

NRC DR 07 10 190

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES
1 2

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

BPA NO.

1. DATE OF ORDER 2/24/2010
2. CONTRACT NO. (If any) GS35F0068J
6. SHIP TO:
a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission

3. ORDER NO. NRC-DR-07-10-190
4. REQUISITION/REFERENCE NO. NSR-10-190
b. STREET ADDRESS Office of Nuclear Sec. & Inc. Response
Att: Roberto Figueroa, 301-415-6075
Mail Stop: T4-A57
c. CITY Washington d. STATE DC e. ZIP CODE 20555

5. ISSUING OFFICE (Address correspondence to)
U.S. Nuclear Regulatory Commission
Div. of Contracts
Att: H. (Eddie) Colón, Jr.
Mail Stop: TWB-01-10M
Washington, DC 20555
7. TO:
a. NAME OF CONTRACTOR PROJECT PERFORMANCE CORPORATION

b. COMPANY NAME
8. TYPE OF ORDER
a. PURCHASE b. DELIVERY
REFERENCE YOUR
Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.

c. STREET ADDRESS 1760 OLD MEADOW RD STE 400
d. CITY MC LEAN e. STATE VA f. ZIP CODE 221024331

9. ACCOUNTING AND APPROPRIATION DATA
011-15-123-133 R1181 2574 31X0200.011
OBLIGATE: \$530,000.00 (FFS Commitment #: NSR-10-190)
DUNS #: 622496230
10. REQUISITIONING OFFICE NSR
Nuclear Security and Incident Response

11. BUSINESS CLASSIFICATION (Check appropriate box(es))
a. SMALL b. OTHER THAN SMALL c. DISADVANTAGED g. SERVICE-DISABLED VETERAN-OWNED
d. WOMEN-OWNED e. HUBZone f. EMERGING SMALLBUSINESS
12. F.O.B. POINT N/A

13. PLACE OF a. INSPECTION b. ACCEPTANCE
14. GOVERNMENT B/L NO.
15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)
16. DISCOUNT TERMS NET 30

17. SCHEDULE (See reverse for Rejections) See CONTINUATION Page

Table with 7 columns: ITEM NO. (a), SUPPLIES OR SERVICES (b), QUANTITY ORDERED (c), UNIT (d), UNIT PRICE (e), AMOUNT (f), QUANTITY ACCEPTED (g). Row 1: The Contractor shall provide "EMERGENCY RESPONSE DATA SYSTEM (ERDS) OPERATION AND MAINTENANCE" in accordance with the following Enclosures and the terms of FSS GSA Contract No. GS-35F-0068J and this order. Enclosure 1 - PRICE SCHEDULE, Enclosure 2 - STATEMENT OF WORK & ATTACHMENTS 1-3, Enclosure 3 - OTHER TERMS AND CONDITIONS, Enclosure 4 - NRC FORM 187 (SECURITY/CLASSIFICATION REQUIREMENTS), Enclosure 5 - BILLING INSTRUCTIONS. PERIOD OF PERFORMANCE: 03/03/2010 - 03/02/2011 w/ 4 Option Years. CEILING: \$553,213.12. OBLIGATIONS: \$530,000.00. ORDER VALUE (including all options): \$4,135,791.37

18. SHIPPING POINT
19. GROSS SHIPPING WEIGHT
20. INVOICE NO.
21. MAIL INVOICE TO:
a. NAME DOI/NBC 7301 West Mansfield Avenue
b. STREET ADDRESS (or P.O. Box) Attn: Fiscal Services Branch - D2770 NRCPAYMENTS NBCCDENVER@nbc.gov
c. CITY Denver d. STATE CO e. ZIP CODE 20555
17(h) TOTAL (Cont. pages)
17(i) GRAND TOTAL
OBLIGATED AMOUNT: \$530,000.00

22. UNITED STATES OF AMERICA BY (Signature)
23. NAME (Typed) Heriberto Colón, Jr. Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (REV. 4/2006) PRESCRIBED BY GSA/FAR 48 CFR 53.213(f)

TEMPLATE - ADM001

BUSINESS REVIEW COMPLETE

APR 8 2010

ADM002

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

DATE OF ORDER *2/24/2010* CONTRACT NO. GS35F0068J ORDER NO. NRC-DR-07-10-190

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
						NTE
						NTE
						NTE

ACCEPTED:
Peter Dierbeck, Director of Contracts

PRINT NAME & TITLE

Peter Dierbeck 02/22/2010
SIGNATURE DATE

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

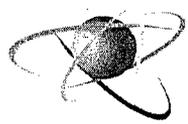
OPTION YEAR 2			
03/03/2012 - 03/02/2013			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal, Labor			[REDACTED]
24 X 7 Support (Firm Fixed Price)			
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Junior SW/Eng/Program Management SME	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal, 24 x 7 Support	FFP		\$ [REDACTED]
Subtotal, Labor + 24 x 7 Support			\$ [REDACTED]
Travel (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
Hardware/Software (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
MH&S (Material Handling and Subcontracts)	NTE	[REDACTED]	\$ [REDACTED]
G&A	NTE	[REDACTED]	\$ [REDACTED]
ODC's Subtotal	NTE		\$ [REDACTED]
Total - OPTION YEAR 2			\$ 589,385.80
OPTION YEAR 3			
03/03/2013 - 03/02/2014			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal, Labor			[REDACTED]
24 X 7 Support (Firm Fixed Price)			
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Junior SW/Eng/Program Management SME	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal, 24 x 7 Support	FFP		\$ [REDACTED]
Subtotal, Labor + 24 x 7 Support			\$ [REDACTED]
Travel (Not-to-Exceed Amount)	NTE		\$ 1 [REDACTED]
Hardware/Software (Not-to-Exceed Amount)	NTE		\$ 2 [REDACTED]
MH&S (Material Handling and Subcontracts)	NTE	[REDACTED]	\$ [REDACTED]
G&A	NTE	[REDACTED]	\$ [REDACTED]
ODC's Subtotal	NTE		\$ [REDACTED]
Total - OPTION YEAR 3			\$ 603,571.84

Total, All Tasks			
BASE YEAR 1			
03/03/2010 - 03/02/2011			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Subtotal, Labor			\$ [REDACTED]
24 X 7 Support (Firm Fixed Price)			
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Junior ITA Process Improvement SME	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Subtotal, 24 x 7 Support	FFP		\$ [REDACTED]
Subtotal, Labor + 24 x 7 Support			\$ [REDACTED]
Travel (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
Hardware/Software (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
MH&S (Material Handling and Subcontracts)	NTE	[REDACTED]	\$ [REDACTED]
G&A	NTE		\$ [REDACTED]
ODC's Subtotal	NTE		\$ [REDACTED]
Total - BASE YEAR			\$ [REDACTED]
OPTION YEAR 1			
03/03/2011 - 03/02/2012			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
System Engineer	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Senior Systems Engineer	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Subtotal, Labor			\$ [REDACTED]
24 X 7 Support (Firm Fixed Price)			
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Junior ITA Process Improvement SME	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]
Subtotal, 24 x 7 Support	FFP		\$ [REDACTED]
Subtotal, Labor + 24 x 7 Support			\$ [REDACTED]
Travel (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
Hardware/Software (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
MH&S (Material Handling and Subcontracts)	NTE	[REDACTED]	\$ [REDACTED]
G&A	NTE		\$ [REDACTED]
ODC's Subtotal	NTE		\$ [REDACTED]
Total - OPTION YEAR 1			\$ 1,097,239.20

OPTION YEAR 4			
		03/03/2014- 03/02/2015	
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal, Labor			
24 X 7 Support (Firm Fixed Price)			
Customer Support (24x7) - [REDACTED]			
System Support (24x7) - [REDACTED]			
Subtotal, 24 x 7 Support	FFP		\$ [REDACTED]
Subtotal, Labor + 24 x 7 Support			\$ [REDACTED]
Travel (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
Hardware/Software (Not-to-Exceed Amount)	NTE		\$ [REDACTED]
MH&S (Material Handling and Subcontracts)	NTE	[REDACTED]	\$ [REDACTED]
G&A	NTE	[REDACTED]	\$ [REDACTED]
ODC's Subtotal	NTE		\$ [REDACTED]
Total - OPTION YEAR 4			\$ 608,681.34
TOTAL - BASE YEAR AND OPTION YEARS 1-4			\$ [REDACTED]

OPTIONAL SOW TASKS 7.1 - 7.5			
7.1 - ADAPTIVE MAINTENANCE (Optional)			
	GSA Blended Rate	Estimated Hours	Total Estimated Cost
GSA IT Category	(Discounted)		
Group/Project Manager	\$		
Engineer	\$		
Senior Information Technology Specialist	\$		
Senior Engineer	\$		
Total - OPTIONAL SOW Task 7.1			
7.2 - NETWORK ALTERNATIVE (Optional)			
	GSA Blended Rate	Estimated Hours	Total Estimated Cost
GSA IT Category	(Discounted)		
Group/Project Manager	\$		
Software Project Manager	\$		
Senior Systems Developer	\$		
Senior Information Technology Specialist	\$		
Total -			
Travel (Not-to-Exceed Amount)	NTE		\$
Hardware/Software (Not-to-Exceed Amount)	NTE		\$
MH&S (Material Handling and Subcontracts)	NTE		\$
G&A	NTE		\$
Subtotal - ODC's	NTE		\$
Total - OPTIONAL SOW Task 7.2			
7.3 - ERDS TRAINING SERVER (Optional)			
	GSA Blended Rate	Estimated Hours	Total Estimated Cost
GSA IT Category	(Discounted)		
Group/Project Manager	\$		
Engineer	\$		
Senior Information Technology Specialist	\$		
Senior Engineer	\$		
Subtotal - Labor			
Travel (Not-to-Exceed Amount)	NTE		\$
Hardware/Software (Not-to-Exceed Amount)	NTE		\$
MH&S (Material Handling and Subcontracts)	NTE		\$
G&A	NTE		\$
Subtotal - ODC's	NTE		\$
Total - OPTIONAL SOW Task 7.3			

7.4 - ERDS RELOCATION (Optional)			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal - OPTIONAL SOW Task 7.4			
7.5 - PLAYBACK CAPABILITY (Optional)			
GSA IT Category	GSA Blended Rate (Discounted)	Estimated Hours	Total Estimated Cost
Group/Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Software Project Manager	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Systems Developer	\$ [REDACTED]	[REDACTED]	[REDACTED]
Senior Information Technology Specialist	\$ [REDACTED]	[REDACTED]	[REDACTED]
Subtotal - OPTIONAL SOW Task 7.5			
TOTAL OPTIONAL SOW Tasks 7.1 - 7.5			
TOTAL VALUE, including OPTION YEARS 1-4 and OPTIONAL TASKS 7.1 - 7.5		[REDACTED]	\$ 4,135,791.37
*PPC shall bill the Federal Government at the GSA Blended and Discounted rates in this PRICE SCHEDULE or PPC established GSA rates for each period for each GSA Labor Category, whichever are lower.			
**Reimbursement for Travel will be in accordance with Federal Travel Regulations.			



U.S. NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

U.S. NUCLEAR REGULATORY COMMISSION (NRC)
OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE (NSIR)

STATEMENT OF WORK

Emergency Response Data System (ERDS)
Operations and Maintenance

NRC-DR-07-10-190

Period of Performance

March 3, 2010 – March 2, 2011 with four (4) one-year option periods

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1. Background

The United States Nuclear Regulatory Commission's (NRC) mission is to regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. In order to carry out these important responsibilities, the NRC's Office of Nuclear Security and Incident Response (NSIR), is responsible for the effective operation of the Headquarters Operations Center (HOC). Headquarter Operations Officers, within the HOC, continuously (24x7) receive and document telephone notifications issued by nuclear power plant operators and fuel cycle facility operators. Written reports of these notifications are distributed outside the HOC for review and for various follow-up actions. A small number of these notifications trigger activation of the NRC Incident Response Plan (NUREG-0728, Rev. 4, April 2005), under which HOC response teams use the facilities in the HOC, Regional Offices, and nuclear power plant sites to fulfill the NRC mission of ensuring that the public is adequately protected.

