

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

CONTRACT ID CODE PAGE OF PAGES

1 2

2. AMENDMENT/MODIFICATION NO. A003	3. EFFECTIVE DATE See Block 16C. Below	4. REQUISITION/PURCHASE REQ. NO. 09CH11469.007	5. PROJECT NO. (If applicable) N/A
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6. ISSUED BY U.S. Department of Energy Chicago Office Office of Science 9800 South Cass Avenue Argonne, IL 60439	7. ADMINISTERED BY (If other than Item 6)
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8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Spectra Tech, Inc. 132 Jefferson Court Oak Ridge, TN 37830	(✓)	9.A. AMENDMENT OF SOLICITATION NO.
		9.B. DATED (SEE ITEM 11)
	(✓)	10.A. MODIFICATION OF Contract/Order NO. DE-AC02-09CH11469
		10.B. DATED (SEE ITEM 13) November 13, 2008

CODE	N/A	FACILITY CODE	N/A
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11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
Appropriation: 89X0222.91 B&R#: KX0340209 Object Class: 25110 Amount: \$275,000

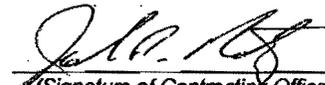
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

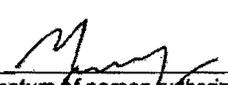
Check One	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority)- Part I, Section B.2 ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS; Part I Appendix A, FAR 52.232-22 Limitation of Funds.

E. IMPORTANT: Contractor is not, is required to sign this document and return 3 copies to the issuing office. (Merely as acknowledgement of receipt)

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
See Page No. 2 of this Modification.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Loong Yong, President	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) John P. Motz, Team Leader Office of Acquisition and Assistance Contracting Officer
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED 3/12/2009
16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 3/12/09


(Signature of person authorized to sign)

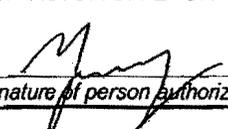
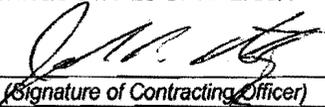
14. DESCRIPTION OF AMENDMENT/MODIFICATION (continued)

The purpose of this modification is to add incremental funding in the amount of \$275,000. The contract is further modified as follows:

Part I, Section B.2. – ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, is revised as follows:

In paragraph (c), the amount allotted and available for payment of allowable costs and base and award fee under this contract is hereby increased by \$275,000 from "\$577,000" to "\$852,000." The period of performance which it is estimated the allotted amount will cover is through April 17, 2009.

END OF MODIFICATION

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT				CONTRACT ID CODE	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. A002	3. EFFECTIVE DATE See Block 16C. Below	4. REQUISITION/PURCHASE REQ. NO. 09CH11469.005 09CH11469.006	5. PROJECT NO. (If applicable) N/A		
6. ISSUED BY CODE U.S. Department of Energy Chicago Office Office of Science 9800 South Cass Avenue Argonne, IL 60439		7. ADMINISTERED BY (If other than Item 6) Code			
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Spectra Tech, Inc. 132 Jefferson Court Oak Ridge, TN 37830				(✓)	9.A. AMENDMENT OF SOLICITATION NO.
					9.B. DATED (SEE ITEM 11)
				(✓)	10.A. MODIFICATION OF Contract/Order NO. DE-AC02-09CH11469
					10.B. DATED (SEE ITEM 13) November 13, 2008
CODE	N/A	FACILITY CODE	N/A		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
Appropriation: 89X0222.91 B&R#: KX0340209 Object Class: 25110 Amount: \$212,000					
Appropriation: 89X0321.93 B&R#: 400906120 Object Class: 25200 Amount: \$65,000					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
Check One	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A				
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).				
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
X	D. OTHER (Specify type of modification and authority)- Part I, Section B.2 ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS; Part I Appendix A, FAR 52.232-22 Limitation of Funds.				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>3</u> copies to the issuing office. (Merely as acknowledgement of receipt)					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
See Page No. 2 of this Modification.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print) Loong Yong, President			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) John P. Moore, Contracting Officer Office of Acquisition and Assistance Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
 (Signature of person authorized to sign)		2/27/2009	BY  (Signature of Contracting Officer)		2/26/09

14. DESCRIPTION OF AMENDMENT/MODIFICATION (continued)

The purpose of this modification is to add incremental funding in the amount of \$277,000. The contract is further modified as follows:

Part I, Section B.2. – ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, is revised as follows:

In paragraph (c), the amount allotted and available for payment of allowable costs and base and award fee under this contract is hereby increased by \$277,000 from "\$300,000" to "\$577,000." The period of performance which it is estimated the allotted amount will cover is through March 16, 2009.

END OF MODIFICATION

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT 1. CONTRACT ID CODE PAGE OF PAGES
 1 2

2. AMENDMENT/MODIFICATION NO. **A001** 3. EFFECTIVE DATE See Block 16C. Below 4. REQUISITION/PURCHASE REQ. NO. 09CH11469.002 09CH11469.003 09CH11469.004 5. PROJECT NO. (If applicable) N/A

6. ISSUED BY CODE U.S. Department of Energy Chicago Office Office of Science 9800 South Cass Avenue Argonne, IL 60439 7. ADMINISTERED BY (If other than Item 6) Code

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Spectra Tech, Inc. 132 Jefferson Court Oak Ridge, TN 37830 9.A. AMENDMENT OF SOLICITATION NO. 9.B. DATED (SEE ITEM 11) 10.A. MODIFICATION OF Contract/Order NO. DE-AC02-09CH11469 10.B. DATED (SEE ITEM 13) November 13, 2008

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
 Fund: 05300 - Object Class: 25110 Program: 3123607 Amount: \$50,000
 Fund: 00500 Object Class: 25110 Program: 2923959 Amount: \$50,000
 Fund: 00500 Object Class: 25109 Program: 2923959 Amount: \$150,000

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

Check One A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
 B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
 C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
 X D. OTHER (Specify type of modification and authority)- Part I, Article B.2 ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS; Part I Appendix A, FAR 52.232-22 Limitation of Funds; Part III, Article J.3 LIST OF KEY PERSONNEL; and Part I, Appendix A, DEAR 952.215-70 Key Personnel.

E. IMPORTANT: Contractor is not, is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
 See Page No. 2 of this Modification.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Loong Yong, President 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Marlene E. Martinez Acquisition and Assistance Officer
 15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 12/29/2008 16B. UNITED STATES OF AMERICA Contracting Officer BY Marlene E. Martinez 12/22/2008 16C. DATE SIGNED
 (Signature of person authorized to sign) (Signature of Contracting Officer)

The purpose of this modification is to add incremental funding in the amount of \$250,000 and to revise the list of key personnel. The contract is further modified as follows:

- A. Part I, Section B.2. – ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, is revised as follows:

In paragraph (c), the amount presently allotted under this contract is hereby increased by \$250,000 from "\$50,000" to "\$300,000." The period of performance which it is estimated the allotted amount will cover is extended to January 31, 2009.

- B. Part III, Section J.3 – LIST OF KEY PERSONNEL, is revised as follows: The Project Manager – "[REDACTED]" is replaced by "[REDACTED]"

b4, b6

END OF MODIFICATION

PART I

SECTION B

SUPPLIES OR SERVICES AND PRICES/COST

TABLE OF CONTENTS

- B.1 ITEMS BEING PROCURED
- B.2 ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS
- B.3 OPTION(S) TO EXTEND THE TERM OF THE CONTRACT - SERVICES
- B.4 ANNUAL INDIRECT RATE SUBMISSIONS

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 ITEMS BEING PROCURED - TECHNICAL SUPPORT SERVICES

- (a) During the period November 13, 2008 through November 12, 2010 the Contractor shall devote the **estimated** level of effort set forth below, which includes subcontractor(s) and consultant(s) effort, if any, or their equivalent as may be approved by the Contracting Officer, and furnish all necessary facilities, materials, services, and incidental personnel necessary to support the level of effort set forth below, and all other necessary and incidental related items (except as may be furnished by the Government, reference Section H. 3 GOVERNMENT FURNISHED PROPERTY), and otherwise do all activity necessary for, or incident to, the performance of the Statement of Work set forth in Part I, Section C, and fulfilling the other requirements of the contract including reports as set forth in Section C.2., PLANS AND REPORTS.

<u>Base Period - Estimated DPLH 41,640 :</u>	<u>24 months</u>
Estimated Cost (exclusive of fee)	\$ [REDACTED]
Base Fee	\$ [REDACTED]
Maximum Award Fee	\$ [REDACTED]
Total Estimated Cost, Base and Maximum Award Fee	<u>\$4,001,026</u>

b4

- (b) The level of effort specified for the base and options periods is the present level of effort **estimated** for the performance of work set forth in Part I, Section C.1 STATEMENT OF WORK. However, changes in programmatic requirements may cause a substantial increase or decrease in the number of DPLH identified in Part I, Section B. This contract is to be available for the Government to obtain services for the contract period (term), even if the level of effort therefore and/or the estimated cost as originally specified is insufficient.
- (c) All work under this contract shall be performed under the general guidance and direction of the DOE Contracting Officer's Representative (COR) identified in Section G - CONTRACT ADMINISTRATION DATA and whose responsibilities are defined in the clause entitled "Technical Direction" set forth in Part II, Section I - APPENDIX A, GENERAL PROVISIONS FOR COST-TYPE CONTRACTS. Such guidance and direction shall not, however, effect any change in the Schedule, Statement of Work, Reporting Requirements, or other provisions of this contract. Such changes shall be only by action of the Contracting Officer.

B.2 ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS

- (a) The estimated cost for the performance of the work hereunder, is \$ [REDACTED]

b4

b4

- (b) The base fee for the performance of the work under this contract is \$ [REDACTED]. Said base fee is defined and payable in accordance with Section H.17 - BASE AND AWARD FEE, of the Schedule. In addition, a maximum performance based award fee of \$ [REDACTED] is also defined and payable in accordance with the aforementioned Section H.17. There shall be no adjustment in the amount of the Contractor's fee by reason of differences between any estimate of cost for performance of the work under this contract and the actual cost for performance of that work; provided, however, that 1) a material change of plus or minus ten percent in the level of effort specified in Section B.1., ITEMS BEING PROCURED - TECHNICAL SUPPORT SERVICES, may result in an equitable adjustment in the fee in accordance with the procedures provided for in the clause entitled "Changes" set forth in Part II, Section I, Appendix A; and 2) said fee may be adjusted in accordance with Section H.17, BASE AND AWARD FEE. Subject to the certification by the Contractor of the level of effort expended, the base fee specified herein shall become due and payable in monthly increments proportionate to the direct productive labor hours expended on each Task Assignment over the total number of hours authorized by each Task Assignment, exclusive of any overruns, and subject to withholdings as may be provided elsewhere in this contract.
- (c) Pursuant to the clause entitled, "Limitation of Funds" set forth in Part II, Section I, Appendix A, the amount of \$50,000 has been allotted and is available for payment of allowable costs and base and award fee under this contract. The period of performance which it is estimated the allotted amount will cover is through December 10, 2009.

B.3 OPTION(S) TO EXTEND THE TERM OF THE CONTRACT - SERVICES

- (a) The Government may unilaterally extend the term of this contract by written notice to the Contractor within the term of the contract; provided that the Government shall give the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 60 months.
- (d) Should the Government exercise any option hereunder all contractual terms and conditions shall apply during the option period. Further, the Contractor agrees that performance under said option period shall be accomplished within the following estimated cost, base fee and award fee.

(1) First Option Period - Estimated DPLH 15,650

Option Term:	12 months
Estimated Cost (exclusive of fee)	\$ [REDACTED]
Base Fee	\$ [REDACTED]

b4

Maximum Award Fee	\$ [REDACTED]	b4
Total Estimated Cost, Base and Maximum Award Fee	\$1,618,785	

(2) Second Option - Estimated DPLH 14,710

Option Term:	12 months	
Estimated Cost (exclusive of fee)	\$ [REDACTED]	
Base Fee	\$ [REDACTED]	b4
Maximum Award Fee	\$ [REDACTED]	
Total Estimated Cost, Base and Maximum Award Fee	\$1,585,476	

(3) Third Option - Estimated DPLH 14,710

Option Term:	12 months	
Estimated Cost (exclusive of fee)	\$ [REDACTED]	
Base Fee	\$ [REDACTED]	b4
Maximum Award Fee	\$ [REDACTED]	
Total Estimated Cost, Base and Maximum Award Fee	\$1,634,418	

B.4 ANNUAL INDIRECT RATE SUBMISSIONS

(a) Introduction

- (1) Indirect billing, revised billing (as necessary), and final rate agreements must be established between a Contractor and the Department of Energy (DOE) for each of the Contractor's fiscal years for the life of the cost reimbursement type contract. These indirect rate agreements allow a Contractor to recover indirect expenses incurred during a fiscal year for which final indirect rates have not been established.
- (2) Indirect billing and revised indirect billing rate proposals must represent the Contractor's best estimate of the anticipated indirect expenses to be incurred and the estimated allocation base for the current fiscal year in accordance with their approved accounting system. Revised billing rates allow a Contractor or DOE to adjust the approved billing rates, based upon updated information, in order to prevent significant over or under billings. Revised billing rates, once established, are retroactive to the beginning of the fiscal year involved and require an adjustment voucher to be submitted by the Contractor reconciling all previous indirect billings which used the previously approved billing rates.

- (3) A final indirect rate proposal represents the indirect rate expenses actually incurred during a fiscal year and the actual business base experienced. Once established they are retroactive to the beginning of the fiscal year involved and require an adjustment voucher to be submitted by the Contractor reconciling all previous indirect billings if the established final rates differ from the previously approved billing rates.
 - (4) FAR 42.703(a) stipulates that "A single agency [see FAR 42.705-1(a)] shall be responsible for establishing indirect cost rates for each business unit. These rates shall be binding upon all agencies and their contracting offices, unless otherwise specifically prohibited by statute." This single Government agency is referred to as the Cognizant Federal Agency (CFA). The CFA is normally the Federal agency which has the largest unliquidated contract dollar amount by fiscal year with a Contractor.
 - (5) The establishment of rates for the reimbursement of independent research and development/bid and proposal costs shall be in accordance with the provisions of FAR 31.205-18, "Independent Research and Development and Bid and Proposal Costs," and both FAR Subpart 42.7 and DEAR 931.205-18, "Independent Research and Development (IR&D) and Bid and Proposal (B&P) Costs."
 - (6) Sections (b) and (c) or (d) of this clause define the requirements to be followed by the Contractor in establishing indirect rates for contracts when DOE is the CFA and when DOE is not the CFA. Specific instructions for submittal of indirect rate proposals to agencies other than DOE must be obtained from the agency involved.
- (b) Requirements whether or not DOE is the CFA
- (1) Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with the applicable sections of FAR Part 30, "Cost Accounting Standards," FAR Part 31 and DEAR 931, "Contract Cost Principles and Procedures," in effect as of the date of this contract.
 - (2) Pending settlement of the final indirect expense rates for any period, the Contractor shall be reimbursed at billing rates approved by the CFA subject to acknowledgment by the DOE Indirect Rate Contracting Officer (IRCO). These billing rates are subject to appropriate adjustments when revised by mutual agreement or when the final indirect rates are settled, either by mutual agreement or unilateral determination by the CFA subject to acknowledgment by the DOE IRCO.
 - (3) The Contractor shall continue to use the latest DOE or CFA approved billing rate(s) which have been acknowledged by the DOE IRCO until those rates are superseded by establishment of final rates or more current billing rates. In those cases where current billing rates have not been established, the latest approved final rates shall be used for invoicing, unless it is determined by the DOE IRCO that use of said rates would not provide for an equitable recovery of indirect costs. In those instances the DOE IRCO will take whatever steps are necessary to establish rates that DOE considers to be reasonable for billing purposes.

