.17.20.0 | 1 | | | |
| | | P. LOURENCO T OF SERVICES | | | a. PURCH | ASE | | 1 — | ELIVERY | a a tha mua | ma thia |
| c. STREET | ADDRESS ANDERSON | RD | | | Please furnish the | | | delivery/tas | k order is subjection this side only o | to Instructio | กร |
| | | | γ | TATE 1.2IP CODE | and on the attache delivery as Indicat | ed sheet, if any, | | issued subj | ect to the terms a | and condition | |
| d. CITY MC LE | AN | | va Va | . | | | | | | | |
| | TING AND APP -344-162 | PROPRIATION DATA J5571 252A | 31×0200 | \$ 93,600.00 | 10. REQUISITION | ING OFFICE | NMS | | | | |
| 65015 | -344-162 -34C-163 | J5539 252A J5565 252A | 31X0200 | \$ 46,400.00 \$165,000.00 | NMSS/PM | DA/RASB | | | | | |
| | | ATION (Check appropriate box | | TE\$305,000.00 | <u> </u> | | | 12. F.O.B | . POINT | | • |
| X B. SMA | UL. | b . (| OTHER THAN SMALL | c. DISADVAN | TAGED | | g. SERVICE- DISABLED | Des | tination | | |
| d. WDI | MEN-OWNED | e. i | HUBZone | 1. EMERGING BUSINESS | SMALL | | VETERAN- OWNED | | | | |
| | | 13. PLACE OF | | 14. GOVERNMENT BA | L NO. | | R TO F.O.B. POINT BEFORE (Dale) | <u></u> | 16. DISCOUN | TERMS | |
| a. INSPECTI | ОИ | b. ACCEPT | ANCE | | | | 26/06 - 06/2 | 5/07 | NET 30 | | |
| | | | | 17. SCHEDULE (See reven | so for Relections) | See | CONTINUATI | ON Page | <u></u> | | |
| | Γ | | | · · · · · · · · · · · · · · · · · · · | | QUANTITY | <u> </u> | UNIT | T | | CUTANUD |
| ITEM NO. | | | SUPPLIES OR SERV (B) | ····· | | ORDERED (C) | UNIT (D) | PRICE (E) | | UNT F) | ACCEPTED (G) |
| | VALIDA with th Federal Task Or | TION (IV&V) SUPP e attached SOW, t Supply Schedule | ORT FOR NM he terms and Contract No. rices stated | ENDENT VERIFICATIONS SYSTEMS. in accordance of GSA GS-35F-0125S and the in the SCHEDULE below of GSA GS-35F-0125S and the intermediate of GSA GS-35F-0125S and the intermediate of GSA | ordance nis | | | | | | |
| 001X | | NATIONAL SOUR | | G SYSTEM (NSTS) IV& | <u>v</u> | | | 200 M | \$391 | , 685.00 | |
| 0018 | Estimate | ed Travel Amount | (Not-to-Exce | ed) | | | | | \$5 | ,000.00 | |
| | | | • | \$3 | 96,685.00 | and the | | | | , | |
| | (Continu | ued on Page 2) | | • | | | | | | | |
| .] | DUNS #: | 152858358 | | | | 1 | | | | | |
| I | | 18. SHIPPING POINT | | 19. GROSS SHIPPING WEIGHT | · | 20. INVOICE | NO. | | 6200 | <i>coc co</i> | |
| | | | | 21. MAIL INVOICE TO: | | | | | \$396 | ,685.00 | 17(h) |
| EL NAME | | | | | | \$420 | 455.00 | TOTAL (Cont. | | | |
| INSTRUCTIONS ON REVERSE | | U.S. Nuclear Regulatory Commission Division of Contracts, Mail Stop T-7-I-2 | | | | | | | | | pages) |
| | | Attn: (DR-02- Washington | | | | | (| EILING: | \$817 | ,140.00 | 17(I). GRAND TOTAL |
| | | c. CITY | | | d. STATE DC | e. ZIP CODE 20555 | | GATED: | \$305 | .000.00 | |
| 22. UNITED S BY (Sign | TATES OF AMI | RICA DO N | | | | Cont | | r icer | | | <u> </u> |
| AUTHORN PREVIOUS | PLATE AL | ADMINI | SUNSI F | REVIEW COM | PLETE | - | | | nwnc | AT) (REV. SAJFAR 41 | 3/2005) CFR 53.213(i |

77) REV. 3/2005) SAFAR 48 CFR 63.213(

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

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

PAGE NO. 2

DATE OF ORDER CONTRACT NO. ORDER NO Jun 28 Date GS35F0125S DR-02-06-009 QUANTITY UNIT YTITHAUC ORDERED ITEM NO. SUPPLIES OR SERVICES UNIT PRICE AMOUNT ACCEPTED (C) (E) (A) (G) TASK 2 - WEB-BASED LICENSING SYSTEM (WBL) IV&V 002A IV&V Technical Specialist(s) \$277,970.00 002B Estimated Travel Amount (Not-to-Exceed) \$3,000.00 TASK 2 Celling - WBL IV&V......\$280,970.00 TASK 3 - IV&V FOR NMSS SYSTEM MAINTENANCE AND IT PLANNING 003A IV&V Technical Specialist(s) \$138,985.00 003B Estimated Travel Amount (Not-to-Exceed) \$500.00 TASK 3 Celling - IV&V NMSS SYS MAINT/IT PLAN......\$139,485.00 TOTAL Order Ceiling: TASKS 1 - 3......\$817,140.00 ATTACHMENTS: 1. Statement of Work (SOW) w/ Enclosures 2. Additional Task Order Terms and Conditions Reference is made to your proposal dated 5/23/2006, as revised 5/26/2006, in response to this effort. ACCEPTED:

ORDER NO. <u>DR-02-06-009</u> (Attachment 1 – Statement of Work)

Independent Verification and Validation (IV&V) for NMSS Systems

Statement of Work

ORDER NO. <u>DR-02-06-009</u>

(Attachment 1 – Statement of Work)

Table of Contents

| 1. | INTRODI | JCTION | 1 | | |
|------------|--|---|----------------|--|--|
| 2. | NRC AND CONTRACTOR ROLES AND REFERENCES | | | | |
| 3. | CONTRA | CT TYPE | 2 | | |
| 4. | SCOPE | | 2 | | |
| 5. | PERIOD | OF PERFORMANCE | 2 | | |
| 6. | PLACE C | PERFORMANCE | 2 | | |
| 6.1 | Contra | ctor Staff Availability and Hours of Work | 2 | | |
| 6.2 | Travel | Requirements | 2 | | |
| 7. | SUPPOR | T ACTIVITIES | 3 | | |
| 7.1 | Genera 7.1.1 7.1.2 7.1.3 7.1.4 | Support | 3 3 3 | | |
| 7.2 | Project 7.2.1 7.2.2 7.2.3 | Support (by project phase) Project Planning Project Execution Project Controlling | 4 5 | | |
| 7.3 | Mainter | nance Support Activities | 7 | | |
| 8. | TECHNO | LOGY PLATFORMS AND STATUS OF SUPPORTED SYSTEMS | 8 | | |
| 8.1 | Nationa | l Source Tracking System (NSTS) | 8 | | |
| 8.2 | Web-ba | sed Licensing System (WBL) | 8 | | |
| 8.3 | Legacy | Systems under Maintenance | 8 | | |
| 9. | CONTRA | CTOR PERFORMANCE REQUIREMENTS | 9 | | |
| 9.1 | Task 1 | - National Source Tracking System (NSTS) IV&V | 9 | | |
| 9.2 | Task 2 | – Web-based Licensing System (WBL) IV&V | 15 | | |
| 9.3 | Task 3 | IV&V for NMSS System Maintenance and IT Planning | 16 | | |
| 9.4 | Perform | nance Requirements | 16 | | |
| 9.5 | Delivera | able Format and Submission | 17 | | |
| 9.6 | Post Av | vard Meeting | 18 | | |
| | | - | 40 | | |
| 9.7 | Reporti 9.7.1 9.7.2 | ng Requirements | 18 | | |
| 9.7 9.8 | 9.7.1 9.7.2 | Weekly Progress Reports and Meetings | 18 18 | | |
| | 9.7.1 9.7.2 Project | Weekly Progress Reports and Meetings | 18 18 19 | | |

ORDER NO. <u>DR-02-06-009</u> (Attachment 1 – Statement of Work)

9.11 Non-disclosure Agreements......19

ORDER NO. <u>DR-02-06-009</u>

(Attachment 1 – Statement of Work)

1. INTRODUCTION

Within the U.S. Nuclear Regulatory Commission (NRC), the Office of Nuclear Material Safety and Safeguards (NMSS) is responsible for ensuring the public health and safety through licensing, inspection, and environmental reviews for all activities regulated by the NRC, except operating power and all non-power reactors and the safeguards technical review of all licensing activities, including export/import of special nuclear material, excluding reactors. NMSS develops and implements NRC policy for the regulation of activities involving the use and handling of radioactive materials, such as: uranium recovery activities; fuel fabrication and development; medical, industrial, academic, and commercial uses of radioactive materials; safeguards activities; transportation of nuclear materials, including certification of transport containers, and reactor spent fuel storage; safe management and disposal of low-level and high-level radioactive waste; and management of related decommissioning. NMSS also identifies and takes action to resolve safety and safeguards issues, and directs NRC contingency planning and emergency response operations dealing with accidents, events, incidents, threats, thefts, and radiological sabotage relating to licensed activities under its responsibility.

