

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</i>				1. REQUISITION NUMBER RES-20-0078		PAGE OF 1 34		
2. CONTRACT NO. 31310020C0013		3. AWARD/ EFFECTIVE DATE 06/12/2020	4. ORDER NUMBER		5. SOLICITATION NUMBER 31310020R0021		6. SOLICITATION ISSUE DATE 04/14/2020	
7. <b>FOR SOLICITATION INFORMATION CALL:</b>		a. NAME JENNIFER DUDEK			b. TELEPHONE NUMBER (No collect calls) 301-415-2257		8. OFFER DUE DATE/LOCAL TIME ET	
9. ISSUED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001				CODE NRCHQ	10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED OR <input type="checkbox"/> SET ASIDE: % FOR:  <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> WOMEN-OWNED SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS <input type="checkbox"/> (WOSB) ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM      NAICS: 541990 <input type="checkbox"/> SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS <input type="checkbox"/> EDWOSB <input type="checkbox"/> 8(A)      SIZE STANDARD: \$16.5			
11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE		12. DISCOUNT TERMS 30		<input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		13b. RATING		
15. DELIVER TO NUCLEAR REGULATORY COMMISSION NUCLEAR REGULATORY COMMISSION WASHINGTON DC 20555-0001				CODE NRCHQ	16. ADMINISTERED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001			
17a. CONTRACTOR/ OFFEROR KEMA-POWERTEST LLC ATTN SCOTT LEDNICKY 4379 COUNTY LINE RD CHALFONT PA 189141825		CODE 183905058	FACILITY CODE	18a. PAYMENT WILL BE MADE BY FISCAL ACCOUNTING PROGRAM ADMIN TRAINING GROUP AVERY STREET A3-G BUREAU OF THE FISCAL SERVICE PO BOX 1328 PARKERSBURG WV 26106-1328				CODE NRCPAYMENTS
TELEPHONE NO. 7812735700				18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM				
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER								
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES				21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	The contractor shall provide services entitled, "High Energy Arcing Faults (HEAF) Testing Facility and Services," in accordance with the enclosed Statement of Work (see Attachment No. 1). (Note: KEMA Laboratories project number 24512713.)  Total Contract Ceiling (Base and All Options): \$729,875.00 Current Contract Ceiling (Base): <span style="background-color: black; color: black;">XXXXXXXXXX</span> Current Obligation Amount: \$25,600.00 Accounting Info: <i>(Use Reverse and/or Attach Additional Sheets as Necessary)</i>							
25. ACCOUNTING AND APPROPRIATION DATA See schedule						26. TOTAL AWARD AMOUNT (For Govt. Use Only) \$729,875.00		
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.								
<input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED.								
<input checked="" type="checkbox"/> 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>1</u> COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED.					<input type="checkbox"/> 29. AWARD OF CONTRACT: _____ OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:			
30a. SIGNATURE OF OFFEROR/CONTRACTOR					31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER) <div style="background-color: black; height: 20px; width: 100%;"></div>			
30b. NAME AND TITLE OF SIGNER (Type or print)			30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER (Type or print)		31c. DATE SIGNED		
JENNIFER A. DUDEK			06/12/2020	JENNIFER A. DUDEK		06/12/2020		

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	2020-X0200-FEEBASED-60-60D002-60B207-1013-11-6-182 -252A-11-6-182-1013 Period of Performance: 07/01/2020 to 06/30/2025				

32a. QUANTITY IN COLUMN 21 HAS BEEN  
 RECEIVED     INSPECTED     ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: \_\_\_\_\_

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE    32c. DATE    32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE    32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE  
 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER    34. VOUCHER NUMBER    35. AMOUNT VERIFIED CORRECT FOR    36. PAYMENT    37. CHECK NUMBER  
 PARTIAL     FINAL     COMPLETE     PARTIAL     FINAL

38. S/R ACCOUNT NUMBER    39. S/R VOUCHER NUMBER    40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT    42a. RECEIVED BY (*Print*)  
 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER    41c. DATE    42b. RECEIVED AT (*Location*)  
 42c. DATE REC'D (*YY/MM/DD*)    42d. TOTAL CONTAINERS