- (4) All Indirect Rate agreements and correspondence shall be submitted to:

U.S. Department of Energy
Chicago Office
Contracting Officer
9800 South Cass Ave
Argonne, IL 60439

- (c) Requirements when DOE is the CFA

- (1) No later than 90 days after the close of its fiscal year, the Contractor shall identify to the DOE IRCO all of its contracts with Federal agencies, either as a prime or as a subcontractor (any level), and provide the following information for those contracts:

Name of Federal Agency
Contract Number
Contract Value (total and by fiscal year)
Period of performance
Type of contract (CPFF, FFP, etc.)

- (2) In accordance with the "Allowable Cost and Payment" clause (DEAR 952.216-7) the Contractor, as soon as possible but not later than 90 days after the close of its fiscal year, shall submit to the DOE IRCO, identified in paragraph (b)(4) of this clause, a proposal for final indirect rates based on the Contractor's actual costs for the period, together with all supporting data. The Contractor's failure to provide the required rate proposals in a timely manner may impact payment of vouchers and could ultimately result in suspension of payments for the indirect expense portion of the vouchers.
- (3) The settlement of the final indirect rates and indirect costs shall be accomplished prior to the Contracting Officer's approval of the final payment.
- (4) Pending settlement of the final indirect expense rates for any period, the Contractor shall be reimbursed at billing rates approved by the DOE IRCO. These billing rates are subject to appropriate adjustments when revised by mutual agreement or when the final indirect rates are settled, either by mutual agreement or unilateral determination by the cognizant DOE IRCO (see FAR 42.704).
- (5) The Contractor shall provide to the DOE IRCO annually, no later than 30 days after the close of its fiscal year, a billing rate proposal for the ensuing fiscal year, with supporting data. Failure to provide the required rate proposals in a timely fashion may impact payment of vouchers and could ultimately result in suspension of the indirect expense portion of vouchers.
- (6) If the projected indirect expenses or bases change substantially during any fiscal year, the Contractor shall notify the DOE IRCO in writing and request an adjustment to the indirect billing rates. Upon review of the revised billing rate proposal the DOE IRCO may adjust the previously approved billing rates. Such adjustments will apply retroactively to all billings containing the previously

approved rates for the fiscal year in question and the Contractor shall make all appropriate adjustments on its next voucher.

- (d) Requirements when DOE is not the CFA
- (1) When another Federal Agency or a different DOE Office has the CFA responsibility for the establishment of indirect rates with the Contractor, the Contractor shall provide a copy of the rate proposals, including all supporting documentation, submitted to the CFA. These submittals to DOE shall be within the time periods established within paragraphs (c)(2) and (c)(5) of this clause unless a written request for an extension is submitted by the Contractor and granted by DOE. Failure to provide the required rate proposals in a timely manner may impact payment of vouchers and could ultimately result in suspension of payments for the indirect expense portion of vouchers.
 - (2) The Contractor shall provide copies of all rates established by that CFA and any correspondence related to indirect rates to the DOE IRCO. It is imperative that the DOE IRCO be provided signed copies of all rate agreements established by the CFA since these agreements must be in the possession of, reviewed, and acknowledged by the DOE IRCO before any rates contained therein can be used by the Contractor for cost reimbursement.
 - (3) The Contractor shall identify, if known, the CFA responsible for the establishment of indirect rates, factors, and Facilities Capital Cost of Money Rates.

PART I

SECTION C

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

TABLE OF CONTENTS

C.1 STATEMENT OF WORK

C.2 PLANS AND REPORTS

C.1 STATEMENT OF WORK

The Statement of Work to be performed under this contract is set forth in Part III, Section J, Attachment No. 1.

C.2. PLANS AND REPORTS

The Contractor shall prepare and submit (postage prepaid) the plans and reports indicated on DOE F 1332.1, Reporting Requirements Checklist, incorporated in Part III, Section J – List of Attachments, to the addresses indicated in the attachment to the form. The level of detail the contractor must provide in the plans and reports shall be commensurate with the scope and complexity of the task and the reporting categories delineated in Block 4, Planning and Reporting Requirements, Block 6, Special Instructions, on the DOE F 1332.1 or in a particular contract clause. The Contractor shall be responsible for levying appropriate reporting requirements on any subcontractors in such a manner to ensure that data submitted is compatible with the data elements that the prime contractor is responsible for submitting to DOE. If subcontractors are involved, the prime contractor plans and reports submissions shall be structured in such a manner to permit clear identification of the subcontractor's costs and manpower inputs. Plans and reports submitted in compliance with this provision are in addition to any other reporting requirements of this contract.

Notwithstanding the "Changes" clause of the contract, set forth in Part II, Section I, Appendix A, the Contracting Officer may require reasonable variations in the quantity of the plans and reports to be submitted pursuant to the above without any adjustment in the fee, if any, under this contract.

PART I

SECTION D

PACKAGING AND MARKING

TABLE OF CONTENTS

D.1 PACKAGING

D.2 MARKING

PART I

SECTION D

PACKAGING AND MARKING

D.1 PACKAGING

- (a) 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) including electronic means.
- (b) Except for those reports 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 sent via electronic means or mailed by first-class mail, unless the urgency of the deliverable sufficiently justifies the use of priority mail.

D.2 MARKING

- (a) 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).
- (b) For any package, report, or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document required in (a) above shall be simultaneously provided to the Contracting Officer.

PART I

SECTION E

INSPECTION AND ACCEPTANCE

TABLE OF CONTENTS

- E.1 FAR 52.246-5 INSPECTION OF SERVICES - COST-REIMBURSEMENT (APR 1984)
- E.2 ACCEPTANCE

PART I

SECTION E

E.1 FAR 52.246-5 Inspection of Services-Cost-Reimbursement. (APR 1984)

- (a) *Definition.* "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing 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 places and times 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 any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by re-performance, the Government may- (1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and(2) Reduce any fee payable under the contract to reflect the reduced value of the services performed.
- (e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may-(1) By contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances; or (2) Terminate the contract for default.

E.2 ACCEPTANCE

Acceptance of all work and effort under this contract (including reporting requirements) shall be accomplished by the Contracting Officer or any duly authorized representative.

PART I

SECTION F

DELIVERIES OR PERFORMANCE

TABLE OF CONTENTS

F.1 PERIOD OF PERFORMANCE

F.2 FAR 52.242-15 STOP WORK ORDER (AUG 1989)- ALTERNATE I (APR 1984)

PART I

SECTION F

DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE

The performance of the work described in Part I, Section C- Description/Specifications/Work Statement shall commence on November 13, 2008, and shall continue to completion thereof, estimated to occur on or about November 12, 2010 unless sooner terminated as hereinafter provided or extended by exercise of any or all of the options contained in Clause B.3 OPTION(S) TO EXTEND THE TERM OF THE CONTRACT - SERVICES, set forth in Part I, Section B.

F.2 FAR 52.242-15 STOP WORK ORDER (AUG 1989) – ALTERNATE I (APR 1984).

- (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 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, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected 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.

PART I

SECTION G

CONTRACT ADMINISTRATION DATA

TABLE OF CONTENTS

- G.1 CORRESPONDENCE PROCEDURES
- G.2 GOVERNMENT CONTACTS FOR POST-AWARD ADMINISTRATION
- G.3 BILLING INSTRUCTIONS

PART I

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 is subject to the following procedures:

- (a) Subject Line(s) - All correspondence should contain a subject line, commencing with the contract number and subject matter. An example is illustrated below:

SUBJECT: CONTRACT NO. DE-AC02-09CH11469, REQUEST FOR
SUBCONTRACT CONSENT.

- (b) Technical Correspondence - Technical correspondence (as used herein, this term excludes correspondence where patent or proprietary data issues are involved or correspondence which proposes or otherwise involves waivers, deviations, or modifications to the requirements, terms, or conditions of this contract) should be addressed to the DOE/Technical Manager (TM), with an information copy of the correspondence to the DOE Contract Specialist.
- (c) Correspondence Regarding Inventions - All correspondence for Patent related matters (inventions, etc.) should be mailed to:

U. S. Department of Energy
Office of Science - Chicago Office
Intellectual Property Law Division
9800 S. Cass Avenue
Argonne, Illinois 60439

Information copies of patent related correspondence should be sent to the Contracting Officer.

Also see the paragraph entitled "Publication", if included in this contract, under the article entitled, "Patent Rights" set forth in Part II, Section I, Appendix B of this contract and the DOE F 1332.1 - Reporting Requirements Checklist set forth in Part III, Section J - List of Attachments, of this contract.

- (d) Other Correspondence - All other correspondence, except for reporting of inventions, should be addressed to the Contracting Officer, with information copies of the correspondence to the DOE TM and DOE Intellectual Property Counsel when deemed appropriate (where patent or technical data issues are involved).

G.2 GOVERNMENT CONTACTS FOR POST AWARD ADMINISTRATION

(a) DOE Contracting Officer

For definition see Part II, Section I, Appendix A, Clause 1, "Definitions" of this contract.

The Contracting Officer is the only official who can:

- (1) assign additional work within the general scope of the Statement of Work of the contract;
- (2) issue a change as defined in the "Changes" clause of the contract;
- (3) cause an increase or decrease in the total estimated cost or the time required for contract performance;
- (4) change any of the expressed terms, conditions or specifications of the contract; and
- (5) accept non-conforming work.

(b) DOE Contract Specialist for Administration

The Contract Specialist should be used as the point of contact for all but technical and patent related matters (see G.1).

The Contract Specialist for this contract is:

Name: Chadsey Kittock
Address: U. S. Department of Energy
Office of Science - Chicago Office
Office of Acquisition & Assistance
9800 South Cass Avenue
Argonne, Illinois 60439

Telephone No.: 630-252-2192

Any change in the DOE Contract Specialist may be made administratively by letter from the Contracting Officer.

(c) DOE Contracting Officer's Representative (COR)

The limitations of the COR's authority are defined in Part II, Section I, Appendix A, DEAR 952.242-70, "Technical Direction (DEC 2000)."

The performance of work under this contract is subject to the direction of the COR in accordance with the DEAR 952.242-70 clause of the contract. The COR should be used as the point of contact on all technical matters (see G.1 (b)). The COR for this contract is:

Name: Peter Siebach
U. S. Department of Energy
Office of Science - Chicago Office
Office of Safety, Technical & Infrastructure Services
9800 South Cass Avenue
Argonne, Illinois 60439

Telephone No.: 630-252-2007

Any change in the DOE COR may be made administratively by letter from the Contracting Officer.

Under this contract the terms COR and Technical Manager (TM) are synonymous.

(d) DOE Intellectual Property Counsel

See G.1(c).

(e) DOE Property Administrator

Property correspondence should be addressed to the Contracting Officer and property matters referred to the Contract Specialist unless property administration has been delegated, in which case, separate instructions will be sent administratively by letter from the Contracting Officer, which will supersede this paragraph G.2(e).

G.3 BILLING INSTRUCTIONS

- (a) Vouchers: Certified original vouchers shall be submitted to the Payment Office (See Block 12 of the SF 26) and copies shall be submitted to the DOE Contract Specialist (See G.2 (b)) and the DOE Technical Manager (See G.2 (c)) in accordance with the Billing Instructions set forth in Part III, Section J -List of Attachments.

Additionally, the Contractor shall identify the individual in its organization to be contacted relative to each voucher.

PART I

SECTION H

SPECIAL CONTRACT REQUIREMENTS

TABLE OF CONTENTS

- H.1 SUBCONTRACTS, PURCHASE ORDERS AND CONSULTING SERVICES
- H.2 COST PRINCIPLES FOR COMMERCIAL ORGANIZATIONS
- H.3 GOVERNMENT-FURNISHED PROPERTY
- H.4 RESERVED
- H.5 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS
- H.6 RESERVED
- H.7 INSURANCE REQUIREMENTS UNDER COST-REIMBURSEMENT CONTRACTS
- H.8 SECURITY CLEARANCES
- H.9 POSITION DESCRIPTIONS
- H.10 TASK ASSIGNMENTS
- H.11 SAFETY AND HEALTH
- H.12 PAYMENT FOR OVERTIME PREMIUMS
- H.13 LOBBYING RESTRICTION (ENERGY & WATER DEVELOPMENT APPROPRIATIONS ACT)
- H.14 ACCESS TO DOE-OWNED OR LEASED FACILITIES
- H.15 SECTION 8(a) DIRECT AWARDS
- H.16 FEDERAL HOLIDAYS
- H.17 BASE AND AWARD FEE

PART I

SECTION H

SPECIAL CONTRACT REQUIREMENTS

H.1 SUBCONTRACTS, PURCHASE ORDERS AND CONSULTING SERVICES

- (a) Prior to the placement of subcontracts and in accordance with the clause entitled "Subcontracts", as set forth in Part II, Section I, the Contractor shall ensure that:
 - (1) Subcontracts contain all of the clauses of this contract (altered when necessary for proper identification of the contracting parties) which contain a requirement for such inclusion in applicable subcontracts;
 - (2) Appropriate Representations and Certifications have been received from the Subcontractor;
 - (3) Any required prior notice and description of the subcontract is given to the Contracting Officer and any required consent is received pursuant to the clause entitled "Subcontracts". Unless the consent or approval specifically provides otherwise, consent by the Contracting Officer to any subcontract shall not constitute a determination (i) to revise this contract or any of the respective obligations of the parties thereunder, or (ii) to create any subcontractor privity of contract with the Government.
- (b) In order to ensure that the proposed subcontract is properly evaluated prior to Contracting Officer consent, a copy of the proposed subcontract document along with any documentation required by the clause, "Subcontracts", shall be submitted by the prime contractor to the responsible Contracting Officer.
- (c) DOE Acquisition Regulation (Subpart 908.71 - Acquisition of Special Items) sets forth requirements and procedures for the acquisition of special items by DOE contractors such as: motor vehicles, alcohol, helium, calibration services, aircraft, Government license tags, office machines, office furniture and furnishings, fuels and packaged petroleum products, coal, forms, electronic data processing tape, tabulating machine cards, heavy water, and precious metals. Contractors should familiarize themselves with the contents of this regulation.
- (d) In addition to the provisions of the clause entitled "Subcontracts", the prior written consent of the Contracting Officer shall be obtained for the services of consultants when:
 - (1) any employee of the Contractor is to be reimbursed as a "consultant" under this contract, or
 - (2) the consulting agreement provides for a daily rate in excess of \$1,000, exclusive of travel costs, or
 - (3) the services of any consultant under this contract exceed 60 days in any calendar year or exceed a total value of \$10,000.

H.2 COST PRINCIPLES FOR COMMERCIAL ORGANIZATIONS

The cost principles contained in Federal Acquisition Regulation (FAR) Subpart 31.2, Contracts with Commercial Organizations, and Department of Energy Acquisition Regulation (DEAR) Subpart 931.2, in effect on the effective date of the contract, are hereby incorporated by reference into this contract and shall be utilized to determine allowability of costs.

For ease of reference the following is a listing of cost principles and their effective dates, which may be applicable to this contract.