2. OBJECTIVE

NMSS utilizes numerous information systems in support of this mission. To support effective development of new systems, maintenance of legacy systems, and effective project performance, NMSS requires a broad range of independent verification and validation (IV&V) services. The purpose of this contract is to obtain professional independent verification and validation (IV&V) services to support NMSS efforts in information technology (IT) project planning and in ensuring compliance with software quality standards, NMSS requirements, and applicable NRC and federal regulations. This contract provides comprehensive IV&V services in support of NMSS system development, maintenance, and IT planning activities.

2. NRC AND CONTRACTOR ROLES AND REFERENCES

As the work description in this document involves numerous roles, all references to the IV&V support Contractor shall be indicated as "the Contractor". In cases where another contractor is referenced, the nature of their contract will be indicated (e.g., "the software development contractor").

In addition to the NRC Project Officer, the NRC will designate a Task Manager for each task. The Task Manager will direct day-to-day details of IV&V Contractor support; however, the Project Officer shall have ultimate authority to provide technical direction to Contractor resources, particularly regarding issues of resource availability, task prioritization, or work scope.

The Contractor shall provide a team structure equivalent to the NRC structure, specifically providing an overall IV&V Team Leader, and a separate Task Support Lead for each task. All of these roles shall be designated as Key Personnel. These four roles may be covered by as few as two or as many as four persons. In combining roles, the Contractor shall ensure that the Task 1 and Task 2 Support Lead roles are not staffed by the same person. However, either of these Task Support Leads may also serve as the Task 3 Support Lead or the overall IV&V Team Leader.

ORDER NO. <u>DR-02-06-009</u> (Attachment 1 – Statement of Work)

3. CONTRACT TYPE

This is a time and materials (T&M) and/or labor hour contract with a fixed price ceiling for each task.

4. SCOPE

The Contractor shall provide all personnel, materials, hardware, software, labor, supplies, equipment, travel and other direct costs necessary to accomplish the performance of the tasks described below.

5. PERIOD OF PERFORMANCE

The period of performance of this delivery order is 12 months (one year) from date of award.

PLACE OF PERFORMANCE

The primary place of performance shall be at NRC headquarters in Rockville, Maryland. The Contractor may be required to travel to software development and maintenance contractor sites to perform testing and quality reviews. While all current development and maintenance contractors are located in the Washington, DC metropolitan area, some contractor hosting sites are located throughout the continental United States. The Contractor may also be required to travel to system stakeholder sites throughout the regulatory domain of the NRC.

6.1 Contractor Staff Availability and Hours of Work

The Contractor shall ensure all key personnel are available on-site at NRC headquarters during the hours of 9:00 a.m. to 4:00 p.m. In instances when work requirements necessitate a change to these hours, the NRC Project Officer will notify the IV&V Team Leader, and the schedule shall be modified accordingly. However, the Contractor will have access to NRC headquarters five (5) days per week, Monday through Friday from 6:00 a.m. to 6:00 p.m., except when the Government facility is closed due to federal holidays, local or national emergencies, administrative closings, or similar Government directed facility closings.

6.2 Travel Requirements

Local travel expenses will <u>not</u> be reimbursed by the NRC. On-site parking is not available.

Occasional travel to the current development and maintenance contractor locations, contractor hosting sites, and system stakeholder sites may be required. All travel, other than local travel, requires the prior approval of the Project Officer.

(Attachment 1 – Statement of Work)

7. SUPPORT ACTIVITIES

This section details the full range of IV&V support activities that the Contractor shall provide. The Contractor shall provide specific support as directed by the NRC Project Officer or Task Manager.

7.1 General Support

Note: These activities may not be associated with a project or may occur in a project phase.

7.1.1 System integration planning studies

The Contractor shall conduct studies as outlined by the NRC, to determine and objectively rank and present risks related to alternatives for integrating and otherwise replacing NMSS systems in an efficient manner. In conducting these studies, the Contractor shall investigate alternatives identified by the NRC as well as identifying further alternatives as required to provide at least four options for NRC consideration. In identifying further alternatives, the Contractor shall consider re-use of other federal and private sector systems as well as emergent technologies not yet employed within the NRC.

7.1.2 Feasibility studies

The Contractor shall conduct feasibility studies as outlined by the NRC, potentially regarding a broad range of topics of concern to IT strategic planning and specific project planning. Feasibility studies may be conducted to investigate an emergent technology with potential application at the NRC or to consider feasibility of actions related to an NRC IT project. While these feasibility studies may require investigation of the applicable project or NRC system context, most effort will be focused on compiling expert Contractor opinions to better inform NRC IT strategic planning.

7.1.3 Technology assessments

The Contractor shall provide unbiased assessments of candidate technologies or products that may be applicable to NMSS projects, citing objective sources for all information that the NRC might use in framing related decisions. The subject technology assessments will generally relate to software products (e.g., COTS or GOTS), including tools used to support the software development or management processes. The emphasis of these assessments will generally be on the functional fit with current or projected NMSS requirements.

7.1.4 Project screening form preparation support

The Contractor shall provide support in the preparation of project screening forms required under the NRC Capital Planning and Investment Control (CPIC) process. Specifically, the Contractor shall support preparation of the NRC Project Management Methodology (PMM) Vision, CPIC Tier Questionnaire, and IT Investment Screening Form documents that are attached as enclosures.

(Attachment 1 – Statement of Work)

7.2 Project Support (by project phase)

7.2.1 Project Planning

Requirements definition

The Contractor shall assess the subject stakeholder community, design a requirement definition approach, obtain NRC concurrence, and execute the requirement definition approach, under NRC direction. The Contractor shall ensure that the requirement definition approach includes sufficient individual interviews, small group interviews, and larger meetings to effectively gather all stakeholder perspectives. The Contractor shall plan, coordinate and facilitate all stakeholder meetings and interviews. The Contractor shall adhere to prevailing NRC standards and practices for documentation of requirements. Currently, the NRC standard is to document requirements in the use case method in IBM Rational RequisitePro, Rose, and Software Modeler. The Contractor shall ensure that all requirement definition efforts directly support development of the business case System Requirements Summary document.

Business case development

The Contractor shall conduct all necessary information gathering efforts and develop comprehensive business case documentation in compliance with prevailing NRC formatting standards. The current NRC business case format requires the following documents, templates for which are found in the enclosures:

Concept of Operations (in System Architecture Document)
Functional and Technical Requirements (in System Requirements Summary – SRS)
Initial Risk Identification
Return on Investment
Lifecycle Cost Projections
Alternatives Analysis
Management Approach (in Project Management Plan – PMP)
Acquisition Plan and Strategy
Management Approach (in PMP)
CPIC Control Phase Review Schedule (in PMP)
Business Case Justification (in Business Case)

Project schedule, cost, and spending plan reasonableness assessments

Note: These activities may be repeated in other project phases due to changes to address schedule or cost variance.

The Contractor shall perform and deliver reports of findings resulting from assessments of project schedules, cost estimates and spending plans. The primary focus of these assessments will be to determine the reasonableness of the plans reviewed. The Contactor shall also prepare alternate schedules, cost estimates, and spending plans for NRC consideration.