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**B - Continuation Pages****B.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION**

(a) The title of this project is: **High Energy Arcing Faults Testing Facility and Services**

(b) Summary work description:

The purpose of this contract is to provide High Energy Arcing Faults (HEAF) testing facilities and services. The test facility shall provide the electrical energy, thermal measurement instrumentation and data acquisition, electrical measurement, equipment preparation facilities, and testing facility to perform high energy arcing fault testing. The work required includes tasks that provide the following: on-site short term storage, on-site work preparation area, electrical arc test power supply and delivery system, testing cell, documentation of test results, ASTM thermal instrumentation and disposal of tested equipment.

**B.2 CONSIDERATION AND OBLIGATION--COST REIMBURSEMENT – NO FEE**

(a) The total estimated cost to the Government for full performance under this contract is currently [REDACTED] (this amount to increase upon exercise of Optional Travel Costs CLIN).

(b) The amount obligated by the Government with respect to this contract is \$0.00.

(c) This is a fully-funded contract and FAR 52.232-20 – “Limitation of Cost” applies.

**B.3 CONSIDERATION AND OBLIGATION-FIRM-FIXED-PRICE**

The total amount of the Firm-Fixed-Price portion of this contract is [REDACTED] (this amount to increase upon exercise of additional fixed-price CLINs). Funding in the amount of \$25,600.00 for [REDACTED] is obligated.

**B.4 52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR. (APR 1984)**

Funds are not presently available for performance under this contract beyond March 31, 2021. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond March 31, 2021, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

**B.5 PRICE/COST SCHEDULE**

<b>CONTRACT PRICE/COST SCHEDULE</b>					
<b>Period of Performance: 07/01/2020 - 06/30/2025</b>					
<b>CONTRACT BASE TASKS/CLINS</b>					
<b>CLIN</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>QTY</b>	<b>TOTAL</b>

00001	Task 1: Medium Voltage Tests				
00001a	Medium Voltage Test & Test Report	■	■	■	■
00001b	Customer Assembly Building	■	■	■	■
00001c	Arc Energy Slug Calorimeters	■	■	■	■
00001d	Test Cell Decontamination	■	■	■	■
00001e	Non-use Test Cell Day Fee (occupancy)	■	■	■	■
CONTRACT BASE TASKS TOTAL (CLIN 00001 – Task 1: Medium Voltage Tests)					■
OPTIONAL TASKS/CLINS					
10001	Task 2: Medium Voltage Tests (OPTIONAL TASK)				
10001a	Medium Voltage Test & Test Report (OPTIONAL TASK)	■	■	■	■
10001b	Customer Assembly Building (OPTIONAL TASK)	■	■	■	■
10001c	Arc Energy Slug Calorimeters (OPTIONAL TASK)	■	■	■	■
10001d	Test Cell Decontamination (OPTIONAL TASK)	■	■	■	■
10001e	Non-use Test Cell Day Fee (occupancy) (OPTIONAL TASK)	■	■	■	■

CLIN 10001 - Task 2: Medium Voltage Tests Total		[REDACTED]			
10002	Task 3: Low Voltage Tests (OPTIONAL TASK)				
10002a	Low Voltage Test & Test Report (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10002b	Customer Assembly Building (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10002c	Arc Energy Slug Calorimeters (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10002d	Test Cell Decontamination (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10002e	Non-use Test Cell Day Fee (occupancy) (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
CLIN 10002 - Task 3: Low Voltage Tests Total		[REDACTED]			
10003	Task 4: Low Voltage Tests (OPTIONAL TASK)				
10003a	Low Voltage Test & Test Report (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10003b	Customer Assembly Building (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]
10003c	Arc Energy Slug Calorimeters (OPTIONAL TASK)	■	[REDACTED]	■	[REDACTED]