<u>Number</u>	<u>Reference</u>	<u>Title</u>	<u>Date</u>
1.	FAR 31.201-1	Composition of total cost.....	May 2004
2.	FAR 31.201-2	Determining allowability.....	May 2004
3.	FAR 31.201-3	Determining reasonableness.....	Jul 1987
4.	FAR 31.201-4	Determining allocability.....	Apr 1984
5.	FAR 31.201-5	Credits.....	Dec 1998
6.	FAR 31.201-6	Accounting for unallowable costs.....	Nov 2005
7.	FAR 31.201-7	Construction and architect-engineer contracts.....	Apr 1984
8.	FAR 31.202	Direct costs.....	May 2004
9.	FAR 31.203	Indirect costs.....	May 2004
10.	FAR 31.204	Application of principles and procedures.....	Jul 2004
11.	FAR 31.205-1	Public relations and advertising costs.....	Aug 2003
12.	FAR 31.205-2	[Reserved]	
13.	FAR 31.205-3	Bad debts.....	Apr 1984
14.	FAR 31.205-4	Bonding costs.....	Apr 1984
15.	FAR 31.205-5	[Reserved]	
16.	FAR 31.205-6	Compensation for personal services.....	Jul 2005
17.	FAR 31.205-7	Contingencies.....	Jul 2004
18.	FAR 31.205-8	Contributions or donations.....	Apr 1986
19.	FAR 31.205-9	[Reserved]	
20.	FAR 31.205-10	Cost of money.....	Jun 2003
21.	FAR 31.205-11	Depreciation.....	Jul 2006
22.	FAR 31.205-12	Economic planning costs.....	Oct 2003
23.	FAR 31.205-13	Employee morale, health, welfare, food service, and dormitory costs and credits.....	Oct 2003
24.	FAR 31.205-14	Entertainment costs.....	Oct 1995
25.	FAR 31.205-15	Fines, penalties, and mischarging costs.....	Jan 1991
26.	FAR 31.205-16	Gains and losses on disposition or impairment of depreciable property or other capital assets.....	Jul 2006
27.	FAR 31.205-17	Idle facilities and idle capacity costs.....	Feb 2002
28.	FAR 31.205-18	Independent research and development and bid and proposal costs (Feb 1998) as modified by DEAR 931.205-18 (JUN 1995)	
29.	FAR 31.205-19	Insurance and indemnification.....	Dec 2003
30.	FAR 31.205-20	Interest and other financial costs.....	Nov 1999
31.	FAR 31.205-21	Labor relations costs.....	Dec 2001
32.	FAR 31.205-22	Lobbying and political activity costs.....	Jan 1997

33.	FAR 31.205-23	Losses on other contracts.....	Apr 1984
34.	FAR 31.205-24	<i>Reserved</i>	
35.	FAR 31.205-25	Manufacturing and production engineering costs.....	Apr 1984
36.	FAR 31.205-26	Material costs.....	Jul 2004
37.	FAR 31.205-27	Organization costs.....	Apr 1988
38.	FAR 31.205-28	Other business expenses.....	Jun 2003
39.	FAR 31.205-29	Plant protection costs.....	Apr 1984
40.	FAR 31.205-30	Patent costs.....	Apr 1984
41.	FAR 31.205-31	Plant reconversion costs.....	Apr 1984
42.	FAR 31.205-32	Precontract costs.....	Apr 1984
43.	DEAR 931.205-32	Precontract costs.....	Oct 1984
44.	FAR 31.205-33	Professional and consultant service costs (Aug 2003) as modified by DEAR 931.205-33 (Jan 2001)	
45.	FAR 31.205-34	Recruitment costs.....	May 1999
46.	FAR 31.205-35	Relocation costs.....	Oct 2005
47.	FAR 31.205-36	Rental costs.....	Jul 2005
48.	FAR 31.205-37	Royalties and other costs for use of patents.....	Apr 1986
49.	FAR 31.205-38	Selling costs.....	Aug 2003
50.	FAR 31.205-39	Service and warranty costs.....	Apr 1986
51.	FAR 31.205-40	Special tooling and special test equipment costs.....	Apr 1986
52.	FAR 31.205-41	Taxes.....	Mar 1996
53.	FAR 31.205-42	Termination costs.....	Oct 1997
54.	FAR 31.205-43	Trade, business, technical, and professional activity costs.....	Oct 1995
55.	FAR 31.205-44	Training and education costs.....	Oct 2005
56.	FAR 31.205-45	[Reserved]	
57.	FAR 31.205-46	Travel costs.....	Oct 2003
58.	FAR 31.205-47	Costs related to legal and other proceedings.....	Jul 2002
59.	FAR 31.205-48	Research and development costs.....	Jun 2003
60.	FAR 31.205-49	Goodwill.....	Oct 1984
61.	FAR 31.205-50	[Reserved]	
62.	FAR 31.205-51	Cost of alcoholic beverages.....	Apr 1986
63.	FAR 31.205-52	Asset valuations resulting from business combinations.....	Apr 1998

H.3 GOVERNMENT-FURNISHED PROPERTY

Pursuant to the Government Property clause, set forth in Part II, Section I, the following item(s) shall be furnished to the Contractor for performance of the work hereunder:

For work performed on a Government site an adequate amount of office space, office furniture (including computers, software, network access, help desk support, fax machines, and reproduction/copy machines), general office supplies, and telephone services will be provided for the Contractor's use.

H.4 RESERVED

H.5 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

Representations and Certifications dated August 13, 2008 are hereby incorporated by reference and made a part of this contract as are all others obtained in connection with this contract or contract modification.

H.6 RESERVED

H.7 INSURANCE REQUIREMENTS UNDER COST-REIMBURSEMENT CONTRACTS

In accordance with FAR 52.228-7, "Insurance – Liability to Third Persons," the minimum amount of insurance coverage to be maintained by the contractor(s) shall be in accordance with FAR 28.307-2, unless increased coverage is otherwise required by law or regulation.

H.8 SECURITY CLEARANCES

The Contractor shall not permit any individual to have access to any classified information or significant quantities of special nuclear material, except in accordance with the Atomic Energy Act of 1954, as amended, Executive Order 12356, and the DOE's regulations or requirements applicable to the particular level and category of classified information to which access is required.

The Contracting Officer shall coordinate necessary security clearances for those contractor personnel where it is required.

H.9 POSITION DESCRIPTIONS

Contractor direct labor personnel assigned to the performance of this contract shall satisfy the applicable minimum labor category qualifications, both education and experience, set forth in the "Position Descriptions" attachment in Part III, Section J - List of Attachments, to this contract, except as the Contracting Officer may otherwise authorize.

H.10 TASK ASSIGNMENTS

- (a) Pursuant to this clause, the Technical Manager (TM) will periodically require work to be performed under this contract.
- (b) Upon written or oral notification by the TM that work is required to be performed, the Contractor shall complete and submit a signed Task Assignment Plan to the TM for review and written approval. The Task Assignment Plan shall include a detailed description of how the work is to be performed, milestones, deliverables (or other completion criteria), the number of DPLH for performance of the task from the labor

categories set forth in this contract, and any travel, materials, or other cost estimates, as may be applicable including any estimates for subcontractors and/or consultants.

- (c) Once the TM approves the Task Assignment Plan it represents an agreement between the Contractor and the TM to a "not to exceed" estimate for the proposed work, and an agreement of the work to be accomplished as well as items to be delivered.

The Contractor shall notify the TM when costs for a given task assignment are expected to exceed the agreed upon total estimated cost. The Contractor shall not exceed the total estimated cost for a Task Assignment without the prior approval of the TM. If the contractor reaches the total estimated cost for a Task Assignment without completing the required task, the TM may increase the total estimated cost and require the Contractor to continue work until the task is completed or the new total estimated cost is reached. The Government shall not reimburse the Contractor for any costs incurred without the TM's approval in excess of the total estimated cost for a Task Assignment.

- (d) Under no circumstances shall the total amount of costs of all Task Assignment Plans, issued under this contract, exceed the estimated cost for the performance of the work under this contract, exclusive of any unexercised option, reflected in Subsection B.2.(a) ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, of the contract.
- (e) The Limitation of Cost and Limitation of Funds clauses, appropriately modified, are applicable to each Task Assignment Plan issued under this contract.
- (f) The Contractor shall monitor, collect, control, report, and invoice costs against each Task Assignment Plan issued.

H.11 SAFETY AND HEALTH

In performing work under this contract, the contractor shall perform work safely, in a manner that ensures adequate protection of employees, the public, and the environment, and shall be accountable for the safe performance of work. The contractor shall exercise a degree of care commensurate with the work and the associated hazards. The contractor shall ensure that management of environment, safety and healthy (ES&H) functions and activities becomes an integral but visible part of the contractor's work planning and execution processes.

With respect to the performance of any portion of the work under this contract which is performed at a DOE-owned or controlled site, the Contractor agrees to comply with all state and federal ES&H regulations, and with all ES&H requirements of the operator of such site. DOE requirements include, but are not limited to, all OSHA standards, plus the DOE directives listed in Part III, Section J, Attachment J.7. The Contractor also agrees to comply with the ES&H reporting requirements indicated on DOE F 1332.1, Reporting Requirements Checklist, in Part III, Section J, Attachment J.2, as well as any other ES&H reporting requirements the Contracting Officer may from time to time require.

In the event that the Contractor fails to comply with any said regulation or requirement, the Contracting Officer may, without prejudice to any other DOE legal or contractual rights, issue

an order stopping all or any part of such work. Thereafter, a start order for resumption of work may be issued at the discretion of the Contracting Officer. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

Additionally, the contractor shall comply with the Department of Energy's Worker Safety and Health Program regulation, 10 CFR 851, which establishes worker safety and health requirements including, but not limited to, the requirement that the contractor have a Department of Energy approved worker safety and health program in place for the covered workplace before any work may be performed at the workplace. Violations of safety and health provisions of 10 CFR 851 may subject the contractor to civil penalties.

The contractor shall apply this provision to its subcontractors.

H.12 PAYMENT FOR OVERTIME PREMIUMS

For purposes of this contract, overtime premiums are not authorized unless prior approval is obtained by the Contracting Officer and the overtime is performed in accordance with FAR 52.222-2.

H.13 LOBBYING RESTRICTION (ENERGY & WATER DEVELOPMENT APPROPRIATIONS ACT)

The contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

H.14 ACCESS TO DOE-OWNED OR LEASED FACILITIES

(a) The performance of this contract requires that employees of the Contractor have physical access to DOE-owned or leased facilities; however, this clause does not control requirements for an employee's obtaining a security clearance. The Contractor understands and agrees that DOE has a prescribed process with which the Contractor and its employees must comply in order to receive a security badge that allows such physical access. The Contractor further understands that it must propose employees whose background offers the best prospect of obtaining a security badge approval for access, considering the following criteria, which are not all inclusive and may vary depending on access requirements:

- (1) is, or is suspected of being, a terrorist;
- (2) is the subject of an outstanding warrant;
- (3) has deliberately omitted, concealed, or falsified relevant and material facts from any Questionnaire for National Security Positions(SF-86), Questionnaire for Non-Sensitive Positions (SF-85), or similar form;

- (4) has presented false or forged identity source documents;
 - (5) has been barred from Federal employment;
 - (6) is currently awaiting a hearing or trial or has been convicted of a crime punishable by imprisonment of six (6) months or longer; or
 - (7) is awaiting or serving a form of pre-prosecution probation, suspended or deferred sentencing, probation or parole in conjunction with an arrest or criminal charges against the individual for a crime that is punishable by imprisonment of six (6) months or longer.
- (b) The Contractor shall assure:
- (1) In initiating the process for gaining physical access, (i) compliance with procedures established by DOE in providing its employee(s) with any forms directed by DOE, (ii) that the employee properly completes any forms, and (iii) that the employee(s) submits the forms to the person designated by the Contracting Officer.
 - (2) In completing the process for gaining physical access, that its employee (i) cooperates with DOE officials responsible for granting access to DOE -owned or leased facilities and (ii) provides additional information, requested by those DOE officials.
- (c) The Contractor understands and agrees that DOE may unilaterally deny a security badge to an employee and that the denial remains effective for that employee unless DOE subsequently determines that access may be granted. Upon notice from DOE that an employee's application for a security badge is or will be denied, the Contractor shall promptly identify and submit the forms referred to in subparagraph (b)(1) of this clause for the substitute employee. The denial of a security badge to individual employees by DOE shall not be cause for extension of the period of performance of this Contract or any contractor claim against DOE.
- (d) The Contractor shall return to the Contracting Officer or designee the badge(s) or other credential(s) provided by DOE pursuant to this clause, granting physical access to DOE - owned or leased facilities by the Contractor's employee(s), upon (1) the termination of this Contract; (2) the expiration of this Contract; (3) the termination of employment on this Contract by an individual employee; or (4) demand by DOE for return of the badge.
- (e) The Contractor shall include this clause, including this paragraph (e), in any subcontract, awarded in the performance of this Contract, in which an employee(s) of the subcontractor will require physical access to DOE-owned or leased facilities.

H.15 SECTION 8(a) DIRECT AWARDS

- (a) This contract is issued as a direct award between the contracting activity and the 8(a) contractor pursuant to a Partnership Agreement between the Small Business Administration (SBA) and the Department of Energy (DOE). Although SBA is not identified in Section A (Standard Form 33), SBA remains the prime contractor for this contract. SBA retains responsibility for 8(a) certifications, 8(a) eligibility determinations

and related issues, and providing counseling and assistance to the 8(a) contractor under the 8(a) program. The cognizant SBA district Office for the 8(a) contractor is:

U.S. Small Business Administration
Nashville District Office
50 Vantage Way
Nashville TN 37228

- (b) DOE is responsible for administering the contract and taking any action on behalf of the Government under the terms and conditions of the contract. However, DOE shall give advance notice to the SBA before it issues a final notice terminating performance either in whole or in part, under the contract. DOE shall also coordinate with SBA prior to processing any novation agreement. DOE may assign contract administration functions to a contract administration office.
- (c) The contractor agrees:
 - (1) to notify the Contracting Officer, simultaneously with its notification to SBA (as required by SBA's 8(a) regulations), when the owner or owners upon whom 8(a) eligibility is based plan to relinquish ownership or control of the concern. Consistent with 15 U.S.C. 637(a)(21), transfer of ownership or control shall result in termination of the contract for convenience, unless SBA waives the requirement for termination prior to the actual relinquishing of ownership or control.
 - (2) to adhere to the requirements of FAR 52.219-14, "Limitations on Subcontracting."

H.16 FEDERAL HOLIDAYS

All Government offices will be closed, except for minimum essential personnel required for in-house operations, during Federal holidays. The ten Federal holidays per year are as follows:

New Year's Day	First day of January (or observed)
Martin Luther King, Jr. Birthday	Third Monday of January
Presidents Day	Third Monday of February
Memorial Day	Last Monday of May
Independence Day	Fourth day of July (or observed)
Labor Day	First Monday of September
Columbus Day	Second Monday of October
Veterans Day	11th day of November (or observed)
Thanksgiving Day	Fourth Thursday of November
Christmas Day	25th day of December (or observed)

H.17 BASE AND AWARD FEE

- (a) Definitions

- (i) Base Fee - the fixed amount available for the performance of work under the contract, as specified in Subsection B.2.(b) of the article, ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS of the contract. The base fee shall not exceed [REDACTED] % of the estimated cost of the contract, exclusive of any overruns. b4
- (ii) Award Fee - the amount available that the contractor may earn, in whole or in part, based on an evaluation of the contractor's performance under the contract, as specified in Subsection B.2(b) of the Article, ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, of the contract.

The amount of award fee specified in Subsection B.2(b), of the Article, ESTIMATED COST, BASE FEE, AWARD FEE, OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS, is the total amount available, for the award fee pool as a single sum, due and payable in the amounts specified herein. Additionally, the award fee amount shall not exceed [REDACTED] % of the estimated cost, exclusive of any overruns. b4

- (iii) With respect to the terms and conditions of this contract, the words "Base Fee" and "Award Fee," as defined above, are to be substituted, as appropriate, for the words "Fixed Fee" or "Fee" where they appear in the contract.
- (iv) Fee Determination Official (FDO) - The DOE Contracting Officer.

(b) Payment of Base and Award Fee

- (i) Base Fee - Upon the submission of a public voucher or invoice, the Government will make payment of the base fee in monthly increments proportionate to the DPLH expended on each task assignment over the total number of DPLH identified in Section B.1.(a), exclusive of any overruns, and subject to withholdings as may be provided elsewhere in this contract.
- (ii) Award Fee - Following the determination by the Contracting Officer as set forth below, the Government will, on a semi-annual basis, promptly make payment of any fee above the base fee upon the submission of a public voucher or invoice in the amount of the total award fee earned for the period evaluated. Payment shall be made without the need for a contract modification.

(c) Determination of Award Fee Earned

- (i) The Government shall at the conclusion of each semi-annual evaluation period specified in paragraph (ii) below provide an overall rating of the contractor's performance and make a determination of award fee earned. The COR will make a recommendation to the Contracting Officer on a semi-annual basis in accordance with the schedule in paragraph (ii) below.
- (ii) The available award fee shall be proportionate to the DPLH expended over the total number of professional DPLH authorized under the contract, exclusive of

any overruns, and subject to withholdings as may be provided elsewhere in this contract.

