

SECTION A - SOLICITATION/CONTRACT FORM

OMB Approval No. 9000-0008

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) <		RATING	PAGE OF 1 82 PAGES
2. CONTRACT NO DE-NT0006731	3. SOLICITATION NO DE-RP26-08NI00227	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 5/13/08	6. REQUISITION/ PURCHASE NO. 26-08NT02301 000 & 26-08NT00227 001
7. ISSUED BY U S Department of Energy National Energy Technology Laboratory P O. Box 880, 3610 Collins Ferry Road, Morgantown, WV 26507-0880			8. ADDRESS OFFER TO (If other than Item 7)		

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

SOLICITATION

9. Sealed offers in original and 0 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8 or if handcarried in the depository located in IPPS Electronic Submission **until 8:00 p.m. local time July 8, 2008**
(Hour) (Date)

CAUTION c LATE Submissions, Modifications, and Withdrawals: See Section L Provision No 52 214-7 or 52 215-1 All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: <	A. NAME Angela Bosley E-mail: Angela.Bosley@netl.doe.gov	B. TELEPHONE NO (NO COLLECT CALLS)	C. E-MAIL ADDRESS SEE BLOCK 10A
	AREA CODE 304	NUMBER 285-4149	EXT

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OFFER (Must be fully completed by offeror)

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

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I Clause No 52 232-8) <	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %
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14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR Quanta Technology LLC 4020 Westchase Boulevard, Suite 300 Raleigh, NC 27607-3960	CODE 809603132	FACILITY	1. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print) Damir Novosel - President
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15B. TELEPHONE NUMBER AREA CODE 919 NUMBER 334-3042 EXT	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE c ENTER SUCH ADDRESS IN SCHEDULE <input type="checkbox"/>	17. SIGNATURE <i>Damir Novosel</i>	18. OFFER DATE 7/8/2008
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AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT \$899,304	21. ACCOUNTING AND APPROPRIATION 05300 2008 31 220530 61000000 25500 3123700 \$899,304
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) () <input type="checkbox"/> 41 U.S.C. 253(c) ()	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) <	ITEM
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24. ADMINISTERED BY (If other than Item 7) CODE	25. PAYMENT WILL BE MADE BY CODE
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26. NAME OF CONTRACTING OFFICER (Type or print) LISA KUZOWAR	27. UNITED STATES OF AMERICA <i>Lisa Kuzowar</i> (Signature of Contracting Officer)	28. AWARD DATE 9-27-08
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IMPORTANT c Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice

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SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 ITEMS BEING ACQUIRED

The Contractor shall furnish required personnel, supervision, facilities, equipment, material, supplies, and services (except as may be expressly set forth in this contract as furnished by the Government) and otherwise do all things necessary for, or incident to, the performance of the statement of work.

Line items 1 through 6 below are FIXED PRICE.

Item No.	Item Description	QTY Ordered	Unit	Amount
1	Presentation materials for project overview presentation	1	job	
2	Presentation materials for project status presentation	1	job	
3	Presentation materials for briefing on the Conceptual Framework of the Specification Development (Final)	1	job	
4	Presentation materials for briefing on Draft Specification (Final)	1	job	
5	Presentation materials for briefing on the Final Specification (Final)	1	job	
6	NAPSI specification (Final)	1	job	
	Line items 1 through 6 above are fixed price.		TOTAL	\$864,304

NOTE: Line items 1 and 2 shall not be billed until after the respective presentation has been made.

Line item 7 below is established as a “NOT TO EXCEED” amount for travel associated with contract performance. Reimbursement will be made for actual costs incurred in accordance with the Federal Travel Regulations (FTR). The contractor shall provide supporting documentation with each invoice that includes a charge for travel. Indirect rates (including profit) do not apply to this line item and shall not be included by the contractor when invoicing for this reimbursement.

Item No.	Supplies/Services	QTY Ordered	Unit	Amount
7	Estimated Travel	1	not to exceed	\$35,000

B.2 CEILING PRICE OF CONTRACT

The ceiling price of this contract, inclusive of Fixed Price Line Items and Travel, is \$899,304.

B.3 CONTRACT OBLIGATIONS

The current **TOTAL** obligation of **\$899,304** is allotted to this contract and made available for expenditure as follows:

- (a) Fixed price contract line item(s) 1 through 6 are fully funded in the amount of \$864,304.
- (b) The travel ceiling established in contract line item 7 is fully funded in the current amount of \$35,000. The contractor exceeds this amount at its own risk. From time to time, this contract may be modified to increase the travel ceiling and obligate additional funds. Utilization of the obligated travel funds are subject to the restrictions provided for in H.6, Prior Approval for Travel and H.7 Travel and Per Diem Costs (FEB 1998).

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 STATEMENT OF WORK (NOV 1997)

The Statement of Work is located in Part III -- Section J, Attachment A to this contract.

SECTION D - PACKAGING AND MARKING

D.1 PACKAGING (FEB 1999)

Preservation, packaging, and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rate(s).

Except for those reports required by the Reporting Requirements Checklist of the contract, which are coded by A (As required) where the urgency of receipt of the report by the Government necessitates the use of the most expeditious method of delivery, reports deliverable under this contract shall be mailed by other than first-class mail, unless the urgency of the deliverable sufficiently justifies the use of first-class mail. The Contractor shall not utilize certified or registered mail or private parcel delivery service for the distribution of reports under this contract without the advance approval of the Contracting Officer except for those reports coded A.

D.2 MARKING (JAN 1999)

Each package, report or other deliverable shall be accompanied by a letter or other document which:

- (1) Identifies the contract by number under which the item is being delivered
- (2) Identifies the deliverable Item Number or Report Requirement which requires the delivered item(s).
- (3) Indicates whether the Contractor considers the delivered item to be a partial or full satisfaction of the requirement.

For any package, report, or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document shall be simultaneously provided to the office administering the contract, as identified in Section G of the contract, or if none, to the Contracting Officer.

SECTION E - INSPECTION AND ACCEPTANCE

E.1 INSPECTION (NOV 1997)

Inspection of all items under this contract shall be accomplished by the DOE Contracting Officer's Representative (COR), or any other duly authorized Government representative.

E.2 ACCEPTANCE (MAR 1999)

Final acceptance of all work and effort under this contract (including "Reporting Requirements," if any) shall be accomplished by the Contracting Officer

E.3 52.246-4 INSPECTION OF SERVICES - FIXED-PRICE. (AUG 1996)

(a) Definition: "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may

(1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and

(2) Reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may -

(1) By contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service; or

(2) Terminate the contract for default.

SECTION F - DELIVERIES OR PERFORMANCE

F.1 TERM OF CONTRACT (NOV 1997)

The term of this contract is **seven (7)** months after the effective date of this contract.

F.2 PRINCIPAL PLACE OF PERFORMANCE (FEB 1998)

The principal place of performance under this contract shall be at the Contractor's facility located in Raleigh, North Carolina.

F.3 52.242-15 STOP-WORK ORDER. (AUG 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either -

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if -

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 CORRESPONDENCE PROCEDURES

To promote timely and effective administration, correspondence (except for invoices and reports) submitted under this contract shall be subject to the following procedures:

(a) Technical Correspondence

Technical correspondence (as used herein, this term excludes technical correspondence where patent or technical data issues are involved and correspondence which proposes or otherwise involves waivers, deviations, or modifications to the requirements, terms, or conditions, of this contract) shall be addressed to the DOE Contracting Officer's Representative, with an information copy of the correspondence to the DOE Contract Specialist.

(b) Correspondence on Patent or Technical Data Issues

Correspondence concerning patent or technical data issues shall be addressed to the Office of Intellectual Property Law, U.S. Department of Energy, Chicago Operations Office, 9800 South Cass Avenue, Building 201, Argonne, IL 60439.

Information copies of correspondence being sent to the Intellectual Property Law Division shall also be sent to the NEIL Patent Attorney, the DOE Contract Specialist, and the Contracting Officer's Representative.

(c) Other Correspondence

All other correspondence shall be addressed to the DOE Contract Specialist with information copies of the correspondence to the DOE Contracting Officer's Representative.

(d) Subject Line(s)

All correspondence shall contain a subject line commencing with the contract number and identifying the specific contract action requested.

G.2 SUBMISSION OF VOUCHERS/INVOICES - FIXED PRICE

(a) Voucher Form (SF 1034)

In requesting reimbursement, contractors shall use Standard Form 1034 (Public Voucher for Purchases and Services Other Than Personal). The Standard Form 1034 shall be completed electronically at the Vendor Inquiry Payment Electronic Reporting System (VIPERS).

In accordance with FAR 52.232-25, "Prompt Payment," all invoices shall include the following information:

- (1) Name and address of contractor/vendor
- (2) Invoice date
- (3) Contract number or other authorization for delivery of property or service
- (4) Description, price and quantity of property and services actually delivered or rendered
- (5) Shipping and payment terms
- (6) Name (where practicable), title, phone number and complete mailing address of responsible official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment)
- (7) Name (where practicable), title, phone number and complete mailing address of the person to be notified in the event of a defective invoice.
- (8) Other substantiating documentation or information as required by the contract.

(b) Supporting Documentation

Travel costs claimed for reimbursement must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, supporting data for travel must comply with the Federal Travel Regulations.

(c) Submission of Voucher

Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at <https://finweb.oro.doe.gov/vipers.htm>. Detailed instructions on how to enroll are provided on the web site.

(d) Billing Period

Vouchers shall be submitted no more frequently than monthly (unless prior written consent of the Contracting Officer for more frequent billing is obtained). The period of performance covered by vouchers should be the same as covered by any required monthly technical progress reports and/or monthly cost reports.

(e) Payment Method

In accordance with the clause entitled "Payment by Electronic Funds Transfer - Central Contractor Registration," payment under this contract will be made utilizing the Automated Clearing House (ACH) network. The payment system is specifically referred to as "Vendor Express."

(f) Defective Invoices

Invoices that are determined to be defective, and therefore not suitable for payment, shall be returned to the Contractor as soon as practicable, specifying the reason(s) why the invoice is not proper.

(g) Status of Payments

The Oak Ridge Financial Service Center (ORFSC) has a system via Internet, in which contractors can request information about payments by invoice, by contract number, and/or by paid date. The system is called Vendor Inquiry Payment Electronic Reporting System (VIPERS) and is available to contractors at the following website: <https://finweb.oro.doe.gov/vipers.htm>. Contractors must have a federal tax identification number (TIN) and then obtain a personal identification number (PIN) to access the system.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 CONSECUTIVE NUMBERING (JAN 1999)

Due to automated procedures employed in formulating this document, clauses and provisions contained within it may not always be consecutively numbered.