10003d	Test Cell Decontamination (OPTIONAL TASK)	■	■	■	■
10003e	Non-use Test Cell Day Fee (occupancy) (OPTIONAL TASK)	■	■	■	■
CLIN 10003 - Task 4: Low Voltage Tests Total					■
10004	Task 5 – Stakeholder Meeting Support (OPTIONAL TASK) (Note: Unit price is for one (1) expert staff member support for one (1) day)	■	■	■	■
10005	Travel (OPTIONAL) The government will pay up to the rates specified in the Government Federal Travel Regulations (FTR) for travel destination. NO PAYMENT WILL BE MADE WITHOUT BACKUP DOCUMENTATION/RECEIPTS. *All travel must be approved in advance by the NRC COR.*				■
OPTIONAL TASKS/CLINS TOTAL					■
TOTAL CONTRACT CEILING (BASE AND OPTIONAL TASKS/CLINS)					\$729,875.00

## **C - Contract Clauses**

### **NRC Local Clauses Incorporated by Full Text**

#### **C.1 PACKAGING AND MARKING**

(a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

(b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

(c) Additional packaging and/or marking requirements are as follows: N/A.

#### **C.2 BRANDING**

The Contractor is required to use the statement below in any publications, presentations, articles, products, or materials funded under this contract/order, to the extent practical, in order to provide NRC with recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Regulatory Research, under Contract/order number 31310020C0013.

#### **C.3 INSPECTION AND ACCEPTANCE BY THE NRC (SEP 2013)**

Inspection and acceptance of the deliverable items to be furnished hereunder shall be made by the NRC Contracting Officer's Representative (COR) at the destination, accordance with FAR 52.247-34 - F.o.b. Destination.

#### **C.4 PLACE OF DELIVERY-REPORTS**

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

a. Contracting Officer's Representative (COR):  
Gabriel Taylor  
11555 Rockville Pike; M/S: T-10A12  
Rockville, MD 20852

b. Contracting Officer (CO):  
Jennifer A. Dudek  
11555 Rockville Pike; M/S: T-7B20  
Rockville, MD 20852

#### **C.5 PERIOD OF PERFORMANCE**

This contract shall commence on July 01, 2020 and will expire on June 30, 2025.



## **C.6 ELECTRONIC PAYMENT (DEC 2017)**

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds Transfer-System for Award Management."

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted through the Invoice Processing Platform (IPP) (<https://www.ipp.gov/>). Back up documentation shall be included as required by the NRC's Billing Instructions.

## **C.7 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY**

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

1. Qty. 14 - Medium voltage test equipment - To be provided 1 week prior to scheduled testing (Tasks 1 and 2)
2. Qty. 12 - Low voltage test equipment - To be provided 1 week prior to scheduled testing (Tasks 3 and 4)
3. []

Include an asterisk (\*) if the item also applies to paragraph (b) below.

(b) The equipment/property listed below is hereby transferred from contract/agreement number:N/A, to contract/agreement number:N/A:

1. []
2. []
3. []

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

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

## **C.8 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS**

Annual and final evaluations of contractor performance under this contract will be prepared in accordance with FAR Subpart 42.15, "Contractor Performance Information," normally at or near the time the contractor is notified of the NRC's intent to exercise the contract option. If the multi-year contract does not have option years, then an annual evaluation will be prepared at the end of each year. Final evaluations of contractor performance will be prepared at the expiration of the contract during the contract closeout process.

The Contracting Officer will transmit the NRC Contracting Officer's Representative's (COR) annual and final contractor performance evaluations to the contractor's Project Manager, unless otherwise instructed by the contractor. The contractor will be permitted thirty days to review the document and submit comments, rebutting statements, or additional information.

Where a contractor concurs with, or takes no exception to an annual performance evaluation, the Contracting Officer will consider such evaluation final and releasable for source selection purposes. Disagreements between the parties regarding a performance evaluation will be referred to an individual one level above the Contracting Officer, whose decision will be final.

The Contracting Officer will send a copy of the completed evaluation report, marked "Source Selection Information", to the contractor's Project Manager for their records as soon as practicable after it has been finalized. The completed evaluation report also will be used as a tool to improve communications between the NRC and the contractor and to improve contract performance.

The completed annual performance evaluation will be used to support future award decisions in accordance with FAR 42.1502 and 42.1503. During the period the information is being used to provide source selection information, the completed annual performance evaluation will be released to only two parties - the Federal government personnel performing the source selection evaluation and the contractor under evaluation if the contractor does not have a copy of the report already.