The Available Award Fee is calculated as follows:

$DPLH \text{ expended} / \text{Total DPLH} \times \text{Award Fee Pool} = \text{Available Award Fee}$

The Award Fee Earned is calculated as follows:

$\text{Available Award Fee} \times \text{total weighted score} / 100 = \text{Award Fee Earned}$

The available award fee will be allocated to performance periods on a semi-annual basis as follows:

Base Period of Performance:

Period No. 1 November 13, 2008 through May 12, 2009
Period No. 2 May 13, 2009 through November 12, 2009
Period No. 3 November 13, 2009 through May 12, 2010
Period No. 4 May 13, 2010 through November 12, 2010

Option 1

Period No. 1 November 13, 2010 through May 12, 2011
Period No. 2 May 13, 2011 through November 12, 2011

Option 2

Period No. 1 November 13, 2011 through May 12, 2012
Period No. 2 May 13, 2012 through November 12, 2012

Option 3

Period No. 1 November 13, 2012 through May 12, 2013
Period No. 2 May 13, 2013 through November 12, 2013

- (iii) It is agreed that the evaluation of contractor(s) performance shall be conducted in accordance with paragraph (d) below, and that the contractor shall be promptly advised, in writing, of the determination. It is further agreed that the contractor will submit a self-evaluation of performance for each period under consideration. Said self-evaluation shall follow the same format prescribed in paragraph (e) below. While it is recognized that the basis for determination of the fee shall be the evaluation by the Government, the self-evaluation which is to be received within 15 days after the end of the period being evaluated, will be given such consideration as the FDO shall find appropriate.
- (iv) Any unearned award fee from each evaluation period shall not be eligible to be earned in any future period(s).
- (v) The contractor agrees that the determination as to the amount of award fee earned will be made solely by the FDO.

(d) Performance Evaluation

- (i) The Contractor performance evaluation criteria upon which the determination of award fee earned shall be based, have been unilaterally established by the Government and are set forth in paragraph (e) below.
- (ii) The performance evaluation criteria may, consistent with the contract, be revised unilaterally by the Government. Notification of such changes shall be provided to the contractor 90 calendar days prior to the start of the evaluation period to which the change will apply.

(e) Criteria For Measurement And Evaluation Of Performance As Basis For Award Fee Determination

The contractor will be evaluated on its performance of the Statement of Work (Section J) and any subsequent task assignments using the evaluation factors set forth in this paragraph. Under each evaluation factor, the contractor will receive a score of between 0 and 10 in accordance with the guidelines set forth in paragraph (f) below. The assigned score for each evaluation factor shall be supported by a sufficiently detailed narrative.

Using the Award Fee Measurement Chart set forth in paragraph (f) below, the score for each evaluation factor will be multiplied by its assigned weight to establish a weighted score. Any evaluation factor receiving a score of less than 5.0 will be assigned a weighted score of zero for the purpose of calculating the award fee amount. Finally, weighted scores for each of the evaluation factors will be added together, with the total weighted score representing the percentage of the award fee pool earned by the contractor with the exception that no award fee will be paid when the total weighted score is less than 50.

Evaluation Factors:

- (i) **COST CONTROL** - Have the task assignments been performed at a cost consistent with or less than the approved Estimate of Cost, exclusive of overruns? Did the Contractor take initiative in identifying and addressing cost issues? Were the appropriate number and mix of resources consistently estimated for and assigned to each area of effort? Has the contractor used personnel, facilities, and equipment in an economic and effective manner?
- (ii) **COMPLIANCE**- Did the contractor comply with applicable laws, regulations, and DOE Orders?
- (iii.) **SCHEDULE MANAGEMENT**- Was the work effort completed and milestones realized on or ahead of schedule? Was the Contractor responsive to DOE requests and requirements in a timely manner? Was the work scheduled so it was completed on time without impacting other task assignments?
- (iv) **TECHNICAL PERFORMANCE/QUALITY** - Did the work products meet the established technical requirements in the Task Assignment Plans? How

many, what type, and how critical were the deficiencies in the work products?
 Did the contractor demonstrate initiative in identifying and resolving problems
 and ensuring the accuracy of work?

(f) AWARD FEE MEASUREMENT CHART

CONTRACTOR: Spectra Tech, Inc.
 CONTRACT NO. DE-AC02-09CH11469
 PERFORMANCE PERIOD: 11/13/2008 – 05/12/09

EVALUATION FACTORS	SCORE *	WEIGHTING x	WEIGHTED SCORE
Cost Control		2	
Compliance		2	
Schedule Management		2	
Technical Performance/ Quality		4	
TOTAL WEIGHTED SCORE			

**See attached Guidelines for Assigning Scores to Evaluation Factors*

GUIDELINES FOR ASSIGNING SCORES TO EVALUATION FACTORS

SCORE	DEFINITION
9 – 10	Contractor has achieved an outstanding level of performance. Numerous significant achievements exist in the performance area. No weaknesses or deficiencies are noted.
7 – 8	Contractor has achieved an above average level of performance. Some significant achievements exist in the performance area. Some minor weaknesses or deficiencies are noted.
5 – 6	Contractor has achieved a satisfactory level of performance. Minimum standards have been met. Numerous minor weaknesses or deficiencies may exist in the performance area.
Below 5*	Contractor's level of performance is unsatisfactory. The Contractor does not meet minimum acceptable standards in one or more areas; remedial action is required in one or more areas; significant deficiencies or weaknesses exist in one or more areas which more than offset any achievements in the performance area.

*Any factor receiving a score less than 5.0 will be assigned a weighted score of zero for the purpose of calculating the award fee amount. No award fee will be paid when the total weighted score is less than 50.

EXAMPLE

Sample Calculation of Earned Fee for the First Evaluation Period

\$200,000.00 is the total estimate of cost for the base period of performance. 1,000 DPLH is the estimated level of effort required to complete the SOW. The Award Fee Pool is 8% of the total estimate of costs, or \$16,000.00. The contractor has used 232 hours to complete the task assignments during the first six months of the contract (first evaluation period), therefore the available award fee for the first evaluation period is \$3,712.00 (232hrs./1000hrs. x \$16,000.00).

<u>Evaluation Factor</u>	<u>Sample Score</u>	<u>Sample Weight</u>	<u>Weighted Score</u>
Cost Control:	9	2	18
Compliance	8	2	16
Schedule Management:	10	2	20
Technical Performance/Quality:	8	4	<u>32</u>
TOTAL WEIGHTED SAMPLE SCORE			86

$$\begin{aligned}
 \text{EARNED FEE} &= \text{AVAILABLE AWARD FEE} \times \text{TOTAL WEIGHTED SCORE}/100 \\
 &= \quad \quad \quad \$3,712.00 \quad \quad \times \quad \quad 86/100 \quad \quad = \underline{\underline{\$3,192.00}}
 \end{aligned}$$

Unearned Fee Not Eligible to be Earned in any Future Period: \$3,712.00 - \$3,192.00 = \$520.00

CONTRACT No. DE-AC02-09CH11469

PART II

SECTION I

CONTRACT CLAUSES

The contract clauses attached and hereby made a part of this contract consist of the following:

APPENDIX A General Provisions for Cost-Type Contracts, Coded July 2007,
consisting of 13 pages.

APPENDIX B Intellectual Property Provisions - Research, Development or
Demonstration, Domestic Small Business and Nonprofit
Organizations, Coded SBNP-498, consisting of 19 pages.

SECTION I

APPENDIX A

DEPARTMENT OF ENERGY – OFFICE OF SCIENCE - CHICAGO OFFICE

GENERAL PROVISIONS
FOR
COST-TYPE CONTRACTS

**DEAR 952.203-70 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES
(DEC 2000)**

- (a) The contractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or-leased sites.
- (b) The contractor shall insert or have inserted the substance of this clause, including this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or leased sites.

**DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (JUN 1997) -
ALTERNATE I**

- (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 therefore (solicited and unsolicited) which stem directly from the contractor's performance of work under this contract for a period of three 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.

FAR 52.215-19

NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

- (a) The Contractor shall make the following notifications in writing:
 - (1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in

the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

- (2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.
- (b) The Contractor shall --
- (1) Maintain current, accurate, and complete inventory records of assets and their costs;
 - (2) Provide the ACO or designated representative ready access to the records upon request;
 - (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and
 - (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.
- (c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

DEAR 952.215-70 KEY PERSONNEL (DEC 2000)

- (a) The personnel listed below or elsewhere in this contract (Section J, Attachment 3) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must: (1) Notify the Contracting Officer reasonably in advance; (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and (3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.
- (b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

FAR 52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

- (a) This clause does not apply to the unrestricted portion of a partial set-aside.
- (b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for --

- (1) *Services (except construction).* At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.
- (2) *Supplies (other than procurement from a nonmanufacturer of such supplies).* The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.
- (3) *General construction.* The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.
- (4) *Construction by special trade contractors.* The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

FAR 52.219-17 SECTION 8(A) AWARD (DEC 1996)

- (a) By execution of a contract, the Small Business Administration (SBA) agrees to the following:
 - (1) to furnish the supplies or services set forth in the contract according to the specifications and the terms and conditions by subcontracting with the Offeror who has been determined an eligible concern pursuant to the provisions of section 8(a) of the Small Business Act, as amended (15 U.S.C. 637(a)).
 - (2) Except for novation agreements and advance payments, delegates to the DOE the responsibility for administering the contract with complete authority to take any action on behalf of the Government under the terms and conditions of the contract; provided, however that the contracting agency shall give advance notice to the SBA before it issues a final notice terminating the right of the subcontractor to proceed with further performance, either in whole or in part, under the contract.
 - (3) That payments to be made under the contract will be made directly to the subcontractor by the contracting activity.
 - (4) To notify the DOE Contracting Officer immediately upon notification by the subcontractor that the owner or owners upon whom 8(a) eligibility was based plan to relinquish ownership or control of the concern.
 - (5) That the subcontractor awarded a subcontract hereunder shall have the right of appeal from decisions of the cognizant Contracting Officer under the "Disputes" clause of the subcontract.
- (b) The offeror/subcontractor agrees and acknowledges that it will, for and on behalf of the SBA, fulfill and perform all of the requirements of the contract.
- (c) The offeror/subcontractor agrees that it will not subcontract the performance of any of the requirements of this subcontract to any lower tier subcontractor without the prior written approval of the SBA and the cognizant Contracting Officer of the DOE.

**FAR 52.219-18 NOTIFICATION OF COMPETITION LIMITED TO ELIGIBLE 8(A)
CONCERNS (JUNE 2003)**

- (a) Offers are solicited only from small business concerns expressly certified by the Small Business Administration (SBA) for participation in the SBA's 8(a) Program and which meet the following criteria at the time of submission of offer --
 - (1) The Offeror is in conformance with the 8(a) support limitation set forth in its approved business plan; and
 - (2) The Offeror is in conformance with the Business Activity Targets set forth in its approved business plan or any remedial action directed by the SBA.
- (b) By submission of its offer, the Offeror represents that it meets all of the criteria set forth in paragraph (a) of this clause.
- (c) Any award resulting from this solicitation will be made to the Small Business Administration, which will subcontract performance to the successful 8(a) offeror selected through the evaluation criteria set forth in this solicitation.
- (d)
 - (1) *Agreement.* A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply in connection with construction or service contracts.
 - (2) The Spectra Tech, Inc. will notify the DOE Contracting Officer in writing immediately upon entering an agreement (either oral or written) to transfer all or part of its stock or other ownership interest to any other party.

**FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION
(JUNE 2007)**

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

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause.

- (b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:
- (1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.
 - (2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract. (3) For long-term contracts—
 - (i) Within 60 to 120 days prior to the end of the fifth year of the contract; and
 - (ii) Within 60 to 120 days prior to the exercise date specified in the contract for any option thereafter.
- (c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/services/contractingopportunities/sizestandardtopics/>.
- (d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.
- (e) Except as provided in paragraph (g) of this clause, the Contractor shall make the rerepresentation required by paragraph (b) of this clause by validating or updating all its representations in the Online Representations and Certifications Application and its data in the Central Contractor Registration, as necessary, to ensure they reflect current status. The Contractor shall notify the contracting office by e-mail, or otherwise in writing, that the data have been validated or updated, and provide the date of the validation or update.
- (f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.
- (g) If the Contractor does not have representations and certifications in ORCA, or does not have a representation in ORCA for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it [] is, [] is not a small business concern under NAICS Code _____ assigned to contract number _____. [Contractor to sign and date and insert authorized signer's name and title].

**FAR 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.

FAR 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 these addresses:

FAR clauses: <http://www.arnet.gov/far>
 DEAR clauses: <http://management.energy.gov/DEAR.htm>

The following clauses are hereby incorporated by reference:

<u>Clause Reference</u>	<u>Title of Clause</u>
FAR 52.202-1	Definitions (JUL 2004) as modified by DEAR 952.202-1 (MAR 2002)
FAR 52.203-3	Gratuities (APR 1984)
FAR 52.203-5	Covenant Against Contingent Fees (APR 1984)
FAR 52.203-6	Restrictions on Subcontractor Sales to the Government (SEP 2006)
FAR 52.203-7	Anti-Kickback Procedures (JUL 1995)
FAR 52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)
FAR 52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)
FAR 52.203-12	Limitation on Payments to Influence Certain Federal Transactions (SEP 2005)
FAR 52.204-4	Printed or Copied Double-Sided on Recycled Paper (AUG 2000)
FAR 52.204-7	Central Contractor Registration (JULY 2006)
FAR 52.204-9	Personal Identity Verification of Contractor Personnel (NOV 2006)
DEAR 952.204-2	Security Requirements (MAY 2002)
DEAR 952.204-70	Classification/Declassification (SEP 1997)
FAR 52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended or Proposed for Debarment (SEPT 2006)

<u>Clause Reference</u>	<u>Title of Clause</u>
FAR 52.215-2	Audit and Records - Negotiation (JUN 1999)
FAR 52.215-8	Order of Precedence – Uniform Contract Format (OCT 1997)
FAR 52.215-10	Price Reduction for Defective Cost or Pricing Data (OCT 1997)
FAR 52.215-12	Subcontractor Cost or Pricing Data (OCT 1997)
FAR 52.215-15	Pension Adjustments and Asset Reversions (OCT 2004)
FAR 52,215-16	Facilities Capital Cost of Money (JUN 2003)
FAR 52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (JUL 2005)
FAR 52.215-21	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data _ Modifications (OCT 1997)
FAR 52.216-7	Allowable Cost and Payment (DEC 2002) as modified by DEAR 952.216-7 Alternate II
FAR 52.216-8	Fixed Fee (MAR 1997)
FAR 52.216-10	Incentive Fee (MAR 1997)
FAR 52.217-8	Option to Extend Services (NOV 1999)
FAR 52.217-9	Option to Extend the Term of the Contract (MAR 2000)
FAR 52.222-2	Payment for Overtime Premiums (JUL 1990) reference paragraph (a) and insert (0)
FAR 52.222-3	Convict Labor (JUN 2003)
FAR 52.222-21	Prohibition of Segregated Facilities (FEB 1999)
FAR 52.222-26	Equal Opportunity (MAR 2007)
FAR 52.222-35	Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006)
FAR 52.222-36	Affirmative Action for Workers with Disabilities (JUN 1998)
FAR 52.222-37	Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and other Eligible Veterans (SEP 2006)
FAR 52.222-50	Combating Trafficking in Persons (APR 2006)
FAR 52.223-5	Pollution Prevention and Right-to-Know Information (AUG 2003)
FAR 52.223-6	Drug-Free Workplace (MAY 2001)
FAR 52.223-10	Waste Reduction (AUG 2000)
FAR 52.223-14	Toxic Chemical Release Reporting (AUG 2003)
FAR 52.225-1	Buy American Act – Supplies (JUN 2003)
FAR 52.225-13	Restrictions on Certain Foreign Purchases (FEB 2006)
FAR 52.228-7	Insurance-Liability to Third Persons (MAR 1996)
FAR 52.232-17	Interest (JUN 1996)
FAR.52-232-18	Availability of Funds (APR 1984)
FAR 52.232-20	Limitation of Cost (APR 1984)
FAR 52.232-22	Limitation of Funds (APR 1984)
FAR 52.232-23	Assignment of Claims (JAN 1986)
FAR 52.232-25	Prompt Payment (OCT 2003) Alternate I (FEB 2002)
FAR 52.232-33	Payment by Electronic Funds Transfer-Central Contractor Registration (OCT 2003)