The Emergency Response Data System (ERDS) is one of the Information Technology (IT) systems that is used in the HOC after a nuclear emergency is declared at a U.S. nuclear power plant. The system is Federally regulated through Title 10 *Code of Federal Regulations* (10 CFR) 50.72.A.4, which states that the licensee must activate ERDS within 1 hour after the licensee declares an emergency at an emergency class level of "alert" or higher (higher means the declaration of a "site area emergency" or "general emergency"), and it is a system that is designed to collect nuclear power plant performance and environmental data for analysis by NRC and State emergency response personnel. ERDS is also used in the HOC at times when the NRC and licensees participate in planned drills.

ERDS is currently implemented at NRC Headquarters (HQ), the four NRC Regions, and at the NRC Technical Training Center (TTC) and it is used over the web by 25 States who are qualified to use ERDS because their State boundary falls within the 10-mile Emergency Protective Zone (EPZ) of a specific plant or group of plants and because they have signed a Memorandum of Understanding (MOU) with the NRC. Additionally, NRC issued modems are installed at every operating nuclear power plant in the country (65 plants, 104 units) so that the required ERDS data can be transmitted.

During declared emergencies and planned drills, the ERDS receives an automated feed of digital data from nuclear power plant operators over long-distance analog telephone circuits. The type of information sent by the nuclear power plant allows the NRC to assess the overall adequacy of licensee actions, provide recommendations for mitigating accident consequences, and to protect the public. Data such as system temperatures, pressures, water levels, flows, radiation levels, wind speed, and direction are all transmitted by the plants.

System development of ERDS first began in 1988 and the system was later deployed at U.S. nuclear facilities regulated by the NRC between 1990 and 1993. Since that time, ERDS has remained a fully-operational system and is used regularly during emergencies and drills.

In 2006, NRC initiated a project to modernize ERDS utilizing a phased technical approach consisting of two phases called replacement and modernization.

The first phase, which was completed on March 2, 2008, was the first project iteration and was designed to replace all of the existing primary HW and SW components while still maintaining the existing operational requirements that licensees use to transmit ERDS plant data. This approach reduces risk and modernizes everything in the system except for the network used to transport plant data and the methods for testing and monitoring the system.

Modernization is the second phase and when complete will introduce an improved and secure communications network for transporting plant data and a modernized method for testing and monitoring the ERDS communications network. The new network will consist of Virtual Private Network (VPN) technology. VPN is a means of having a secure data tunnel between your local computer and a computer at a remote location.

The goal of this Statement of Work (SOW) is to obtain contractor support services to continuously maintain the current ERDS solution using both the current communication methodology as well as the VPN solution as it is incrementally implemented at the plants.

2. System Overview

Even though the ERDS first phase solution is completed, until the analog modems are phased out, licensees will continue to transmit their ERDS data using the NRC-provided analog modem connected to the Public Switched Telephone Network (PSTN) as they always have in the past. The hardware that comprises the ERDS solution consists of communications equipment from CISCO and servers and workstations from Dell. The core application software for the ERDS solution is OS/soft PI, a commercial-off-the-shelf product.

ERDS is a distributed system with four tiers.

- The remote tier (licensee system) collects the required power plant data points, establishes a modem connection through the PSTN, and transmits the required power plant data to the NRC.
- The NRC communications tier receives the data transmitted by the plants. These transmissions are received by one of several analog modems¹ installed in a CISCO 3825 Integrated Services Router. The router is capable of supporting up to 32 analog modems as well as Ethernet and serial interfaces. The analog modems answer and negotiate the telephone calls initiated by the plants. (In Phase II, as the plants begin to incrementally migrate to a modernized VPN Transmission Control Protocol/Internet Protocol (TCP/IP) network, transmission of data will be sent from a CISCO 5505 device located at the plants

¹Throughout this document, the term "analog modems" refers to legacy communication equipment and "modems" to the new CISCO communication equipment.

and received by a CISCO 5510 Adaptive Security Appliance and then transferred to the CISCO 3825 Integrated Service Router). TCP/IP is the basic communication language or protocol of the Internet. Once communication is successfully established, the data received from the plant will be transmitted via Ethernet to a software interface that resides on a system interface node. The software interface only accepts plant data that conforms to a pre-defined format. Once the software interface determines the data to be acceptable, the system interface node will transfer the data to the ERDS application servers.

- The ERDS application server tier, comprised of servers at HQ and Region IV, receives data from the system interface node so that NRC users can view the plant data in a "near real-time" manner. The data is transferred to the data historian element of the ERDS application. The data is presented to users through various plant graphic display screens. These display screens map to plant-specific data points. The contractor shall change the plant graphic display screens as requested. ERDS users can also create new ad-hoc display screens.
- The ERDS presentation tier, comprised of web servers at HQ and Region IV allow State users and select NRC staff to access and view ERDS data over the Internet. NRC users can access ERDS using either client software installed on an NRC workstation or through a web portal or the Internet. State users can only access ERDS through the Internet. There are approximately 426 users capable of accessing the system at any period. NRC users are required to provide a user name and password to access the system. State users are required to authenticate with a user ID, password, and a Secure Socket Layer (SSL) certificate.

3. Objectives

The primary objectives of this contract are:

- To maintain the existing ERDS hardware and software to ensure operability over the next 5 years (24X7).
- To ensure the ERDS remains stable, supportable, and continues to be fully functional in its current operational environment.
- To obtain skilled personnel that can provide expert-level operational, maintenance, and technical support of the ERDS.
- To manage the ERDS configuration and to keep system documentation updated.
- To maintain the ERDS in compliance with Federal IT Security, National Institute of Science and Technology (NIST), and NRC standards.
- To provide training
- To provide operations and maintenance support services for the ERDS VPN rollout to all NRC licensee sites.
- To maintain services for all communication equipment that will use the VPN network path once it is completed and that currently uses a dial up modem network.
- To provide support to all State users authorized to use ERDS.
- To maintain services to address Data Point Library changes.

- To maintain System and security administration and provide high-quality help desk support for ERDS users.
- To provide and maintain administrative and maintenance support of disaster recovery/backup system for continuation of operations.

The contractor shall provide the necessary personnel and management to meet the requirements described in this SOW.

4. Scope of Work

The scope of work for this contract includes all required and necessary tasks to maintain the ERDS and to ensure its operability for its users. It consists of, but is not limited to, daily system and security administrative activities, tasks, and activities for maintaining the ERDS equipment (hw and sw), operational users support, maintaining the System Security Plan and Authority-To-Operate (ATO) certification, periodic testing of the Security Test and Evaluation plan, and performing contingency testing and reporting.

The contractor shall provide operations and maintenance support services for the production and ERDS maintenance environments at NRC Headquarters in Rockville, Maryland. The contractor shall provide operations and maintenance support services for the production environments at Region I in King of Prussia, Pennsylvania, Region II in Atlanta, Georgia, Region III in Lisle, Illinois, Region IV in Arlington, Texas and at the Technical Training Center in Chattanooga, Tennessee. The contractor shall also support all State users authorized to use ERDS.

5. General Requirements

1. The contractor shall maintain availability of key personnel who are required to successfully perform the work required in this SOW. The contractor shall ensure that both key and backup personnel are committed in performing these services during the NRC's official hours of operation (7:00 A.M. – 4:30 P.M., Eastern Time, Monday through Friday, except on Federal holidays) and shall provide a within 1-hour response to any NRC calls. The contractor's on-site staff shall be located on the Headquarters campus in Rockville, Maryland.
2. In order to support NRC's mission to ensure adequate protection of public health and safety, the contractor shall become familiar with:
 - The functions, activities, and operational organization of the NRC HOC and Emergency Response Centers at NRC regional offices.
 - The design and architectural concepts of ERDS.
 - The hw and sw associated with ERDS.
 - The hw and sw design documents supporting ERDS.
 - The communications protocols used in conjunction with ERDS.
 - The communications interfaces used in conjunction with ERDS.

- The requirements for Federal Information Security Management Act (FISMA), NIST Standards, and applicable NRC management directives.
 - Change Control Board procedures.
3. The following rules of behavior shall be adhered to by the contractor's personnel at all times during the life of the contract.

The contractor shall:

- Report in writing all security incidents and potential threats and vulnerabilities involving the ERDS within 1 hour to the designated NSIR Information System Security Officer (ISSO) and NSIR Project Officer (PO).
- Protect system access authenticators from unauthorized use.
- Ensure that system media and system output are properly marked, controlled, and stored per NRC Management Directive (MD) 12.5.

The contractor shall not attempt to:

- Introduce malicious code into the ERDS or physically damage the network.
 - Bypass, strain, or test security mechanisms; any ongoing or regular bypass of security mechanisms will be approved in advance by the NSIR PO (i.e., business processes that require security waivers from Federal IT requirements).
 - Introduce or use unauthorized software, firmware, or hardware in the ERDS environment.
 - Assume the roles and privileges of others and attempt to gain access to information for which they have no authorization.
4. The contractor personnel shall adhere to document and implement all required security measures in their activities as set forth by the FISMA and NRC IT security requirements throughout the life of the contract. The contractor shall maintain the ERDS Security Plan and develop and maintain any other type of IT system security and operational documentation as requested by the NSIR PO to maintain the ATO certification of ERDS.
5. The contractor shall adhere to and apply the NRC Project Management Methodology (PMM) throughout the life of the contract. The PMM provides important system development guidance for all NRC IT programs across the life cycle from initial concept to retirement and defines key milestones, activities, and deliverables.
6. The contractor shall coordinate their activities with other NRC internal offices, such as the Office of Computer Security, the Office of Information Services (OIS), and the Office of Administration (ADM). In doing so, the contractor may be required to work with various NRC staff and other contractors subject to technical direction by the NSIR PO for this contract.

6. Tasks

The primary tasks associated with this SOW include:

- Contract Kickoff
- ERDS Phase II Support
- Monitor ERDS for the life of the contract
- Maintain ERDS for the life of the contract
- Manage ERDS for the life of the contract

The contractor shall perform these tasks in accordance with technical direction from the NSIR PO and following the guidance provided in the NRC PMM.

6.1 Contract Kickoff

The tasks described below are required to startup the ERDS maintenance contract.

6.1.1 The contractor shall host a kick-off meeting to be held within 10 days following contract award to introduce staff and to present a proposed project and transition plan. The agenda for this meeting will be agreed upon by the NSIR Project Officer and the contractor project manager prior to the meeting.

6.1.2 ERDS is comprised of a number of hardware and software components. Each of these components are purchased with individual maintenance and support contracts, typically provided by the manufacturers. The contractor shall become familiar with all of these support contracts. The contractor shall setup and host a meeting within 10 days following the kick-off meeting (see 6.1.1) with NRC to discuss the details about each equipment vendor support agreement and the proposed plans to maintain and extend the agreements when it becomes necessary. The contractor shall establish procedures and contact lists for each support agreement.

6.1.3 The contractor shall create and maintain both the Standard Operating Procedure (SOP) and maintain the Maintenance and Activity Log (MAL) throughout the life of the contract.

6.1.4 The contractor shall record their regular technical activities and describe any problems adversely affecting the overall system in an electronic MAL throughout the life of the contract. The MAL shall contain: date, time, person, activity, reason, and result. In support of this activity, the contractor shall create and provide the MAL within 10 days following the task order award. The contractor shall update the MAL within 1 hour of an incident occurring. The contractor shall make the log available to all designated NRC staff as needed.