Review and support in developing standards and guidelines related to development and maintenance of NMSS systems

The Contractor shall provide support in the development of any standards and guidelines required by NMSS to supplement prevailing NRC and federal standards in support of effective performance of NMSS IT projects. As the NRC has comprehensive standards for

(Attachment 1 - Statement of Work)

IT project management, the support required here relates to standards for application of software development technologies to be used on NMSS projects (e.g., object naming conventions) or detailed guidelines for documenting NMSS system design specifications. In drafting these documents for NRC consideration, the Contractor shall document authoritative industry sources and foundations for the proposed standards.

7.2.2 Project Execution

Advising Source Evaluation Panels

The Contractor shall provide subject matter experts with applicable skills to provide advice to acquisition Source Evaluation Panels (SEPs). The nature of this technical advice would relate to impact of proposed technologies on the NRC environment and identification of potential risks related to the proposed solution and/or services.

Functional gap analysis

In cases where a proposed IT solution involves use of a commercial off-the-shelf (COTS) product or other type of existing solution, the Contractor shall conduct a thorough analysis of the gaps between the COTS product and the NRC requirements. The nature of such studies will vary by project and may only involve Contractor efforts to validate externally provided gap analysis documents.

Requirements validation

The Contractor shall provide support to facilitate a timely and accurate understanding of NRC requirements by the software development contractor. This support may involve presentations to the development team and timely response to requests for clarification. The Contractor shall also support the NRC project manager in cases where the foundation for a given requirement is required, including the requesting stakeholder(s) and rationale behind the requirement.

Design review

The Contractor shall review the design proposed by the development contractor, particularly with regard to compliance with NRC design documentation standards, accurate implementation of system requirements, and application adherence to commonly accepted practices for open architecture, maintainability, and extensibility.

7.2.3 Project Controlling

Project performance monitoring

The Contractor shall develop and implement project performance monitoring plans for review by the NRC. These plans shall address a systematic approach to monitoring overall schedule, cost and risk of NMSS IT projects. While the perspective is the overall NRC project, the Contractor shall consider input from development contractors and other contributors to the overall project. Cost and schedule monitoring shall utilize, but not be limited to earned value analysis, particularly in cases where work breakdown structure decomposition does not permit sufficient detail in monitoring. Project risk monitoring shall include periodic assessment of known and emergent project risks and timely reporting to the NRC project manager. The Contractor shall provide all support needed to produce periodic earned value management assessments in compliance with prevailing American

(Attachment 1 – Statement of Work)

National Standards Institute/Electronic Industries Alliance (ANSI/EIA) Standard 748 earned value management system (EVMS) guidelines.

(Attachment 1 - Statement of Work)

Review of development contractor deliverables

The Contractor shall perform reviews of development contractor deliverables, beyond those directly related to software code and system components. These deliverables will include, but not be limited to quality assurance plans, software development plans, development contractor test plans, data conversion scripts, and test result summaries. In reviewing each deliverable, the Contractor shall inform the NRC project manager of any issues with accuracy, completeness, or potential project risk.

Technical code audits

The Contractor shall review all software products delivered in relation to NMSS IT projects. For each deliverable review, the Contractor shall assess compliance with NRC requirements, the approved design, applicable standards, and absence of techniques that may reduce maintainability or extensibility.

User acceptance testing

The Contractor shall provide comprehensive support for NMSS user acceptance testing. This support shall include development of user support test plans, ensuring coverage of all requirements, and shall include development of scripts for automated performance of acceptance testing. The Contractor shall execute test scripts and supplement the NRC user role to the extent directed by the NRC project manager. All test plans shall be outlined by using available IBM Rational RequisitePro requirements and developing the plans in the IBM Rational Test Manager. Test scripts shall be automated unless otherwise directed by the NRC project manager. The Contractor shall develop automated scripts in the IBM Rational Robot, Functional Tester, and Manual Test tools.

System Security Accreditation Support

The Contractor shall provide limited support for specific activities related to the system certification and accreditation process (C&A). The Contractor shall support the NRC's Office of Information Services (OIS) security personnel and C&A contractors in understanding the proposed system architecture and technological concerns related to C&A. The Contractor shall conduct security test and evaluation (ST&E) testing.

7.3 Maintenance Support Activities

Defect verification and analysis

The Contractor shall investigate reported software defects, confirming existence, proposing short-term work-arounds, relationship to stated system requirements, and evaluation of maintainer-proposed solutions. All software change requests are tracked in the IBM Rational ClearQuest tool.

Software change specification review

The Contractor shall review, for clarity and completeness, all proposed software changes to NMSS systems under maintenance. The Contractor shall provide support the NRC so that each change specification can be verified upon implementation.

Configuration/Change Control Board (CCB) support

The Contractor shall serve as an expert advisor to Configuration/Change Control Boards (CCB) for NMSS systems. In this capacity, the Contractor shall explain the implications of each defect or proposed enhancement that is under consideration by the CCB. The

(Attachment 1 – Statement of Work)

Contractor shall also advise the Project Officer during the evaluation of maintainer cost and schedule proposals.

8. TECHNOLOGY PLATFORMS AND STATUS OF SUPPORTED SYSTEMS

8.1 National Source Tracking System (NSTS)

The NSTS will employ a Java 2 Enterprise Edition (J2EE) multi-tiered web architecture that logically separates the three classic partitions of an information system – Presentation, Logic, and Data. It will use the open source Struts framework to implement a Model-View-Controller (MVC) design pattern that accesses business logic implemented as a mixture of plain java classes and Enterprise Java Beans (EJB). The back-end database management system will be Oracle.

The NSTS will be under development with delivery of the first release expected by June, 2007, with the second major release to be delivered about one year later. NSTS Version 1 will be under maintenance during the time that Version 2 is being developed so IV&V on a limited number of maintenance releases is also anticipated during that time. Following July 2008, NMSS expects that the NSTS will be under maintenance only, with managed quarterly releases. Exhibits 1 and 2 provide details of anticipated deliverables related to the NSTS V1 and V2 development. Maintenance activities will entail all activities covered under Sections 7.2 and 7.3.

8.2 Web-based Licensing System (WBL)

The WBL is implemented using the LicenseEase and eGateway COTS products provided by Versa Systems. The LicenseEase COTS product is the 'back-office' application used by the NRC internal staff. It uses Oracle Forms and the Oracle Application Server to implement a web-based rich client interface. eGateway is the 'front-office' application used by external users. It is a standard J2EE application with application logic written as J2EE components that reside on an Orion Application Server. The back-end database management system is Oracle.

The WBL has been under development since the fall of 2004 with deployment of the first release expected in late 2006 or early 2007, since this project has experienced deployment delays. The current development contract period of performance ends in late 2006. The NRC anticipates that system development will continue past that time through a contract vehicle that has not been determined. The NRC anticipates that the WBL will be under maintenance by late 2007.

8.3 Legacy Systems under Maintenance

The NMSS portfolio of legacy systems currently consists of the following:

- General License Tracking System (GLTS)
- National Sealed Source and Device Registry System (NSSDRS)
- Transportation Approval Packaging Information System (TAPIS)
- Technical Assistance Program for Nuclear Materials (TAPNM)
- Inspection Planning System (IPS) will be replaced by final release of WBL
- Reciprocity Tracking System (RTS) will be replaced by final release of WBL

(Attachment 1 – Statement of Work)

• License Tracking System (LTS) – will be replaced by final release of WBL

The GLTS and NSSDRS are both LAN-based client/server systems employing Powerbuilder front-ends using Sybase as the back-end database engine. Both systems are stable and have approximately two planned maintenance releases annually.

The TAPIS runs on an IBM mainframe in a MVS/TSO environment that is hosted at the National Institutes of Health. The system was developed using the DB2 database system. A very small user pool accesses the system using 3270 terminal emulation. TAPIS has limited maintenance activity with no more than two releases per year.

The TAPNM system runs on an IBM mainframe in a MVS/TSO environment that is hosted at the National Institutes of Health. The system was developed as a COBOL application that utilizes a DB2 database. The user interface is provided by using a menu interface with 3270 terminal emulation. The TAPNM has limited maintenance activity with no more than two releases per year.

The IPS runs on an IBM mainframe in a MVS/TSO environment that is hosted at the National Institutes of Health. The system was developed using IBM's DB2 database software. The user accesses the system using 3270 terminal emulation. The IPS has limited maintenance activity with no more than two releases per year.

The RTS is a PC application written in the CA-Clipper application development system. It accesses a Clipper database located on a centralized network server. The RTS has limited maintenance activity with no more than two releases per year.

The LTS runs on an IBM mainframe in a MVS/TSO environment that is hosted at the National Institutes of Health. The system was developed using the RAMIS II database system. The user accesses the system using 3270 terminal emulation. The LTS has limited maintenance activity with no more than two releases per year.