<u>Clause Reference</u>	<u>Title of Clause</u>
FAR 52.232-35	Designation of Office for Government Receipt of Electronic Funds Transfer Information (MAY 1999) Reference paragraph (c) Insert the following information: Name: U.S. Department of Energy Office of Science - Chicago Office Mailing Address: 9800 S. Cass Avenue Argonne, IL 60439 Telephone number: (630) 252-2351 Person to Contact: Ms. Paulette Hubbard Electronic Address: paulette.hubbard@ch.doe.gov
FAR 52.233-1	Disputes (JUL 2002) Alternate I (DEC 1991)
FAR 52.233-3	Protest After Award (AUG 1996) Alternate I (JUN 1985)
FAR 52.233-4	Applicable Law For Breach Of Contract Claim (OCT 2004)
FAR 52.237-2	Protection of Government Buildings, Equipment, and Vegetation (APR 1984)
FAR 52.237-3	Continuity of Services (JAN 1991)
FAR 52.242-1	Notice of Intent to Disallow Costs (APR 1984)
FAR 52.242-3	Penalties for Unallowable Costs (MAY 2001)
FAR 52.242-4	Certification of Final Indirect Costs (JAN 1997)
FAR 52.242-13	Bankruptcy (JUL 1995)
DEAR 952.242-70	Technical Direction (DEC 2000)
FAR 52.243-2	Changes-Cost-Reimbursement (AUG 1987) Alternate I (APR 1984)
FAR 52.244-2	Subcontracts (JUN 2007) Alternate I (JUN 2007)
FAR 52.244-5	Competition in Subcontracting (DEC 1996)
FAR 52.244-6	Subcontracts for Commercial Items (MAR 2007)
FAR 52.245-1	Government Property (JUN 2007)
FAR 52.245-9	Use and Charges (JUN 2007)
FAR 52.246-25	Limitation of Liability – Services (FEB 1997)
FAR 52.249-6	Termination (Cost-Reimbursement) (MAY 2004)
FAR 52.249-14	Excusable Delays (APR 1984)
FAR 52.251-1	Government Supply Sources (APR 1984)
DEAR 952.251-70	Contractor Employee Travel Discounts (DEC 2000)
FAR 52.253-1	Computer Generated Forms (JAN 1991)

SECTION I

APPENDIX B

**Intellectual Property Provisions
Research, Development, or Demonstration
Domestic Small Business and Nonprofit Organizations**

01. FAR 52.227-1 Authorization and Consent (JUL 1995), Alternate I
02. FAR 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)
This clause is not applicable if the award is for less than \$100,000.
03. FAR 52.227-14 Rights in Data - General, as modified by DEAR 927.409 (Effective Apr 1998)
*If this award requires the use or delivery of limited rights data and/or restricted computer software, Alternates II and III are incorporated, unless modified upon recommendation of Patent Counsel.
In acquisition awards for basic or applied research with educational institutions, paragraph (d)(3) is replaced with Alternate IV, unless software is specified for delivery or other special circumstances exist.*
04. FAR 52.227-16 Additional Data Requirements (JUN 1987)
05. FAR 52.227-23 Rights to Proposal Data (Technical) (JUN 1987)
06. DEAR 952.227-9 Refund of Royalties (MAR 1995)
07. DEAR 952.227-11 Patent Rights – Retention by Contractor (Short Form) (MAR 1995)

Attachment 1 (for reference only): Patent Rights – Acquisition by the Government (MAR 1995); DEAR 952.227-13

01. FAR 52.227-1 Authorization and Consent; Alternate I

AUTHORIZATION AND CONSENT (JUL 1995)

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

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services 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.

(End of clause)

02. FAR 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement

NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(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 possession of the Contractor pertaining to such suit or claim. 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 agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

(End of clause)

03. FAR 52.227-14 Rights in Data - General, as modified by DEAR 927.409 (Effective Apr 1998)

RIGHTS IN DATA - GENERAL (JUN 1987)

(a) Definitions.

(1) *Computer data bases*, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

(2) *Computer software*, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

(3) *Data*, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. For the purposes of this clause, the term does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.

(4) *Form, fit, and function data*, as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance

requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

(5) *Limited rights data*, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of subparagraph (g)(2) of this section if included in this clause.

(6) *Restricted computer software*, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (g)(3) of this section if included in this clause.

(7) *Technical data*, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

(8) *Unlimited rights*, as used in this clause, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) below regarding copyright, the Government shall have unlimited rights in:

- (i) Data first produced in the performance of this contract;
- (ii) Form, fit, and function data delivered under this contract;
- (iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair items, components, or processes delivered or furnished for use under this contract; and
- (iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) below.

(2) The Contractor shall have the right to:

- (i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) below;
- (ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) below;
- (iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) below; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) below.

(c) Copyright.

(1) Data first produced in the performance of this contract. Unless provided otherwise in subparagraph (d) below, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are 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. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

(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 contains the copyright notice of 17 U.S.C. 401 and 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 (1) above; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) below if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, publication and use of data.

(1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided below in this paragraph or expressly set forth in this contract.

(2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(3) The Contractor agrees not to assert copyright in computer software first produced in the performance of this contract without prior written permission of the DOE Patent Counsel assisting the contracting activity. When such permission is granted, the Patent Counsel shall specify appropriate terms, conditions, and submission requirements to assure utilization, dissemination, and commercialization of the data. The Contractor, when requested, shall promptly deliver to Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled.

(e) Unauthorized marking of data.

(1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraphs (g)(2) or (g)(3) below and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will not longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (i) above, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be canceled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor shall be so notified in writing. If the Contracting Officer determines, with concurrence of the Head of the Contracting Activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (1) above may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

(1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) below, or the copyright notice required by paragraph (c) above, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor:

- (i) Identifies the data to which the omitted notice is to be applied;
- (ii) Demonstrates that the omission of the notice was inadvertent;
- (iii) Establishes that the use of the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also (i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or (ii) correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software.

(1) When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) above are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this Contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government is to be treated as limited rights data and not restricted computer software.

(2) [Reserved.]

(3) [Reserved.]

(h) Subcontracting.

The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

(i) Relationship to patents.

Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(j) The Contractor agrees, except as may be otherwise specified in this contract for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to three years after acceptance of all items to be delivered under this contract, inspect at the Contractor's facility any data withheld pursuant to paragraph (g)(1) above, for purposes of verifying the Contractor's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Contractor whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

(End of clause)

Alternate II (Jun 1987)

(g)(2) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Contractor may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with such Notice:

LIMITED RIGHTS NOTICE (JUN 1987)

(a) These data are submitted with limited rights under Government contract No. _____ (and subcontract No. _____, if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure:

-[Agencies may list additional purposes as set forth in 27.404(d)(1) or if none, so state]

(b) This Notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

Alternate III (Jun 1987)

(g)(3)(i) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of restricted computer software, or the Contracting Officer may require by written request the delivery of restricted computer software that has been withheld or would otherwise be withholdable. If delivery of such computer software is so required, the Contractor may affix the following "Restricted Rights Notice" to the computer software and the Government will thereafter treat the computer software, subject to paragraphs (e) and (f) of this clause, in accordance with the Notice:

RESTRICTED RIGHTS NOTICE (JUN 1987)

(a) This computer software is submitted with restricted rights under Government Contract No. _____ (and subcontract _____, if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this Notice or as otherwise expressly stated in the contract.

(b) This computer software may be:

- (1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;
- (2) Used or copied for use in a backup computer if any computer for which it was acquired is inoperative;
- (3) Reproduced for safekeeping (archives) or backup purposes;
- (4) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating restricted computer software are made subject to the same restricted rights;
- (5) Disclosed to and reproduced for use by support service Contractors in accordance with subparagraphs (b)(1) through (4) of this clause, provided the Government makes such disclosure or reproduction subject to these restricted rights; and
- (6) Used or copied for use in, or transferred to a replacement computer.

(c) Notwithstanding the foregoing, if this computer software is published copyrighted computer software, it is licensed to the Government, without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause.

(d) Any others rights or limitations regarding the use, duplication, or disclosure of this computer software are to be expressly stated in, or incorporated in, the contract.

(e) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of notice)

(ii) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

RESTRICTED RIGHTS NOTICE SHORT FORM (JUN 1987)

Use, reproduction, or disclosure is subject to restrictions set forth in Contract No. (and subcontract _____, if appropriate) with _____ (name of Contractor and subcontractor)."

(End of notice)

(iii) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, it will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause, unless the Contractor includes the following statement with such copyright notice: "Unpublished-rights reserved under the Copyright Laws of the United States."

Alternate IV (Jun 1987)

(c) Copyright--(1) Data first produced in the performance of the contract. Except as otherwise specifically provided in this contract, the Contractor may establish claim to copyright subsisting in any data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are 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. For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting on its behalf, a paid up, nonexclusive, irrevocable worldwide license for all such computer software to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government.

(End of notice)

04. FAR 52.227-16 Additional Data Requirements

ADDITIONAL DATA REQUIREMENTS (JUN 1987)

(a) In addition to the data (as defined in the clause at 52.227-14, Rights in Data-General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.

(b) The Rights in Data-General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the Contractor to deliver any data the withholding of which is authorized by the Rights in Data-General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.

(c) When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(d) The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

(End of clause)

05. FAR 52.227-23 Rights to Proposal Data

RIGHTS TO PROPOSAL DATA (TECHNICAL)(JUN 1987)

Except for data contained on pages _____, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this contract) in and to the technical data contained in the proposal dated _____ upon which this contract is based.

06. DEAR 952.227-9 Refund of Royalties

REFUND OF ROYALTIES (MAR 1995)

- (a) The contract price includes certain amounts for royalties payable by the Contractor or subcontractors or both, which amounts have been reported to the Contracting Officer.
- (b) The term "royalties" as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications in connection with performing this contract or any subcontract here-under. The term also includes any costs or charges associated with the access to, use of, or other right pertaining to data that is represented to be proprietary and is related to the performance of this contract or the copying of such data or data that is copyrighted.
- (c) The Contractor shall furnish to the Contracting Officer, before final payment under this contract, a statement of royalties paid or required to be paid in connection with performing this contract and subcontracts hereunder together with the reasons.
- (d) The Contractor will be compensated for royalties reported under paragraph (c) of this clause, only to the extent that such royalties were included in the contract price and are determined by the Contracting Officer to be properly chargeable to the Government and allocable to the contract. To the extent that any royalties that are included in the contract price are not, in fact, paid by the Contractor or are determined by the Contracting Officer not to be properly chargeable to the government and allocable to the contract, the contract price shall be reduced. Repayment or credit to the Government shall be made as the Contracting Officer directs. The approval by DOE of any individual payments or royalties shall not prevent the Government from contesting at any time the enforceability, validity, scope of, or title to, any patent or the proprietary nature of data pursuant to which a royalty or other payment is to be or has been made.
- (e) If, at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of the royalties included in the final contract price as adjusted pursuant to paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer of that fact and shall reimburse the Government in a corresponding amount.
- (f) The substance of this clause, including this paragraph (f), shall be included in any subcontract in which the amount of royalties reported during negotiation of the subcontract exceeds \$250.

(End of clause)

07. DEAR 952.227-11 Patent Rights - Retention by the Contractor (short form)

PATENT RIGHTS - RETENTION BY THE CONTRACTOR (SHORT FORM) (MAR 1995)

(a) Definitions.

(1) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

(2) "Made" when used in relation to any invention means the conception of first actual reduction to practice of such invention.

(3) "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(4) "Practical application" means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such

conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

(5) "Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

(6) "Subject invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.

(7) "Agency licensing regulations" and "agency regulations concerning the licensing of Government-owned inventions" mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

(b) Allocation of principal rights. The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention disclosure, election of title, and filing of patent application by Contractor.

(1) The Contractor will disclose each subject invention to the Department of Energy (DOE) within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the DOE, the Contractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.

(2) The Contractor will elect in writing whether or not to retain title to any such invention by notifying DOE within 2 years of disclosure to DOE. However, in any case where publication, on sale or public use has initiated the 1-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOE to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor will file its initial patent application on a subject invention to which it elects to retain title within 1 year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) Requests for extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2), and (3) of this clause may, at the discretion of the agency, be granted.

(d) Conditions when the Government may obtain title. The Contractor will convey to the Federal agency, upon written request, title to any subject invention--

(1) If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title; provided, that DOE may only request title within 60 days after learning of the failure of the Contractor to disclose or elect within the specified times.

(2) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the Federal agency, the Contractor shall continue to retain title in that country.

(3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum rights to Contractor and protection of the Contractor right to file.

(1) The Contractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the Federal agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and agency regulations concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

(f) Contractor action to protect the Government's interest.

(1) The Contractor agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and (ii) convey title to DOE when requested under paragraph (d) of this clause and to enable the government to obtain patent protection throughout the world in that subject invention.

(2) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor will notify DOE of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

(4) The Contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

(g) Subcontracts.

(1) The Contractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for the Contractor in this clause, and the Contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(2) The contractor shall include in all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work the patent rights clause at 952.227-13.

(3) In the case of subcontracts, at any tier, DOE, subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(h) Reporting on utilization of subject inventions. The Contractor agrees to submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received, by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by that agency in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) Preference for United States Industry. Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in rights. The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that-- (1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use; (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees; (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or (4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or

because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special provisions for contracts with nonprofit organizations: If the Contractor is a nonprofit organization, it agrees that--

(1) Rights to a subject invention in the United States may not be assigned without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Contractor;

(2) The Contractor will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) The balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions will be utilized for the support of scientific research or education; and

(4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(4).

(l) Communications.

(1) The contractor shall direct any notification, disclosure, or request to DOE provided for in this clause to the DOE patent counsel assisting the DOE contracting activity, with a copy of the communication to the Contracting Officer.

(2) Each exercise of discretion or decision provided for in this clause, except subparagraph (k)(4), is reserved for the DOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.

(3) Upon request of the DOE Patent Counsel or the contracting officer, the contractor shall provide any or all of the following:

(i) a copy of the patent application, filing date, serial number and title, patent number, and issue date for any subject invention in any country in which the contractor has applied for a patent;

(ii) a report, not more often than annually, summarizing all subject inventions which were disclosed to DOE individually during the reporting period specified; or

(iii) a report, prior to closeout of the contract, listing all subject inventions or stating that there were none.

(End of clause)

Attachment 1: DEAR 952.227-13 Patent Rights - Acquisition by the Government

PATENT RIGHTS-ACQUISITION BY THE GOVERNMENT (MAR 1995)

(a) Definitions.

"Invention", as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

"Practical application", as used in this clause, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

"Subject invention", as used in this clause, means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract.

"Patent Counsel", as used in this clause, means the Department of Energy Patent Counsel assisting the procuring activity.

"DOE patent waiver regulations", as used in this clause, means the Department of Energy patent waiver regulations at 41 CFR 9-9.109-6 or successor regulations. See 10 CFR part 784.

"Agency licensing regulations" and "applicable agency licensing regulations", as used in this clause, mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

(b) Allocations of principal rights.

(1) Assignment to the Government. The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that rights are retained by the Contractor under subparagraph (b)(2) and paragraph (d) of this clause.

(2) Greater rights determinations.

(i) The contractor, or an employee-inventor after consultation with the Contractor, may request greater rights than the nonexclusive license and the foreign patent rights provided in paragraph (d) of this clause on identified inventions in accordance with the DOE patent waiver regulations. A request for a determination of whether the Contractor or the employee-inventor is entitled to acquire such greater rights must be submitted to the Patent Counsel with a copy to the Contracting Officer at the time of the first disclosure of the invention pursuant to subparagraph (e)(2) of this clause, or not later than 8 months thereafter, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. Each determination of greater rights under this contract shall be subject to paragraph (c) of this clause, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.