## **C.9 COMPLIANCE WITH U.S. IMMIGRATION LAWS AND REGULATIONS**

NRC contractors are responsible to ensure that their alien personnel are not in violation of United States immigration laws and regulations, including employment authorization documents and visa requirements. Each alien employee of the Contractor must be lawfully admitted for permanent residence as evidenced by Permanent Resident Form I-551 (Green Card), or must present other evidence from the U.S. Department of Homeland Security/U.S. Citizenship and Immigration Services that employment will not affect his/her immigration status. The U.S. Citizenship and Immigration Services provides information to contractors to help them understand the employment eligibility verification process for non-US citizens. This information can be found on their website, <http://www.uscis.gov/portal/site/uscis>.

The NRC reserves the right to deny or withdraw Contractor use or access to NRC facilities or its equipment/services, and/or take any number of contract administrative actions (e.g., disallow costs, terminate for cause) should the Contractor violate the Contractor's responsibility under this clause.

## **C.10 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES**

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

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

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

#### **C.11 GREEN PURCHASING (SEP 2015 )**

(a) In furtherance of the sustainable acquisition goals of Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," products and services provided under this contract/order shall be energy efficient (EnergyStar® or Federal Energy Management Program - FEMP-designated products), water efficient, biobased, environmentally preferable (excluding EPEAT®-registered products), non-ozone depleting, contain recycled content, or are non- or low toxic alternatives or hazardous constituents (e.g., non-VOC paint), where such products and services meet agency performance requirements. See: Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade."

(b) The NRC and contractor may negotiate during the contract term to permit the substitution or addition of designated recycled content products (i.e., Comprehensive Procurement Guidelines - CPG), EPEAT®-registered products, EnergyStar®- and FEMP designated energy efficient products and appliances, USDA designated biobased products (Biopreferred® program), environmentally preferable products, WaterSense and other water efficient products, products containing non- or lower-ozone depleting substances (i.e., SNAP), and products containing non- or low-toxic or hazardous constituents (e.g., non-VOC paint), when such products and services are readily available at a competitive cost and satisfy the NRC's performance needs.

(c) The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order.

#### **C.12 KEY PERSONNEL. (JAN 1993)**

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

[REDACTED]

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

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

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

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

#### **NRCAR Clauses Incorporated By Full Text**

#### **C.13 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST. (JAN 1993)**

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

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

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

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

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with

respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

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

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

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

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

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

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

(d) Disclosure after award.

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

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

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

(e) Access to and use of information.

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

- (i) Use this information for any private purpose until the information has been released to the public;
- (ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;
- (iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or
- (iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

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

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

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

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

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

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

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

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

(End of Clause)

**C.14 2052.215-71 CONTRACTING OFFICER REPRESENTATIVE AUTHORITY. (OCT 1999)**

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

Name:	Gabriel Taylor
Address:	11555 Rockville Pike; M/S: T-10A12, Rockville, MD 20852
Telephone Number:	301-415-0781
Email:	Gabriel.Taylor@nrc.gov

The Alternate COR for this contract is:

Name: David Stroup  
Address: 11555 Rockville Pike; M/S: T-10A12, Rockville, MD 20852  
Telephone Number: 301-415-1649  
Email: David.Stroup@nrc.gov

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

- (1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.
- (2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.
- (3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

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

- (1) Constitutes an assignment of work outside the general scope of the contract.
- (2) Constitutes a change as defined in the "Changes" clause of this contract.
- (3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.
- (4) Changes any of the expressed terms, conditions, or specifications of the contract.
- (5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

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

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

(f) If, in the opinion of the contractor, any instruction or direction issued by the COR is within one of the categories as defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working



days after the receipt of any instruction or direction and shall request the contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

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

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

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

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

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

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

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

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

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

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

(End of Clause)

**C.15 2052.215-77 TRAVEL APPROVALS AND REIMBURSEMENT. (OCT 1999)**

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

(b) The contractor must receive written approval from the NRC Project Officer before taking travel that was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work, or changes to specific travel identified in the Statement of Work).