6.1.5 The contractor shall follow the existing NSIR Change Management Charter throughout the life of this contract. Any diversion from the existing Charter shall be directed and approved in advance by the NSIR Project Officer.

6.2 ERDS Phase II Support

6.2.1 As the ERDS Phase II solution is incrementally implemented at the plants, the contractor shall provide maintenance support services associated with the installation and maintenance of a VPN solution for ERDS.

6.2.2 The contractor shall provide network support services 24 hours/day, 7 days/week. Tasks shall include monitoring the operational state of the network, resolving any communication problems, continuous automated tracking and weekly reporting on the condition of the network to the NSIR Project Officer electronically, and providing all maintenance and support services that may be necessary for all other service contracts (e.g. hardware and software vendor maintenance agreements) associated with operating the ERDS network.

6.3 Monitor ERDS

6.3.1 The contractor shall monitor the daily performance of the ERDS hardware to identify and resolve hardware problems that may arise. The contractor shall notify the NSIR PO electronically or by phone of any unusual activity that may represent potential threats, introduce adversity, or degrade system performance within 1 hour of occurrences. The contractor shall report to the NSIR PO electronically or by phone any hardware failure that is not resolved after 1 hour of occurrence. The term "ERDS hardware" includes all of the items listed below.

- Primary, Secondary, and Development ERDS Servers
- Dell Computers PowerEdge 6850 (7)
- Interface Nodes/Domain Servers
- Dell Computers PowerEdge 2950 (3)
- Web Servers
- Dell Computers PowerEdge 860 (2)
- Workstations
- Dell Computers Optiplex 745 (2)
- Tape Library with Autoloader
- Dell Computers PowerVault 124T (2)
- Color LaserJet Printer
- Dell Computers 3115N (1) and 3010N (1)
- Network Switch
- Dell Computers PowerConnect 2724 (2)
- Integrated Services Router
- Router CISCO 3825 (2)
- Power Supply PWR 675-AC-RPS-N1 (2)
- Universal Power Supply
- APC Smart-UPS 5000 with transformer (2)
- APC Smart-UPS 5000 (1)
- APC Smart-UPS 3000 (1)
- Rack
- Dell 42U Rack (4)

- Keyboard Monitor Mouse (KMM) console
- Dell 15 inch rack mount console (3)
- CISCO
- ASA5510 (4)
- ASA5505 (71)
- Unmanaged Switch

6.3.2 The contractor shall monitor the daily performance of the ERDS software to identify and resolve software problems that may arise. The contractor shall report to the NSIR PO electronically or by phone any software failure that is not resolved after 1 hour of occurrence. The term "ERDS software" includes all of the items listed below.

- Microsoft Windows 2003 for servers
- Microsoft Windows XP
- Microsoft (IIS) Internet Information Services 6.0
- Microsoft Visual Studio MSDN Profession Subscription
- Microsoft SharePoint Services 2007
- Microsoft ASP.Net 2.0
- Microsoft SQL Server 2005
- Microsoft Office Basic Edition 2003
- Symantec Backup Exec 11d
- Symantec Norton Anti Virus
- OS/soft PI Suite 3.4
 - PI Server
 - PI Interface
 - IT Monitor
 - RTWebParts

6.3.3 The contractor shall bring problems or potential problems affecting performance to the attention of the NSIR PO and Contracting Officer (CO) as soon as they are known. Verbal reports will be followed up with written reports when directed by the NSIR PO.

6.3.4 Throughout this contract, the contractor shall be required to update the ERDS hw and sw list applicable to this contract, within 30 days, when additions and/or deletions are made to the ERDS hw and sw list. Upon revision of the hw and sw list, an electronic copy shall be provided within 30 days to the NSIR PO for approval and a potential contract modification.

6.3.5 The contractor shall maintain a proactive security stance by accurately documenting routine and non-routine actions occurring on the system in the ERDS Maintenance and Activity Log (MAL). The contractor shall document all abnormal system malfunctions in the MAL. At a minimum, the information recorded in the ERDS MAL shall include the name of the affected device(s), the name of the contractor making the entry, the date of the malfunction, details about the abnormality, any actions taken by the contractor to remedy the situation, and whether or not further action is still required.

- 6.3.6 The contractor shall ensure that only authorized personnel are included in the privileged accounts. Privileged accounts are defined as Microsoft Active Directory administrative accounts, application administrative accounts, and system administrative accounts. The contractor shall provide the NSIR PO electronically an initial list of privileged account names and passwords 10 days after the kick-off meeting. The list shall be updated immediately upon any changes occurring to privileged accounts. The contractor shall provide the NSIR PO a revised list electronically within 3 working days of the changes. The contractor shall follow account access control procedures documented in the ERDS Operations Manual (OM).
- 6.3.7 The contractor shall verify twice weekly that the management workstation anti-virus definition files are up-to-date. The contractor shall record verification in the MAL on the day of verification. The contractor shall report to the NSIR PO electronically or by phone any software infections found.
- 6.3.8 The contractor shall monitor activity daily on user accounts and document all abnormal user account activities in the MAL within 1 hour. The contractor shall also report abnormal activities to the NSIR PO electronically within 1 hour of the mitigating risks.
- 6.3.9 The contractor shall follow the approval process documented in the ERDS OM for certificate issuance through OIS. The contractor shall issue all SSL certificates required for ERDS web access. The contract shall monitor and control all SSL certificates required for ERDS web access and network equipment.
- 6.3.10 The contractor shall review security sites for vulnerabilities such as: www.ciac.org, www.cert.mil, and all appropriate vendor sites weekly. The appropriate vendor sites shall include all sites for both the operating system and applications that are running on the server(s). These may include www.microsoft.com and others. The contractor shall identify applicable vulnerabilities and take appropriate mitigating steps.
- 6.3.11 The contractor shall monitor Redundant Array Independent Disks integrity and drive availability. Any hard drives that fail shall be replaced in accordance with the vendor support warranty and documented in the MAL.
- 6.3.12 The contractor shall follow the approval process and the procedure for changing passwords within applications documented in the ERDS OM when a privileged user permanently stops using ERDS.
- 6.3.13 The contractor shall conduct quarterly data transmission tests with the nuclear units at each nuclear power plant in the U.S. to verify the integrity of the communications link between NRC and the nuclear power plant. There are currently 104 nuclear units. Every plant shall be successfully tested once each quarter throughout the life of the contract. Also, each plant test that is conducted by the contractor in any given quarter is not considered complete until the quarterly plant test is fully successful.
- 6.3.14 The contractor shall conduct the ERDS quarterly tests as defined in the ERDS Quarterly Test Standard Operating Procedure (SOP). The contractor shall conduct tests of ERDS

communications at plants between Tuesdays and Thursdays weekly from 8:00 A.M. to 4:00 P.M. (Monday and Friday shall be reserved for re-testing, if necessary). The contractor shall update the ERDS Quarterly Test SOP quarterly or as needed and shall provide the NSIR PO an updated copy electronically within 10 days when changes occur.

- 6.3.15 The contractor shall assist the licensees in resolving communication issues in order to allow for successful completion of the ERDS quarterly tests.
- 6.3.16 For any quarterly tests that were not successful due to matters within the control of the licensees, the contractor shall follow-up with licensees within 1 month to ensure adequate resolution of all identified problems. The contractor shall notify the NSIR PO electronically if the problem has not been resolved within 30 days of identification.
- 6.3.17 The contractor shall maintain a quarterly testing log to document the details of each test conducted in a given quarter. At a minimum, the log shall contain the name of the individuals contacted at each facility, the date and time they were contacted, the date that the test was conducted, and the results of the tests. The contractor shall provide an electronic copy of the quarterly report to the NSIR PO that documents the results of each test conducted during a given quarter and provide an overall percentage of the success and failure rates for each nuclear unit. This report shall be provided to the NSIR PO within 10 days after the quarterly testing is complete throughout the life of the contract.

6.4 Maintain ERDS

The tasks described below are required to maintain ERDS.

- 6.4.1 The contractor shall maintain the ERDS hw to ensure continual and reliable system operation. The term "maintain" includes all of the various activities associated with repair, security management and operation, system modification(s), and enhancement of the ERDS which includes all hw.
- 6.4.2 The contractor shall maintain the ERDS sw to ensure continual and reliable system operation. The term "maintain" includes all of the various activities associated with repair, security management and operations, system modification(s), and enhancement of the ERDS sw. The contractor shall also conduct a weekly review of all information provided by each of the ERDS sw manufacturers related to potential problems or defects. The contractor shall apply corrective sw updates within 10 working days.
- 6.4.3 The contractor shall maintain operability of the ERDS hw and sw required for the successful reception, storage, use, and retransmission of ERDS data provided by each plant.
- 6.4.4 The contractor shall evaluate current ERDS display screens to ensure user-friendly interfaces and shall make recommendations to the NSIR PO for improvements electronically. Once the NSIR PO approves the recommendations issued by the contractor, the contractor shall update the display screens.

- 6.4.5 The contractor shall maintain and update the ERDS user interface software including the operability of the software which provides the capability to display ERDS data in the NRC HOC, located in Rockville, Maryland, as well as at the Regional Emergency Response Centers, at site team locations (nuclear power plant sites), and other locations (State Government emergency response facilities, NRC Regional Offices located in King of Prussia, Pennsylvania; Atlanta, Georgia; Lisle, Illinois; Arlington, Texas; and the Technical Training Center in Chattanooga, Tennessee) in accordance with the design specifications contained in the ERDS OM. The contractor shall ensure that the appropriate security monitoring infrastructure is in place and maintained. The contractor shall provide security management monitoring and reporting to the ERDS ISSO and the NRC Computer Security Incident Response Team in accordance with MD 12.5 as appropriate.
- 6.4.6 Any changes to the ERDS that are approved by the NSIR PO, tested and instituted by the contractor, shall be implemented in such a manner as not to disrupt ERDS operability with all of the existing plants.
- 6.4.7 The contractor shall evaluate system or application patches as appropriate. Only after approval in accordance with the change control procedures in the NSIR Change Control Board Charter and testing in the ERDS maintenance environment shall the contractor install the patch on the production system.
- 6.4.8 The contractor shall maintain the development system that replicates ERDS and shall provide a platform for sw development and troubleshooting for ERDS as required.
- 6.4.9 The contractor shall maintain an operational set of 12 spare plant modems to resolve reported modem hw failures at nuclear power plants. There are currently six analog modems on hand. The remaining six modems will be procured during the Phase II transition to VPN and subsequently provided to the contractor.
- 6.4.10 The contractor shall produce daily incremental tape backup of all the ERDS servers and a full backup once a month. Incremental tape backup shall be stored in the NRC designated space. The contractor shall provide a full backup tape monthly to OIS for storage in a geographically remote location.
- 6.4.11 The contractor shall ensure that the data is recoverable from the backup tapes. The contractor shall perform verification tests to restore several different files from the tapes to temporary directories on various servers. Temporary files shall be deleted after verification is complete. Verification tests of the backup system shall be performed quarterly and shall be documented in the MAL. Procedures for the data recovery "verification" test shall be developed 10 days after the kick-off meeting, updated quarterly, and provided by the contractor to the ERDS ISSO and NSIR PO electronically within 10 days of an update to the procedure.