9. CONTRACTOR PERFORMANCE REQUIREMENTS

9.1 Task 1 - National Source Tracking System (NSTS) IV&V

The Contractor shall provide all support services described under Section 7.2, Project Support. Much of the near term NSTS support work relates to Section 7.2.3 Project Controlling. In particular, the Contractor shall provide this support in relation to all deliverables reflected in Exhibits 1 and 2. The NSTS development schedule enclosures provide further perspective through an overview of the current project plan, showing planned delivery dates for all software builds. Please note that the estimated delivery dates found in Exhibits 1 and 2 were based on pre-award planning. Dates reflected in the enclosures are more current.

ORDER NO. <u>DR-02-06-009</u>

(Attachment 1 - Statement of Work)

Exhibit 1 - NSTS Version 1 Deliverables

| WBS | Development Contract Task No. | Deliverable | Estimated delivery date offset |
|----------|-------------------------------------|---|--------------------------------|
| } | | | from start |
| | | | date of |
| 1.2.3.1 | 1.16 | System Test Plan - Draft V1.0 (Test Strategy) | 12/23/2005 T1 + 147 |
| 1.2.3.3 | 1.16 | System Test Plan - Final V1.0 (Test Strategy) | T1 + 173 |
| 1.2.2.2 | 1.8 | Detailed Design Model - Database - Draft V1.0 | T1 + 188 |
| | | | |
| 1.2.4.4 | 1.13 | System Security Risk Assessment - Final V1.0 Detailed Design Model - User Interface - Draft V1.0 | T1 + 188 |
| 1.2.2.5 | 1.8 | <u></u> | T1 + 195 |
| 1.2.2.8 | 1.8 | Detailed Design Model - UML (All components) -Draft V1.0 | T1 + 197 |
| 1.2.2.9 | 1.8 | Detailed Design Model - Supplemental - Draft V1.0 | T1 + 197 |
| 1.2.2.10 | 1.9 | System Architecture Document - Draft V1.1 | T1 + 203 |
| 1.2.2.4 | 1.8 | Detailed Design Model - Database - Final V1.0 | T1 + 208 |
| 1.2.4.5 | 1.14 | System Security Plan - Draft V1.0 | T1 + 210 |
| 1.2.2.7 | 1.8 | Detailed Design Model - User Interface - Final V1.0 | T1 + 215 |
| 1.2.2.12 | 1.8 | Detailed Design Model - UML (All components) -Final V1.0 | T1 + 223 |
| 1.2.2.12 | 1.8 | Detailed Design Model - Supplemental - Final V1.0 | T1 + 223 |
| 1.2.2.12 | 1.9 | System Architecture Document - Final V1.1 | T1 + 223 |
| 1.3.1.1 | 1.12 | Data Conversion Design Documentation - Draft V1.0 | T1 + 228 |
| 1.2.6.21 | 1.6 | Deployment Plan - Draft V1.0 (Elaboration phase) | T1 + 232 |
| 1.3.1.3 | 1.12 | Data Conversion Design Documentation - Final V 1.0 | T1 + 237 |
| 1.2.6.16 | 1.2 | Software Development Plan - Draft V3.0 (Design revision) | T1 + 237 |
| 1.3.3.1 | 1.8 | Detailed Design Model - Database - Draft V2.0 (Design revision) | T1 + 251 |
| 1.3.3.2 | 1.8 | Detailed Design Model - User Interface - Draft V 2.0 (Design revision) | T1 + 251 |
| 1.3.3.3 | 1.8 | Detailed Design Model - UML (All components) -Draft V2.0 | T1 + 251 |
| 1.2.6.23 | 1.6 | Deployment Plan - Final V1.0 (Elaboration phase) | T1 + 251 |
| 1.3.3.4 | 1.8 | Detailed Design Model - Supplemental Design- Draft V2.0 (Design revision) | T1 + 253 |
| 1.2.4.7 | 1.14 | System Security Plan Final V1.0 | T1 + 253 |
| 1.2.6.18 | 1.2 | Software Development Plan - Final V3.0 (After design revision) | T1 + 256 |
| 1.3.10.2 | 1.18 | Workshop Materials - Draft V1.0 | T1 + 271 |
| 1.3.11.1 | 1.13 | System Security Risk Assessment Report - Draft V2.0 | T1 + 271 |
| 1.3.1.4 | 1.12 | Data Conversion Scripts - V1.0 | T1 + 278 |
| 1.3.3.6 | 1.8 | Detailed Design Model - Database - Final V2.0 (Design revision) | T1 + 281 |

(Attachment 1 – Statement of Work)

Exhibit 1 - NSTS Version 1 Deliverables

| WBS | Development Contract Task No. | Deliverable | Estimated delivery date offset from start date of 12/23/2005 |
|----------|-------------------------------------|---|--|
| 1.3.3.6 | 1.8 | Detailed Design Model - User Interface - Final V 2.0 (Design revision) | T1 + 281 |
| 1.3.3.6 | 1.8 | Detailed Design Model - UML (All components) -Final V2.0 | T1 + 281 |
| 1.3.3.6 | 1.8 | Detailed Design Model - Supplemental Design- Final V2.0 | T1 + 281 |
| 1.3.10.4 | 1.28 | Operational Guide, Draft V1.0 | T1 + 284 |
| 1.3.1.5 | 1.12 | Data Conversion Result Report and Related Documentation (incl. Test Plan, Scripts, etc.) - Draft V1.0 | T1 + 285 |
| 1.3.12.2 | 1.2 | Software Development Plan - Draft V4.0 (Construction Phase) | T1 + 286 |
| 1.2.4.11 | 1.15 | IT Contingency Plan and Test - Draft V1.0 | T1 + 286 |
| 1.3.1.7 | 1.12 | Data Conversion Result Report and Related Documentation (incl. Test Plan, Scripts, etc.) - Final V1.0 | T1 + 294 |
| 1.3.11.4 | 1.14 | System Security Plan - Draft V2.0 | T1 + 298 |
| 1.3.3.8 | 1.9 | System Architecture Document - Draft V2.0 (w/ System Design) | T1 + 299 |
| 1.3.2.1 | 1.12 | Data Conversion Design Documentation - Draft V 2.0 (Updated Design based on Results) | T1 + 301 |
| 1.3.8.1 | 1.16 | System Test Plan - Draft V2.0 | T1 + 301 |
| 1.3.12.4 | 1.2 | Software Development Plan - Final V4.0 (Construction Phase) | T1 + 302 |
| 1.3.10.1 | 1.19 | User Guide - Draft V1.0 | T1 + 302 |
| 1.3.2.3 | 1.12 | Data Conversion Design Documentation - Final V 2.0 (Updated Design based on Results) | T1 + 312 |
| 1.3.3.10 | 1.9 | System Architecture Document - Final V2.0 (w/ System Design) | T1 + 313 |
| 1.3.11.3 | 1.13 | System Security Risk Assessment Report - Final V2.0 | T1 + 314 |
| 1.3.10.3 | 1.19 | Training Material Draft V1.0 | T1 + 315 |
| 1.3.2.4 | 1.12 | Data Conversion Scripts - V2.0 | T1 + 319 |
| 1.3.2.5 | 1.12 | Data Conversion Result Report and Related Documentation (incl. Test Plan, Scripts, etc.) - Draft V2.0 | T1 + 321 |
| 1.3.8.3 | 1.16 | System Test Plan - Final V2.0 | T1 + 327 |
| 1.2.4.13 | 1.15 | IT Contingency Plan and Test - Final V1.0 | T1 + 328 |
| 1.3.5.2 | 1.11 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection, Construction Feature Set #1 | T1 + 328 |

ORDER NO. <u>DR-02-06-009</u> (Attachment 1 – Statement of Work)