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

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

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

(End of Clause)

**FAR Clauses Incorporated By Reference**

**C.16 52.204-13 SYSTEM FOR AWARD MANAGEMENT MAINTENANCE. (OCT 2018)**

**FAR Clauses Incorporated By Full Text**

**C.17 52.204-19 INCORPORATION BY REFERENCE OF REPRESENTATIONS AND CERTIFICATIONS. (DEC 2014)**

The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

(End of clause)

**C.18 52.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS. (OCT 2018)**

(a) *Inspection/Acceptance.* The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The

Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its postacceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) *Assignment*. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) *Changes*. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) *Disputes*. This contract is subject to 41 U.S.C. chapter 71, Contract Disputes. Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) *Definitions*. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) *Excusable delays*. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) *Invoice*. (1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include-

(i) Name and address of the Contractor;

(ii) Invoice date and number;

(iii) Contract number, line item number and, if applicable, the order number;

(iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;

(v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;

(vi) Terms of any discount for prompt payment offered;

(vii) Name and address of official to whom payment is to be sent;

(viii) Name, title, and phone number of person to notify in event of defective invoice; and

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) *Patent indemnity.* The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) *Payment-* (1) *Items accepted.* Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) *Prompt payment.* The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) *Electronic Funds Transfer (EFT)*. If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) *Discount*. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) *Overpayments*. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall-

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

(A) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) *Interest*. (i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 7109, which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) *Final decisions*. The Contracting Officer will issue a final decision as required by 33.211 if-

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

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

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(j) *Risk of loss.* Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) *Taxes.* The contract price includes all applicable Federal, State, and local taxes and duties.

(l) *Termination for the Government's convenience.* The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the

Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) *Termination for cause.* The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) *Title.* Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) *Warranty.* The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) *Limitation of liability.* Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) *Other compliances.* The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) *Compliance with laws unique to Government contracts.* The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. chapter 37, Contract Work Hours and Safety Standards; 41 U.S.C. chapter 87, Kickbacks; 41 U.S.C. 4712 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. chapter 21 relating to procurement integrity.

(s) *Order of precedence.* Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) The Assignments, Disputes, Payments, Invoice, Other Compliances, Compliance with Laws Unique to Government Contracts, and Unauthorized Obligations paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause; (7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.

(t) Removed and reserved.

(u) *Unauthorized Obligations.* (1) Except as stated in paragraph (u)(2) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(i) Any such clause is unenforceable against the Government.

(ii) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(iii) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(2) Paragraph (u)(1) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(v) *Incorporation by reference.* The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

(End of clause)

**C.19 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS - COMMERCIAL ITEMS. (MAR 2020)**

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(2) 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91).

(3) 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2019) (Section 889(a)(1)(A) of Pub. L. 115-232).



(4) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (NOV 2015).

(5) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(6) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Public Laws 108-77 and 108-78 (19 U.S.C. 3805 note)).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 4704 and 10 U.S.C. 2402).

(2) 52.203-13, Contractor Code of Business Ethics and Conduct (OCT 2015) (41 U.S.C. 3509).

(3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

(4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (OCT 2018) (Pub. L. 109-282) (31 U.S.C. 6101 note).

(5) (Reserved)

(6) 52.204-14, Service Contract Reporting Requirements (OCT 2016) (Pub. L. 111-117, section 743 of Div. C).

(7) 52.204-15, Service Contract Reporting Requirements for Indefinite-Delivery Contracts (OCT 2016) (Pub. L. 111-117, section 743 of Div. C).

(8) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (OCT 2015) (31 U.S.C. 6101 note).

(9) 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters (OCT 2018) (41 U.S.C. 2313).

(10) (Reserved)

(11)(i) 52.219-3, Notice of HUBZone Set-Aside or Sole Source Award (MAR 2020) (15 U.S.C. 657a).

(ii) Alternate I (MAR 2020) of 52.219-3.

(12)(i) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (MAR 2020) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

(ii) Alternate I (MAR 2020) of 52.219-4.

(13) (Reserved)

(14)(i) 52.219-6, Notice of Total Small Business Set-Aside (MAR 2020) (15 U.S.C. 644).

(ii) Alternate I (MAR 2020).