- 6.4.12 The contractor shall review the ERDS audit logs located in the Audit Manager of the Administration Console weekly. The contractor shall look for any unusual activity, in particular denied logins, review the issues and notify NSIR PO and the ERDS ISSO electronically or by phone within 1 hour of identification.
- 6.4.13 The contractor shall maintain the list of ERDS active users. The contractor shall register users and remove all inactive users. In conformance with NIST standards (e.g. Special Publication 800-53), separation of duties through system access authorization must be assured between a system administrator and a system security administrator.
- 6.4.14 The contractor shall work on all required activities in response to the ERDS Plan of Action and Milestones (POA&M) in order to maintain an ATO for ERDS. The POA&M process is an NRC tool for tracking the mitigation of cyber security program and system-level weaknesses. The contractor shall resolve within FISMA guidelines any identified vulnerabilities entered into the POA&M worksheet by NRC security personnel as a result of NRC quarterly security scanning.
- 6.4.15 The contractor shall support all of the existing security documentation and testing requirements for ERDS as set forth by the FISMA and NRC MD 12.5 throughout the life of the contract. The contractor shall maintain the ERDS Security Plan and develop any other type of system-related documentation as requested by the NSIR PO.
- 6.4.16 The contractor shall apply routine plant data point library (DPL) changes on all systems installed at HQs and Region IV on an as-needed basis throughout the life of the contract to ensure data integrity. Data points are tags associated with the nuclear unit equipment at the licensees (e.g. water pumps, steam generator, wind speed, etc). These tags are replicated in ERDS as graphical display of the equipment. The changes are issued by licensees and will be provided to the contractor by the NSIR PO at an estimated frequency of four per quarter. The contractor shall successfully test and document the test results in a test environment prior to deploying changes to the ERDS production environment. The contractor shall also update the DPL Test Plan whenever a change is made.
- 6.4.17 The contractor shall visit the ERDS Region IV backup site quarterly in order to perform maintenance activities as necessary. The contractor shall provide a site visit summary report to the NSIR PO electronically 10 days after each site visit. This report will provide details on the condition of the equipment and make recommendations the contractor deems necessary.
- 6.4.18 Disaster Recovery

The contractor shall be responsible for taking the following actions in case of a partial or total interruption of the ERDS operation as a result of a failure due to an unforeseen event.

- The contractor shall determine the causes and the extent of the damage to the ERDS and submit a remediation plan of action electronically to the NSIR PO within 3 days following the incident.

- If purchases are necessary, the contractor shall prepare a list of accredited hw and sw needed and provide it to the NSIR PO electronically within 3 days.
- Once hw/sw is replaced or (re-)installed, the contractor shall perform all necessary functional tests to ensure that the system is functioning properly.
- The contractor and the NSIR PO will determine what, if any, contents on the ERDS must be restored from the backup device/tape.
- Once the data is restored, the contractor shall test the data to ensure proper data restoration.
- The contractor shall make the restored content available to all ERDS users 3 days after restoration.
- All backup and recovery efforts shall be documented in the MAL within 3 days of the backup/restore event.
- The contractor shall follow and maintain the disaster recovery procedures documented in the ERDS contingency plan

6.5 Manage ERDS

6.5.1 The contractor shall maintain and revise the ERDS Administrator and Operations Manual, the Operating System Configuration Guide, the ERDS Configuration and Installation Guide, the ERDS User's Manual, the ERDS Contingency Plan, and all existing system drawings annually or as system changes occur. The documentation of all sw shall be in accordance with the criteria described in NRC MD 2.8. The contractor shall provide to the NSIR PO all revised documents electronically in draft format for concurrence and approval of the revision within 30 days.

6.5.2 System Documentation Reference and Update

The contractor shall make the necessary changes or updates to existing system documentation annually at the request of the NSIR PO and store documents in the NRC designed repository. Some of these changes or updates may be as a result of required system configuration changes or actions taken in response to the ERDS POA&M in order to maintain the system ATO.

Every time a change or update is to be made in an existing system document, the following steps shall be followed through by the contractor:

- Necessary changes are made in draft form and submitted electronically to the NSIR PO.
- Approved changes are added to the appropriate document by the NSIR PO.

6.5.3 The contractor shall perform work under this contract in such a manner to assure ERDS availability at 97.99% quarterly throughout the life of the contract. ERDS availability will be evaluated by the NRC for every month but assessed using the availability formula below on a quarterly basis.

ERDS availability shall be defined as:

$$\frac{\text{System operable time}}{\text{System operable time} + \text{System inoperable time}}$$

This formula, with the applicable monthly figures filled in, shall be provided by the contractor in the last monthly technical progress report of each quarter.

ERDS shall be considered operable any time the ERDS hw and sw performs the following core functions:

1. Ability to receive data from up to 24 reactor units simultaneously while ERDS Phase I is in operation and 104 units simultaneously after ERDS Phase II is fully implemented.
2. Store all received power plant data.
3. Support display of all power plant data using the NRC approved user and web interface.
4. Archive nuclear power plant data for further review.
5. Playback archive power plant data.

ERDS shall not be considered inoperable when the cause for the system failure is outside the scope of this contract (e.g., extended power failure, loss of telephone service, agency network down time, licensee system down time, etc.). NRC scheduled maintenance down times will not be counted against the system's operable time.

6.5.4 Failure to achieve system availability of 97.99% as assessed on a quarterly basis will be subject to the following deductions:

97.99%-97.00%	1%	deduction of the total of the last monthly invoice per quarter
96.99%-96.00%	3%	deduction of the total of the last monthly invoice per quarter
95.99%-95.00%	5%	deduction of the total of the last monthly invoice per quarter
94.99% or below	10%	deduction of the total of the last monthly invoice per quarter

6.5.5 The contractor shall respond to telephone calls within 1 hour of ERDS failures. Performance standards for call response times outside the 1 hour threshold are deducted as follows:

Response Time	Deduction
1 - 2 hours	\$200.00
2 - 3 hours	\$400.00
3 or more hours	\$600.00

6.6 Equipment Refresh

- 6.6.1 During the life of this contract, it is envisioned that some of the equipment will need to be refreshed due to the age of the operating system. The contractor shall develop a comprehensive refresh plan 20 days after exercising the optional period one. The contractor shall define all tasks necessary to effectively replace the ERDS hw equipment. This plan shall include, but not be limited to, identification of all components that need to be refreshed, alternative strategies for refresh/replacement, continuation of operations, and coordination planning around HOC activities. The contractor shall follow the procurement responsibility as stated in Section 13, "Procurement Responsibilities for ERDS Hardware."
- 6.6.2 After the completion of the equipment refresh, the contractor shall update all documentation impacted by the equipment refresh within 30 days. The document set shall include, but is not limited to, design, configuration, and maintenance documentation of refreshed equipment.

6.7 Transition

- 6.7.1 In the event that the follow-on contract is awarded to a firm other than the incumbent contractor, the contractor shall be required to work side by side with the incumbent during a transition period. This transition period shall take place during the term of the current contract. The NRC will determine the length of the transition period and will notify the contractor of the time period of the transition 10 days prior to its commencement.

7. Optional Tasks

The following tasks are optional and may be exercised by the NRC at any time during the life of the contract.

7.1 Adaptive Maintenance

- 7.1.1 The contractor shall provide adaptive maintenance for ERDS - hw/sw enhancements - which will incrementally improve functionality and security. NSIR's change control standards will be used to prioritize the change requests associated with these maintenance activities. Adaptive Maintenance shall include, but not be limited to, the ERDS OS/soft PI interface, website, and reports.

7.2 Network Alternative

- 7.2.1 The contract shall analyze feasible technical and commercial alternatives to meet the NRC need to provide an alternative data and voice path for the end-to-end connectivity of the 104 licensee sites to the NRC HQ and Region IV buildings. The results of these studies shall show a range of technical alternatives based on cost/benefit/risk, technical capability, and scheduled availability. This study shall identify and recommend the solution that best matches the NRC requirements. The contractor shall, as necessary, include technical

alternatives that address Internet Protocol Version 6 (IPv6) requirements and integration if the NRC IT infrastructure transitions to IPv6 during the contract period of performance.

7.2.2 The contractor shall produce a report that provides recommended solutions. The report shall contain a discussion of each solution proposed and give the pros and cons as well as cost of each solution. The contractor shall rank each solution from most to least viable. The contractor shall identify all components of the architecture including hw and sw. The contractor shall develop a logical view of the system as components and describe the interfaces between them as well as any external system interfaces. The contractor shall provide the study to the NSIR PO electronically 30 day after the optional task is exercised.

7.2.3 The contractor shall implement and demonstrate a satellite architectural prototype as proof of concept to clarify requirements and reduce technical and requirements risk. The prototype cannot be connected to any NRC production system without approval from the NRC. The prototype shall be demonstrated to the NSIR PO and staff from NSIR for evaluation and feedback.

7.2.4 The contractor shall develop and provide to the NSIR PO electronically a project plan 15 days after the solution acceptance. The contractor shall perform all necessary tasks to implement the NRC selected solution.

7.3 ERDS Training Server

7.3.1 The contractor shall provide and install all of the necessary hw and sw required to produce a fully functioning ERDS training server that mirrors the production environment.

7.3.2 The contractor shall validate the ERDS training server against the ERDS production environment once the installation is complete to determine that the system is functioning properly.

7.3.3 The contractor shall provide a complete demonstration of the training server to the NSIR PO and staff members from NSIR. The demonstration provided shall encompass all functional aspects of the working system.

7.3.4 The contractor shall provide a complete set of documentation. The document set should include, but is not limited to, design, configuration, and maintenance documentation.

7.4 ERDS Relocation

7.4.1 The contractor shall develop a comprehensive plan to define all tasks necessary to effectively relocate the ERDS hw equipment to an alternate site. This plan shall include, but not be limited to, identification of all components, continuation of operations, and coordination planning around HOC activities. The Plan shall be provided to the NSIR PO 10 days after exercising this optional task.

7.4.2 The contractor shall execute all the necessary steps to breakdown the existing equipment at the current location and reassemble the equipment at the new location.

- 7.4.3 The contractor shall test ERDS once the relocation is complete to determine that the system is functioning properly and meets system-up time requirements.
- 7.4.4 Once the ERDS has been relocated and reassembled, the contractor shall provide a complete demonstration to the NSIR PO and staff members from NSIR. The demonstration provided should cover all functional aspects of the working system.
- 7.5 Playback Capability
 - 7.5.1 The contractor shall develop and install all of the necessary sw to produce the capability for continuous playback of ERDS data files received from the NRC regulated plant units at an NRC selectable frequency.
 - 7.5.2 The contractor shall validate the playback capability once the installation and development is complete to determine that the system functions properly.
 - 7.5.3 The contractor shall provide a complete demonstration of the playback capability to the NSIR PO and staff members from NSIR once the system is successfully installed and validated. The demonstration provided shall encompass all functional aspect of the working system.

8. Meetings and Reporting Requirements

8.1 Meetings

The contractor shall attend system review and technical meetings to discuss such topics as: schedule, budget, resources, equipment, goals, milestones, or anything else that may need attention by the NSIR PO. The frequency of these meetings will be agreed upon by both the NSIR PO and contractor immediately following contract award. However, at a minimum, there will be at least one system review meeting conducted per quarter throughout the life of the contract.

The contractor shall be requested by the NSIR PO to document/produce minutes of these meetings.

8.2 Monthly Status Report

- 8.2.1 The contractor shall provide a monthly Technical Progress Report to the NSIR PO and the CO. This report shall meet the requirements of NRCAR [Nuclear Regulatory Commission Acquisition Regulation] §2052.211-71

In addition, the Technical Progress Report shall include the following:

- Staffing Plan and changes.
- Current tasks and deliverable status. This should include the cumulative and current hours of each labor category spent on each task.
- Identified risk and mitigation plan.

8.2.2 The contractor shall provide a Monthly Financial Status Report to the NSIR PO and CO. The report is due the 10th of each month and must identify the title of the contract, the contract number, Job Code Number (JCN), project manager, the contract period of performance, and the period covered by the report. Each report shall meet the requirements of NRCAR §2052.211-72.