H.2 TECHNICAL DIRECTION (JUNE 1998)

- (a) Performance of the work under this contract shall be subject to the technical direction of the Contracting Officer's Representative (COR). The term "technical direction" is defined to include, without limitation:
- (1) Directions to the Contractor which redirect the contract effort, shift work emphasis between work areas or tasks, required pursuit of certain lines of inquiry, fill in details or otherwise serve to accomplish the contractual Statement of Work.
 - (2) Provision of written information to the Contractor which assists in the interpretation of drawings, specifications or technical portions of the work description.
 - (3) Review and, where required by the contract, approval of technical reports, drawings, specifications and technical information to be delivered by the Contractor to the Government under the contract.
- (b) Technical direction must be within the scope of work stated in the contract. The COR does not have the authority to, and may not, issue any technical direction which:
- (1) Constitutes an assignment of additional work outside the Statement of Work;
 - (2) Constitutes a change as defined in the contract clause entitled "Changes";
 - (3) In any manner 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; or
 - (5) Interferes with the Contractor's right to perform the terms and conditions of the contract.
- (c) All technical directions shall be issued in writing by the COR.
- (d) The Contractor shall proceed promptly with the performance of technical directions duly issued by the COR in the manner prescribed by this clause and within the authority under the provisions of this clause. If, in the opinion of the Contractor, any instruction or direction by the COR falls within one of the categories defined in (b)(1) through (5) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within five (5) working days after receipt of any such 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:
- (1) Advise the Contractor in writing within thirty (30) days after receipt of the Contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the "Changes" clause of the contract; or
 - (2) Advise the Contractor within a reasonable time that the Government will issue a written change order.
- (e) A failure of the Contractor and Contracting Officer to agree that the technical direction is within the scope of the contract, or a failure to agree upon the contract action to be taken with respect thereto shall be subject to the provisions of the clause entitled "Disputes - Alternate I".

H.3 MODIFICATION AUTHORITY (NOV 1997)

Notwithstanding any of the other provisions of this contract, the Contracting Officer shall be the only individual authorized to:

- (a) accept nonconforming work,
- (b) waive any requirement of this contract, or
- (c) modify any term or condition of this contract

H.4 GOVERNMENT PROPERTY AND DATA - NONE

The Government is not obligated to furnish any real or personal property or data under this contract, and the Contractor is not authorized to acquire any real or personal property or data at the Government's expense under this contract.

H.5 KEY PERSONNEL/PROGRAM MANAGER (MAR 1998)

The key personnel, which includes the Program Manager, specified below, are considered to be essential to the work being performed under this award; moreover, any changes to these personnel require prior DOE Contracting Officer's written approval.

The Program Manager shall serve as the Contractor's authorized supervisor for technical and administrative performance of all work hereunder. The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the DOE Contracting Officer's Representative may issue within the terms and conditions of the contract.

The following is a list of key personnel that have been approved for this contract:

Name	Title
Dr. Yi Hu	Director

Prior to diverting any of the specified individuals, the Contractor shall notify the Contracting Officer not less than thirty (30) calendar days prior to the diversion or substitution of key personnel and shall submit a written justification (including qualifications of proposed substitutions) to permit evaluation. The proposed changes will be approved in writing at the sole discretion of the Contracting Officer, with concurrence of the Contracting Officer's Representative.

H.6 PRIOR APPROVAL FOR TRAVEL

Costs incurred by contractor personnel for travel shall be considered allowable only to the extent that travel was approved by the Contracting Officer's Representative (COR) in advance of the cost being accrued or incurred by the contractor. The contractor shall submit a Request for Official Travel to the COR for approval no less than five (5) business days in advance of the trip. The Request for Official Travel form is located in Section III, Section J, Attachment B.

H.7 TRAVEL AND PER DIEM COSTS (FEB 1998)

Costs incurred by contractor personnel for travel, including costs of lodging, other subsistence, and incidental expenses, shall be considered to be reasonable and allowable only to the extent that they do not exceed the rates and amounts set by Subchapter I of Chapter 57 of Title 5, United States Code, or by the Administrator of General Services or the President (or his designee) pursuant to any revision of such subchapter; and are allowable pursuant to the "Allowable Cost and Payment" clause, FAR 52.216-7.

H.8 RESERVED

H.9 CONFIDENTIALITY OF INFORMATION (MAY 1998)

To the extent that the work under this contract requires that the Contractor be given access to confidential or proprietary business, technical, or financial information belonging to the Government or other companies, the Contractor shall, after receipt thereof, treat such information as confidential and agree not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized by the Contracting Officer in writing. The foregoing obligations, however, shall not apply to:

- (a) Information which, at the time of receipt by the Contractor, is in the public domain;
- (b) Information which is published after receipt thereof by the Contractor or otherwise becomes part of the public domain through no fault of the Contractor;
- (c) Information which the Contractor can demonstrate was in his possession at the time of receipt thereof and was not acquired directly or indirectly from the Government or other companies;
- (d) Information which the Contractor can demonstrate was received by it from a third party who did not require the Contractor to hold it in confidence.

The Contractor shall obtain the written agreement, in a form satisfactory to the Contracting Officer, of each employee permitted access, whereby the employee agrees that he will not discuss, divulge or disclose any such information or data to any person or entity except those persons within the Contractor's organization directly concerned with the performance of the contract.

The Contractor agrees, if requested by the Government, to sign an agreement identical, in all material respects, to the provisions of this clause, with each company supplying information to the Contractor under this contract, and to supply a copy of such agreement to the Contracting Officer. From time to time upon request of the Contracting Officer, the Contractor shall supply the Government with reports itemizing information received as confidential or proprietary and setting forth the company or companies from which the Contractor received such information.

The Contractor agrees that upon request by DOE it will execute a DOE-approved agreement with any party whose facilities or proprietary data it is given access to or is furnished, restricting use and disclosure of the data or the information obtained from the facilities. Upon request by DOE, such an agreement shall also be signed by Contractor personnel.

This clause shall flow down to all subcontracts.

H.10 REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF THE OFFEROR

The Representations, Certifications and Other Statements of the Offeror for this contract were downloaded and are hereby incorporated by reference.

H.11 COMPLIANCE WITH INTERNET VERSION 6 (IPV6) IN ACQUIRING INFORMATION TECHNOLOGY (JAN 2006)

This contract involves the acquisition of Information Technology (IT) that uses Internet Protocol (IP) technology. The contractor agrees that: (1) All deliverables that involve IT that uses IP (products, services, software, etc.) will comply with IPv6 standards and interoperate with both IPv6 and IPv4 systems and products; and (2) it has IPv6 technical support for development and implementation and fielded product management available.

If the contractor plans to offer a deliverable that involves IT that is not initially compliant, the contractor agrees to: (1) obtain the Contracting Officer's approval before starting work on the deliverable; (2) provide a migration path and firm commitment to upgrade to IPv6 for all application and product features by June 2008; and (3) have IPv6 technical support for development and implementation and fielded product management available.

Should the contractor find that the statement of work or specifications of this contract do not conform to the IPv6 standard, it must notify the Contracting Officer of such nonconformance and act in accordance with instructions of the Contracting Officer.

H.12 COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS (FEB 1998)

In performing work under this contract, the Contractor shall comply with all relevant federal, state, and local statutes, ordinances, laws, and regulations

H.13 CONTRACTOR PRESS RELEASES (APR 1998)

The DOE policy and procedure on news releases requires that all Contractor press releases be reviewed and approved by DOE prior to issuance. Therefore, the Contractor shall, at least ten (10) days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned press releases related to work performed under this contract. The Contracting Officer will then obtain necessary reviews and clearances and provide the Contractor with the results of such reviews prior to the planned issue date.

H.14 952-209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (JUN 1987) – ALTERNATE 1

(a) Purpose. The purpose of this clause is to ensure that the contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any unfair competitive advantage over other parties by virtue of its performance of this contract

(b) Scope. The restrictions described herein shall apply to performance or participation by the contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "contractor") in the activities covered by this clause as a prime contractor, subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(1) Use of Contractor's Work Product (i) The contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefor (solicited and unsolicited) which stem directly from the contractor's performance of work under this contract for a period of five (5) years after the completion of this contract. Furthermore, unless so directed in writing by the contracting officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the contractor from competing for follow-on contracts for advisory and assistance services

(ii) If, under this contract, the contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive acquisitions, the contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the contracting officer, in which case the restriction in this subparagraph shall not apply.

(iii) Nothing in this paragraph shall preclude the contractor from offering or selling its standard and commercial items to the Government

(2) Access to and use of information (i) If the contractor, in the performance of this contract, obtains access to information, such as Department plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or data which has not been released or otherwise made available to the public, the contractor agrees that without prior written approval of the contracting officer it shall not:

(A) use such information for any private purpose unless the information has been released or otherwise made available to the public;

(B) compete for work for the Department based on such information for a period of six (6) months after either the completion of this contract or until such

information is released or otherwise made available to the public, whichever is first;

(C) submit an unsolicited proposal to the Government which is based on such information until one year after such information is released or otherwise made available to the public; and

(D) release such information unless such information has previously been released or otherwise made available to the public by the Department.

(ii) 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. 552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.

(iii) The contractor may use technical data it first produces under this contract for its private purposes consistent with paragraphs (b)(2)(i) (A) and (D) of this clause and the patent, rights in data, and security provisions of this contract.

(c) Disclosure after award. (1) The contractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this contract, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to the contracting officer. Such disclosure may include a description of any action which the contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Department may, however, terminate the contract for convenience if it deems such termination to be in the best interest of the Government.

(2) In the event that the contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the contracting officer, DOE may terminate this contract for default.

(d) Remedies. For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Government may terminate the contract for default, disqualify the contractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract.

(e) Waiver. Requests for waiver under this clause shall be directed in writing to the contracting officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the contracting officer may grant such a waiver in writing.

(f) Subcontracts. (1) The contractor shall include a clause, substantially similar to this clause, including this paragraph (f), in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with FAR Part 13 and involving the performance of advisory and assistance services as that term is defined at FAR 37.201. The terms "contract," "contractor," and "contracting officer" shall be appropriately modified to preserve the Government's rights.