(ii) Within two (2) months after the filing of a patent application, the Contractor shall provide the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and, promptly upon issuance of a patent, provide the patent number and issue date for any subject invention in any country for which the Contractor has been granted title or the right to file and prosecute on behalf of the United States by the Department of Energy.

(iii) Not less than thirty (30) days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application.

(iv) Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(c) Minimum rights acquired by the Government.

(1) With respect to each subject invention to which the Department of Energy grants the Contractor principal or exclusive rights, the Contractor agrees as follows:

(i) The Contractor hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency).

(ii) The Contractor agrees that with respect to any subject invention in which DOE has granted it title, DOE has the right in accordance with the procedures in the DOE patent waiver regulations (10 CFR part 784) to require the Contractor, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if it determines that--

(A) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(B) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(C) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(D) Such action is necessary because the agreement required by paragraph (i) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(iii) The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by that agency in accordance with subparagraph (c)(1)(ii) of this clause. To the extent data or information supplied under this section is considered by the Contractor, its licensee, or assignee to be privileged and confidential and is so marked, the Department of Energy agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government.

(iv) The Contractor agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(v) The Contractor agrees to provide for the Government's paid-up license pursuant to subparagraph (c)(1)(i) of this clause in any instrument transferring rights in a subject invention and to provide for the granting of licenses as required by subparagraph (c)(1)(ii) of this clause, and for the reporting of utilization information as required by subparagraph (c)(1)(iii) of this clause, whenever the instrument transfers principal or exclusive rights in a subject invention.

(2) Nothing contained in this paragraph (c) shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.

(d) Minimum rights to the Contractor.

(1) The Contractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the Contractor fails to disclose the subject invention within the times specified in subparagraph (e)(2) of this clause. The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(4) The Contractor may request the right to acquire patent rights to a subject invention in any foreign country where the Government has elected not to secure such rights, subject to the conditions in subparagraphs (d)(4)(i) through (d)(4)(vii) of this clause. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph (e)(2) of this clause, with a copy to the DOE Contracting Officer. DOE approval, if given, will be based on a determination that this would best serve the national interest.

(i) The recipient of such rights, when specifically requested by DOE, and three years after issuance of a foreign patent disclosing the subject invention, shall furnish DOE a report stating:

(A) The commercial use that is being made, or is intended to be made, of said invention, and

(B) The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.

(ii) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary of Energy or designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.

(iii) If noted elsewhere in this contract as a condition of the grant of an advance waiver of the Government's title to inventions under this contract, or, if no advance waiver was granted but a waiver of the Government's title to an identified invention is granted pursuant to subparagraph (b)(2) of this clause upon a determination by the Secretary of Energy that it is in the Government's best interest, this license shall include the right of the Government to sublicense foreign governments pursuant to any existing or future treaty or agreement with such foreign governments.

(iv) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right to terminate the foreign patent rights granted in this subparagraph (d)(4) in whole or in part unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.

(v) Subject to the rights granted in subparagraphs (d)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right, commencing four years after foreign patent rights are accorded under this subparagraph (d)(4), to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing:

(A) If the Secretary of Energy or designee determines, upon review of such material as he deems relevant, and after the recipient of such rights or other interested person has had the opportunity to provide such relevant and material information as the Secretary or designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or

(B) Unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

(vi) If the contractor is to file a foreign patent application on a subject invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures for such period of time as specified by Patent Counsel, but in no event shall the Government or its employees be liable for any publication thereof.

(vii) Subject to the license specified in subparagraphs (d)(1), (2), and (3) of this clause, the contractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the contractor or inventor fails to have a patent application filed in a timely manner or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the contractor or inventor shall, not less than 60 days before the expiration period for any action required by any patent office, notify the Patent Counsel of such failure or decision, and deliver to the Patent Counsel, the executed instruments necessary for the conveyance specified in this paragraph.

(e) Invention identification, disclosures, and reports.

(1) The Contractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Contractor personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

(2) The Contractor shall disclose each subject invention to the DOE Patent Counsel with a copy to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters or, if earlier, within 6 months after the Contractor becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the Contractor. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Contractor shall promptly notify Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor. The report should also include any request for a greater rights determination in accordance with subparagraph (b)(2) of this clause. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Contractor contends in writing at the time the invention is disclosed that it was not so made.

(3) The Contractor shall furnish the Contracting Officer the following:

(i) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of the contract, listing subject inventions during that period, and certifying that all subject inventions have been disclosed (or that there are not such inventions) and that the procedures required by subparagraph (e)(1) of this clause have been followed.

(ii) A final report, within 3 months after completion of the contracted work listing all subject inventions or certifying that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such subcontracts.

(4) The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (e)(2) of this clause.

(5) The Contractor agrees, subject to FAR 27.302(j), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

(f) Examination of records relating to inventions.

(1) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether--

(i) Any such inventions are subject inventions;

(ii) The Contractor has established and maintains the procedures required by subparagraphs (e)(1) and (4) of this clause;

(iii) The Contractor and its inventors have complied with the procedures.

(2) If the Contracting Officer learns of an unreported Contractor invention which the Contracting Officer believes may be a subject invention, the Contractor may be required to disclose the invention to DOE for a determination of ownership rights.

(3) Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(g) Withholding of payment (NOTE: This paragraph does not apply to subcontracts).

(1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the Contractor fails to--

(i) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this clause.

(ii) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (e)(1) of this clause;

- (iii) Disclose any subject invention pursuant to subparagraph (e)(2) of this clause;
- (iv) Deliver acceptable interim reports pursuant to subparagraph (e)(3)(i) of this clause; or
- (v) Provide the information regarding subcontracts pursuant to subparagraph (h)(4) of this clause.

(2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

(3) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of subject inventions required by subparagraph (e)(2) of this clause, and acceptable final report pursuant to subparagraph (e)(3)(ii) of this clause, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.

(4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.

(h) Subcontracts.

(1) The contractor shall include the clause at 48 CFR 952.227-11 (suitably modified to identify the parties) in all subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the subcontract is subject to an Exceptional Circumstances Determination by DOE. In all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the contractor shall include this clause (suitably modified to identify the parties). The contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(2) In the event of a refusal by a prospective subcontractor to accept such a clause the Contractor--

(i) Shall promptly submit a written notice to the Contracting Officer setting forth the subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such subcontract without the written authorization of the Contracting Officer.

(3) In the case of subcontracts at any tier, DOE, the subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause.

(4) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(5) The contractor shall identify all subject inventions of the subcontractor of which it acquires knowledge in the performance of this contract and shall notify the Patent Counsel, with a copy to the contracting officer, promptly upon identification of the inventions.

(i) Preference United States industry. Unless provided otherwise, no Contractor that receives title to any subject invention and no assignee of any such Contractor shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Government upon a showing by the Contractor or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely

to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) Atomic energy.

(1) No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of subparagraph (e)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(k) Background Patents.

(1) Background Patent means a domestic patent covering an invention or discovery which is not a subject invention and which is owned or controlled by the Contractor at any time through the completion of this contract:

(i) Which the contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and

(ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.

(2) The Contractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any background patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.

(3) The Contractor also agrees that upon written application by DOE, it will grant to responsible parties, for purposes of practicing a subject of this contract, nonexclusive licenses under any background patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.

(4) Notwithstanding subparagraph (k)(3) of this clause, the contractor shall not be obligated to license any background patent if the Contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(i) a competitive alternative to the subject matter covered by said background patent is commercially available or readily introducible from one or more other sources; or

(ii) the Contractor or its licensees are supplying the subject matter covered by said background patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

(l) Publication. It is recognized that during the course of the work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.

(m) Forfeiture of rights in unreported subject inventions.

(1) The Contractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Contractor fails to report to Patent Counsel within six months after the time the Contractor:

- (i) Files or causes to be filed a United States or foreign patent application thereon; or
- (ii) Submits the final report required by subparagraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in subparagraph (m)(1) of this clause, the Contractor:

(i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or

(ii) Contending that the invention is not a subject invention, the Contractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer; or

(iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (m) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to subject inventions.

(End of clause)

PART III

SECTION J

LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

LIST OF ATTACHMENTS

- J.1 STATEMENT OF WORK, consisting of 12 pages
- J.2 DOE F 1332.1 - REPORTING REQUIREMENTS CHECKLIST, consisting of 3 pages
- J.3 LIST OF KEY PERSONNEL, consisting of 1 pages
- J.4 BILLING INSTRUCTIONS, consisting of 2 pages
- J.5 POSITION DESCRIPTIONS, consisting of 5 pages
- J.6 PRICING SCHEDULES, consisting of 2 pages
- J.7 DOE DIRECTIVES, consisting of 2 pages

CONTRACT No. DE-AC02-09CH11469

PART III

SECTION J

J.1 STATEMENT OF WORK

Statement of Work

Technical Support Services for Department of Energy Office of Science – Chicago Office (SC-CH)

1. Background

The Department of Energy (DOE) Chicago Office (CH) is a key component of the Office of Science (SC) Integrated Support Center. In this role, CH supports the SC mission to foster, formulate, and support research programs at world class Government laboratories and at numerous universities which advance the nation's leadership in science and technology. The SC Strategic Plan states: *We provide solutions for our Nation's energy challenges in the following research areas: fusion/plasma sciences, materials research, combustion research, hydrogen storage, energy biosciences, global climate change research, geosciences, engineering sciences, membrane and separation sciences, [and] advanced computation and simulation.*

The SC-Chicago Office (SC-CH), Argonne, IL, provides business, technical, and administrative support to SC Headquarters and Site Office elements (which have management responsibility for the SC laboratories). As a strong partner and service support leader, SC-CH provides similar assistance to other DOE program offices and other Federal agencies that execute programs through SC-CH based on agreements with those organizations.

SC-CH is recognized as a "go-to" service organization, a supportive unit that can be relied upon to lead and/or assist in project and program planning and performing complex technical support functions.

General information regarding SC-CH may be found at <http://www.ch.doe.gov>. General information regarding SC may be found at <http://www.er.doe.gov/>. SC-CH provides support with both federal and contractor staff.

Historically, SC-CH technical support contractors have needed to respond quickly to changing support requirements. Such fluctuations in work priorities have commonly been addressed through sub-contracting, although this tact has sometimes created challenges in achieving the minimum ratio for the division of work between prime and subcontractors.

2. Scope

The objective of this effort is to acquire technical support services, identified in Section 4. Technical Support, for the following site offices:

Ames Site Office (AMSO), Argonne, IL

Argonne Site Office (ASO), Argonne, IL

Brookhaven Site Office (BHSO), Upton, NY

Fermi Site Office (FSO), Batavia, IL

New Brunswick Laboratory (NBL), Argonne, IL

Pacific Northwest Site Office (PNSO), Richland, WA

Princeton Site Office (PSO), Princeton, NJ

SC-Chicago Office (SC-CH), Argonne, IL

Work relating to the SC mission may also be performed for other SC Site Offices or DOE program offices or for the SC Chief Operating Officer for work assigned to SC-CH in its Integrated Support Center role. Additionally, work may be performed for non-SC DOE program offices where work supports SC sites or where SC organizational units have agreements with non-SC organizational units to manage certain programs. A recent example of such work includes environmental management work performed for the Oakland Projects Office in support of Berkeley Site Office and Stanford Site Office.

2.1. Resources

The contractor shall furnish the personnel, facilities, and materials (except as expressly set forth in this contract by DOE) necessary to meet the requirements set forth in this statement of work. For work that is performed at the government site(s), DOE will provide the contractor with office space and with appropriate equipment such as a computer(s) and a telephone(s).

2.2. Place of Performance

The primary location for the performance of work under this contract shall be at Argonne, IL and at any of the site offices listed in Section 2.0 above. Additionally, as directed by the DOE Technical Manager (DOE-TM), the contractor may be required to travel in conjunction with the work effort identified in this Statement of Work. All travel will be identified in each individual task assignment and shall be approved by the DOE-TM prior to commencement of travel.

3. Applicable Documents

The Contractor shall adhere to the documents specified in Part III, Section J, Attachment J.7, and any new applicable DOE directives that are issued during the solicitation and contract periods.

4. Technical Support

At SC-CH's discretion, the Contractor shall provide technical support services, including, but not limited to, the following Functional Areas as they relate to the Technical Support Areas identified in Figure 1, below.

Functional Areas

1. **Policy Assistance:** Provide services to be used by agency personnel in developing regulations, standards, orders, strategic plans, procedures, and guidance; assist in implementation of such policy and guidance;

2. **Management:** Assist in project and program planning, control and implementation;
3. **Assessment:** Provide advice concerning assessment methods, plan and lead/participate on assessment teams;
4. **Analysis:** Gather, maintain, and evaluate data to identify trends, generate lessons learned, and make recommendations to resolve issues. Monitor technical work performed by others to determine progress and compliance with requirements. Develop corrective action plans and other reports. Prepare and review designs.
5. **Communication:** Develop tools to communicate information, e.g., reports, web sites, brochures, and be a clearing house for accurate information. Prepare training materials and conduct training;
6. **Administrative:** Provide administrative support related to the contractor employees' technical effort.

Technical Support Areas					
Environment	Safety	Health	Facilities	Program and Project Management	Other
Clean Air	Accelerator Safety	Human Subjects	Architectural Services	Value Engineering	Lessons Learned
Clean Water	Aviation Safety	Industrial Hygiene	Data Management: Facility Information Management System	Project Risk Management	Business Planning
Environmental Management Systems	Construction Safety	Occupational Medicine	Facility Assessment and Maintenance	Project Control and Budget Analysis	Quality Assurance
Environmental Monitoring	Criticality Safety	Health Physics	Real Estate	Cost Estimation and Validation	Community/Public Outreach
Environmental Restoration	Emergency Management	Epidemiology	Utilities Management	Cost and Schedule Performance	Safeguards and Security
Historic Preservation	Fire Protection			Earned Value Analyses	Document Control
National Environmental Policy Act	Integrated Safety Management			Change Control Process	Accident Investigations
Pollution Prevention and Recycling	Industrial Safety				Occurrence Reporting
Packaging and Transportation	Nuclear Safety				Electric Power Transmission
Hazardous and Radioactive Waste Management	Radiological Safety				Chemistry
Decontamination and Decommissioning	Seismic Safety				Mass Spectrometry
Nuclear Materials Management	Electrical Safety				Strategic/Business Planning
Regulatory Compliance	Biological Safety				Radiological Laboratory Operations
Brownfields	Pressure Safety				Web Design/Maintenance
Floodplains and Wetlands					

Figure 1 - Technical Support Areas

Approximately 80% of the required support will consist of ongoing, "routine" tasks and 20% is expected to consist of "specialized" tasks intended to address short term issues.

4.1. Routine Support Areas

The Contractor shall provide support in the following technical subject areas: health physics, physical science, physical science related project/program management, project controls and radiological safety for the indicated DOE organizational units.

1. Health Physics

NBL:

- Perform direct radiological and smear sample surveys of laboratories and equipment.
Submits formal reports of findings.
- Perform routine maintenance and calibration of radiological instrumentation.
- Develop and maintain records documenting repair, calibration, and location of radiological detection instrumentation.
- Review and evaluate current and proposed methods and procedures for radiation safety considerations and provide NBL supervision/management with recommendations where appropriate.
- Provide employees with information and advise regarding safe radiological work practices.

2. Physical Science (Chemistry and Mass Spectrometry)

NBL

- Provide technical support as physical scientist (mass spectrometrists) in the Standards and Evaluation Division of NBL.
- Responsible for chemical and instrumental analysis of actinides and other materials
- Plans, coordinates, and performs highly accurate and precise isotopic ratio mass spectrometric measurements on nuclear and related materials in support of NBL reference

materials, measurement evaluation, measurement services, measurement development, and safeguards assistance functions.

- Provide employees with information and advise regarding safe radiological work practices.