8.2.3 The contractor shall submit a monthly invoice to NRC by the 15th of the next following month.

8.2.4 The contractor shall prepare all documentation in accordance with the Presidential Memorandum on Plain Language (63 FR 31883, June 10, 1998). All documentation shall include a "Level 2" technical edit to correct the following problems:

- Misspelled words
- Subject/Verb disagreement
- Incomplete sentences
- Punctuation errors
- Typographical errors
- Poor word choice or usage
- Poor syntax
- Overuse of passive voice
- Faulty parallelisms
- Misplaced modifiers
- Incomplete comparisons
- Inconsistent/incorrect use of symbols, terms, acronyms, and/or abbreviations
- Wordiness
- Overly complex sentences
- Errors in figures and tables, including inconsistencies with the text
- Use of references not available in the public domain

8.3 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 reports, summaries, data, and related documents to include correcting, deleting, editing, revising, modifying, formatting, and supplementing of the information contained therein at no additional cost to the NRC. Deliverables will not be deemed accepted or completed

until the NRC's directions are fully met. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor shall provide a revised draft within 10 working days for rejected deliverable. 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.

8.3.1 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.

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. The contractor shall clearly mark sensitive unclassified non-safeguards information (SUNSI), sensitive, and safeguards information to include for example Official Use Only and Safeguards Information on any reports, documents, designs, data, materials, and written information as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet forms (e.g. NRC Form 461 Safeguards Information and NRC Form 190B Official Use Only) in maintaining these records and documents. The contractor will ensure that sensitive and safeguards information is handled appropriately, maintained, and protected from unauthorized disclosure. The contractor shall comply with the requirements to mark, maintain, and protect all information including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954, as amended, its implementing regulations (10 CFR 73.21), and NRC Management Directive and Handbook 12.6.

9. Deliverables

The contractor shall be required to comply with the delivery schedule stated below. All deliverables shall be formatted and prepared using Microsoft Word for documentation and reports; Microsoft PowerPoint for briefings; and Microsoft Project for schedules.

The contractor shall provide the following deliverables:

Item	Deliverable	Estimated Delivery Schedule (Calendar days unless otherwise noted)
6.1.2	Kick-Off Meeting; proposed Project and Transition plan	<u>10</u> days after contract award
6.1.2	Final Project and Transition Plan	<u>10</u> days following the Kick-off meeting
6.1.4	Maintenance and Activity Log	<u>10</u> days after the task order award and within 1 hour of occurrence
6.1.4	Standard Operating Procedure (SOP)	<u>90</u> days after the contract award and <u>10</u> days after any changes
6.2.18	Remediation plan of action	Within 3 days following the incident
6.3.3	Hardware and Software List	Within <u>30</u> days of change occurring
6.3.5	Initial Privileged Account List and Password	10 days following the Kick-off meeting
6.3.5	Privileged Account List and Password	Within 3 working day after changes
6.3.13	Quarterly Test SOP	Within <u>10</u> days of change occurring
6.3.16	Quarterly Test Report	<u>10</u> days after completion of Quarterly testing
6.4.10	Full backup	<u>5</u> working days of the following month
6.4.11	Draft Data Recovery Verification Test Procedures	<u>10</u> days after Kick-off Meeting
6.4.11	Data Recovery Verification Test Procedures	<u>10</u> days after update occurs
6.4.16	DPL Test Plan	Within <u>10</u> days of occurrence
6.4.17	Site Visit Summary Report	<u>10</u> days after Site Visit
6.4.18	Remediation Plan of Action	Win in <u>5</u> day of following incident
6.5.2	System documentation	Within <u>30</u> days of changes
6.6.2	Comprehensive ERDS Refresh Plan	<u>20</u> days after exercising option period 1
7.2.4	Network Alternative Analysis Report	<u>30</u> days after exercising task

Item	Deliverable	Estimated Delivery Schedule (Calendar days unless otherwise noted)
7.2.4	Prototype Demonstration	10 days after prototype completion
7.2.4	Project Plan for Implementation of Network Alternative	15 days after NRC acceptance of the solution
7.4.4	Comprehensive Relocation Plan	15 days after exercising task
7.4.4	Demonstration	5 days after completion of task 7.4.3
8.1	Meeting minutes and presentation	With 5 working days of the meeting
8.2.1	Monthly Technical Progress Report	10 th day of each Month
8.2.2	Monthly Financial Report	10 th day of each Month

Any deliverables rejected by the NSIR PO shall be revised and resubmitted within 5 working days of notification from the PO that the delivery was rejected.

10. Replacement Parts/New Parts

The contractor shall acquire any replacement parts that are necessary (HW or SW) to resolve a problem on system failure. Please refer to Section 13, Procurement Responsibilities, for details on how procurements must be handled throughout the life of the contract.

11. Training

11.1.1 The contractor shall provide the following ERDS user training at dates and times mutually agreed to by the NRC PO and the contractor:

11.1.2 The contractor shall provide up to 6 training sessions per year. It is estimated that one training session will be held at each of the following locations:

NRC Operations Center - Headquarters (Rockville, Maryland.)
Regional Offices (I - King of Prussia, Pennsylvania; II - Atlanta, Georgia; III - Lisle, Illinois;
IV - Arlington, Texas)
Technical Training Center (Chattanooga, Tennessee)

Each training session shall consist of 8 hours of training for (up to 25 individuals, which consists of up to 10 ERDS operators and up to 15 State ERDS operators from the regional office where the training is taking place).

11.1.3 The contractor shall provide training materials and formal completion certificates for all attendees and training sessions provided. The contractor shall also be required to provide up to 12 2-hour webinar training sessions annually at dates and time mutually agreed to by

the NSIR PO and the contractor.

11.1.4 The contractor shall update the training materials as needed. The updated training materials shall be presented to the NSIR PO for approval prior to implementation.

12. Travel

It is anticipated that the contractor shall be required to travel to the Region IV site four times each year for maintenance support.

Travel may be expected to the Regional Offices (King of Prussia, Pennsylvania; Atlanta, Georgia; Lisle, Illinois; Arlington, Texas), Technical Training Center (Chattanooga, Tennessee), and State emergency offices.

Travel under this contract will be reimbursed in accordance with Federal Travel Regulations. For anticipated task related travel, the contractor shall submit travel requests in writing to the NSIR PO for prior approval, a minimum of 3 working days before the requested date of the travel, and include a breakdown of estimated travel costs.

If travel is expected to exceed the not-to-exceed amount stated in the contract Price Schedule and/or is unanticipated, the contractor shall submit a travel request, including estimated travel costs, in writing to the NSIR Contracting Officer and must obtain prior written approval from the Contracting Officer.

Travel for training and operation and maintenance support to Region IV is estimated to be one-person 3-day trips each.

13. Procurement Responsibilities for ERDS Hardware/Software (HW/SW) - GSA Federal Supply Schedule (FSS) items only

13.1 Contractor Purchase Request authorization

13.1.1 The contractor shall submit a Purchase Request Authorization (PRA) to the NSIR PO for approval in support of the requirements under this order. Each PRA shall include the following information to include but not limited to:

- PRA number assigned by the contractor
- Vendor item description
- Unit prices
- Total prices
- Cumulative Total
- Quotes solicited and obtained from other known sources

13.1.2 The contractor shall be responsible for procurement of hardware/software for the ERDS by requesting competitive quotations from at least three approved **GSA FSS** sources, placing orders to the vendors for delivery, receipt, and deployment of the HW/SW. **All HW/SW purchases by the contractor are subject to prior written approval by the NSIR PO**

and the NRC CO. The NRC/ADM Division of Contracts will provide the necessary assistance and guidance to the contractor regarding procurement of the hardware.

13.1.4 Upon receipt of the purchase, the NSIR PO shall be notified and requested to acknowledge receipt. A PRA shall be filed with the NRC PO when the order is placed.

13.1.5 The Contractor will be reimbursed for materials, equipment, shipping charges, and contractually authorized mark-up in the PRICE SCHEDULE of this order for these other direct costs upon receipt of a properly executed invoice.

14. Contractor Personnel Skill Set Requirements

14.1.1 The contractor staff shall possess and demonstrate experience and knowledge to meet the following skill set requirements:

- Extensive experience with Microsoft Windows server software.
- Extensive experience with Microsoft Active Directory.
- Extensive experience with Microsoft SharePoint Services
- Extensive experience with Microsoft Internet Information Services (IIS)
- Experience with OSIsoft PI Interface
- Experience with network design, network protocols, CISCO routers
- Experience with Microsoft SQL Server
- Experience with secure Web Portal design and implementation
- Extensive experience with and knowledge of FISMA and application certification and accreditation
- Experience with developing administration and operations support procedures
- Experience with help desk support
- Experience with training sessions provided in and out of classroom settings
- Experience with nuclear power plant operations
- Experience with nuclear power plant sensors and sensor data

Extensive is defined as 7+ years of working knowledge

Experience is defined as 5 + yeas of working knowledge

14.1.2 The contractor resume shall demonstrate knowledge and experience with applying Federal compliance standards for security specifications including:

1. FIPS 140-2, NIST Encryption Standards
2. FIPS 199, Standards for Security Categorization of Federal Information and Information Systems
3. FIPS 200 Minimum Security Controls for Federal Information Systems
4. NIST SP 800-30 Risk Management Guide for Information Technology Systems, July 2002
5. NIST SP 800-60, Volume I: Guide for Mapping Types of Information and Information Systems to Security Categories

6. NIST SP 800-60, Volume II: Guide for Mapping Types of Information and Information Systems to Security Categories
 7. NIST SP 800-18 Guide for Developing Security Plans for Information Technology Systems
 8. NIST SP 800-26 Security Self-Assessment Guide for Information Technology Systems
 9. NIST SP 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems
 10. NIST SP 800-47 Security Guide for Interconnecting Information Technology Systems
 11. NIST SP 800-53 Recommended Security Controls for Federal Information Systems
 12. NIST SP 800-64 Security Considerations in the Information System Development Life Cycle
 13. DOD 5015.2 requirements regarding implementation of the electronic recordkeeping systems
 14. Appendix III to OMB Circular No. A-130 - Security of Federal Automated Information Resources
 15. DoD 5220.22-M: National Industrial Security Program Operating Manual (NISPOM)
 16. Additional issuances from the Committee on National Security Systems relevant to classified systems
 17. Federal Information Security Management Act 2002
 18. NRC Management Directive 12.5 (to be furnished upon contract award)
 19. NRC Management Directive 2.8 (to be furnished upon contract award)
- 14.1.3 In addition, the contractor personnel skill sets shall demonstrate strong communications and interpersonal skills. The contractor's project manager and designated staff shall be required to meet with, discuss, and obtain information required to accomplish the tasks described in this SOW, which will involve regular communications – formal and informal – with senior NRC staff members. The contractor's project manager and designated staff shall be required to communicate with, coordinate, and collaborate with security experts within NRC's OIS to ensure that the ERDS production system follows the NRC security standards and meets the compliance requirements with security regulations.
- 14.1.4 The contractor shall provide a resume for each individual proposed to work on this contract.
- 14.1.5 The contractor agrees that key personnel shall not be removed from the contract or replaced without compliance with paragraphs (a) and (b) of this section.
- a) 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 NRC CO and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.
 - b) 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 NRC CO and the PO shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

- c) 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 NRC CO 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, lost, or damage.

15. Safeguard of Proprietary Information

In connection with the performance of the work under this delivery order, the contractor may be furnished, or may develop or acquire, proprietary data (trade secrets) 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 agrees to hold the information in confidence and not to 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.

16. Period of Performance

March 3, 2010, through March 2, 2011 with four (4) one-year option periods.