(2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the contractor shall obtain from the proposed subcontractor or consultant the disclosure required by DEAR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the contractor shall take actions to avoid, neutralize, or mitigate the organizational conflict to the satisfaction of the contractor. If the conflict cannot be avoided or neutralized, the contractor must obtain the approval of the DOE contracting officer prior to entering into the subcontract.

SECTION I - CONTRACT CLAUSES

I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

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

Federal Acquisition Regulations (Clauses starting with 52): <http://www.arnet.gov/far/index.html>
Department of Energy Regulations (Clauses starting with 952): <http://www.professionals.doe.gov>

I.2 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES. (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause

(b) The use in this solicitation or contract of any [insert regulation name] (48 CFR []) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

I.3 52.202-1 DEFINITIONS. (JUL 2004)

(a) When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

- (1) The solicitation, or amended solicitation, provides a different definition;
- (2) The contracting parties agree to a different definition;
- (3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
- (4) The word or term is defined in FAR Part 31, for use in the cost principles and procedures

(b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at <http://www.acqnet.gov> at the end of the FAR, after the FAR Appendix.

I.4 952.202-1 DEFINITIONS.

(a) As prescribed in 902.200, insert the clause at FAR 52.202-1 in all contracts. The contracting officer shall substitute the following for paragraph (a) of the clause

(a) Head of Agency means: (i) The Secretary; (ii) Deputy Secretary; (iii) Under Secretaries of the Department of Energy and (iiii) the Chairman, Federal Energy Regulatory Commission

(b) The following shall be added as paragraphs (h) and (i) except that they will be designated paragraphs (g) and (h) if Alternate I of the FAR clause is used.

(h) The term DOE means the Department of Energy, FERC means the Federal Energy Regulatory Commission, and NNSA means the National Nuclear Security Administration

(i) The term Senior Procurement Executive means, for DOE:

Department of Energy--Director, Office of Procurement and Assistance Management, DOE;

National Nuclear Security Administration--Administrator for Nuclear Security, NNSA; and

Federal Energy Regulatory Commission--Chairman, FERC

I.5 52.203-3 GRATUITIES. (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative -

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled -

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

I.6 52.203-5 COVENANT AGAINST CONTINGENT FEES. (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

I.7 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT. (SEP 2006)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold.

I 8 52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor" as used in this clause, means a person who has entered into a prime contract with the United States

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold

from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

I.9 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY. (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may -

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which -

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27(a) or (b) of the Act for the purpose of either -

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsection 27(e)(1) of the Act

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

I.10 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY. (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27(a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be -

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts -

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may -

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

I.11 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS. (SEP 2007)

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

"Agency" means "executive agency" as defined in Federal Acquisition Regulation (FAR) 2.101

"Covered Federal action" means any of the following actions:

- (1) Awarding any Federal contract
- (2) Making any Federal grant.
- (3) Making any Federal loan
- (4) Entering into any cooperative agreement
- (5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b) and include Alaskan Natives.

"Influencing or attempting to influence" means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government" means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government

"Officer or employee of an agency" includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment
- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2

"Person" means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Reasonable compensation" means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment" means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient" includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Regularly employed" means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State" means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition. 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352, the Contractor shall not use appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contract, the extension, continuation, renewal, amendment, or modification of this contract.

- (1) The term appropriated funds does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) Exceptions. The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees. (i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern--

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub L. 95-507, and subsequent amendments

(2) Professional and technical services (i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in paragraph (c)(2) of this clause, "professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of

this clause are permitted

(d) Disclosure. (1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52 203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL .

(e) Penalties. (1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form

(f) Cost allowability Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) Subcontracts. (1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52 203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract exceeding \$100,000 under this contract. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in any subcontract exceeding \$100,000.

I.12 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER. (AUG 2000)

(a) Definitions As used in this clause -

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as -

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

"Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.

"Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

- (1) Postconsumer fiber; and
- (2) Manufacturing wastes such as -
 - (i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and
 - (ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards

I.13 52.204-7 CENTRAL CONTRACTOR REGISTRATION. (JUL 2006)

(a) Definitions As used in this clause--

Central Contractor Registration (CCR) database means the primary Government repository for Contractor information required for the conduct of business with the Government.

Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet, Inc (D&B) to identify unique business entities.

Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same parent concern.

Registered in the CCR database means that--

- (1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and
- (2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record "Active" The Contractor will be required to provide consent for TIN validation to the

Government as a part of the CCR registration process.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one

(1) An offeror may obtain a DUNS number--

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com>; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company Physical Street Address, City, State, and Zip Code

(iv) Company Mailing Address, City, State and Zip Code (if separate from physical).

(v) Company Telephone Number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry)

(x) Company Headquarters name and address (reporting relationship within your entity)

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name

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

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

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

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423, or 269-961-5757.

I.14 952.208-70 PRINTING. (APR 1984)

The contractor shall not engage in, nor subcontract for, any printing (as that term is defined in Title I of the U.S. Government Printing and Binding Regulations in effect on the effective date of this contract) in connection with the performance of work under this contract. Provided, however, that performance of a requirement under this contract involving the duplication of less than 5,000 copies of a single unit, or no more than 25,000 units in the aggregate of multiple units, will not be deemed to be printing. A unit is defined as one sheet, size 8 1/2 by 11 inches one side only, one color. A requirement is defined as a single publication document.

(1) The term "printing" includes the following processes: composition, plate making, presswork, binding, microform publishing, or the end items produced by such processes.

(2) If fulfillment of the contract will necessitate reproduction in excess of the limits set forth above, the contractor shall notify the contracting officer in writing and obtain the contracting officer's approval prior to acquiring on DOE's behalf production, acquisition, and dissemination of printed matter. Such printing must be obtained from the Government Printing Office (GPO), a contract source designated by GPO or a Joint Committee on Printing authorized federal printing plant.

(3) Printing services not obtained in compliance with this guidance will result in the cost of such printing being disallowed.

(4) The Contractor will include in each of his subcontracts hereunder a provision substantially the same as this clause including this paragraph (4).

I.15 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (SEP 2006)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of \$30,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed

\$30,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the Excluded Parties List System) The notice must include the following:

- (1) The name of the subcontractor.
- (2) The Contractor's knowledge of the reasons for the subcontractor being in the Excluded Parties List System.
- (3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in the Excluded Parties List System
- (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment

I.16 52.215-2 AUDIT AND RECORDS - NEGOTIATION. (JUN 1999)

(a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to -

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

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

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating -

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) Availability The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract In addition -

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and -

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-re-determinable type or any combination of these;

(2) For which cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract

I.17 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT. (OCT 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

(a) The Schedule (excluding the specifications).

(b) Representations and other instructions.

(c) Contract clauses.

(d) Other documents, exhibits, and attachments.

(e) The specifications.

I.18 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS. (MAY 2004)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest

extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) Definitions. As used in this contract -

"HUBZone small business concern" means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration

"Service-disabled veteran-owned small business concern" -

(1) Means a small business concern -

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16)

"Small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto

"Small disadvantaged business concern" means a small business concern that represents, as part of its offer that -

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, Subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

"Veteran-owned small business concern" means a small business concern -

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern -

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding

their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

I.19 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN. (APR 2008)

a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause—

“Alaska Native Corporation (ANC)” means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

“Commercial item” means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

“Commercial plan” means a subcontracting plan (including goals) that covers the offeror’s fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

“Electronic Subcontracting Reporting System (eSRS)” means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at <http://www.esrs.gov>.

“Indian tribe” means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C.A. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

“Individual contract plan” means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror’s planned subcontracting in support of the specific contract except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

“Master plan” means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

“Subcontract” means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business concerns, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and with women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror’s subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The

offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626:

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business (SDB) concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe

(ii) Where one or more subcontractors are in the subcontract tier between the prime contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award

(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of—

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

(v) Total dollars planned to be subcontracted to HUBZone small business concerns;

(vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and

(vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to --

(i) Small business concerns,

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns, and

(vi) Women-owned small business concerns.

- (4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Central Contractor Registration database (CCR), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations) A firm may rely on the information contained in CCR as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of CCR as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with --
- (i) Small business concerns (including ANC and Indian tribes);
 - (ii) Veteran-owned small business concerns;
 - (iii) Service-disabled veteran-owned small business concerns;
 - (iv) HUBZone small business concerns;
 - (v) Small disadvantaged business concerns (including ANC and Indian tribes); and
 - (vi) Women-owned small business concerns
- (7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual
- (8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.
- (9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$550,000 (\$1,000,000 for construction of any public facility with further subcontracting possibilities) to adopt a plan similar to the plan that complies with the requirements of this clause.
- (10) Assurances that the offeror will --
- (i) Cooperate in any studies or surveys as may be required;
 - (ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;
 - (iii) Submit the Individual Subcontracting Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with the paragraph (I) of this clause using the Electronic Subcontracting Reporting System (eSRS) at <http://esrs.gov>. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions Reporting shall be in accordance with this clause, or as provided in agency regulations.
 - (iv) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS

(v) Provide its prime contract number, its DUNS number, and the e-mail address of the Government or Contractor official responsible for acknowledging or rejecting the reports, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their reports; and

(vi) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the Government or Contractor official responsible for acknowledging or rejecting the reports, to its subcontractors with subcontracting plans

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (e.g., CCR), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating --

(A) Whether small business concerns were solicited and if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and if not, why not;

(F) Whether women-owned small business concerns were solicited and if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact --

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through --

(A) Workshops, seminars, training, etc., and

(B) Monitoring performance to evaluate compliance with the program's requirements

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is identified as a certified HUBZone small business concern by accessing the Central Contractor Registration (CCR) database or by contacting SBA

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided --

(1) The master plan has been approved;

(2) The offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) A contract may have no more than one plan. When a modification meets the criteria in 19.702 for a plan, or an option is exercised, the goals associated with the modification or option shall be added to those in the existing subcontract plan.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders—Commercial Items, or when the subcontractor provides a commercial item subject to the clause at 52.244-6, Subcontracts for Commercial Items, under a prime contract

(k) The failure of the Contractor or subcontractor to comply in good faith with --

(1) The clause of this contract entitled "Utilization Of Small Business Concerns;" or

(2) An approved plan required by this clause, shall be a material breach of the contract

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at <http://www.esrs.gov>. Purchases from a corporation, company, or subdivision that is an affiliate of the prime Contractor or subcontractor are not included in these reports. Subcontract award data reported by prime Contractors and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe.

(1) ISR. This report is not required for commercial plans. The report is required for each contract containing an individual subcontract plan and shall be submitted to the Administrative Contracting Officer (ACO) or Contracting Officer, if no ACO is assigned.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period.