3. Radiological Safety (and associated engineering)

NBL:

- Facilitate prompt disciplined resolution of radiological safety issues related to resumption of and then ongoing safe operations. Issues will extend to nuclear safety, fire protection, and criticality safety technical support areas.
- Provide employees with information and advise regarding safe radiological work practices.

4. Physical Science Related Project/Program Management

NBL:

- Provide project leadership support for NBL activities for production of uranium isotopic calibration mixes.
- Provide project leadership for ANL activities for production of uranium oxide impurity standards (to replace CRM (certified reference material) 124).
- Develop the gravimetric method for uranium assay.
- Provide expertise related highly enriched uranium work on isotopic ratios for age determination.
- Provide expertise related to low level environmental standards work.
- Provide project leadership for NBL activities for coordination and analytical work on the Pu-244 isotopic spike certified reference material project (including verification of the test portion and work on the enriched production portion).
- Provide coordination of NBL clean room operations, procedures and developmental work to ensure these areas are productive and operational.
- Provide support for International Atomic Energy Commission – Safeguards Analytical laboratory projects as requested.

- Assist in completing the ISO 17025-related tasks for laboratory accreditation

5. Project Controls

BHSO:

- Prepare budget data and coordination of budget documents between SC-CH, SC-HQ and BHSO
- Track and process all baseline changes and maintenance requirements to ensure that baseline is maintained.
- Administer the BHSO Change Control system.
- Monitor performance measures.
- Coordinate the work authorization process.

SC-CH:

- Define system requirements for data, systems and controls based upon DOE directives and project specific guidance.
- Support the evaluation of project performance against performance measurement baselines.
- Support the development of management plans and procedures
- Assist DOE in oversight of assigned projects and programs by review and analysis of monthly contractor performance reports and by tracking planned corrective actions to judge their adequacy.
- Recommend corrective actions to improve cost and schedule performance and to cope with changing program developments, new and changing technologies, laws and regulations and revised strategies.
- Identify opportunities for improving program/project cost and schedule performance.
- Maintain baseline change control logs and processes baseline change actions.
- Provide input on project planning strategies.

- Prepare and provide quarterly summary reports and additional reports, if requested, for assigned projects and programs.

4.2. Specialized Support Areas

The Contractor will provide specialized support on complex or unique/infrequent projects. The Contractor will support DOE program and project managers by providing task-specific expertise for potential task assignments that may not be identified under "Routine Support" but are within the envelope of functional areas and technical support areas identified in Section 4.. Types of specialized support may include any other technical support areas identified on Figure 1, or technical support areas identified as Routine Support Areas in Section 4.1, but at sites other than those identified in Section 4.1.

4.3. Program Execution Statement of Work

The contractor will perform tasks that are in support of the program execution responsibilities for which SC-CH is accountable, including, but not limited to, provision of discrete technical and analytical products and performance of discrete work scope. As programmatic requirements change, new task assignments may be developed within the envelope of functional areas and technical support areas identified in Section 4.

4.4. Task Assignments

Upon written or oral notification by the TM that work is required to be performed, the Contractor shall complete and submit a signed Task Assignment Plan to the TM for review and DOE approval. The Task Assignment Plan shall include a detailed description of how the work is to be performed, schedule, deliverable(s), the amount of DPLH for performance of the task from the labor categories set forth in this contract, and any travel, materials, or other cost estimates, as may be applicable including any estimates for subcontractors and/or consultants.

Specialized, and to a much lesser extent routine, work performed under predecessor technical support contracts has routinely evolved, with new efforts commencing as older efforts are finishing. Hence, predicting a constant focus for contractor efforts is not possible. Recognizing such, the contractor will need skill in identifying experts and making them available to complete task assignments. The Contractor's performance under each task assignment will be used as a basis for determining the amount of award fee to be earned.

5. Performance Requirements

5.1. This is a performance-based contract. The contractor will be formally evaluated on a semi-annual basis. Unacceptable work, as determined by the DOE-TM, or poor performance by the Contractor are among the reasons the Government may choose not to exercise the contract's option period(s).

5.2. Achieving performance requirements is critical to the Contractor's success. Performance requirements contain the following three elements – Objectives, Measures, and Expectations as identified in Figure 2.

- Performance Objective – A statement of the outcome or results expected in a specific task assignment area.
- Performance Measures – These are the critical few characteristics or aspects achieving the objective that will be monitored by the Government, those things that the Government will be gathering data about for the purpose of evaluating the contractor. Performance objectives identified in each task assignment may have one or more measures.
- Performance Expectations – The targeted level or range of levels of performance for each performance measure. SC-CH expects a continuous high quality of technical support services

from the Contractor. The performance objectives, measures, and expectations applicable to each of the sections of the Statement of Work are stated in the table below.

FIGURE 2 – PERFORMANCE REQUIREMENTS

<u>PERFORMANCE OBJECTIVES</u>	<u>PERFORMANCE MEASURES</u>	<u>PERFORMANCE EXPECTATIONS</u>
a) Cost Control – Keep project costs within the contract award value.	The percentage of task assignments that are completed within 5% of the contractor estimated cost plan.	95% of task assignments.
b) Technical Performance – Maintain compliance with laws, regulations, and DOE Orders, etc.	The extent to which technical performance is in compliance.	100% compliance.
c) Performance Schedule – Complete task assignments within the performance schedule	The percentage of task assignments completed within the specified time period.	95% of task assignments.
d) Product Quality – Continuously deliver quality work products.	The percentage of deliverables accepted as quality products suitable for presentation to DOE upper-level management.	95% of deliverables.

PART III

SECTION J

J.2 DOE F 1332.1 - REPORTING REQUIREMENTS CHECKLIST

U.S. DEPARTMENT OF ENERGY
REPORTING REQUIREMENTS CHECKLIST

1. PROGRAM/PROJECT TITLE: Technical Support Services for the Chicago Office and Various Office of Science Site Offices	2. IDENTIFICATION NUMBER: DE-AC02-09 CH1.1469
--	---

3. PARTICIPANT NAME AND ADDRESS

4. PLANNING AND REPORTING REQUIREMENTS		Frequency	E. Financial Incentives		Frequency
A. General Management			<input type="checkbox"/> Statement of Income and Expense		
<input checked="" type="checkbox"/> Management Plan		O	<input type="checkbox"/> Balance Sheet		
<input checked="" type="checkbox"/> Status Report		M	<input type="checkbox"/> Cash Flow Statement		
<input type="checkbox"/> Summary Report			<input type="checkbox"/> Statement of Changes in Financial Position		
B. Schedule/Labor/Cost			<input type="checkbox"/> Loan Drawdown report		
<input type="checkbox"/> Milestone Schedule/Plan			<input type="checkbox"/> Operating Budget		
<input type="checkbox"/> Labor Plan			<input checked="" type="checkbox"/> Supplementary Information: Indirect Cost Proposal Submission		A
<input type="checkbox"/> Facilities Capital Cost of Money Factors Computation			F. Technical		
<input type="checkbox"/> Contract Facilities Capital and Cost of Money			<input type="checkbox"/> Notice of Energy RD&D Project (Requirement with any of the following)		
<input checked="" type="checkbox"/> Cost Plan	Y, A		<input checked="" type="checkbox"/> Technical Progress Report		
<input checked="" type="checkbox"/> Milestone Schedule/Status	M, A		<input checked="" type="checkbox"/> Draft for Review		A
<input type="checkbox"/> Labor Management Report			<input checked="" type="checkbox"/> Final for Approval		F
<input checked="" type="checkbox"/> Cost Management Report	M, A		* <input checked="" type="checkbox"/> Topical Report		
C. Exception Reports			<input type="checkbox"/> Final Technical Report		
<input type="checkbox"/> Conference Record			<input checked="" type="checkbox"/> Draft for Review		A
<input type="checkbox"/> Hot Line Report			<input checked="" type="checkbox"/> Final for Approval		F
D. Performance Measurement			* Technical Deliverables per individual Work Assignments		
<input type="checkbox"/> Management Control System Description			<input type="checkbox"/> Software		
<input type="checkbox"/> WBS Directory			<input checked="" type="checkbox"/> Other (Specify) <u>ES&H reporting, DOE O 231.1</u>		A, Q
<input type="checkbox"/> Index			<u>10 CFR 851</u>		O*, Y
<input type="checkbox"/> Element Definition			*Due prior to commencement of work		
C. Exception Reports			<input type="checkbox"/> Cost Performance Reports		
<input type="checkbox"/> Conference Record			<input type="checkbox"/> Format 1 - WBS		
<input type="checkbox"/> Hot Line Report			<input type="checkbox"/> Format 2 - Function		
D. Performance Measurement			<input type="checkbox"/> Format 3 - Baseline		

5. FREQUENCY CODES

A - As required	M - Monthly - Within 15 days after end of reporting period	X - With Proposal/Bid/Application or with Significant Changes
C - Change to Contractual Agreement	O - Once after award	Y - Yearly or upon Renewal of Contractual Agreement
F - Final (End of effort)	Q - Quarterly	Z - Upon Significant Changes
	S - Semi-Annually	

6. SPECIAL INSTRUCTIONS (ATTACHMENTS)

<input checked="" type="checkbox"/> Report Distribution List/Addresses	<input type="checkbox"/> Analysis Thresholds
<input type="checkbox"/> Reporting Elements	<input type="checkbox"/> Work Breakdown Structure
<input type="checkbox"/> Due Dates	<input checked="" type="checkbox"/> Other ES&H Reporting, DOE O 231.1, Use DOE F 5484.3 Cost Plans/Reporting, See examples: DOE F 1332.7 and 1332.9 http://www.forms.doe.gov

PREPARED BY (SIGNATURE AND DATE) 7/18/2007	REVIEWED BY (SIGNATURE AND DATE) 7/18/2007
---	---

REPORT DISTRIBUTION LIST			
REPORT/PLAN	FREQUENCY	NUMBER OF COPIES	ADDRESS
Management Plan	O	1, 1	A, B
Status Report	M	1, 1	A, B (and E, as required)
Cost Plan	Y, A	1, 1	A, B
Milestone Schedule/Status	M, A	1, 1	A (and E, designated Task Manager only)
Cost Management Report	M, A	1, 1	A, B
Supplementary Information: Indirect Cost Proposal Submission	A	1	B (and C, as required)
Technical Reports	A, F	1,1	A (and E, designated Task Manager only)
Topical Report	A, F	1,1	A (and E, designated Task Manager only)
Other -- ES&H Reporting	A, Q	1,1	A, D
Other -- 10 CFR 851	O, Y	1,1	A, D

- A. U.S. Department of Energy
Office of Science – Chicago Office
9800 South Cass Avenue
Argonne, IL 60439
Attn: Peter Siebach
Technical Manager
Safety and Technical Services
- B. U.S. Department of Energy
Office of Science – Chicago Office
9800 South Cass Avenue
Argonne, IL 60439
Attn: Chadsey Kittock
Contract Specialist
Office of Acquisition and Assistance
- C. U.S. Department of Energy
Office of Science – Chicago Office
9800 South Cass Avenue
Argonne, IL 60439
Attn: Accounting and Finance
- D. U.S. Department of Energy
Office of Science – Chicago Office
9800 South Cass Avenue
Argonne, IL 60439
Attn: Mr. Karl Moro
Safety and Technical Services
- E. U.S. Department of Energy
Office of Science
Address Various TBD
Attn: Task Manager, Various TBD

PART III

SECTION J

J.3 LIST OF KEY PERSONNEL

Project Manager- [REDACTED]

Senior Project Controls Specialist- [REDACTED]

Health Physicist- [REDACTED]

Chemist- [REDACTED]

106

PART III

SECTION J

J.4 BILLING INSTRUCTIONS

Billing Instructions

I Introduction.

These instructions are provided for use by Contractor in the preparation and submission of vouchers for work performed under this contract. Compliance with these instructions will reduce correspondence, and other causes for delay, and will thus promote prompt payments to the Contractor.

II. Voucher Form.

In requesting payment for work performed under this contract, the Contractor shall use Standard Form 1034 (Public Voucher for Purchases and Services Other Than Personal) (see Exhibit A), supported by a Statement of Cost (see Exhibit B). An acceptable substitute (which provides the same necessary information as found in Exhibits A and B of these instructions) may be used.

III. Preparation.

Standard Form 1034 shall be completed in accordance with the following instructional notations (see counterpart notations on Exhibit A):

- (1) Leave Blank.
- (2) Enter voucher number (number consecutively, commencing with "1"). Completion/final vouchers shall clearly be marked as such.
- (3) Enter date voucher prepared.
- (4) Enter contract number and date of contract award.
- (5) Enter contractor's name, mailing address, and telephone number of office responsible for submitting voucher.
- (6) Identify the period the billing covers (e.g., "Jan. 2006" or "Jan-Mar. 2006").
- (7) Enter the dollar amount of this billing. The amount claimed must agree with the amount reflected in the attached Statement of Cost (see Exhibit B).
- (8) Place an "X" in the appropriate block for the type of payment for which reimbursement is requested.

IV. Billing Period. Vouchers shall be submitted no more frequently than once every 2 weeks (except that small business concerns may invoice more frequently).

V. Submission.

An original voucher shall be submitted to the Payment Office specified in Block 25 of the SF 33, Solicitation, Offer and Award. It shall be submitted electronically through the Oak Ridge Financial Service Center Vendor Inquiry Payment Electronic Systems (VIPERS) which can be accessed at <http://finweb.oro.doe.gov/vipers.htm>. A copy of the voucher shall also be submitted to the DOE Contract Specialist and the DOE Technical

Manager as set forth in Part I, Section G - Contract Administration Data, of this contract. Each voucher (original and two copies) shall be supported by a Statement of Cost. The Certification on the Statement of Cost attached to each voucher must be signed by a responsible official of the Contractor. If follow-up billings are necessary, they must be clearly marked to show that they are second or third billings. Completion/final vouchers shall clearly be marked as such.

CONTRACT No. DE-AC02-09CH11469

PART III

SECTION J

J.5 POSITION DESCRIPTIONS

Position Descriptions – Key Personnel

Project Manager

Minimum Qualifications: Bachelors degree in a technical field and ten years experience performing project or program management and/or supervisory duties similar to those described below.

Duties: Responsible for all work performed under the contract. Plans, directs and coordinates activities of all assigned work to ensure that high quality work products are delivered within the prescribed time frame and funding parameters. Reviews government statements of need or tentative plans received from the Technical Manager (TM) to determine time frame, funding limitations, procedures for accomplishing projects, staffing requirements, and allotment of available resources. Establishes work plans and staffing, and arranges for recruitment or assignment of personnel as required. Confers with TM staff to outline work plans and to assign duties, responsibilities, and scope of authority. Prepares Task Assignments and reviews status reports prepared by staff, coordinates technical, cost and schedule reporting, and proposed changes to approach or corrective actions as required. Prepares and approves summary status reports for work under the contract. Coordinates reviews of work products for technical adequacy and compliance with contract requirements. Confers with project personnel to provide technical advice and to resolve problems.

Senior Project Controls Specialist

Minimum Qualifications: Bachelors degree and ten years experience performing project management and/or project control duties similar to those described below.

Duties: Supports definition of system requirements for data, systems, and controls based upon DOE directives and project-specific guidance. Supports the evaluation of project performance against performance measurement baselines. Supports Earned Value Management (EVM) systems and the analysis of data in the standard reports produced by such systems. Supports the development of management plans and procedures. Provides detailed oversight of assigned projects and programs by review and analysis of monthly contractor performance reports and by tracking planned corrective actions to judge their adequacy. Recommends corrective actions to improve cost and schedule performance and to cope with changing program developments, new and changing technologies, laws and regulations and revised strategies. Identifies opportunities for improving program/project cost and schedule performance including conducting value engineering studies. Maintains baseline change control logs and processes baseline change actions. Provides input on project planning strategies. Prepares and provides monthly summary reports and additional reports (if requested) for assigned projects and programs.

Health Physicist

Minimum Qualifications: Bachelors degree in science or engineering and ten years experience performing health physics related duties similar to those described below.