(15)(i) 52.219-7, Notice of Partial Small Business Set-Aside (MAR 2020) (15 U.S.C. 644).

(ii) Alternate I (MAR 2020) 52.219-7.

(16) 52.219-8, Utilization of Small Business Concerns (OCT 2018) (15 U.S.C. 637(d)(2) and (3)).

(17)(i) 52.219-9, Small Business Subcontracting Plan (MAR 2020) (15 U.S.C. 637(d)(4)).

(ii) Alternate I (NOV 2016) of 52.219-9.

(iii) Alternate II (NOV 2016) of 52.219-9.

(iv) Alternate III (MAR 2020) of 52.219-9.

(v) Alternate IV (AUG 2018) of 52.219-9.

(18) 52.219-13, Notice of Set-Aside of Orders (MAR 2020) (15 U.S.C. 644(r)).

(19) 52.219-14, Limitations on Subcontracting (MAR 2020) (15 U.S.C. 637(a)(14)).

(20) 52.219-16, Liquidated Damages-Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).

(21) 52.219-27, Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (MAR 2020) (15 U.S.C. 657f).

(22)(i) 52.219-28, Post-Award Small Business Program Rerepresentation (MAR 2020) (15 U.S.C. 632(a)(2)).

(ii) Alternate I (MAR 2020) of 52.219-28.

(23) 52.219-29, Notice of Set-Aside for, or Sole Source Award to, Economically Disadvantaged Women-Owned Small Business (EDWOSB) Concerns (MAR 2020) (15 U.S.C. 637(m)).

(24) 52.219-30, Notice of Set-Aside for, or Sole Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program (MAR 2020) (15 U.S.C. 637(m)).

(25) 52.219-32, Orders Issued Directly Under Small Business Reserves (MAR 2020) (15 U.S.C. 644(r)).

(26) 52.219-33, Nonmanufacturer Rule (MAR 2020) (15 U.S.C. 637(a)(17)).

(27) 52.222-3, Convict Labor (JUN 2003) (E.O. 11755).

(28) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (JAN 2020) (E.O. 13126).

(29) 52.222-21, Prohibition of Segregated Facilities (APR 2015).

(30)(i) 52.222-26, Equal Opportunity (SEP 2016) (E.O. 11246).

(ii) Alternate I (FEB 1999) of 52.222-26.

(31)(i) 52.222-35, Equal Opportunity for Veterans (OCT 2015) (38 U.S.C. 4212).

(ii) Alternate I (JUL 2014) of 52.222-35.

(32)(i) 52.222-36, Equal Opportunity for Workers with Disabilities (JUL 2014) (29 U.S.C. 793).

(ii) Alternate I (JUL 2014) of 52.222-36.

(33) 52.222-37, Employment Reports on Veterans (FEB 2016) (38 U.S.C. 4212).

(34) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).

(35)(i) 52.222-50, Combating Trafficking in Persons (JAN 2019) (22 U.S.C. chapter 78 and E.O. 13627).

(ii) *Alternate I* (MAR 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627).

(36) 52.222-54, Employment Eligibility Verification (OCT 2015). (E. O. 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)

(37)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items (MAY 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

(ii) Alternate I (MAY 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

(38) 52.223-11, Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons (JUN 2016) (E.O. 13693).

[ ] (39) 52.223-12, Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (JUN 2016) (E.O. 13693).

[ ] (40)(i) 52.223-13, Acquisition of EPEAT®-Registered Imaging Equipment (JUN 2014) (E.O.s 13423 and 13514).

[ ] (ii) Alternate I (OCT 2015) of 52.223-13.

[ ] (41)(i) 52.223-14, Acquisition of EPEAT®-Registered Televisions (JUN 2014) (E.O.s 13423 and 13514).

(ii) Alternate I (JUN 2014) of 52.223-14.

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

[ ] (43)(i) 52.223-16, Acquisition of EPEAT®-Registered Personal Computer Products (OCT 2015) (E.O.s 13423 and 13514).

[ ] (ii) Alternate I (JUN 2014) of 52.223-16.

[X] (44) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011)

[ ] (45) 52.223-20, Aerosols (JUN 2016) (E.O. 13693).

[ ] (46) 52.223-21, Foams (JUN 2016) (E.O. 13693).