Exhibit 1 - NSTS Version 1 Deliverables

| WBS | Development Contract Task No. | | Estimated delivery date offset from start date of 12/23/2005 |
|-----------|-------------------------------------|---|--|
| 1.3.2.7 | 1.12 | Data Conversion Result Report and Related Documentation (incl. Test Plan, Scripts, etc.) - Final V2.0 | T1 + 330 |
| 1.3.11.6 | 1.14 | System Security Plan - Final V2.0 | T1 + 340 |
| 1.3.6.2 | 1.11 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection, Construction Feature Set #2 | T1 + 340 |
| 1.3.10.6 | 1.19 | User Guide - Final V1.0 | T1 + 342 |
| 1.3.10.6 | 1.18 | Workshop Materials - Final V1.0 | T1 + 342 |
| 1.3.10.6 | 1.19 | Training Material - Final V1.0 | T1 + 342 |
| 1.3.10.6 | 1.28 | Operational Guide - Final V1.0 | T1 + 342 |
| 1.4.3.1 | 1.19 | User Guide Draft V2.0 | T1 + 355 |
| 1.4.3.3 | 1.28 | Operational Guide Draft V2.0 | T1 + 356 |
| 1.4.3.4 | 1.28 | Guide for Formatting and Submission of Electronic Data Files - Draft V1.0 | T1 + 356 |
| 1.3.11.10 | 1.15 | IT Contingency Plan - Draft V2.0 (for Security Testing) | T1 + 356 |
| 1.3.8.4 | 1.16 | System Test Script - Final (Feature Set #1) | T1 + 356 |
| 1.3.8.5 | 1.16 | System Test Script - Final (Feature Set #2) | T1 + 364 |
| 1.4.3.2 | 1.19 | Training Material Draft V2.0 | T1 + 368 |
| 1.4.3.6 | 1.19 | User Guide Final V2.0 | T1 + 382 |
| 1.4.3.6 | 1.28 | Operational Guide Final V2.0 | T1 + 382 |
| 1.4.3.6 | 1.19 | Training Material Final V2.0 | T1 + 382 |
| 1.4.3.6 | 1.28 | Guide for Formatting and Submission of Electronic Data Files - Final V1.0 | T1 + 382 |
| 1.3.7.2 | 1.11 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection, Construction Feature Set #3 | T1 + 386 |
| 1.3.11.12 | 1.15 | IT Contingency Plan - Final V2.0 (for Security Testing) | T1 + 398 |
| 1.3.12.5 | 1.6 | Deployment Plan - Draft V2.0 (Construction phase) | T1 + 407 |
| 1.3.8.7 | 1.11 | Deployed System (Unit and integration tested), Build for System Testing | T1 + 407 |
| 1.3.8.6 | 1.16 | System Test Script - Final (Feature Set #3) | T1 + 414 |
| 1.3.12.7 | 1.6 | Deployment Plan - Final V2.0 (Construction phase) | T1 + 425 |
| 1.3.8.9 | 1.17 | System Test Evaluation Summary | T1 + 447 |
| 1.4.5.4 | 1.15 | IT Contingency Test Report - Draft V1.0 (for Certification) | T1 + 454 |
| 1.3.9.2 | 1.11 | Deployed System (Unit and integration tested), Build for IV&V Inspection, Addresses System Testing Issues | T1 + 456 |
| 1.4.5.5 | 1.14 | System Security Plan - Draft V3.0 (for System Certification) | T1 + 461 |

(Attachment 1 - Statement of Work)

Exhibit 1 - NSTS Version 1 Deliverables

| WBS | Development Contract Task No. | Deliverable | Estimated delivery date offset from start date of 12/23/2005 |
|---------|-------------------------------------|--|--|
| 1.4.5.7 | 1.14 | System Security Plan - Final V3.0 (for System Certification) | T1 + 467 |
| 1.4.5.7 | 1.15 | IT Contingency Test Report - Final V1.0 (for Certification) | T1 + 467 |
| 1.4.2.2 | 1.11 | Deployed System (Unit and integration tested), Build for IV&V Inspection, Addresses User Acceptance Testing Issues | T1 + 531 |
| 1.4.7.3 | 1.12 | Data Conversion and Conversion Documentation - Final V3.0 (Production Environment conversion results) | T1 + 547 |
| 1.4.7.4 | 1.11 | Deployed System (Unit and integration tested) - Final V1.0 | T1 + 547 |
| 1.4.9.1 | 1.30 | System Refinement Recommendations | T1 + 589 |

Exhibit 2 - NSTS Version 2 Deliverables

| WBS | Development Contract Task No. | Deliverables | Estimated delivery date offset from approximate start date of 7/1/2007 |
|----------|-------------------------------------|--|--|
| 1.2.5.1 | 2.1 | Quality Assurance Plan - Draft V2.0 | Task 2 Start Date (T2) + 3 |
| 1.2.5.3 | 2.1 | Quality Assurance Plan - Final V2.0 | T2 + 3 |
| 1.2.5.4 | 2.1 | Configuration Management Plan - Draft V2.0 | T2 + 3 |
| 1.2.5.7 | 2.1 | Project Risk Management Plan - Draft V2.0 | T2 + 8 |
| 1.2.5.6 | 2.1 | Configuration Management Plan - Final V2.0 | T2 + 10 |
| 1.2.5.9 | 2.1 | Project Risk Management Plan - Final V2.0 | T2 + 14 |
| 1.2.5.10 | 2.1 | Software Development Plan - Final V5.0 | T2 + 37 |
| 1.2.1.2 | 2.2 | Summary Findings of Requirements Validation - Draft & Final V1.0 | T2 + 40 |
| 1.2.1.3 | 2.2 | Proposed Requirement Changes - Draft V1.0 | T2 + 42 |
| 1.2.3.2 | 2.7 | System Security Risk Assessment - Draft V3.0 | T2 + 45 |
| 1.2.1.5 | 2.2 | Proposed Requirement Changes - Final V1.0 | T2 + 49 |
| 1.2.5.12 | 2.1 | Software Development Plan - Final V5.0 | T2 + 49 |
| 1.2.5.13 | 2:1 | Software Development Plan - Draft V6.0 | T2 + 55 |
| 1.2.5.15 | 2.1 | Software Development Plan - Final V6.0 | T2 + 59 |
| 1.2.3.4 | 2.7 | System Security Risk Assessment - Final V3.0 | T2 + 77 |

ORDER NO. <u>DR-02-06-009</u>

(Attachment 1 - Statement of Work)

Exhibit 2 - NSTS Version 2 Deliverables

| WBS | Development Contract Task No. | Deliverables | Estimated delivery date offset from approximate start date of 7/1/2007 |
|----------|-------------------------------------|---|--|
| 1.2.2.2 | 2.4 | Database Design - Draft V3.0 | T2 + 94 |
| 1.2.2.4 | 2.4 | Database Design - Final V3.0 | T2 + 104 |
| 1.2.2.9 | 2.4 | Supplemental Design Document - Draft V3.0 | T2 + 112 |
| 1.2.2.8 | 2.4 | Design Models - Draft V3.0 | T2 + 113 |
| 1.2.2.5 | 2.4 | User Interface Design - Draft V3.0 | T2 + 115 |
| 1.2.2.10 | 2.4 | | T2 + 119 |
| 1.2.2.12 | 2.4 | Design Models, Supplemental Design Document and SAD - Final V3.0 | T2 + 133 |
| 1.2.2.7 | 2.4 | User Interface Design - Final V3.0 | T2 + 133 |
| 1.2.3.5 | 2.8 | System Security Plan - Draft V4.0 | T2 + 133 |
| 1.2.5.21 | 2.3 | Deployment Plan - Draft V1.0 | T2 + 134 |
| 1.2.5.23 | 2.3 | Deployment Plan - Final V1.0 | T2 + 134 |
| 1.4.3.3 | 2.12 | Operational Support Materials - Draft V3.0 | T2 + 135 |
| 1.2.5.16 | 2.1 | Software Development Plan - Draft V7.0 | T2 + 136 |
| 1.2.5.18 | 2.1 | Software Development Plan - Final V7.0 | T2 + 142 |
| 1.4.3.1 | 2.12 | System Support Materials - Draft V3.0 | T2 + 143 |
| 1.4.3.2 | 2.12 | Training Materials - Draft V3.0 | T2 + 147 |
| 1.3.7.2 | 2.1 | Software Development Plan - Draft V8.0 | T2 + 154 |
| 1.2.3.7 | 2.8 | System Security Plan - Final V4.0 | T2 + 162 |
| 1.3.7.4 | 2.1 | Software Development Plan - Final V8.0 | T2 + 162 |
| 1.3.4.1 | 2.1 | System Test Plan - Draft V1.0 | T2 + 163 |
| 1.4.3.5 | 2.12 | System Support Materials, Training Materials, and Operational Support Materials - Final V3.0 | T2 + 168 |
| 1.3.6.1 | 2.9 | Contingency Plan - Draft V3.0 | T2 + 177 |
| 1.3.2.2 | 2.6 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection, Construction Feature Set #1 | T2 + 185 |
| 1.3.4.3 | 2.1 | System Test Plan - Final V1.0 | T2 + 189 |
| 1.3.6.3 | 2.9 | Contingency Plan - Final V3.0 | T2 + 189 |
| 1.3.4.4 | 2.1 | System Test Scripts (Feature Set #1) | T2 + 217 |
| 1.3.3.2 | 2.6 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection, Construction Feature Set #2 | T2 + 273 |
| 1.3.7.5 | 2.3 | Deployment Plan - Draft V2.0 | T2 + 288 |
| 1.3.4.6 | 2.6 | Deployed System (Unit and integration tested), Interim Build for System Testing and ST&E Evaluation | T2 + 296 |
| 1.3.7.7 | 2.3 | Deployment Plan - Final V2.0 | T2 + 300 |
| 1.3.4.5 | 2.1 | System Test Scripts (Feature Set #2) | T2 + 302 |