17. Government Furnished Resource/Equipment

The Government will provide defined space for spare parts, as well as office space. Such office space will include heat, light, ventilation, and electric current, and computer systems at no cost to the contractor. The Government will provide office supplies (e.g., writing paper, pens, pencils, staples, etc.) to the contractor. Telephones will be provided in the office by the Government at no expense to the contractor. The telephone will have the capability of receiving long distance calls and of making **work-related** long distance calls. The Government will provide (an NRC account for) e-mail and network connectivity to the contractor subject to security requirements.

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

1. LG VX3200 Cell Phone – Serial #505CYMRA45, 240-888-2326
2. LG VX3200 Cell Phone – Serial #505CYNL45, 240-731-2581
3. 12 Modems – Refer to Section 6.4.9 under SOW

The contractor shall be responsible and accountable for all Government property under this contract.

18. Place of Performance

The equipment location will be:

- U.S. Nuclear Regulatory Commission Headquarters
11545 and 11555 Rockville Pike
Rockville, Maryland 20852

The contractor shall provide support for the hardware and software at the locations listed above. This support shall include on-site support at these locations.

19. Reference Materials

The following reference materials shall be provided to the contractor for use under this contract:

1. Modem List
2. NRC NUREG-1394 Rev. 1 (Hard Copy Only)
3. ERDS Documentation
 - o ERDS System Administrator Manual
 - o OS Configuration Guide
 - o ERDS Configuration & Installation Guide
 - o ERDS User's Manual
4. NRC Plant Test Schedule

System Overview

Emergency Response Data System (ERDS) Modernization Project encompasses two development cycles: Phase I and Phase II. The primary Phase I objective, which is complete, modernized the hardware (hw) and software (sw) at NRC Headquarters (HQ) and Regions, the Technical Training Center, and at the participating State Emergency Offices. Phase II will address long-term issues such as plant communications, plant data, system administration, and system security.

This attachment provides an overview of the system as well as descriptions of subsystems and component functionality. The ERDS is comprised of three subsystems:

- Server
- Client
- Communications

The ERDS subsystems are discrete but not independent; thus the system cannot provide full functionality if any of the subsystems are degraded or absent. Each of the subsystems is defined in greater detail in the following attachments.

The ERDS Modernization application selected by the NRC is OSIsoft's PI sw product. OSIsoft's PI software product is a commercial-off-the-shelf product. The product was selected because of its demonstrated ability to satisfy system requirements. PI will act as the enterprise historian and is the core sw component of the ERDS real-time infrastructure platform. The PI software will heretofore be referred to as the ERDS application.

1.1 Server Subsystem Overview

The logical boundary of the server subsystem is comprised of the ERDS application servers at HQ and Region IV. Functionality of the subsystem includes:

- Receipt of data from nuclear power plants
- Storage, maintenance, and access to data

The server subsystem consists of two identical sets of hw and sw components used to execute the aforementioned functions. One set is located at NRC HQ in Rockville, Maryland and the second at Region IV offices. The Rockville location serves as the primary location and the Region IV location will serve as the backup or secondary site. Each location hosts a primary and secondary ERDS server. The only deviation to this configuration will be at the HQ location, which will also host an offline development/test server.

1.1.1 Hardware Components

The hw components that comprise the server subsystem consist of a primary and secondary ERDS server, and in the case of HQ, a development server which will be a standalone system segmented from the production environment. All servers are configured to insure a high-level of availability. The subsystem also includes a backup capability for each ERDS hw component.

The device selected to carry out the backup is a Dell PowerVault tape Library. The Dell PowerVault tape library will also backup other compatible system components. Component configuration and system data will be backed up daily, stored, and archived¹ in a fashion that is consistent with NRC policies and procedures.

The following tables summarize hw make and model specifications:

1.1.1.1 ERDS Servers

Table 1 - Server Descriptions

NRC Tag	Asset Tag values are available for each device
Device	Primary and Secondary and Development ERDS Servers
Brand	Dell Computers
Model	PowerEdge 6850
Rack Size	4u
Link	http://www.dell.com/

The server subsystem's configuration as well as ERDS data shall be maintained in a tape library. The specifications for the tape library are as follows:

Table 2 - Backup Device Descriptions

NRC Tag	Asset Tag values are available for each device
Device	Tape Library with Autoloader
Brand	Dell Computers
Model	PowerVault 124T
Rack Size	2U
Link	http://www.dell.com/

Table 3 - Miscellaneous Equipment Descriptions

NRC Tag	Asset Tag values are available for each device
Device	Color LaserJet Printer
Brand	Dell Computers
Model	3115N and 3010N
Rack Size	N/A
e.g. Link	http://www.dell.com/

1.1.2 Software Components

The server subsystem requires several software packages for complete functionality. These software packages are separate and distinct from the ERDS application. All server subsystem hw components operate on a Microsoft operating system platform. The following sw components are required for the server subsystem:

¹ A monthly backup will be stored off site at an assigned NARA facility.

Table 4 - System Software Components

Description	Type	Applicable System
Microsoft Windows 2003 for servers	Operating System	Primary, Secondary, Web Servers, and Interface Nodes
Microsoft Windows XP	Operating System	Workstations
Microsoft (IIS) Internet Information Services 6.0	Internet Browser Portal software	Web Servers
Microsoft SharePoint Services 2007	Internet Portal software	Web Servers
ASP.Net 2.0	System Services	Web Servers
Microsoft SQL Server 2005	Database software	Primary and Secondary Servers
Microsoft Office Basic Edition 2003 with SP – includes Microsoft Word and Excel	Productivity software	Workstations
Symantec Anti Virus Enterprise 11	Virus Protection software	Primary, Secondary, Web Servers, Interface Nodes, and Workstations
Symantec Backup Exec 10d	Backup Software	Primary, Secondary, Web Servers, and Interface Nodes
OSIsoft PI Interface	ERDS Application software	Interface Nodes
OSIsoft PI Suite <ul style="list-style-type: none"> ➤ PI Server ➤ PI Interface ➤ IT Monitor ➤ RTWebParts 	ERDS Application and Portal software	Primary and Secondary Servers

1.1.3 Server Subsystem Operation

Licensees transmit data to ERDS on a modem via the Public Switched Telephone Network (PSTN). Data transmissions sent by the plants are routed thru the NRC's Nortel telephone switch. This switch is capable of relaying as many as 23 simultaneous incoming data transmissions to the ERDS data center located within NRC HQ. The transmissions are then received by one of the modems located within a CISCO 3825 Integrated Services Router (CISCO 3825). The CISCO 3825 is constructed with 32 analog modems as well as Ethernet and serial interfaces. The analog modems answer telephone calls from the plants and negotiate a series of communication commands. Once the communication session is established the data is transmitted.

The CISCO 3825 converts the serial data transmission from the plants to an Ethernet transport. The data is then transmitted via Ethernet to a software interface that resides on an interface node [Dell PowerEdge 860 1u rack server]. The interface only accepts data transmissions that conform to the format defined in NUREG-1394, Rev. 1 (See Section 2 Data Format and Appendix A) and this data is sent to an assigned Internet Provider address and port on the interface device. Additionally, all data transmissions must be preceded by a verbal acknowledgement from the plant. This provides a level of assurance that the data being

transmitted is from a valid source. The interface node then distributes plant data to all of the ERDS servers. This is possible because of the high-availability (HA) functionality of the ERDS application. The servers within the subsystem are configured to be part of a logical "collective". Upon receipt of data the interface node transmits the data to all servers within the "collective" simultaneously. The ERDS server configuration tables and time-series data is distributed as changes occur. Both HQ and Region IV locations will host an interface node with the HQ location acting as primary.

As the data is being received from the interface node it is stored temporarily in the memory of the ERDS application server. This configuration provides users with the ability to quickly view plant data at near real-time rates. The data is then written to the data historian element of the ERDS application.

ERDS is a mission critical system with an availability requirement of 97.99% of operational hours. In order to meet this level of availability the design includes redundancy and failover capabilities. As described in the overview section, the HQ server subsystem includes a primary and secondary ERDS server. In the event the primary is unavailable operation automatically switches to the secondary server through the ERDS application "collective" manager software. In the event the entire HQ site is unavailable operations will be automatically transferred to the Region IV backup site.

Data received from plants is stored in the ERDS data historian. Viewing this data is made possible through a series of plant displays. The displays map to relevant data points specific to each plant. The ERDS contractor shall have the capability to add new data points and displays as needed. ERDS users will have limited capability to create ad hoc displays. Ad hoc displays will not become part of the system's permanent displays.

The ERDS development server is a platform upon which ERDS operators test and validate software patches, configuration changes, and security controls prior to operational deployment. The ERDS development server configuration shall not duplicate the configuration of the operational systems. The objective of the ERDS development server is to mitigate any impact a change or upgrade may impart to the operational environment. The ERDS development server will be offline and isolated from the operational network.

1.2 Client Subsystem Overview

The ERDS client subsystem consists of the hw and sw components necessary to access ERDS as a client. There are two client groups: NRC staff and State Emergency Office users. NRC clients are geographically located at NRC's Headquarter's Operations Center (Rockville, Maryland), Regional Offices (King of Prussia, Pennsylvania; Atlanta, Georgia; Lisle, Illinois; and Arlington, Texas), and Technical Training Center (Chattanooga, Tennessee). State Emergency Offices located within a 10 mile radius of a nuclear plant are eligible to access ERDS. State Emergency Offices are responsible for providing their respective clients with the necessary hw, sw and connectivity necessary to access ERDS.

This design does not anticipate/recognize a requirement to replace any of the existing personal computers currently being used at NRC HQs, regions, or training facilities, to access ERDS. However, the following HW Components section provides some recommendations for the baseline workstation configuration.

1.2.1 Hardware Components

For optimal performance this design document suggests a hw and sw baseline that is applicable to both NRC and State office application. The next section identifies the suggested baseline configuration for ERDS workstations.

ERDS Typical minimum specifications

SMART CLIENTS (launched thru OCIMS LAN/WAN)

Hardware/Software

Minimum: (suggest running P4 with 128MB RAM and 140MB free disk space)

- Intel Pentium with 32MB of Ram
- Windows 2000 or XP with latest service patches
- Internet Explorer 6.x+
- Microsoft Office 2003 (includes Word and Excel)
- Adobe SVG (Scalable Vector Graphic) Viewer 3.0

Vendor software, which may include:

- Pi Process Book
- BatchView
- SQC Client
- AlarmView
- Analysis Framework Modeler Add-in
- Process Templates Clients
- Pi DataLink

THIN CLIENTS (launched thru Internet Browser)

Hardware/Software

Minimum: (suggest running P4 with 64MB RAM and 100MB free disk space)

- Intel Pentium with 32MB of Ram
- Windows XP with latest service patches
- Internet Explorer 6.x+
- Adobe SVG (Scalable Vector Graphic) Viewer 3.0

Recommended Vendor software

- RtWebParts, which may include:
- RtActiveView
- RtGuage
- RtGraphic
- RtMessenger
- RtTimeRange
- RtTreeView

- RtTrend
- RtTable
- RtXYPlot

1.2.2 Software Components

The following software components are required for each of the ERDS client workstation:

Table 5 - Client Software Components

Description	Type	Applicable System
Microsoft Windows XP Professional	Operating System	ERDS Client
Microsoft Office 2003	Word and Excel	ERDS Client
Microsoft Internet Explorer 7.0 (Cipher strength 128-bit);	Internet Browser	Web Interface
OSIsoft ➤ ProcessBook ➤ DataLink ➤ RtAlerts ➤ RtReports ➤ Batchview	ERDS Application Software	ERDS Client Systems

All ERDS workstations that access ERDS via the OCIMS LAN or WAN require the installation of ERDS client software. All State users will be required to use Microsoft Internet Explorer browser to access ERDS.