(ii) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(iii) The authority to acknowledge receipt or reject the ISR resides--

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) SSR

(i) Reports submitted under individual contract plans--

(A) This report encompasses all subcontracting under prime contracts and subcontracts with the awarding agency, regardless of the dollar value of the subcontracts.

(B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If a prime Contractor and/or subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over \$550,000 (over \$1,000,000 for construction of a public facility) and contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime Contractors. However, for construction and related maintenance and repair, a separate report shall be submitted for each DoD component.

(D) For DoD and NASA, the report shall be submitted semi-annually for the six months ending March 31 and the twelve months ending September 30. For civilian agencies, except NASA, it shall be submitted annually for the twelve month period ending September 30. Reports are due 30 days after the close of each reporting period. (E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts.

(ii) Reports submitted under a commercial plan--

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency from which contracts for commercial items were received.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

(iii) All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a Year-End Supplementary Report for Small Disadvantaged Businesses. The report shall include subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. If the data are not available when the year-end SSR is submitted, the prime Contractor and/or subcontractor shall submit the Year-End Supplementary Report for Small Disadvantaged Businesses within 90 days of submitting the year-end SSR. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

L.20 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN. (JAN 1999)

(a) "Failure to make a good faith effort to comply with the subcontracting plan", as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled, Disputes, from any final decision of the Contracting Officer

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

I.21 52.222-3 CONVICT LABOR. (JUN 2003)

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U S Virgin Islands.

(b) The Contractor is not prohibited from employing persons--

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

I.22 52.222-21 PROHIBITION OF SEGREGATED FACILITIES. (FEB 1999)

(a) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the

Equal Opportunity clause of this contract.

I.23 52.222-26 EQUAL OPPORTUNITY. (MAR 2007)

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island

(b)(1) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor's activities (41 CFR 60-1.5)

(c)(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to -

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion;
- (iv) Transfer;
- (v) Recruitment or recruitment advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the Contracting Officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance, provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(d) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

I.24 52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS. (SEP 2006)

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

All employment openings means all positions except executive and top management, those positions that will be filled from within the Contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment.

Executive and top management means any employee--

- (1) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;
- (2) Who customarily and regularly directs the work of two or more other employees;
- (3) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight;
- (4) Who customarily and regularly exercises discretionary powers; and
- (5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service

establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

Other eligible veteran means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

Positions that will be filled from within the Contractor's organization means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization

Qualified special disabled veteran means a special disabled veteran who satisfies the requisite skill, experience, education, and other job-related requirements of the employment position such veteran holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

Special disabled veteran means--

(1) A veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Department of Veterans Affairs for a disability--

(i) Rated at 30 percent or more; or

(ii) Rated at 10 or 20 percent in the case of a veteran who has been determined under 38 U.S.C. 3106 to have a serious employment handicap (i.e., a significant impairment of the veteran's ability to prepare for, obtain, or retain employment consistent with the veteran's abilities, aptitudes, and interests); or

(2) A person who was discharged or released from active duty because of a service-connected disability.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.

(b) General. (1) The Contractor shall not discriminate against the individual because the individual is a special disabled veteran, a veteran of the Vietnam era, or other eligible veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans without discrimination based upon their disability or veterans' status in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

- (ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;
- (iii) Rate of pay or any other form of compensation and changes in compensation;
- (iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- (v) Leaves of absence, sick leave, or any other leave;
- (vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;
- (vii) Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
- (viii) Activities sponsored by the Contractor including social or recreational programs; and
- (ix) Any other term, condition, or privilege of employment.

(2) The Contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. 4211 and 4212).

(c) Listing openings (1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate local public employment service office of the State wherein the opening occurs. Listing employment openings with the U.S. Department of Labor's America's Job Bank shall satisfy the requirement to list jobs with the local employment service office

(2) The Contractor shall make the listing of employment openings with the local employment service office at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State public employment agency in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency when it is no longer bound by this contract clause

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands of the United States, and Wake Island

(e) Postings. (1) The Contractor shall post employment notices in conspicuous places that are available to employees and applicants for employment

(2) The employment notices shall--

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are special disabled veterans, veterans of the Vietnam era, and other eligible veterans; and

(ii) Be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary of Labor), and provided by or through the Contracting Officer.

(3) The Contractor shall ensure that applicants or employees who are special disabled veterans are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled veteran, or may lower the posted notice so that it can be read by a person in a wheelchair)

(4) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement, or other contract understanding, that the Contractor is bound by the terms of the Act and is committed to take affirmative action to employ, and advance in employment, qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) Subcontracts. The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of \$100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Deputy Assistant Secretary of Labor to enforce the terms, including action for noncompliance

I.25 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES. (JUN 1998)

(a) General (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as -

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating -

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair) The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

I.26 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS. (SEP 2006)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on-

(1) The number of special disabled veterans, the number of veterans of the Vietnam era, and other eligible veterans in the workforce of the Contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of special disabled veterans, the number of veterans of the Vietnam era, and the number of other eligible veterans; and

(3) The maximum number and the minimum number of employees of the Contractor during the period covered by the report

(b) The Contractor shall report the above items by completing the Form VETS100, entitled "Federal Contractor Veterans' Employment Report (VETS100 Report)".

(c) The Contractor shall submit VETS100 Reports no later than September 30 of each year beginning September 30, 1988

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date-

(1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100)

(e) The Contractor shall base the count of veterans reported according to paragraph (a) of this clause on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all special disabled veterans, veterans of the Vietnam era, and other eligible veterans who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that-

(1) The information is voluntarily provided;

(2) The information will be kept confidential;

(3) Disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and

(4) The information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of \$100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

I.27 52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES. (DEC 2004)

(a) Definition. As used in this clause--

United States means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188))

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs

Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information

1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at <http://www.nlr.gov>.

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to--

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that--

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall--

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U S Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at <http://www.olms.dol.gov>; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c) For indefinite quantity

subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold Pursuant to 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States

I.28 52.222-50 COMBATING TRAFFICKING IN PERSONS. (AUG 2007)

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

"Coercion" means--

- (1) Threats of serious harm to or physical restraint against any person;
- (2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or
- (3) The abuse or threatened abuse of the legal process.

"Commercial sex act" means any sex act on account of which anything of value is given to or received by any person

"Debt bondage" means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined

"Employee" means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

"Involuntary servitude" includes a condition of servitude induced by means of--

- (1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or
- (2) The abuse or threatened abuse of the legal process.

"Severe forms of trafficking in persons" means--

- (1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or
- (2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery

"Sex trafficking" means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act

(b) Policy. The United States Government has adopted a zero tolerance policy regarding trafficking in persons Contractors and contractor employees shall not--

- (1) Engage in severe forms of trafficking in persons during the period of performance of the contract;
- (2) Procure commercial sex acts during the period of performance of the contract; or

- (3) Use forced labor in the performance of the contract.
- (c) Contractor requirements. The Contractor shall--
 - (1) Notify its employees of--
 - (i) The United States Government's zero tolerance policy described in paragraph (b) of this clause; and
 - (ii) The actions that will be taken against employees for violations of this policy. Such actions may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and
 - (2) Take appropriate action, up to and including termination, against employees or subcontractors that violate the policy in paragraph (b) of this clause.
- (d) Notification. The Contractor shall inform the Contracting Officer immediately of--
 - (1) Any information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, or subcontractor employee has engaged in conduct that violates this policy; and
 - (2) Any actions taken against Contractor employees, subcontractors, or subcontractor employees pursuant to this clause.
- (e) Remedies. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), or (f) of this clause may render the Contractor subject to--
 - (1) Required removal of a Contractor employee or employees from the performance of the contract;
 - (2) Required subcontractor termination;
 - (3) Suspension of contract payments;
 - (4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;
 - (5) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or
 - (6) Suspension or debarment.
- (f) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (f), in all subcontracts.

I.29 52.223-6 DRUG-FREE WORKPLACE. (MAY 2001)

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

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall - within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration -

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about -

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will -

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23 506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

I.30 952.224-70 PAPERWORK REDUCTION ACT. (APR 1984)

(a) In the event that it subsequently becomes a contractual requirement to collect or record information calling either for answer to identical questions from 10 or more persons other than Federal employees, or information from Federal employees which is to be used for statistical compilations of general public interest, the Paperwork Reduction Act will apply to this contract. No plan, questionnaire, interview guide, or other similar device for collecting information (whether repetitive or single-time) may be used without first obtaining clearance from the Office of Management and Budget (OMB).

(b) The contractor shall request the required OMB clearance from the contracting officer before expending any funds or making public contacts for the collection of data. The authority to expend funds and to proceed with the collection of data shall be in writing by the contracting officer. The contractor must plan at least 90 days for OMB clearance. Excessive delay caused by the Government which arises out of causes beyond the control and without the fault or negligence of the contractor will be considered in accordance with the clause entitled "Excusable Delays," if such clause is applicable. If not, the period of performance may be extended pursuant to this clause if approved by the contracting officer.

I.31 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES. (FEB 2006)

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at <http://www.treas.gov/offices/enforcement/ofac/sdn>. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's Web site at <http://www.treas.gov/offices/enforcement/ofac>.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

I.32 52.227-1 AUTHORIZATION AND CONSENT. (DEC 2007)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent--

(1) Embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract; or

(2) Used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a United States patent shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are expected to exceed the simplified acquisition threshold. However, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

I.33 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT. (DEC 2007)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in the Contractor's possession pertaining to such claim or suit. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold.

I.34 52.227-17 RIGHTS IN DATA- SPECIAL WORKS DEC 2007)

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

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

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

(b) *Allocation of Rights*

(1) The Government shall have—

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

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

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

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

(c) *Copyright—*

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

(i) The Contractor shall not assert or authorize others to assert any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the Contracting Officer. When copyright is asserted, the Contractor

shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all delivered data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

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

(2) *Data not first produced in the performance of this contract* The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

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

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

I.35 952.227-82 RIGHTS TO PROPOSAL DATA (APR 1984)

Except for technical data contained on pages N/A of the contractor's proposal dated 7/8/08 which are asserted by the contractor as being proprietary data, it is agreed that, as a condition of the award of this contract, and notwithstanding the provisions of any notice appearing on the proposal, the Government shall have the right to use, duplicate, disclose and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this contract is based.