[ ] (47)(i) 52.224-3, Privacy Training (JAN 2017) (5 U.S.C. 552a).

[ ] (ii) Alternate I (JAN 2017) of 52.224-3.

[ ] (48) 52.225-1, Buy American-Supplies (MAY 2014) (41 U.S.C. chapter 83).

[ ] (49)(i) 52.225-3, Buy American-Free Trade Agreements-Israeli Trade Act (MAY 2014) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, 19 U.S.C. 4001 note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43).

[ ] (ii) Alternate I (MAY 2014) of 52.225-3.

[ ] (iii) Alternate II (MAY 2014) of 52.225-3.

[ ] (iv) Alternate III (MAY 2014) of 52.225-3.

[ ] (50) 52.225-5, Trade Agreements (OCT 2019) (19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).

[X] (51) 52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

(52) 52.225-26, Contractors Performing Private Security Functions Outside the United States (OCT 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(53) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (NOV 2007) (42 U.S.C. 5150).

(54) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (NOV 2007) (42 U.S.C. 5150).

(55) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 4505, 10 U.S.C. 2307(f)).

(56) 52.232-30, Installment Payments for Commercial Items (JAN 2017) (41 U.S.C. 4505, 10 U.S.C. 2307(f)).

(57) 52.232-33, Payment by Electronic Funds Transfer-System for Award Management (OCT 2018) (31 U.S.C. 3332).

(58) 52.232-34, Payment by Electronic Funds Transfer - Other than System for Award Management (JUL 2013) (31 U.S.C. 3332).

(59) 52.232-36, Payment by Third Party (MAY 2014) (31 U.S.C. 3332).

(60) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

(61) 52.242-5, Payments to Small Business Subcontractors (JAN 2017)(15 U.S.C. 637(d)(13)).

(62)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631).

(ii) Alternate I (APR 2003) of 52.247-64.

(iii) Alternate II (FEB 2006) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

(1) 52.222-17, Nondisplacement of Qualified Workers (MAY 2014) (E.O. 13495).

(2) 52.222-41, Service Contract Labor Standards (AUG 2018) (41 U.S.C. chapter 67).

(3) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 2014) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

[ ] (4) 52.222-43, Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (Multiple Year and Option Contracts) (AUG 2018) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

[ ] (5) 52.222-44, Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (MAY 2014) (29 U.S.C 206 and 41 U.S.C. chapter 67).

[ ] (6) 52.222-51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (MAY 2014) (41 U.S.C. chapter 67).

[ ] (7) 52.222-53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (MAY 2014) (41 U.S.C. chapter 67).

[ ] (8) 52.222-55, Minimum Wages Under Executive Order 13658 (DEC 2015).

[ ] (9) 52.222-62, Paid Sick Leave Under Executive Order 13706 (JAN 2017) (E.O. 13706).

[ ] (10) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (MAY 2014) (42 U.S.C. 1792).

(d) *Comptroller General Examination of Record.* The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records - Negotiation.

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

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (OCT 2015) (41 U.S.C. 3509).

(ii) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(iii) 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91).

(iv) 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2019) (Section 889(a)(1)(A) of Pub. L. 115-232).

(v) 52.219-8, Utilization of Small Business Concerns (OCT 2018) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$700,000 (\$1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(vi) 52.222-17, Nondisplacement of Qualified Workers (MAY 2014) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause 52.222-17.

(vii) 52.222-21, Prohibition of Segregated Facilities (APR 2015).

(viii) 52.222-26, Equal Opportunity (SEP 2016) (E.O. 11246).

(ix) 52.222-35, Equal Opportunity for Veterans (OCT 2015) (38 U.S.C. 4212).

(x) 52.222-36, Equal Opportunity for Workers with Disabilities (JUL 2014) (29 U.S.C. 793).

(xi) 52.222-37, Employment Reports on Veterans (FEB 2016) (38 U.S.C. 4212).

(xii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(xiii) 52.222-41, Service Contract Labor Standards (AUG 2018) (41 U.S.C. chapter 67).

(xiv) [X] (A) 52.222-50, Combating Trafficking in Persons (JAN 2019) (22 U.S.C. chapter 78 and E.O. 13627).