(Attachment 1 – Statement of Work)

Exhibit 2 - NSTS Version 2 Deliverables

| WBS | Development Contract Task No. | Deliverables | Estimated delivery date offset from approximate start date of 7/1/2007 |
|---------|-------------------------------------|--|--|
| 1.4.5.4 | 2.9 | Contingency Test Report - Draft V2.0 | T2 + 324 |
| 1.4.5.5 | 2.9 | Contingency Test Report - Final V2.0 | T2 + 328 |
| 1.3.4.8 | 2.11 | System Test Evaluation Summary | T2 + 335 |
| 1.3.5.2 | 2.6 | Deployed System (Unit and integration tested), Interim Build for IV&V Inspection | T2 + 345 |
| 1.4.2.2 | 2.6 | Deployed System (Unit and integration tested), for IV&V Inspection | T2 + 392 |
| 1.4.6.4 | 2.6 | Deployed System Final Production Build | T2 + 392 |

Deliverables

- Requirements reports, extracted from IBM Rational RequisitePro in IBM Rational SoDA format or other formats;
- Earned value reports, utilizing Microsoft Office with IBM Rational Project Console as well as supporting any other earned value reporting tool that the NRC may adopt (e.g., Prosight);
- Report of findings and recommendations regarding development contractor product reviews; and
- Acceptance test plans, test cases and test scripts (using IBM Rational Robot or IBM Rational Functional Tester, and IBM Manual Tester), for each system build.

9.2 Task 2 – Web-based Licensing System (WBL) IV&V

The Contractor shall provide all support services described under Section 7.2, Project support. Near term WBL support will largely entail activities described Section 7.2.3, Project Controlling. Specifically, user acceptance testing, reviews for compliance with contractual stipulations regarding allowable methods for configuring and extending COTS functionality, functional gap analyses, and ST&E testing.

Deliverables

- Requirements reports, extracted from IBM Rational RequisitePro in IBM Rational SoDA format or other formats as directed by the NRC project manager;
- Earned value reports, utilizing Microsoft Office with IBM Rational Project Console as well as supporting any other earned value reporting tool that the NRC may adopt (e.g., Prosight);
- Report of findings and recommendations regarding development contractor product reviews; and
- Acceptance test plans, test cases and "manual" (IBM Rational Manual Tester) or automated (IBM Rational Robot or IBM Rational Functional Tester) test scripts, for each system build.

(Attachment 1 – Statement of Work)

9.3 Task 3 – IV&V for NMSS System Maintenance and IT Planning

The vast majority of legacy system IV&V support is devoted to the two newest systems, the GLTS and NSSDRS. The Contractor shall maintain the existing suite of automated regression test scripts for both the GLTS and NSSDRS. The existing regression test suites and associated test plans employ the IBM Rational Robot and Test Manager tools. These scripts are used as part of the NRC user acceptance testing process. With each maintenance release, the Contractor shall develop and add appropriate scripts to enhance the scope of the regression suite.

For all systems under maintenance, the Contractor shall provide all support services described in Sections 7.2.3, Project Controlling, and 7.3, Maintenance Support Activities.

The NRC does not anticipate requiring the Contractor to perform detailed code reviews on any of the mainframe-based legacy systems at this time. IV&V support for systems under maintenance other than the GLTS and NSSDRS is limited to user-perspective black box testing and replacement/integration planning.

In addition to IV&V in direct support of system maintenance, the Contractor shall conduct interviews and facilitate meetings as needed to gather information and develop periodic updates to the NMSS Integration Planning Study and to perform other IT-related studies. The NMSS Integration Planning Study document summarizes the state of the NMSS system portfolio and outlines alternate paths for potential system integration and replacement planning. Maintenance of the critical NMSS IT planning document can include investigation of systems owned by other NRC organizations, other agencies such as the Department of Energy and Department of Homeland Security, where interface issues and system replacement plans have a direct and significant effect on an NMSS system.

Deliverables

- Reports of findings related to investigation of reported system problems:
- Reports of recommendations regarding system enhancement feasibility studies;
- Report of findings and recommendations regarding system reviews;
- Acceptance test plans, test cases and "manual" (IBM Rational Manual Tester) or automated (IBM Rational Robot or IBM Rational Functional Tester) test scripts, for each system build;
- Revised editions of the NMSS Integration Planning Study; and
- Reports regarding feasibility studies, investigations of candidate technologies, and other studies.

9.4 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 (Microsoft Word) and ADOBE Acrobat Portable Document Format (PDF). At the same time, the Contractor shall provide 3 printed copies of each deliverable, and any IBM Rational tool or Microsoft files (e.g., Project or Excel), if applicable. The Contractor shall deliver draft and final versions of all deliverables required under this order, addressing NRC comments and concerns prior to delivery of the final version of each product.

(Attachment 1 – Statement of Work)

9.5 Deliverable Format and Submission

All documentation shall be submitted in draft form for comment to the NRC Project Officer.

The NRC will provide comments within ten federal work days of receiving each product. The Contractor shall address and incorporate into the final deliverable documentation any NRC comments received on the draft documentation within 3 business days of receipt of comments from the NRC Project Officer.

The NRC Project Officer will review all draft documents submitted as part of contract deliverables for conformity to the standards referenced in this Statement of Work. Any changes required after the first revision cycle shall be completed at no additional cost to the Government. The first revision cycle for a deliverable shall be acceptable to the Government when the Contractor submits a revised deliverable incorporating any comments and suggestions made by the NRC Project Officer on his review of the initial draft.

The following provisions also apply to all deliverables:

Reporting Requirements: In addition to meeting the delivery schedule in the timely submission of any draft and final reports, summaries, data and documents that are created in the performance of this 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

(Attachment 1 - Statement of Work)

(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.

Remedies: In addition to any civil, criminal and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions and or NRC directions may result in suspension, withholding or offsetting of any payments invoiced or claimed by the Contractor. If the Contractor intends to enter into any subcontracts or other agreements to perform this contract, the Contractor shall include all the above provisions in any subcontract or agreements.

Additional written reports may be required and negotiated.

9.6 Post Award Meeting

The Government will schedule a kick-off meeting within five (5) business days after contract award or upon security clearance authorization. The Project Officer will provide an agenda prior to the meeting. The Contractor shall participate in the meeting to establish process, procedures and priority of tasking. The Contracting Officer, the Project Officer, and the Project Officer's technical personnel will represent the Government. The Contractor shall have equivalent representation at the meeting.

9.7 Reporting Requirements

9.7.1 Weekly Progress Reports and Meetings

Following the kick-off meeting, the Contractor shall meet at least weekly with the Project Officer during the first month of the contract. Subsequent meetings will be scheduled on a regular basis. Meetings may be conducted via teleconference. Prior to each weekly status meeting, the Contractor shall submit a written report, summarizing major accomplishments, any notable variance from anticipated support schedules, and any emergent resource balancing issues.

9.7.2 Monthly Reports and Meetings

The Contractor shall provide a Monthly Status Report to the NRC Project Officer and the Contracting Officer by the 15th of each month. Each monthly report will summarize updates to the Project Management Plan and schedule (Work Breakdown Schedule), listing the reasons for changes, proposed adjustments and justification, cost and schedule impacts.

(Attachment 1 - Statement of Work)

The report shall also contain the contract number, and task; the period covered by the report; a summary of work performed during the reporting period for each task, including appropriate statistics and plans for the next reporting period; a discussion of project plans, problems, and the proposed corrective action, and analysis of the impact on other tasks within the scope of the SOW; and a status of expenditures under the order for the reporting period, cumulative expenditures to date, funds obligated to date, and balance of funds required to complete the order; any project risks and appropriate risk mitigation strategies especially those which require NRC management action; and a list of any deliverables completed during the prior month as well as deliverables scheduled for completion during the next month and the schedule and cost variances, if any, for those upcoming deliverables.