I.36 52.229-3 FEDERAL, STATE, AND LOCAL TAXES. (APR 2003)

(a) As used in this clause--

"All applicable Federal, State, and local taxes and duties," means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

"Contract date," means the date set for bid opening or, if this is a negotiated contract or a modification, the effective

date of this contract or modification

"Local taxes" includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the contract is performed wholly or partly in any of those areas.

- (b) The contract price includes all applicable Federal, State, and local taxes and duties
- (c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.
- (d) The contract price shall be decreased by the amount of any after-relieved Federal tax
- (e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.
- (f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250
- (g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs
- (h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption

I.37 52.232-1 PAYMENTS. (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if -

- (a) The amount due on the deliveries warrants it; or
- (b) The Contractor requests it and the amount due on the deliveries is at least \$1,000 or 50 percent of the total contract price.

I.38 52.232-8 DISCOUNTS FOR PROMPT PAYMENT. (FEB 2002)

(a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a discount for prompt payment in conjunction with the offer, offerors awarded contracts may include discounts for prompt payment on individual invoices.

(b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office receives a proper invoice, provided the agency annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day

I.39 52.232-11 EXTRAS. (APR 1984)

Except as otherwise provided in this contract, no payment for extras shall be made unless such extras and the price therefor have been authorized in writing by the Contracting Officer.

I.40 52.232-17 INTEREST. (JUN 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

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

- (1) The date fixed under this contract
- (2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.
- (3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt
- (4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

I.41 52.232-23 ASSIGNMENT OF CLAIMS. (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

I.42 52.232-25 PROMPT PAYMENT. (OCT 2003)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Due date (i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office is the later of the following two

events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements

(2) Certain food products and other payments (i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are--

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.

(3) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.

- (i) Name and address of the Contractor
- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)
- (iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
- (iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
- (v) Shipping and payment terms (e.g., shipment number and date of shipment, discount for prompt payment terms) Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice
- (viii) Taxpayer Identification Number (TIN) The Contractor shall include its TIN on the invoice only if required elsewhere in this contract
- (ix) Electronic funds transfer (EFT) banking information.
 - (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
 - (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
 - (C) EFT banking information is not required if the Government waived the requirement to pay by EFT
- (x) Any other information or documentation required by the contract (e.g., evidence of shipment).

(4) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty

- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.
- (iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(5) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(6) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(7) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of \$1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest is due; and

(3) State that payment of the principal has been received, including the date of receipt

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand,

provided such date is no later than the 40th day after payment was made.

(iii) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation)

(b) Contract financing payment. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Fast payment procedure due dates. If this contract contains the clause at 52 213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

(d) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment

I.43 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR REGISTRATION. (OCT 2003)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either -

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause)

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for -

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and -

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System

(g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the CCR database and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent <P>

(i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

L.44 52.233-1 DISPUTES. (JUL 2002) - ALTERNATE I (DEC 1991)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) Claim, as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding \$100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor "

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

I.45 52.233-3 PROTEST AFTER AWARD. (AUG 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either -

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if -

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost

properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

I.46 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM. (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

I.47 52.239-1 PRIVACY OR SECURITY SAFEGUARDS. (AUG 1996)

(a) The Contractor shall not publish or disclose in any manner, without the Contracting Officer's written consent, the details of any safeguards either designed or developed by the Contractor under this contract or otherwise provided by the Government.

(b) To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor shall afford the Government access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records, and databases.

(c) If new or unanticipated threats or hazards are discovered by either the Government or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.

I.48 52.242-13 BANKRUPTCY. (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

I.49 52.243-1 CHANGES - FIXED-PRICE. (AUG 1987) - ALTERNATE I (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

- (1) Description of services to be performed.
- (2) Time of performance (i e., hours of the day, days of the week, etc.)
- (3) Place of performance of the services

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

I.50 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS. (MAR 2007)

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

"Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

"Subcontract" includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

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

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

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

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39.

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

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

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

I.51 52.246-25 LIMITATION OF LIABILITY - SERVICES. (FEB 1997)

(a) Except as provided in paragraphs (b) and (c) below, and except to the extent that the Contractor is expressly responsible under this contract for deficiencies in the services required to be performed under it (including any materials furnished in conjunction with those services), the Contractor shall not be liable for loss of or damage to property of the Government that -

- (1) Occurs after Government acceptance of services performed under this contract; and
- (2) Results from any defects or deficiencies in the services performed or materials furnished.

(b) The limitation of liability under paragraph (a) above shall not apply when a defect or deficiency in, or the Government's acceptance of, services performed or materials furnished results from willful misconduct or lack of good faith on the part of any of the Contractor's managerial personnel. The term "Contractor's managerial personnel," as used in this clause, means the Contractor's directors, officers, and any of the Contractor's managers, superintendents, or equivalent representatives who have supervision or direction of

- (1) All or substantially all of the Contractor's business;
- (2) All or substantially all of the Contractor's operations at any one plant, laboratory, or separate location at which the contract is being performed; or
- (3) A separate and complete major industrial operation connected with the performance of this contract.

(c) If the Contractor carries insurance, or has established a reserve for self-insurance, covering liability for loss or damage suffered by the Government through the Contractor's performance of services or furnishing of materials under this contract, the Contractor shall be liable to the Government, to the extent of such insurance or reserve, for loss of or damage to property of the Government occurring after Government acceptance of, and resulting from any defects and deficiencies in, services performed or materials furnished under this contract.

I.52 RESERVED

I.53 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE). (MAY 2004)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

- (1) Stop work as specified in the notice.
- (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- (3) Terminate all subcontracts to the extent they relate to the work terminated.
- (4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the

right to settle or to pay any termination settlement proposal arising out of those terminations

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government -

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under subparagraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of -

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49 202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including -

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted -

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the

Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C App 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

I.54 52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE). (APR 1984)

(a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to -

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) of this clause).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the

Contractor

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

I.55 52.253-1 COMPUTER GENERATED FORMS. (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

SECTION J - LIST OF ATTACHMENTS

J.1 LIST OF ATTACHMENTS (MAR 1999)

ATTACHMENT	DESCRIPTION
A	Statement of Work
B	Request for Official Travel

J.2 ATTACHMENT A - STATEMENT OF WORK

STATEMENT OF WORK Specification for North American SynchroPhasor Initiative (NASPI) May 2008

A. SCOPE OF WORK

The scope of work is limited to the contractor developing, and delivering a specification for a NASPI network (NASPInet) to the Department of Energy's (DOE), National Energy Technology Laboratory (NETL). NASPInet will be composed of Phasor Gateways, a Data Bus, and a set of common Services, all per the Technical Requirements below. NETL anticipates using the specification delivered by the contractor to implement NASPInet.

B. PROJECT BACKGROUND

NETL is issuing this solicitation for work in support of DOE's Office of Electricity Delivery and Energy Reliability in its mission to lead national efforts to modernize the electric grid, enhance the security and reliability of the energy infrastructure, and facilitate recovery from disruptions to the energy supply.

NASPI's mission is to create a robust, widely available and secure synchronized data (Synchrophasor) measurement infrastructure for the interconnected North American electric power system with associated analysis, monitoring tools for better planning and operation, and with improved reliability. NASPI's ultimate objective is to de-centralize, expand, and standardize the current Synchrophasor infrastructure through the introduction of a NASPI network (NASPInet) that will be composed of Phasor Gateways, a Data Bus, and a set of common Services. A mature NASPInet could involve hundreds of Phasor Gateways and tens of thousands of Phasor Measurement Units, each typically sampling data at 30 times per second.

The NASPI data measurement infrastructure currently involves a number of devices, including, among others, Phasor Measurement Units (PMUs) and Phasor Data Concentrators (PDCs).

PMUs are the source of synchronized phasor data. They are located in the field at a utility substation, receiving station, or generating station. They may be a stand-alone piece of equipment or a function embedded within another type of equipment, such as a microprocessor-based relay or a Disturbance Fault Recorder. All PMUs require a highly accurate clock signal for referencing, a sampling/measurement front end, and some sort of communication link to output synchrophasor data.

Phasor measurement data is typically transmitted continually from a PMU to a PDC. PDCs are generally located in the utility office environment, although they could physically be located in the field. PDCs function as an aggregation point for data from one or more PMUs that is streamed in via communication links to the field. Some local storage may be present along with an administrator interface and possibly some visualization tools. Today's PDCs were not designed to support the scalability and flexibility required to meet NASPI's mission.

Data retrieval and handling devices are installed by North American utilities within their own company guidelines and infrastructure. Data from these devices is currently sent to centralized data gathering locations, e.g. Tennessee Valley Authority, Bonneville Power Administration, where data is then made available for authorized distribution as required.

A utility's portal through which Synchrophasor data will be published and subscribed is called a "Phasor Gateway". A Phasor Gateway may handle data directly from a PMU, but most likely will send and receive data from one or more PDCs. A logical entity, called the "Data Bus" will transport data from one Phasor Gateway to another. The Data Bus is one logical entity, but it will be comprised of a large number of components throughout the NASPInet, much like the Internet has network-level routers deployed everywhere the Internet is accessible.

A basic conceptual architectural diagram of the NASPInet that includes PMUs, Phasor Gateways and the Data Bus are shown in Figure 1.