1.2.3 Client Subsystem Operation

Clients can access ERDS using one of four possible methods:

1. OCIMS Local Area Network (LAN);
2. NRC Wide Area Network (WAN);
3. NRC Citrix Server
4. Internet thru a SSL connection with an assigned 128 bit certificate

The first three methods are only available to NRC personnel. State users only have the option to access ERDS via the Internet (Option 4).

All NRC users will be required to utilize a user name and password to access ERDS.

Table 6 - User authentication

User	Unique User Name & Password	Role-based Login	SSL Certificate
NRC – HQ	✓	✓	
NRC – Regions & TTC	✓	✓	
State Emergency Offices	✓	✓	✓

State users authenticate using a user ID and password and a 128-bit encrypted Secure Socket Layer (SSL) assigned certificate utilizing the Server-Gated Cryptography (SGC) protocol. Using an SGC-enabled SSL Certificate increases the encryption level available to all site visitors and ensures that all site visitors will connect at 128-bit encryption. The access and control of all users is derived from the respective group policy. The following table provides an overview of ERDS groups.

Table 7 - User Group capabilities

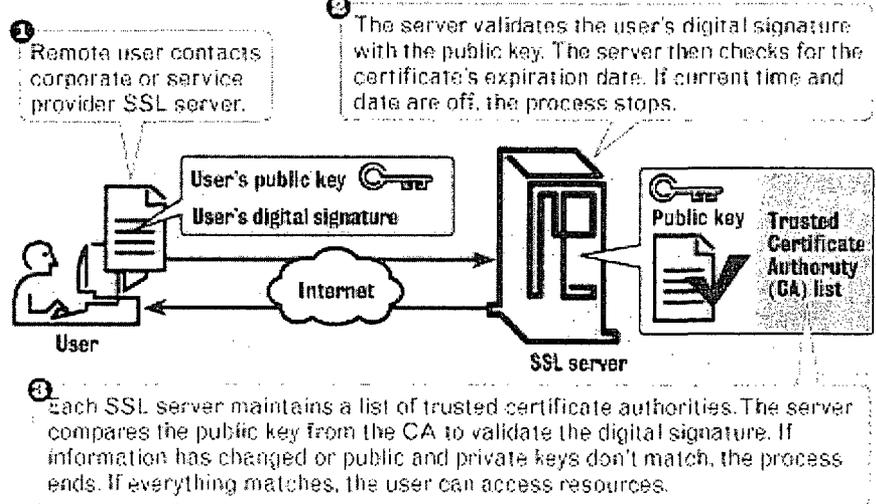
Groups	Group functionality and rights
Administrators	Users can view and modify most system data
Headquarters Users	Users have the ability to view all plant data with restricted change capabilities
Regional Users	Users are restricted to only view assigned regional data in their jurisdiction
State Users	Users are restricted to only view assigned State data in their jurisdiction
Site (Plant) Users	Users are restricted to only view assigned plant data in their jurisdiction

State users and Site Plant users can only authenticate to an ERDS secure web server using an assigned user id, password, and SSL certificate. Figure 1 – How SSL Works, illustrates how this design will implement a secure website for State and Site Plant users.

Figure 1 - How SSL Works

How SSL works

These are the steps an SSL server goes through to authenticate a user.



SOURCE: NETSCAPE

1.3 Communications Subsystem Overview

The communication subsystem consists of all elements necessary to facilitate system access and transmission of plant data. The communications subsystem design, when possible, leverages existing NRC infrastructure and implements new hw components as needed.

Nuclear power plants transmit data to the NRC via the PSTN. Modifications to the plant transmission methodology and infrastructure were not impacted during Phase I. Furthermore, Phase I did not impact the method, quality, quantity, or format of plant data. Phase I design of the communication consists of a CISCO 3825 Integrated Services Router with internal analog modems and an interface node.

The Phase II design approach is modular in the context that the NRC's ERDS communication infrastructure will be upgraded to simultaneously utilize both a broadband Transmission Control Protocol/Internet Protocol (TCP/IP) communications protocol as well as the current dial-up modems. This approach was chosen because it will facilitate an incremental deployment to TCP/IP as nuclear power plants migrate from the use of modem to TCP/IP. It was also determined that this approach was the most effective way to achieve the NRC's objective of improving communications, data content, system administration, and security while minimizing contractual and financial risks during the transition period.

1.3.1 Hardware Components

The communications subsystem design includes the following hardware components:

Table 8- Web Server Descriptions

NRC Tag	Asset Tag values are available for each device
Device	Web/Portal Server
Brand	Dell Computers
Model	PowerEdge 2950
Rack Size	2u
Link	http://www.dell.com/

Table 9 - Interface Descriptions

NRC Tag	Asset Tag values are available for each device
Device	Interface Nodes
Brand	Dell Computers
Model	PowerEdge 925
Rack Size	1u
Link	http://www.dell.com/

Table 10 - Router, Modems, Firewall

NRC Tag	Asset Tag values are available for each device
Device	Integrated Services Router
Brand	Cisco
Model	3825
Rack Size	2u
Link	http://www.cisco.com/

1.3.2 Software Components

The integrated services router manufacturer packages the necessary software with the product and additional software is not required.

Table 11 - Communication Software Components

Description	Type	Applicable System
Microsoft Windows® 2003 for servers	Operating System	Web Servers
Microsoft IIS 6.0, ASP.Net 1.1 and SharePoint Services 2.0	System Services	Web Servers
Microsoft SQL Server 2000a Standard	Database software	Primary Server
Symantec Backup Exec 11d	Virus Protection software	Web Servers
OSIsoft ➤ RtWebParts	ERDS Portal Application software	Primary and Secondary Servers
OSIsoft PI Interface	ERDS interface software	Interface nodes
CICSO OIS	Switch OS	Interface nodes

Table 12 - TCP/IP Appliance (NRC)

NRC Tag	Asset Tag values are available for each device
Device	Adaptive Security Appliance
Brand	Cisco
Model	5510
Rack Size	2u
e.g. Link	http://www.cisco.com/

Table 13 - TCP/IP Appliance (Licensee)

NRC Tag	Asset Tag values are available for each device
Device	Adaptive Security Appliance
Brand	Cisco
Model	5505
Rack Size	
e.g. Link	http://www.cisco.com/

1.3.3 Communications Subsystem Operation

As discussed in the preceding section the fundamental change to the communication subsystem is the replacement of the communications cabinet with an integrated services router (CISCO 3825) and interface node. The integrated services router will receive the telephonic data transmissions from nuclear power plants. Telephone calls from the plants are answered by the analog modems contained within the CISCO 3825 using defined link control messages. The CISCO 3825 then converts the serial transmission to a TCP/IP transmission. The data is transmitted to the ERDS Server interface, which resides on an interface node at HQ and Region IV. The CISCO 3825 supports up to 32 simultaneous reactor connections and data transmissions. The specifications of the interface will be defined in the ERDS Interface Specification.

ERDS screens created in the server subsystem environment will be converted to a format that is consistent with OS/soft's WebParts.

1.3.4 Nuclear Regulatory Commission Network

The ERDS design uses the Integrated Services Router that segregates the ERDS network from the OCIMS network and ultimately the OCIMS LAN. The new integrated services router institutes the standard NRC Office of Information Services (OIS) router Access Control Lists (ACL) and rules to prevent unauthorized access of the OCIMS network.

ERDS leverages the existing OCIMS and NRC infrastructure, specifically the demilitarized zone (DMZ), to host ERDS web servers. The NRC has established a DMZ for the purpose of securing and protecting NRC assets from unauthorized web access by isolating web servers. The ERDS web servers, primary, backup, and regional devices, will be contained within the NRC DMZ. The ERDS web servers require standard TCP/IP port access. The administration and maintenance of the DMZ is the responsibility of OIS.

1.3.4.1 Public Switched Telephone Network (PSTN)

The PSTN is an integral part of the ERDS system and will remain so during the incremental deployment of Phase II. ERDS equipment has the capacity to receive transmissions from up to 32 analog lines simultaneously. HQ provides 23² telephone lines and Region IV replicates the environment with 24 telephone lines.

² Due to resource limitations of the HQ Nortel phone switch infrastructure, the ability to support 23 simultaneous connections will be available. The ERDS System Requirements Specification 4.0 is for 24 lines.

Hardware

Asset Tag values are available for each device.

The following pieces of hardware are applicable to this contract:

- Primary, Secondary and Development ERDS Servers.
- Dell Computers PowerEdge 6850 (7)
- Interface Nodes/Domain Servers
- Dell Computers PowerEdge 2950 (3)
- Web Servers
- Dell Computers PowerEdge 860 (2)
- Workstations
- Dell Computers Optiplex 745 (2)
- Tape Library with Autoloader
- Dell Computers PowerVault 124T (2)
- Color LaserJet Printer
- Dell Computers 3115N (1) and 3010N (1)
- Network Switch
- Dell Computers PowerConnect 2724 (2)
- Integrated Services Router
- Router Cisco 3825 (2)
- Power Supply PWR 675-AC-RPS-N1 (2)
- Universal Power Supply
- APC Smart-UPS 5000 with transformer (2)
- APC Smart-UPS 5000 (1)
- APC Smart-UPS 3000 (1)
- Rack
- Dell 42U Rack (4)
- Keyboard Monitor Mouse (KMM) console
- Dell 15 inch rack mount console (3)
- CISCO
- ASA5510 (4)
- ASA5505 (71)
- Unmanaged Switch

Software

Description	Type	Applicable System
Microsoft Windows 2003 for servers	Operating System	Primary, Secondary, Web Servers, and Interface Nodes
Microsoft Windows XP	Operating System	Workstations
Microsoft (IIS) Internet Information Services 6.0	Internet Browser Portal software	Web Servers
Microsoft SharePoint Services 2007	Internet Portal software	Web Servers
ASP.Net 2.0	System Services	Web Servers
Microsoft SQL Server 2005	Database software	Primary and Secondary Servers
Microsoft Office Basic Edition 2003 with SP – includes Microsoft Word and Excel	Productivity software	Workstations
Symantec Anti Virus Enterprise 11	Virus Protection software	Primary, Secondary, Web Servers, Interface Nodes, and Workstations
Symantec Backup Exec 10d	Backup Software	Primary, Secondary, Web Servers, and Interface Nodes
OSIsoft PI Interface	ERDS Application software	Interface Nodes
OSIsoft PI Suite > PI Server > PI Interface > IT Monitor > RTWebParts	ERDS Application and Portal software	Primary and Secondary Servers

Enclosure 2 - ORDER NO. NRC-DR-07-10-190)

ADDITIONAL TERMS AND CONDITIONS

A.1 CONSIDERATION AND OBLIGATION

(a) The total estimated amount of this order (ceiling) for the products/services ordered, delivered, and accepted under this contract is **\$553,213.12**.

(b) The amount presently obligated with respect to this contract is **\$530,000.00**. 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.

A.2 PROJECT OFFICER AUTHORITY (November 2006)

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

Name: Roberto Figueroa
Address: U.S. Nuclear Regulatory Commission
Office of Nuclear Security and Incident Response (NSIR)
Mail Stop: T4-A45
11554 Rockville Pike
Rockville, MD 20852

Telephone Number: 301-415-6075

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. The term "technical direction" is defined to include the following:(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A.3 2052.215-70 KEY PERSONNEL (JAN 1993)

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

DAVID STEPP, PROJECT MANAGER
ROGER CHOW, LEAD SYSTEMS ADMINISTRATOR
STEVE SAGE, SYSTEMS ENGINEER
TONI KITZ, SUBJECT MATTER EXPERT

PATRICK MURPHY, SR. ENGINEER

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

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

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

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

A.4 2052.209-73 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.

(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.