The Contractor shall attend status meetings on a monthly basis or as requested by the NRC Project Officer.

9.8 Project Management Plan

The Contractor shall maintain a detailed Project Management Plan using Microsoft Project and provide to the Project Officer a revised copy whenever the plan is revised, or as requested by the NRC Project Officer. Within two business days of a revision to the task sequence or a change of 15% or greater in the duration of a task, the Contractor shall revise the plan. Where near term NRC task specifications permit, the Contractor shall decompose the work breakdown structure, as represented by MS Project tasks, such that no task has a time span greater than 80 hours. In the project plan, the Contractor shall maintain separate tracking by contract task, either using upper level task groupings or sub-projects.

9.9 Independent Reporting

In providing Project Controlling support as detailed in Section 7.2.3, the Contractor shall specifically watch for project performance or deliverable quality issues that may introduce a significant risk to the NRC through project schedule, cost or quality. In cases where the Contractor detects such an issue, the Contractor shall notify the NRC Project Officer and Contracting Officer, in writing, of the issue, providing all available background and a summary of the perceived risk.

9.10 Auditing

It is essential that the NMSS IV&V support Contractor provide an objective and unbiased view. To support this, the Contractor shall be responsive to external efforts to audit the independence of the NMSS IV&V support function. Specifically, the Contractor shall participate in interviews and respond to questionnaires that may be required by OIS or other external organizations.

9.11 Non-disclosure Agreements

The Contractor shall be responsible for coordinating and executing all applicable site access and non-disclosure agreements with parties other than the Nuclear Regulatory Commission prior to commencement of the above mentioned activities, ensuring that project schedules are not impacted.

(Attachment 1 - Statement of Work)

SOW ENCLOSURE LIST

ENCLOSURE 1 - NRC FORM 187 - CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

ENCLOSURE 2 - MONTHLY PROGRESS REPORT FORMAT

ENCLOSURE 3 - BILLING INSTRUCTIONS FOR T&M AND/OR LABOR HOUR CONTRACTS

ENCLOSURE 4 - NRC PROJECT MANAGEMENT METHODOLOGY (PMM) VISION DOCUMENT

ENCLOSURE 5 - NRC PMM CPIC TIER QUESTIONNAIRE

ENCLOSURE 6 - NRC PMM IT INVESTMENT SCREENING FORM

ENCLOSURE 7 - PMM SYSTEM ARCHITECTURE DOCUMENT

ENCLOSURE 8 - PMM SYSTEM REQUIREMENTS SPECIFICATION

ENCLOSURE 9 - PMM BUSINESS CASE

ENCLOSURE 10 - NSTS V1 DEVELOPMENT SCHEDULE SUMMARY

ENCLOSURE 11 - NSTS V2 DEVELOPMENT SCHEDULE SUMMARY

ENCLOSURE 12 - DETAILED DESIGN STANDARDS

ENCLOSURE 13 - FUNCTIONAL TESTING STANDARDS

ENCLOSURE 14 - EARNED VALUE REPORTING TECHNICAL GUIDE

D.1 CLAUSES INCORPORATED BY REFERENCE

This contract will incorporate one or more clauses by reference, with the same force and effect as if they were given in full text, if they are not already included in the Offeror's GSA Schedule contract. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: http://www.arnet.gov/far

| NUMBER | TITLE | DATE |
|--|--|--|
| 52.232-22 52.227-14 52.224-1 52.224-2 | LIMITATION OF FUNDS RIGHTS IN DATAGENERAL PRIVACY ACT NOTIFICATION PRIVACY ACT | APR 1984 JUN 1987 APR 1984 APR 1984 |

D.2 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/Enclosures) 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.
- (I) 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.

D.3 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY ACCESS APPROVAL (FEB 2004)

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 over granting, denying, withholding, or terminating building access approvals for individuals performing work under this contract.

SECURITY REQUIREMENTS FOR 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. Such contractor personnel shall be subject to the NRC contractor personnel security requirements of NRC Management Directive (MD) 12.3, Part I and will require a favorably adjudicated Limited Background Investigation (LBI).

A contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by Security Branch, Division of Facilities and Security (SB/DFS). Temporary access may be approved based on a favorable adjudication of their security forms and checks. Final access will be approved based on a favorably adjudicated LBI in accordance with the procedures found in NRC MD 12.3, Part I. However, temporary access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of SB/DFS. Timely receipt of properly completed security applications is a contract requirement. Failure of the contractor to comply with this condition within the ten work-day period may be a basis to void the notice of selection. In that event, the Government may select another firm for award. When an individual receives final access, the individual will be subject to a reinvestigation every 10 years.

The contractor shall submit a completed security forms packet, including the SF-86, "Questionnaire for National Security Positions," and fingerprint charts, through the Project Officer to SB/ 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 (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope), as set forth in MD 12.3 which is incorporated into this contract by reference as though fully set forth herein. Based on SB review of the 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 under the provisions of MD 12.3. Any questions regarding the individual's eligibility for IT Level I approval will be resolved in accordance with the due process procedures set forth in MD 12.3 and E. O. 12968.

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) 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 of 30 days) to NRC Headquarters controlled buildings; or otherwise requires issuance of an NRC badge.

SECURITY REQUIREMENTS FOR 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. Such contractor personnel shall be subject to the NRC contractor personnel requirements of MD 12.3, Part I, which is hereby incorporated by reference and made a part of this contract as though fully set forth herein, and will require a favorably adjudicated Access National Agency Check with Inquiries (ANACI).

A contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by SB/DFS. Temporary access may be approved based on a favorable review of their security forms and checks. Final access will be approved based on a favorably adjudicated ANACI in accordance with the procedures found in MD 12.3, Part I. However, temporary access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of SB/DFS. Timely receipt of properly completed security applications is a contract requirement. Failure of the contractor to comply with this condition within the ten work-day period may be a basis to void the notice of selection. In that event, the Government may select another firm for award. When an individual receives final access, the individual will be subject to a reinvestigation every 10 years.

The contractor shall submit a completed security forms packet, including the SF-86, "Questionnaire for National Security Positions," and fingerprint charts, through the Project Officer to the NRC SB/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 (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope), as set forth in MD 12.3. Based on SB review of the 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 under the provisions of MD 12.3. Any questions regarding the individual's eligibility for IT Level II approval will be resolved in accordance with the due process procedures set forth in MD 12.3 and E.O. 12968.

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) 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 30 days) to NRC Headquarters controlled buildings; or otherwise requires issuance of an NRC badge.

CANCELLATION OR TERMINATION OF IT ACCESS/REQUEST

When a request for investigation is to be withdrawn or canceled, the contractor shall immediately notify the Project Officer by telephone in order that he/she will immediately contact the SB/DFS so that the investigation 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 in writing to the Project Officer who will forward the confirmation via email to the SB/DFS. Additionally, SB/DFS must be immediately notified 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 access under the NRC "Personnel Security Program."

D.4 SECURITY REQUIREMENTS FOR BUILDING ACCESS APPROVAL (MARCH 2006)

The contractor shall ensure that all its employees, including any subcontractor employees and any subsequent new employees who are assigned to perform the work herein, are approved by the Government for building access. Timely receipt of properly completed security applications is a contract requirement. Failure of the contractor to comply with this condition within the ten work-day period may be a basis to void the notice of selection. In that event, the Government may select another firm for award.

A contractor employee shall not have access to NRC facilities until he/she is approved by the Security Branch, Division of Facilities and Security (SB/DFS). Temporary access may be approved based on a favorable adjudication of their security forms. Final access will be approved based on favorably adjudicated background checks by the General Services Administration in accordance with the procedures found in NRC Management Directive 12.3, Part I. However, temporary access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of SB/DFS. When an individual receives final access, the individual will be subject to a reinvestigation every five years.