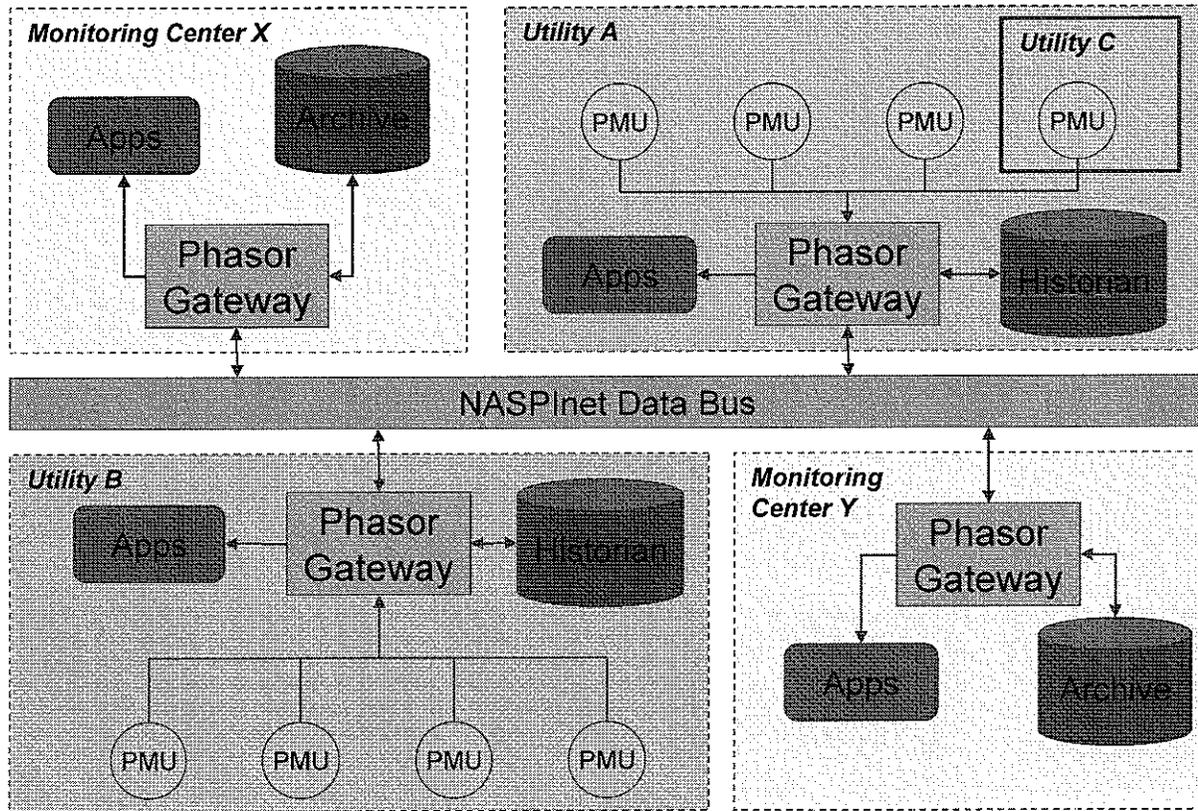


Figure 1. Basic Conceptual NASPInet Architecture

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The NASPInet will support a hierarchical flow of data and information from utilities, to regional reliability centers, and on to NERC (North American Electric Reliability Corporation), as shown in Figure 2. NERC has been designated by the Federal Energy Regulatory Commission to be the Electricity Reliability to implement mandatory reliability standards for North American utilities. NERC will use a subset of the NASPInet data to perform this function

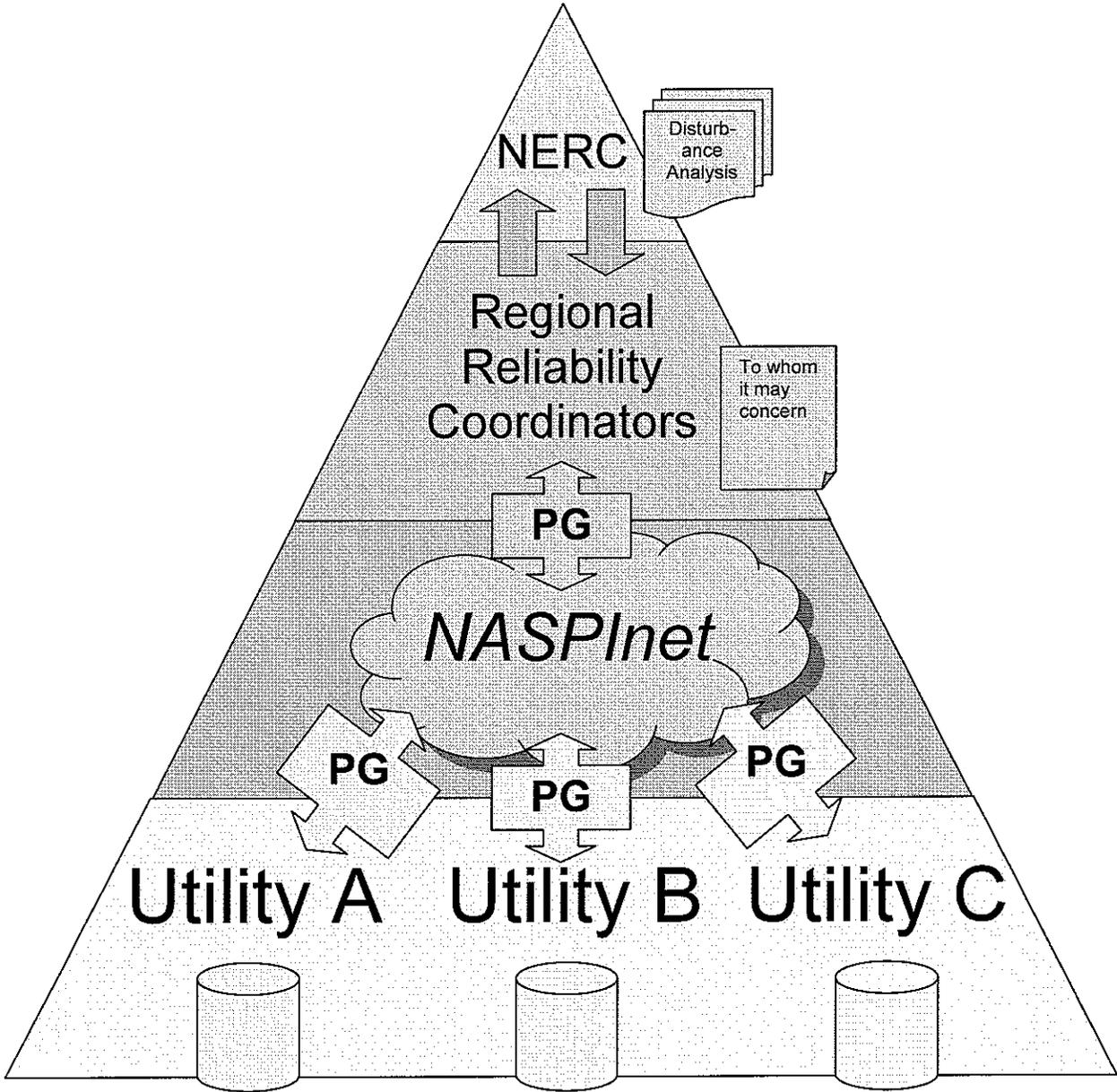


Figure 2. Top-down view of information flow from Utilities to the Regional Reliability Coordinators, and ultimately, on to NERC - all via the NASPInet and associated Phasor Gateways.

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The main purpose of the Phasor Gateway is as follows:

- Serve as the sole access point to the Data Bus for inter-organizational Synchrophasor traffic
- Administer and disseminate cyber security and access rights
- Monitor and maintain data integrity
- Manage traffic format and timing compatibility issues
- Manage traffic priority according to Service Classes

The main purpose of the Data Bus is as follows:

- Provide connectivity between Phasor Gateways and other elements of the NASPInet
- Provide Quality of Service (QoS) guarantees for reliable and redundant delivery of real-time operational data
- Provide QoS conformance monitoring over NASPInet for Service Classes
- Enforce conformance with cyber security and access control policies

The NASPInet Services support the operation of the NASPInet's Phasor Gateways, Data Bus, Data Bus elements, and NASPInet applications. NASPInet services can be grouped in to the following three general categories:

- Name Services
- Cyber Security Services
- Data and Control Services

C. WORK TO BE PERFORMED

Develop a specification for NASPInet consistent with the following technical requirements. Technical requirements are described in each of four areas:

General Technical Requirements

Phasor Gateway Technical Requirements

Data Bus Technical Requirements

NASPInet Services

General Technical Requirements

The Specification of the NASPInet system-level behavior shall do the following as shown for each topic area:

G1. Equipment and Device Naming conventions

- Provide for guaranteed unique assignments
- Be tolerant of errors and failures
- Describe the necessary attributes of the NASPInet component naming convention(s)

G2. Protocols

- Enumerate which core interoperability protocol(s) will be mandated
- Outline an interoperability framework for extending the core protocols so that a vendor can provide support for additional or new functionality
- Identify all relevant existing protocols with which the NASPInet system must be compatible or interoperable
- Identify whether any new protocols are needed and if so, specify their attributes

G3. Service Classes

- Address the Service Classes identified in Appendix A (located in Section G)
- Address the need for a variety of NASPInet applications that span multiple Service Classes (see Appendix A located in Section G)
- Address the co-existence of multiple Service Classes within the NASPInet
- Enumerate all additional Service Classes included in the Specification

- G4. Quality of Service (QoS)
- Address end-to-end QoS issues for both data and control traffic per each Service class
 - Address latency, throughput, cyber security strength and any other Quality of Service issues relevant to the specifications for the Phasor Gateways, the Data Bus and its components, the overall NASPInet system and its applications
- G5 Cyber Security
- Address cyber security, both globally for the NASPInet and locally for individual NASPInet components (e.g., Phasor Gateway (PG) and Data Bus (DB) elements)
 - Address cyber security for both data and control traffic as it flows through the NASPInet
 - Address the following cyber security properties: confidentiality, integrity, availability, non-repudiation, and privacy
 - Include the cyber security architecture and mechanism(s) by which a positive cyber security model (i.e., a list of allowed behaviors is used instead of a list of disallowed behaviors) will be implemented, managed, and verified
 - Address the need to defend against, tolerate (or fail gracefully), and recover from cyber security attacks
 - Require that any vendor extension meet or exceed the Specification's cyber security standards
 - Provide an architecture for ensuring verifiable end-to-end "chain of custody" for both data and control traffic
 - Address cyber security for Phasor Gateways, the Data Bus and its components, the overall NASPInet system and its applications
 - Address relevant "chain of custody" issues
- G6 Emergency Modes
- Support for emergency mode management and operations
 - Identify which emergency modes are required and identify what component operational requirements are in effect when in those modes
- G7 Trust Management
- Describe an architecture to both provide and validate trust within a given organization and across organizational boundaries
 - Present an architecture for providing multiple layers of trust, flexible deployment, retention, and upgrading trust mechanisms for the lifespan of the data
 - Describe a trust management architecture for inter- and intra-organizational trust
 - Describe a architecture that provides multiple layers of trust and that supports operational reliability
- G8 Open Standards and Vendor Diversity
- Be an open standard that can be implemented by a variety of vendors
 - Not adopt proprietary technologies or protocols in order to promote vendor diversity and avoid vendor 'lock-in'
 - Provide an extensibility framework within which vendors may exceed the Specification's standards
 - Describe the extensibility framework to be used for vendor extensions
- G9 Instrumentation
- Address the need for instrumentation of all components within the NASPInet for the purposes of network management, cyber security, diagnostics, performance, and post-event analysis
 - Describe the instrumentation requirements

G10. Data Standards and Formats

- Enumerate which core data standards and formats will be mandated
- Describe a data framework that allows for the extension of the core data standards and formats so that a vendor can provide support for additional or new data
- Identify all relevant existing data standards with which the NASPInet system must be compatible or interoperable
- Identify whether any new data standards are needed and if so, specify their attributes

G11 Policy-based Control

- Enumerate the key facets of the NASPInet that required policy-based control of admission control for subscribers, configuration of Data Busses, adaptations to failures, emergency modes, and other things the Offeror believes should not be "hard-coded" within the NASPInet.
- Provide a policy architecture(s) that shall enable policy-based control of these identified policy-controlled facets of NASPInet. The architecture should address whether a given facet that needs policy control can be controlled by simple database tables or would require something more flexible such as a small policy language for that facet.