A.5 2052.204-70 SECURITY (March 2004)

(a) Contract Security and/or Classification Requirements (NRC Form 187). The policies, procedures, and criteria of the NRC Security Program, NRC Management Directive (MD) 12 (including MD 12.1, "NRC Facility Security Program;" MD 12.2, "NRC Classified Information Security Program;" MD 12.3, "NRC Personnel Security Program;" MD 12.4, "NRC Telecommunications Systems Security Program;" MD 12.5, "NRC Automated Information Systems Security Program;" and MD 12.6, "NRC Sensitive Unclassified Information Security Program"), apply to performance of this contract, subcontract or other activity. This MD is incorporated into this contract by reference as though fully set forth herein. The attached NRC Form 187 (See List of Attachments) furnishes the basis for providing security and classification requirements to prime contractors, subcontractors, or others (e.g., bidders) who have or may have an NRC

contractual relationship that requires access to classified Restricted Data or National Security Information or matter, access to unclassified Safeguards Information, 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, proprietary data (trade secrets) or confidential or privileged technical, business, or financial information, including Commission plans, policies, reports, financial plans, other (Official Use Only) internal data protected by the Privacy Act of 1974 (Pub. L. 93-579), or other information which has not been released to the public or has been determined by the Commission to be otherwise exempt from disclosure to the public. The contractor shall ensure that information protected from public disclosure is maintained as required by NRC regulations and policies, as cited in this contract or as otherwise provided by the NRC. The contractor will not directly or indirectly duplicate, disseminate, or disclose the information in whole or in part to any other person or organization except as may be necessary to perform the work under this contract. The contractor agrees to return the information to the Commission or otherwise dispose of it at the direction of the contracting officer. Failure to comply with this clause is grounds for termination of this contract.

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

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

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

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

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

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

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

(j) Criminal Liabilities. It is understood that disclosure of National Security Information, Restricted Data, and Formerly Restricted Data relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data, Formerly Restricted Data, or any other classified matter that may come to the contractor or any person under the contractor's control in connection with work under this contract, may subject the contractor, its agents, employees, or subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and Executive Order 12958.)

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

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

A.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.

A.7 SAFETY OF ON-SITE CONTRACTOR PERSONNEL

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

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

The NRC Project Officer shall ensure that the contractor's Project Director has communicated the requirement for on-site contractor staff to follow the guidance in the OEP. The NRC Project Officer also will assist in accounting for on-site contract persons in the event of a major emergency (e.g., explosion occurs and casualties or injuries are suspected) during which a full evacuation will be required, including the assembly and accountability of occupants. The NRC DFS will conduct drills periodically to train occupants and assess these procedures.

A.8 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY ACCESS APPROVAL (February 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 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."

A.8 OPTION PERIODS - TASK ORDER/DELIVERY ORDER UNDER A GSA FEDERAL SUPPLY SCHEDULE CONTRACT (MARCH 2007)

The Period of Performance (PoP) for this requirement may extend beyond the Quoter's current PoP on their GSA Schedule. Quoters may submit proposals for the entire PoP as long as their current GSA Schedule covers the requested PoP, or their GSA Schedule contains GSA's "Evergreen Clause" (Option to Extend the Term of the Contract), which covers the requested PoP if/when the option(s) are exercised. Quoters are encouraged to submit accurate/realistic pricing for the requirement's entire PoP, even if the proposed GSA Schedule does not include pricing for the applicable option years, etc.

For proposal evaluation purposes, the NRC assumes that applicable Evergreen Clause Option(s) will be exercised and the NRC will apply price/cost analysis, as applicable. It is in the best interest of the Quoter to explain major deviations in escalation, proposed in any Evergreen Clause option years. Resulting GSA task/delivery order option years subject to the Evergreen Clause will be initially priced utilizing the same rates proposed under the last GSA-priced year of the subject GSA Schedule. Upon GSA's exercise of the GSA Schedule option year(s) applicable to the Evergreen Clause, the NRC will modify the awarded task/delivery order to incorporate either the proposed pricing for the option years or the GSA-approved pricing (whichever is lower).

It is incumbent upon the Quoter to provide sufficient documentation (GSA-signed schedule, schedule modifications, etc.) that shows both the effective dates, pricing and terms/conditions of the current GSA Schedule, as well as Evergreen Clause terms/conditions (as applicable). Failure to provide this documentation may result in the Quoter's proposal being found unacceptable.

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

(a) The Government may extend the term of this order by written notice to the Contractor within 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the order expires. The preliminary notice does not commit the Government to an extension.

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

(c) The total duration of this order, including the exercise of any options under this clause, shall **not** exceed **5** years.

A.10 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

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

A.11 52.217-7 OPTION FOR INCREASED QUANTITY—SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as optional items/services, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within **30** days during the contract period. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

A.12 52.237-3 CONTINUITY OF SERVICES (JAN 1991)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to (1) furnish phase-in training and (2) exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

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

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

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

A.13 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT-ALTERNATE 1 (OCT 1999)

(a) Total expenditure for travel may not exceed \$18,200.00 (Includes G&A) without the prior approval of the contracting officer.

(b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel. **This form will be provided to the Contractor by the NRC Project Officer.**

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

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

(e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, shall be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of

Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

A.14 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.

A.15 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES (JULY 2006)

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

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

Atomic Energy Act of 1954 (as amended) and the Energy Reorganization Act of 1974 (as amended).

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

The policies, procedures, and criteria of the NRC Security Program, NRCMD 12, apply to performance of this contract, subcontract or other activity.

CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

COMPLETE CLASSIFIED ITEMS BY SEPARATE CORRESPONDENCE

1. CONTRACTOR NAME AND ADDRESS

PROJECT PERFORMANCE CORPORATION
1760 OLD MEADOW RD STE 400
MCLEAN, VA 22102-4331

A. CONTRACT NUMBER FOR COMMERCIAL CONTRACTS OR JOB CODE FOR DOE PROJECTS (Prime contract number must be shown for all subcontracts.)

NRC-DR-07-10-190

B. PROJECTED START DATE

03/03/2010

C. PROJECTED COMPLETION DATE

03/02/2015

2. TYPE OF SUBMISSION

- A. ORIGINAL
 B. REVISED (Supersedes all previous submissions)
 C. OTHER (Specify)

3. FOR FOLLOW-ON CONTRACT, ENTER PRECEDING CONTRACT NUMBER AND PROJECTED COMPLETION DATE

A. DOES NOT APPLY

B. CONTRACT NUMBER

NRC-DR-07-08-142

DATE

03/02/2010

4. PROJECT TITLE AND OTHER IDENTIFYING INFORMATION

"EMERGENCY RESPONSE DATA SYSTEM (ERDS) OPERATION AND MAINTENANCE (O&M)"

5. PERFORMANCE WILL REQUIRE

A. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION

- YES (If "YES," answer 1-7 below)
 NO (If "NO," proceed to 5.C.)

NOT APPLICABLE

NATIONAL SECURITY

RESTRICTED DATA

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

1. ACCESS TO FOREIGN INTELLIGENCE INFORMATION

2. RECEIPT, STORAGE, OR OTHER SAFEGUARDING OF CLASSIFIED MATTER. (See 5.B.)

3. GENERATION OF CLASSIFIED MATTER.

4. ACCESS TO CRYPTOGRAPHIC MATERIAL OR OTHER CLASSIFIED COMSEC INFORMATION.

5. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION PROCESSED BY ANOTHER AGENCY.

6. CLASSIFIED USE OF AN INFORMATION TECHNOLOGY PROCESSING SYSTEM.

7. OTHER (Specify)

B. IS FACILITY CLEARANCE REQUIRED? YES NO

C. UNESCORTED ACCESS IS REQUIRED TO NUCLEAR POWER PLANTS.

G. REQUIRE OPERATION OF GOVERNMENT VEHICLES OR TRANSPORT PASSENGERS FOR THE NRC.

D. ACCESS IS REQUIRED TO UNCLASSIFIED SAFEGUARDS INFORMATION.

H. WILL OPERATE HAZARDOUS EQUIPMENT AT NRC FACILITIES.

E. ACCESS IS REQUIRED TO SENSITIVE IT SYSTEMS AND DATA.

I. REQUIRED TO CARRY FIREARMS.

F. UNESCORTED ACCESS TO NRC HEADQUARTERS BUILDING.

J. FOUND TO USE OR ADMIT TO USE OF ILLEGAL DRUGS.

FOR PROCEDURES AND REQUIREMENTS ON PROVIDING TEMPORARY AND FINAL APPROVAL FOR UNESCORTED ACCESS, REFER TO NRCMD 12.

NOTE: IMMEDIATELY NOTIFY DRUG PROGRAM STAFF IF BOX 5 A, C, D, G, H, I, OR J IS CHECKED.

6. INFORMATION PERTAINING TO THESE REQUIREMENTS OR THIS PROJECT, EVEN THOUGH SUCH INFORMATION IS CONSIDERED UNCLASSIFIED, SHALL NOT BE RELEASED FOR DISSEMINATION EXCEPT AS APPROVED BY:

NAME AND TITLE Roberto Figueroa, IT Specialist	SIGNATURE 	DATE 8/10/09
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7. CLASSIFICATION GUIDANCE

NATURE OF CLASSIFIED GUIDANCE IDENTIFICATION OF CLASSIFICATION GUIDES

8. CLASSIFIED REVIEW OF CONTRACTOR / SUBCONTRACTOR REPORT(S) AND OTHER DOCUMENTS WILL BE CONDUCTED BY:

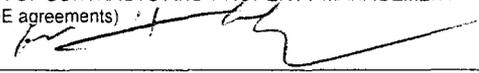
- AUTHORIZED CLASSIFIER (Name and Title) DIVISION OF FACILITIES AND SECURITY

9. REQUIRED DISTRIBUTION OF NRC FORM 187 Check appropriate box(es)

- SPONSORING NRC OFFICE OR DIVISION (Item 10A) DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT
 DIVISION OF FACILITIES AND SECURITY (Item 10B) CONTRACTOR (Item 1)
 SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

10. APPROVALS

SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

NAME (Print or type)	SIGNATURE	DATE
A. DIRECTOR, OFFICE OR DIVISION Virginia Huth		DATE 6/12/09
B. DIRECTOR, DIVISION OF FACILITIES AND SECURITY Robert B. Webber	SIGNATURE	DATE
C. DIRECTOR, DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT (Not applicable to DOE agreements) Phyllis Bower		DATE

REMARKS

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

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

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

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

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

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

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

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

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

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

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

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED

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

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

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

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

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

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

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

Supersession: These instructions supersede any previous billing instructions.

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

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

1. Official Agency Billing Office

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

2. Voucher Information

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

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

c. Contract Number. Insert the NRC contract number.

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

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

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

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

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

3. Definitions

- a. Non-capitalized Equipment, Materials, and Supplies. These are equipment other than that described in number (4) below, plus consumable materials, supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.
- b. Capitalized Non Expendable Equipment. List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) the item number for the specific piece of equipment listed in the property schedule of the contract; or (b) the Contracting Officer's approval letter if the equipment is not covered by the property schedule.
- c. Material handling costs. When included as part of material costs, material handling costs shall include only costs clearly excluded from the labor-hour rate. Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the contractor's usual accounting procedures.

Sample Voucher Information (Supporting Documentation must be attached)

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

		<u>Amount Billed</u>	
		<u>Current Period</u>	<u>Cumulative</u>
(f)	<u>Direct Costs:</u>		
	(1) Direct Labor	\$ _____	\$ _____
	(2) Travel	\$ _____	\$ _____
	(3) Materials	\$ _____	\$ _____
	(4) Equipment	\$ _____	\$ _____
	(5) Materials Handling Fee	\$ _____	\$ _____
	(6) Consultants	\$ _____	\$ _____
	(7) Subcontracts	\$ _____	\$ _____
	Total Direct Costs:	\$ _____	\$ _____