Duties: Responsible for evaluating research, training and monitoring programs to protect DOE, contractor and/or laboratory personnel from radiation hazards. Recommends and develops

policies and procedures to include: inspection standards, safety management, decontamination procedures, radiological emergency procedures. Reviews and comments on radiation protection standards in accordance with Federal, State and industry programs to ensure ALARA. Reviews and comments on DOE radiation exposure measurements, radiation equipment testing and radioactive materials and waste measurements. Maintains records and supporting data for required government, industry and management records. Makes recommendations for changes in work environment based on interpretations and principles of professional practices. Must keep current on existing and proposed changes in Federal, State and industry radiation protection regulations. Provides technical assistance and guidance on documented safety analyses and radiological control problems.

Chemist

Minimum Qualifications: Bachelors degree in chemistry or chemical engineering and ten years experience performing chemistry related duties similar to those described below.

Duties: Provides project leadership support to DOE laboratories for specific activities. At New Brunswick Laboratory, provides leadership in the production of uranium isotopic calibration mixes. Work involves project planning, work organization and analytical work. Provides project leadership for activities related to the production of uranium oxide impurity standards (to replace Certified Reference Material 124). Develops the gravimetric method for uranium assay. Provides expertise related to Highly Enriched Uranium work on isotopic ratios for age determination. Provides expertise related to low level environmental standards work at NBL. Provides project leadership activities for coordination and analytical work on the Pu-244 isotopic spike certified reference material project (including verification of the test portion and work on the enriched production portion). Provides coordination of laboratory clean room operations, procedures and developmental work to ensure these areas are productive and operational. Provides support for International Atomic Energy Agency – Safeguards Analytical Library projects as requested.

Position Descriptions – Other than key personnel

Project Controls Technician

Minimum Qualifications: Two years experience performing project control duties similar to those described below.

Duties: Supports systems requirements for data, systems, and controls based upon specific guidance and direction. Prepares materials to assist in the evaluation of project performance against performance measurement baselines and the development of management plans and procedures. Provides assistance in tracking planned activities, including corrective actions. Maintains baseline change control logs and baseline change actions. Assists in preparation of such deliverables as budget input, monthly summary reports and additional reports (if requested) for assigned projects and programs.

Project Controls Specialist

Minimum Qualifications: Bachelors degree and five years experience performing project management and/or project control duties similar to those described below.

Duties: Assists with project planning, cost estimating, and scheduling for various DOE projects and programs. Assists in the evaluation of project performance against performance measurement baselines including value engineering. Supports EVM systems. Activities may include oral presentations of project status; providing technical and management support to project control systems and work processes. Assists in maintaining change control logs and monthly summary reports.

Health Physics Technician

Minimum Qualifications: Five years experience performing health physics related duties similar to those described below.

Duties: Provides operational health physics and radioactive materials packaging and transportation support services. Assists in determining methods and procedures for making chemical, radiochemical, and/or instrumental survey measurements of the working environment in the laboratory, performing the measurements, evaluating the data and recommending appropriate action. Provides back-up support for the building manager. Performs direct radiological and smear sample surveys of laboratories and equipment. Performs routine maintenance and calibration of radiological instrumentation. Prepares and maintains records of laboratory radiation safety equipment. Reviews and evaluates current and proposed methods and procedures for radiation safety considerations and provides management with recommendations where appropriate. Provides employees with information and advice regarding health and safety practices. Performs assigned functions in accordance with applicable laws, regulations, rules and operating procedures relating to the protection of the environment, the health and safety of workers and the surrounding community.

Environmental Protection Specialist

Minimum Qualifications: Bachelors degree and ten years experience performing environmental protection/environmental compliance duties similar to those described below.

Duties: Provides specialized technical expertise to solve various complex environmental problems. Conducts scientific investigations, which includes analyzing and interpreting trends and patterns generally using established precedents and standards. Assists in the development of appropriate sampling and monitoring procedures and guidelines. Prepares and revises technical documents for internal and external audit groups. Assists in the evaluation and review of proposed and existing codes, standards, regulations, and guidelines to determine the impact on programs and facility modifications. Works on ecological screening studies for potential sites. Provides technical guidance in interpreting and monitoring compliance with regulatory requirements and industry guidelines and conducts assessments. Reviews technical and compliance-related documents to ensure their accuracy and completeness. Keeps current on the changes developing in the regulations and legislation. Applies principles of Environmental Management System (EMS) and conducts EMS compliance-related assessments.

Financial Analyst

Minimum Qualifications: Five years experience performing duties similar to those described below. Bachelors degree preferred.

Duties: Provides assistance with fiscal activities, preparation of Purchase Requisitions, cost plans, obligation of funds, budget input and additional reports (if requested) for assigned programs and projects. Prepares financial and business related analyses and research in such areas as financial and expense performance, rate of return, depreciation, working capital, and investment. Prepares forecast and analyzes trends in costs, overhead costs, specific project costs and general business conditions and other related areas. Utilizing PC and/or mainframe based systems and software, compiles and prepares reports, graphs and charts of data developed. Assists in the development of organization business policies, conducts special financial and business related studies and cooperates with other DOE offices in the preparation of analyses.

Fire Protection Engineer

Minimum Qualifications: Bachelors degree in fire protection engineering or related science or engineering field and ten years experience performing fire protection duties similar to those described below.

Duties: Advises on, administers, supervises, or performs work in the investigation or development of fire prevention/protection aspects of various facilities, programs and projects. Reviews design activities and other documents pertaining to the proper application of fire protection codes and standards, conducts inspections/assessments/accident investigations and participates in testing, operation or maintenance of firefighting or fire prevention apparatus, appliances, devices and systems. Assists in the development of policies and procedures in the area of fire protection/prevention.

Nuclear Engineer/Nuclear Safety Analyst

Minimum Qualifications: Bachelors degree in nuclear engineering or a nuclear safety related field and ten years experience performing nuclear engineering/nuclear safety analyst duties similar to those described below.

Duties: Responsible for all aspects of nuclear safety associated on assigned projects associated with SC nuclear facilities and ancillary facilities. Reviews safety analyses, documented safety analyses, justification for continued operations, interim safety bases, basis for interim operations, assessment of unreviewed safety questions/screenings and determinations; completion of nuclear safety documentation reviews via safety evaluation reports; and integration of safety documentation with other technical disciplines and requirements. Analyzes the extent to which DOE policies and practices could be improved and participates in developing the required revisions to safety program policies and performance measures. Individual should be certified as nuclear safety analyst to DOE Standard STD-1183 DOE Qualification Standards for Nuclear Safety Systems.

Mass Spectrometrists

Minimum Qualifications: Bachelors degree in science or engineering and ten years experience performing physical science duties similar to those described below.

Duties: Responsible for chemical and instrumental analysis of actinides and other materials at New Brunswick Laboratory (NBL). In this role, plans, coordinates, and performs highly accurate and precise isotopic ratio mass spectrometric measurements including coupled plasma mass spectrometry, thermal ionization, and electron ionization (gas) mass spectrometry techniques; and

performs complex instrumental measurements at the limits of the state-of-the-art on materials containing uranium, plutonium, americium, neptunium, and other elements; analyses require highly developed instrumentation and analytical skills and involve a broad range of methodologies including sample preparation, chemical separation, gravimetric, and chromatographic techniques. Serves as a member of technical projects including tasks from NBL projects which have been developed to meet the needs of NBL reference materials, measurement evaluation, measurement services, measurement development, and safeguards assistance activities. This includes critically reviewing literature, scheduling and arranging material transfers of shipments, evaluating materials for use as reference materials, and performing specific analytical measurements. Participates as NBL representative at national scientific meetings and conferences on nuclear analytical measurement technology. Prepares or assists in the preparation of reports of investigations for internal distribution and for publication in DOE reports.

Real Estate Specialist

Minimum Qualifications: Ten years experience performing federal government real estate related duties similar to those described below.

Duties: Provides support in the planning, coordinating, administering, reviewing and recommending approval of DOE realty actions. Supports in the tracking of real property assets through the DOE Facilities Information Management System (FIMS). Assists in the development of strategies for interactions with State and local officials, other Federal agencies, business and industry, and the general public to ensure a proper flow of information regarding the acquisition, use and disposal of real property. Provides expertise in all areas of commercial real estate.

Safety Engineer

Minimum Qualifications: Bachelors degree in science or engineering and ten years experience performing safety related duties similar to those described below.

Duties: Knowledge of and experience in implementing the core functions of integrated safety management: 1) defining scope of work, 2) analyzing hazards, 3) developing/implementing hazard controls, 4) performing work within controls, and 5) feedback and improvement. Develops plans and strategies. Conducts assessments. Participates in accident investigations. Prefer competencies in one or more of the following: aviation safety, construction safety, hoisting and rigging, industrial safety, seismic safety, electrical safety, fire protection, biological safety, pressure safety.

CONTRACT No. DE-AC02-09CH11469

PART III

SECTION J

J.6 PRICING SCHEDULES

SECTION J ATTACHMENT J.6 – PRICING SCHEDULES

Attachment J.6 Pricing Schedules Summary Base Period of Performance

Labor Category	DPLH Year One	Labor Rates Year One	Estimated Cost Year One	DPLH Year Two	Labor Rates Year Two	Estimated Cost Year Two	Estimated Cost Base Period of Performance
Senior Project Controls Specialist		\$	\$		\$	\$	\$
Project Controls Specialist		\$	\$		\$	\$	\$
Project Controls Technician		\$	\$		\$	\$	\$
Nuclear Engr/Nuclear Safety Analyst		\$	\$		\$	\$	\$
Safety Engineer		\$	\$		\$	\$	\$
Environmental Protection Specialist		\$	\$		\$	\$	\$
Health Physicist		\$	\$		\$	\$	\$
Health Physics Technician		\$	\$		\$	\$	\$
Fire Protection Engineer		\$	\$		\$	\$	\$
Chemist		\$	\$		\$	\$	\$
Mass Spectrometrist		\$	\$		\$	\$	\$
Real Estate Specialist		\$	\$		\$	\$	\$
Financial Analyst		\$	\$		\$	\$	\$
Project Manager		\$	\$		\$	\$	\$
SubTotal Direct Labor			\$			\$	\$
SubTotal Contract Labor (G&A only)			\$			\$	\$
Total Labor			\$			\$	\$
Fringe on Direct Labor			\$			\$	\$
SubTotal Fringe and Direct Labor			\$			\$	\$
Overhead (OH)			\$			\$	\$
Subtotal Direct Labor, Fringe, and OH			\$			\$	\$
Subcontracts			\$			\$	\$
Other Direct Costs			\$			\$	\$
Total Cost Input (TCI)* (Including contract labor from above)			\$			\$	\$
General & Administrative (G&A) on TCI less Subcontracts			\$			\$	\$
Subcontracts Handling Charge			\$			\$	\$
Total Estimated Cost (TCI + G&A)			\$			\$	\$
Base Fee			\$			\$	\$
Maximum Award Fee Pool			\$			\$	\$
Total Fee (Base + Award Fee)			\$			\$	\$
Total Estimated Cost Plus Fee			\$ 2,033,028			\$ 1,967,998	\$ 4,001,026

b4

Attachment J.6 Pricing Schedules Summary Option Years

Labor Category	DPLH Option Year One	Labor Rates Option Year One	Estimated Cost Option Year One	DPLH Option Year Two	Labor Rates Option Year Two	Estimated Cost Option Year Two	DPLH Option Year Three	Labor Rates Option Year Three	Estimated Cost Option Year Three	Total Estimated Cost Base Plus Option Periods of Performance
Senior Project Controls Specialist		\$	\$		\$	\$		\$	\$	\$
Project Controls Specialist		\$	\$		\$	\$		\$	\$	\$
Project Controls Technician		\$	\$		\$	\$		\$	\$	\$
Nuclear Engr/Nuclear Safety Analyst		\$	\$		\$	\$		\$	\$	\$
Safety Engineer		\$	\$		\$	\$		\$	\$	\$
Environmental Protection Specialist		\$	\$		\$	\$		\$	\$	\$
Health Physicist		\$	\$		\$	\$		\$	\$	\$
Health Physics Technician		\$	\$		\$	\$		\$	\$	\$
Fire Protection Engineer		\$	\$		\$	\$		\$	\$	\$
Chemist		\$	\$		\$	\$		\$	\$	\$
Mass Spectrometrists		\$	\$		\$	\$		\$	\$	\$
Real Estate Specialist		\$	\$		\$	\$		\$	\$	\$
Financial Analyst		\$	\$		\$	\$		\$	\$	\$
Project Manager		\$	\$		\$	\$		\$	\$	\$
SubTotal Direct Labor			\$			\$			\$	\$
SubTotal Contract Labor (G&A only)			\$			\$			\$	\$
Total Labor		-	\$		-	\$		-	\$	\$
Fringe on Direct Labor			\$			\$			\$	\$
SubTotal Fringe and Direct Labor			\$			\$			\$	\$
Overhead (OH)			\$			\$			\$	\$
Subtotal Direct Labor, Fringe, and OH			\$			\$			\$	\$
Subcontracts			\$			\$			\$	\$
Other Direct Costs			\$			\$			\$	\$
Total Cost Input (TCI)* (including contract labor from above)			\$			\$			\$	\$
General & Administrative (G&A) on TCI less Subcontracts			\$			\$			\$	\$
Subcontracts Handling Charge			\$			\$			\$	\$
Total Estimated Cost (TCI + G&A)			\$			\$			\$	\$
Base Fee			\$			\$			\$	\$
Maximum Award Fee Pool			\$			\$			\$	\$
Total Fee (Base + Award Fee)			\$			\$			\$	\$
Total Estimated Cost Plus Fee			\$ 1,618,785			\$ 1,585,476			\$ 1,634,418	\$ 8,839,705

b4

PART III

SECTION J

J.7 DOE DIRECTIVES

DOE DIRECTIVES

ES&H

O 414.1C	06/17/05	Quality Assurance
420.1B	12/22/05	Facility Safety
M442.1-1	11/16/06	Differing Professional Opinions Manual for Technical Issues
O 450.1	01/15/03	Environmental Protection Program
Chg. 1	01/24/05	
Chg. 2	12/07/05	
Chg. 3	01/03/07	
M450.4-1	11/01/06	Integrated Safety Management System Manual
O 5400.5	02/08/90	Radiation Protection of the Public and Environment
Chg. 1	06/05/90	
Chg. 2	01/07/93	
O 5480.19	07/09/90	Conduct of Operations Requirements for DOE Facilities
Chg. 1	05/18/92	
Chg. 2	10/23/01	

SAFEGUARDS AND SECURITY

O 205.1A	12/04/06	DOE Cyber Security Management Program
N 206.4	06/29/07	Personal Identity Verification
O 470.2B	10/31/02	Independent Oversight and Performance Assurance Program
M470.4-1	08/26/05	Safeguards and Security Program Planning and Management
Chg. 1	03/07/06	
M470.4-2	08/26/05	Physical Protection
Chg. 1	03/07/06	
M470.4-4	08/26/05	Information Security
Chg. 1	06/29/07	

M470.4-5	08/26/05	Personnel Security
O 471.3	04/09/03	Identifying and Protecting Official Use Only Information
<u>OTHER</u>		
O 110.3A	01/25/07	Conference Management
O 200.1	09/30/96	Information Management Program
O 221.1.	03/22/01	Reporting Fraud, Waste, and Abuse to the Office of the Inspector General
O221.2	03/22/01	Cooperation with the Office of Inspector General
O 241.1A Chg. 1	04/09/01 10/14/03	Scientific and Technical Information Management
O 243.1	02/03/06	Records Management Program
O 243.2	02/02/06	Vital Records
O 350.1 Chg. 1	09/30/96 05/08/98	Contractor Human Resource Management Programs
O 413.3A	07/28/06	Program and Project Management of the Acquisition of Capital Assets
M 413.3-1	03/28/03	Project Management for the Acquisition of Capital Assets Manual
O 580.1	12/07/05	DOE Personal Property Management Program
O 1340.1B	01/07/93	Management of Public Communications, Publications, And Scientific, Technical, and Engineering Publications