G12. Phased Implementation Approach

- Address the need, or lack thereof, for a phased approach to the implementation of the Specification
- Provide a strategy for implementation of this Specification in logical and coherent phases

Phasor Gateway Technical Requirements

The Specification of the Phasor Gateway (PG) must do the following as shown for each topic area:

P1 Scalability

- Address scalability
- Describe the mechanism(s) by which scaling is achieved and define the range over which traffic load will be supported
- Consider the long-term (20 year+) time horizon
- Describe the important dimensions of scalability

P2 Fault Tolerance

- Address tolerance to traffic flow degradation, equipment failure, configuration management errors, and other errors that could affect overall system availability
- Include requirements related to any needed data buffering, retransmission, recovery, and the extent to which they are necessary for each Service Class

P3 Availability

- Describe how to achieve a very high level of system availability
- Quantify the level of system availability that will be specified, and describe how this level of availability is achieved and quantified for each Service Class
- Specify the required availability of individual components and of each Service Class
- Describe a high-level architecture that is anticipated to achieve system availability in the face of individual component failures

P4 Industry-standard protocol support

- Identify the required industry-standards that must be supported at each level of the protocol stack(s)
- Include support for IEEE C37 118 devices

- Include support for International Electrotechnical Commission (IEC) 61850
 - Include a requirement for Institute of Electrical and Electronic Engineers (IEEE) C37.118
 - Include support for IEC 61850 and enumerate all other standards and protocols deemed necessary
 - Describe how interoperability with Specification standards is to be achieved so that proprietary vendor components can seamlessly interact with standards-based solutions
- P5 Vendor interoperability
- Address an interoperability framework for vendor software and hardware interoperability
 - Address both legacy and forward compatibility
- P6 Traffic flow management
- Address traffic flow management in the context of the Service Classes
 - Address the mechanism(s) used to implement traffic flow management, including but not limited handling of time stamps, control messages prioritization and disposition of stale data for each Service Class
 - Address the requirements for traffic flow management mechanisms across the classes of traffic
 - Address the priorities of multiple classes of control traffic
 - Address how these priorities are used to ensure that critical traffic is delivered in the presence of anomalies such as Information Technology (IT) failures and cyber-attacks
- P7 Failure mode & event notification
- Address the conditions under which operator/administration attention is required, and the mechanisms by which the operator(s) and administrator(s) are notified and the information that is provided
 - Address the dissemination of failure and adverse event notices for each class of service, including the mechanism(s) by which users of the data are notified of service degradation
 - Enumerate what failures will be monitored and what type and level of notification is required in the event of failure
- P8 Data & task logging
- Describe the capabilities needed for data and control logging and determine the quality and completeness of the logging. The logs must be sufficient to enable post-event analysis, forensic analysis, and other post-anomaly analyses
 - Include mechanism(s) that enable triggered high-resolution logging. The events can include either conditions arising out of part NASPInet components as well as conditions arising out of the PMU data itself
 - Describe the required data that is recorded in the logs, and provide requirements for what is deemed necessary
- P9 Naming Conventions
- Address the implementation of the global logical and physical naming conventions, name resolution, name assignment, and physical-logical name translation
 - Allow the vendors to use proprietary naming protocols on the private side of the PG
 - Describe the necessary attributes of the NASPInet component naming convention(s) as it applies to the Phasor Gateways
- P10 Access control
- Address the requirements and implementation of access control and the mechanism(s) that vendors will be required to use
 - Address the NASPInet's long-term identification, authentication, and access control requirements

- Describe the granularity (e.g., device, data block, data item, variable) at which access control is specified
- Distinguish between human-device and device-device access control
- Propose an architecture for access control implementation
- Anticipate a 20+ year life expectancy

P11. Cyber security

- Address how the Phasor Gateways will comply with the Specification's overall cyber security requirements (see requirement G5: Cyber Security), especially with regard to data and control traffic
- Describe a framework that allows Phasor Gateways to describe the cyber security requirements for end-to-end traffic that they deliver to the Data Bus
- Conform to the NERC Critical Infrastructure Protection (CIP) Standards and all other applicable cyber security standards.
- Address how CIP standards compliance is achieved. Specifically, NERC CIP reports must be generated for Phasor Gateways according to the NERC CIP Standards, and any additional reporting requirements arising from the Specification must be reported
- Propose a cyber security architecture for implementing and auditing compliance with cyber security standards

P12. Gateway utilization

- Address the need for the Phasor Gateways to make efficient use of its capabilities, i.e. one-to-many connections that optimize network utilization, such as a publish-subscribe architecture
- Identify appropriate mechanisms, such as User Datagram Protocol (UDP) multicast or Internet Protocol, version 6 (IPv6) multicast, that support this feature
- Describe a high-level architecture that supports multicasting capabilities

P13. Open Application Programming Interface (API) feature

- Address what standards are to be adhered to in the area of PG API development and specify the degree of compliance to be achieved
- Enumerate, at a high level, the required core API interfaces that will be implemented by the Phasor Gateways

P14. Support and training

- Address any necessary hardware, software and training support requirements, such as:
 - Adequate hardware and software support, including spare component availability
 - On-site start-up support to the end-user
 - Training for end-users during start-up & commissioning and upon major feature revisions
 - All hardware, software, and PG system features documentation and instruction manuals
- Outline the expected support and training needs for the Phasor Gateways

Data Bus Technical Requirements

The Specification of NASPInet Data Bus (DB) the must do the following as shown for each topic area:

D1. Data Bus Access

- Mandate that access to the Data Bus shall only be through Phasor Gateways. All SynchroPhasor data must first flow through a Phasor Gateway before it reaches the Data Bus

D2. Forwarding Latency

- Address the forwarding latency requirements for each Service Class
- Specify performance requirements in milliseconds/hop and maximum hops for each Service Class over NASPInet (i.e., source PG to destination PG)
- Describe the maximum allowable latency(ies) in milliseconds per hop and maximum hops for each class of service

D3. Throughput

- Address the forwarding throughput requirements for each Service Class
- Address how the Data Bus manages load balancing
- Describe the minimum throughput and shall provide specific metrics in data-points/second for each Service Class over NASPInet (both per Data Bus component and for Data Bus aggregate)

D4. Cyber Security

- Address how the Data Bus enables and implements end-to-end cyber security for the cyber security services described in the Services specification
- Describe a framework that allows Phasor Gateways to describe the cyber security requirements for end-to-end traffic that they deliver to the Data Bus
- Describe the high-level cyber security architecture for end-to-end security of the data and control traffic flow

D5. Traffic Prioritization

- Address admission control management and admission decisions for traffic of various classes over the NASPInet to manage dynamic, variable traffic loads
- Address traffic prioritization at both the component and the aggregate Data Bus level if traffic load shedding is required

D6. Network Utilization

- Address the issue of efficient data delivery and network utilization when a single payload must be delivered to multiple end-users (e.g., multicasting)
- Describe a high-level architecture that supports efficient network utilization in data and control traffic delivery

D7. Flexibility and Heterogeneity

- Support vendor diversity
- Address how multiple hardware platforms, network topologies, communications infrastructures, network transports, vendors, and software technologies will be supported
- Anticipate a 20+ year life expectancy

D8. Quality of Service (QoS)

- Address the Data Bus QoS for each data stream
- Provide measurements of QoS that will permit data end-users to determine whether a data stream conforms to a given quality of service at any component of the network
- Address how data streams are constructed end-to-end such that the quality of service is provided (e.g., guaranteed delivery vs. best effort, frequency of delivery)
- Enumerate the QoS metrics collected and maintained by the Data Bus and its components

D9. Temporal Synchronicity

- Address mechanism(s) that support temporal synchronism across multiple data streams

- Describe the appropriate rate filtering, data decimation, and data sequencing requirements for each class of service

D10. Instrumentation

- Address instrumentation of the Data Bus and its components for the purposes of network management, cyber security, diagnostics, and performance
- Include at least link latency, throughput, availability, and QoS violations in instrumentation metrics
- Describe the required data that is collected

D11. Anomaly Resilience

- Address how anomalous traffic or behavior from either Phasor Gateway or Data Bus components can be managed so as to ensure resilient Data Bus performance
- Propose an architecture for implementing anomaly resilience within the Data Bus

NASPInet Services

Core services are those which are necessary to the operation of the NASPInet system, some of which are enumerated below. Value-added services are those which vendors may find provide benefits to NASPInet users and/or product differentiation. The Specification of NASPInet Services must do the following as shown for each topic area:

- Address the services below to ensure that a standardized approach for communicating between the various applications, PG and DB are included in the Specification
- Describe a services architecture as well as a services implementation framework
- Address core services and should address value-added services. However, the Responses should address in detail those services that are critical in the immediate future

Name Services

1. Component registration services address the registration of physical devices.
2. Name registration services address the registration and resolution of logical names to physical devices

Cyber Security Services

1. Authentication services provide identity verification for both equipment (e.g., devices and software with Personal Computer (PC) cards) and people (e.g., users with passwords) entities.
2. Key management services provide key assignment and resolution.
3. Non-repudiation services verifies that the entity reporting to have performed an action actually performed the action.
4. Data integrity services provide protection of data for the purpose of guaranteeing that the data has not been modified since it was generated, and information about whether a data or control transaction requires integrity protection
5. Data confidentiality services provide protection of data for the purpose of guaranteeing that only authorized entities can obtain the data, and information about whether a data or control transaction requires confidentiality protection
6. Access authorization and control services provide access rights information for devices and users with respect to data or control traffic.
7. Trust management services address the question of who is permitted to administer what parts of the NASPInet system (e.g., user/device credentials, inter- and intra-organization access control updates)

Data and Control Services

1. Chain of custody services provide data and control pedigree/provenance tracking during network routing from source to destination
2. Connection management services provide bandwidth, resource allocation, and cyber security conformance management to accommodate varying demand and traffic loads
3. Configuration management services provide support for all administration activities such as rollbacks and backup.