The Government shall have and exercise full and complete control over granting, denying, withholding, or terminating building access approvals for individuals performing work under this contract. Individuals performing work under this contract for a period of 180 days or more shall be required to complete and submit to the contractor representative an acceptable OPM Form 85P (Questionnaire for Public Trust Positions), and two FD-258 (Fingerprint Charts). Non-U.S. citizens must provide official documentation to the DFS/SB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than two years residency in the U.S. will not be approved for building access. The contractor representative will submit the documents to the Project Officer who will give them to the SB/DFS. SB/DFS may, among other things, grant or deny temporary unescorted building access approval to an individual based upon its review of the information contained in the OPM Form 85P. Also, in the exercise of its authority, GSA may, among other things, grant or deny permanent building access approval based on the results of its investigation and adjudication guidelines. This submittal requirement also applies to the officers of the firm who, for any reason, may visit the work sites for an extended period of time during the term of the contract. In the event that SB/DFS and GSA are unable to grant a temporary or permanent building access approval, to any individual performing work under this contract, the contractor is responsible for assigning another individual to perform the necessary function without any delay in the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. The contractor is responsible for informing those affected by this procedure of the required building access approval process (i.e., temporary and permanent determinations), and the possibility that individuals may be required to wait until permanent building access approvals are granted before beginning work in NRC's buildings.

The contractor will immediately notify the Project Officer when a contractor employee terminates. The Project Officer will immediately notify SB/DFS (via e-mail) when a contractor employee no longer requires building access and return any NRC issued badges to the SB/DFS within three days after their termination.

D.5 SITE ACCESS BADGE REQUIREMENT

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

D.6 BADGE REQUIREMENTS FOR UNESCORTED BUILDING ACCESS TO NRC FACILITIES (MARCH 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.

D.7 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.

D.8 SECURITY REQUIREMENTS FOR ACCESS TO CLASSIFIED MATTER OR INFORMATION (FEB 2004)

Performance under this contract will require access to classified matter or information (National Security Information or Restricted Data) in accordance with the attached NRC Form 187 (See List of Attachments/Enclosures). Prime contractor personnel, subcontractors or others performing work under this contract shall require a "Q" security clearance (allows access to Top Secret, Secret, and Confidential National Security Information and Restricted Data) or a "L" security clearance (allows access to Secret and Confidential National Security Information and/or Confidential Restricted Data).

The proposer/contractor must identify all individuals to work under this contract and propose the type of security clearance required for each. The NRC sponsoring office shall make the final determination of the type of security clearance required for all individuals working under this contract.

Such contractor personnel shall be subject to the NRC contractor personnel security requirements of NRC Management Directive (MD) 12.3, Part I and 10 CFR Part 10.11, which is hereby incorporated by reference and made a part of this contract as though fully set forth herein, and will require a favorably adjudicated Single Scope Background Investigation (SSBI) for "Q" clearances or a favorably adjudicated Limited Background Investigation (LBI) for "L" clearances.

A contractor employee shall not have access to classified information until he/she is granted a security clearance by the Security Branch, Division of Facilities and Security (SB/DFS), based on a favorably adjudicated investigation. In the event the contractor employee's investigation cannot be favorably adjudicated, their interim approval could possibly be revoked and the individual could be subsequently removed from the contract. The individual will be subject to a reinvestigation every five years for "Q" clearances and every ten years for "L" clearances.

The contractor shall submit a completed security forms packet, including the SF-86, "Questionnaire for National Security Positions," and fingerprint charts, through the Project Officer to SB/DFS for review and submission to the Office of Personnel Management for investigation. The individual may not work under this contract until SB has granted them the appropriate security clearance, read, understand, and sign the SF 312, "Classified Information Nondisclosure Agreement." The contractor shall assure that all forms are accurate, complete, and legible (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope), as set forth in MD 12.3. Based on SB review of the applicant's investigation, the individual may be denied his/her security clearance in accordance with the due process procedures set forth in MD 12.3 Exhibit 1, E. O. 12968, and 10 CFR Part 10.11.

In accordance with NRCAR 2052.204.70 cleared contractors shall be subject to the attached NRC Form 187 (See Section J for List of Attachments) 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 classified information; access on a continuing basis (in excess of 30 days) to NRC Headquarters controlled buildings; or otherwise requires NRC photo identification or card-key badges.

D.9 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.

D.10 CONSIDERATION AND OBLIGATION

- (a) The total estimated amount of this contract (ceiling) for the products/services ordered, delivered, and accepted under this contract is \$817,140.00.
- (b) The amount presently obligated with respect to this contract is \$305,000.00. This obligated amount may be unilaterally increased from time to time by the Contracting Officer by written modification to this contract. The obligated amount shall, at no time, exceed the contract ceiling as specified in paragraph (a) above. When and if the amount(s) paid and payable to the Contractor hereunder shall equal the obligated amount, the Contractor shall not be obligated to continue performance of the work unless and until the Contracting Officer shall increase the amount obligated with respect to this contract. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's sole risk.

D.11 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST

- (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.

4

- (1) Notwithstanding any other provision of this contract, during the term of this contract the contractor agrees to forgo 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, 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 therefore (solicited or unsolicited), which stem directly from the contractor's performance of work under this contract. Furthermore, unless so directed in writing by the contracting officer, the contractor may not perform any technical consulting or management support services work or evaluation activities under this contract on any of its products or services or the products or services of another firm if the contractor has been substantially involved in the development or marketing of the products or services.
- (1) If the contractor, under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in

the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

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

D.12 PROJECT OFFICER AUTHORITY

The Contracting Officer's authorized representative hereinafter referred to as the NRC Project Officer for this contract is:

Administrative Project Officer Technical Project Officer

Name: Organization: Carolyn Boyle

Mail Stop:

NMSS/PMDA/RASB T-8A23

Telephone Number: Email:

301-415-7818

CJB@nrc.gov

Joel Bristor

NMSS/PMDA/ITBPB

T-8A23

301-415-8037 JSB1@nrc.gov

- (a) 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.
- (b) Technical direction must be within the general statement of work stated in the contract. The NRC 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.
- (c) All technical directions must be issued in writing by the NRC Project Officer or must be confirmed by the NRC Project Officer in writing within ten (10) working days after verbal issuance. A copy of the written direction must be turnished 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.

- (d) The contractor shall proceed promptly with the performance of technical directions duly issued by the NRC Project Officer in the manner prescribed by this clause and within the NRC Project Officer's authority under the provisions of this clause.
- (e) If, in the opinion of the contractor, any instruction or direction issued by the NRC 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.
- (f) Any unauthorized commitment or direction issued by the NRC 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.
- (g) 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.
- (h) In addition to providing technical direction as defined in paragraph (b) of the section, the NRC 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 SB/DFS (via e-mail) when a contractor employee no longer requires access authorization and return of any NRC issued badge to the 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 the SB/DFS prior to access in accordance with MD 12.3.

D.13 KEY PERSONNEL (JAN 1993)

F 11 %

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

Tom Lourenco IV&V Tech. Spec. (Functional Expert) – Task 2 Support Lead (Team Leader)

Carmen Cheng IV&V Technical Specialist – Task 1 Support Lead

Brenda Austin IV&V Technical Specialist – Task 3 Support Lead

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.

D.14 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY

The NRC will provide a fully functional office environment for four Contractor personnel within the NRC headquarters complex. Within this office space, the NRC will provide four desktop workstations with all software needed to perform the work specified under this contract. The NRC will also provide four telephones and access to computer printing and photo copying equipment.

For any work performed at the Contractors offices, the Contractor shall provide necessary computer, software, and telephone equipment.

When performing work at software development contractor sites, the Contractor shall utilize the software and hardware being tested/evaluated or shall use Contractor-provided portable computers, as needed.

D.15 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.



D.16 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.usdoi.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.

D.17 PAYMENT FOR OVERTIME PREMIUMS

No overtime premiums are authorized for the performance of this contract.

D.18 CURRENT/FORMER AGENCY EMPLOYEE INVOLVEMENT (OCT 1999)

- (a) The following representation is required by the NRC Acquisition Regulation 2009.105-70(b). It is not NRC policy to encourage offerors and contractors to propose current/former agency employees to perform work under NRC contracts and as set forth in the above cited provision, the use of such employees may, under certain conditions, adversely affect NRC's consideration of non-competitive proposals and task orders.
- (b) There () are (X) are no current/former NRC employees (including special Government employees performing services as experts, advisors, consultants, or members of advisory committees) who have been or will be involved, directly or indirectly, in developing the offer, or in negotiating on behalf of the offeror, or in managing, administering, or performing any contract, consultant agreement, or subcontract resulting from this offer. For each individual so identified, the Technical and Management proposal must contain, as a separate attachment, the name of the individual, the individual's title while employed by the NRC, the date individual left NRC, and a brief description of the individual's role under this proposal.