D. DELIVERABLES/SCHEDULE

D 1 The following deliverables shall be submitted:

- 1 Presentation materials for project overview briefing (due one week before briefing)
- 2 Presentation materials for project status briefing (due one week before briefing)
- 3 Presentation materials for briefing on the Conceptual Framework of the Specification Development (due one week before briefing)
- 4 Presentation materials for briefing on the Conceptual Framework of the Specification Development, revised to incorporate agreed upon changes (due two weeks after briefing)
- 5 Presentation materials for briefing on Draft Specification (due one week before briefing)
- 6 Presentation materials for briefing on Draft Specification, revised to incorporate agreed upon changes (due two weeks after briefing)
- 7 Draft complete specification (due five months after award)
- 8 Presentation materials for briefing on the Final Specification (one week before briefing)
- 9 Presentation materials for briefing on the Final Specification, revised to incorporate agreed upon changes (due two weeks after briefing)
- 10 Complete specification (due seven months after award)

D 2 Format

D.2.1 a Specifications shall be delivered in Microsoft Word or Adobe Acrobat format

D.2.1 b Presentation materials shall be delivered in Microsoft Word, Microsoft PowerPoint or Adobe Acrobat format

D 2.2 For all deliverables, one hard copy and one electronic copy should be submitted to the Contract Specialist (CS) for the contract file and one electronic copy to the Contracting Officer's Representative (COR).

E. BRIEFINGS

E.1 The contractor shall present a project overview on the "Specification for North American Synchrophasor Initiative (NASPI)" – October 2008, at the DOE Visualization and Controls Peer Review. It is anticipated that this will be a 20-minute presentation with 10 minutes of questions.*

E.2 The contractor shall present the status of project at the NASPI Working Group Meeting in February 2009 in Phoenix AZ.*

E.3 The contractor shall present the Conceptual Framework of the Specification Development to the Data Network Management Task Team (DNMTT) (approximately two months after award)*

E.4 The contractor shall present the Draft Specification to the DNMTT (approximately four months after award.)*

E.5 The contractor shall present the Final Specification to the DNMTT (approximately six months after award.)*

*The exact date, duration and location of the briefings E.1. through E 5 will be mutually agreed upon by the contractor and NETL.

F. DECISION POINTS

After the E.3, E.4, and E 5 presentations, the NASPI DNMTT will review progress and will make recommendations to NETL. Based on these recommendations, NETL will make a decision on how to proceed and the Contracting Officer will notify the Contractor accordingly. Possible decision outcomes include:

1. Go Decision – SOW revisions are **not** necessary. The contractor shall continue progress of the specification for the next deliverable/presentation.

2. No-Go Decision - SOW revisions **are** necessary. The contractor shall not progress toward the next deliverable/presentation until SOW revisions are incorporated by modification to the contract.

G. Appendix A - Service Classes

To support varying end-user application requirements with different data needs, currently five classes of synchrophasor data service have been identified and defined within NASPInet. These Service Classes are based upon qualitative end-to-end application requirements and therefore may have varying Phasor Gateway, Data Bus, and NASPInet Service requirements. NASPI Service classes are both a generalization and expansion of the per-link scalability and performance requirements from [1], which mainly involves a substation-level scope. The original analysis and justification of many of the flexibility and robustness requirements and emergency modes for the NASPInet Data Bus are found in [2]. Many future-looking case studies of what NASPInet may be used for, as well as data availability requirements, can be found in [3]. The implementation of the Specification may require the quantification of end-to-end resource usage requirements, in which case it may be useful to define quantifiably-defined sub-classes within each qualitatively-defined Service Class.

The five currently defined Service Classes are as follows:

CLASS A: Feedback Control Typical use: Small Signal Stability
This class is characterized by very low latency and a fast data rate (e.g., 60 messages per second). Data must be transmitted and received as quickly as possible. A high level of data availability is required (no gaps). End user applications of this data class are generally operating on data from a small number of PMUs that are likely geographically close.

CLASS B: Feed-forward Control Typical use: State Estimator Enhancement
Latency requirement is less strict than class A due to the relatively slower processing rate of state estimator applications. However, the time alignment of the received data from the entire set of PMUs is critical.

CLASS C: Post Event Typical use: Post-mortem Event Analysis
This class requires a high degree of data completeness and accuracy. Higher latency is acceptable since analysis is generally conducted off-line (hours or days later) with archived data, as opposed to an on-line data stream. A high message rate is desirable to be able to reconstruct as many power system event characteristics as possible. However, in practice this may not be achievable for large-scale post event data sets due to NASPInet bandwidth limitations that may be imposed on Class C traffic.

CLASS D: Visualization Typical use: Operator visibility
Latency is not a critical issue. Data must be time-aligned, but not to the extent of class B data. There is a wider tolerance for accuracy. This data class is analogous to a Doppler radar view of the system. End-user applications may retrieve data from many PMUs across a wide geographical area.

CLASS E: Research Typical use: Testing or Research and Development (R&D)
There are no guarantees on any attributes of this data class. Class E shall be given the lowest priority of all NASPInet data traffic.

The table below summarizes key NASPInet traffic attributes, as of January 2008, among the five classes:

NASPInet Traffic Attribute	CLASS A Feedback Control	CLASS B Feed-forward Control	CLASS C Post Event	CLASS D Visualization	CLASS E Research
Low Latency	4	3	1	2	1
Availability	4	2	3	1	1
Accuracy	4	2	4	1	1
Time Alignment	4	4	1	2	1
High message rate	4	2	4	2	1
Path Redundancy	4	4	1	2	1
Table key: 4 – Critically important, 3 – Important, 2 – Somewhat important, 1 – Not very important					

H. ACRONYMS AND DEFINITIONS

API	Application Programming Interface
CIP	Critical Infrastructure Protection
CS	Contract Specialist
COR	Contracting Officer's Representative
DB	Data Bus
DNMTT	Data Network Management Task Team
DOE	Department of Energy
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IPv6	Internet Protocol, version 6
IT	Information Technology
MTBF	Mean Time Between Failures
MTTR	Mean Time To Recovery
NASPI	North American SynchroPhasor Initiative
NASPInet	NASPI network, composed of Phasor Gateways, a Data Bus and a set of common services
NERC	North American Electric Reliability Corporation
NETL	National Energy Technology Laboratory
PC	Personal Computer
PDC	Phasor Data Concentrator
PG	Phasor Gateway
PMU	Phasor Measurement Unit
QoS	Quality of Service
R&D	Research & Development
UDP	User Datagram Protocol

Availability - A probabilistic measure of whether a service or component is correctly functioning when needed [4]. There are many sub-definitions. Steady-state availability is this measure over all time, and is quantified by Mean Time Between Failures (MTBF)/[MTBF+Mean Time To Recovery (MTTR)]. Interval availability is a measure over a given time interval, for example time to delivery a single data update or alert

Confidentiality – The concealment of information or resources from unauthorized entities.

Fault Tolerance - The ability of a component, service, or system to operate satisfactorily under anomalous conditions such as traffic flow degradation, equipment failure, configuration management errors, and other errors that could affect overall system availability [4]

Integrity – The accuracy and completeness of data and resources. Data integrity ensures that only authorized entities may modify data content. Origin integrity ensures that entities trust the origin of data or resources

Traffic Load Shedding - The act of reducing data or control traffic, based on service class, during times of high demand to insure service class requirements are met.

NASPInet – NASPI data delivery service and network on which it is built.

Privacy – The prevention of unauthorized dissemination of information about an entity and its actions

Reliability - A measure of the probability that a system or component or service does not fail during a given time period; i.e., time to first failure [4].

Service Classes - Synchrophasor data service groupings based upon qualitative end-to-end application requirements

Synchrophasor - Synchronized phasors

The Specification - The work product the contractor will deliver to DOE per the Statement of Work

Traffic - Refers to the transmission of both control and data elements.

- Control Traffic - Refers to the transmission of non-data elements
- Data Traffic - Refers to the transmission of data elements.

I. REFERENCES

[1] IEEE 1646 Standard Communication Delivery Time Performance Requirements for Electric Power Substation Automation, IEEE, 2004

[2] David E. Bakken, Carl H. Hauser, Harald Gjermundrød, and Anjan Bose. "Towards More Flexible and Robust Data Delivery for Monitoring and Control of the Electric Power Grid", Technical Report EECS-GS-009, School of Electrical Engineering and Computer Science, Washington State University, May 30, 2007 Available via <http://www.gridstat.net/IR-GS-009.pdf>

[3] IntelliGrid Project, "The Integrated Energy and Communication Systems Architecture, Vol IV: Technical Analysis" 2004, Available via <http://www.epri.com/IntelliGrid/>

[4] A. Avizienis, J. Laprie, B. Randell, and C. Landwehr. "Basic Concepts and Taxonomy of Dependable and Secure Computing", IEEE Transactions on Dependable and Secure Computing, 1:1, January 2004, 11-33

IEEE C37.118-2005 IEEE Standard for Synchrophasors for Power Systems, IEEE, 2006.

IEC 61850 Communication Networks and Systems in Substations

<http://www.61850.com/index.html>

NERC Critical Infrastructure Protection Standards

http://www.nerc.com/~filez/standards/Reliability_Standards.html#Critical_Infrastructure_Protection

J.3 ATTACHMENT B – REQUEST FOR OFFICAL TRAVEL

The Request for Official Travel Form is provided as a separate attachment entitled “AtachB-RFOT.pdf”.

REQUEST FOR OFFICIAL TRAVEL

TRAVELER INFORMATION

Name:		Travel Date(s):
Travel Date Begin:	Travel Date End:	Project:

TRIP INFORMATION

Reason for Travel:

Will you travel with anyone else (who?):

Allowable Lodging Per Diem:	Allowable ME/I Per Diem:
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Trip Itinerary:

Date	Location				Airfare Cost
	From:				
	To:				
	To:				
	To:				

Hotel:	1 st	Name:	Lodging Cost:
	2 nd	Name:	Lodging Cost:
	3 rd	Name:	Lodging Cost:

Rental Car:	Company:	Rental Car Cost:
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Miscellaneous Expenses:	ME/I (food expenses)	\$	
	Gas	\$	
	Parking	\$	
	Tolls	\$	
		\$	
		\$	
TOTAL ESTIMATED TRAVEL		\$	

Traveler Notes:

Approvals Required: _____

Signature of Traveler	date
COR Approved	date