[ ] (B) Alternate I (MAR 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627).

(xv) 52.222-51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (MAY 2014) (41 U.S.C. chapter 67).

(xvi) 52.222-53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (MAY 2014) (41 U.S.C. chapter 67).

(xvii) 52.222-54, Employment Eligibility Verification (OCT 2015) (E. O. 12989).

(xviii) 52.222-55, Minimum Wages Under Executive Order 13658 (DEC 2015).

(xix) 52.222-62 Paid Sick Leave Under Executive Order 13706 (JAN 2017) (E.O. 13706).

(xx)(A) 52.224-3, Privacy Training (JAN 2017) (5 U.S.C. 552a).

(B) Alternate I (JAN 2017) of 52.224-3.

(xxi) 52.225-26, Contractors Performing Private Security Functions Outside the United States (OCT 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xxii) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (MAY 2014) (42 U.S.C. 1792). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

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

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

(End of clause)



**C.20 52.217-7 OPTION FOR INCREASED QUANTITY - SEPARATELY PRICED LINE ITEM. (MAR 1989)**

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 15 days of the required period of performance start of the optional CLIN. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

**C.21 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999)**

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

(End of clause)

**C.22 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)**

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

(End of clause)

**D - Contract Documents, Exhibits and Attachments****D.1 Section D Attachment Table****Attachment Table**

<b>Attachment Number</b>	<b>Title</b>	<b>Date</b>
1	Attachment No. 1: Statement of Work - High Energy Arcing Faults	05/28/2020
2	Attachment 2: BILLING INSTRUCTIONS FOR FIXED-PRICETYPE CONTRACTS (JULY 2017)	07/01/2017

**DESCRIPTION/SPECIFICATIONS/WORK STATEMENT**  
**High Energy Arcing Faults Testing Facility and Services**

**Contents**

- C.1 Title of Project
- C.2 Background
- C.3 Objective
- C.4 Scope of Work/Tasks
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- C.17 Section 508 – Information and Communication Technology Accessibility
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## **DESCRIPTION/SPECIFICATIONS/WORK STATEMENT**

### **High Energy Arcing Faults Testing Facility and Services**

#### **C.1 Title of Project**

This is a non-personal services contract to provide high energy arcing fault (HEAF) testing facilities and services.

#### **C.2 Background**

High Energy Arcing Faults (HEAFs) have the potential to cause extensive damage to the failed electrical component and distribution system along with adjacent equipment and cables within the zone of influence. The significant energy released during a HEAF event can act as an ignition source to other components. By better understanding the HEAF event hazard through testing, the U.S. Nuclear Regulatory Commission (NRC) can advance the state of knowledge and support developing a model to adequately evaluate this hazard in performance-based applications.

NUREG/CR-6850 contains a model to evaluate HEAFs in cabinets, and the National Fire Protection Association (NFPA) 805 frequently asked question (FAQ) 35 contains a HEAF model for bus ducts. Each of these models is based primarily on a single event that corresponds to the type of failure; however, these models do not allow adjustments to account for variables that can influence hazards to adjacent critical equipment. To support improvement in state-of-the-art fire Probabilistic Risk Assessment (PRA) modeling of HEAF events, the NRC needs additional test data. Additional test data will improve the state of knowledge and provide better characterization of HEAFs in the fire PRA and NFPA 805 license amendment request applications.

Previously, a test program was conducted between 2014 and 2016 to obtain data to support model advancements and in cooperation with international partners. These test programs support the Organisation for Economic Co-Operation and Development (OECD) Nuclear Energy Agency's (NEA), "A Project to Characterize High Energy Arcing Fault Events." As part of the international agreement, each participating country donated equipment to the NRC for testing. Following the testing performed between 2014 and 2016, additional equipment and needs for testing was identified.

In 2019, the NRC entered into an international agreement with eight countries to perform additional testing to collect vital data needed to advance understanding and methods to assess and characterize the risk of HEAF. The international agreement requires the NRC to act as the operating agent to perform 21 sponsored tests. In addition, the NRC plans to

perform 15 additional tests that aim at resolving a pre-generic issue (pre-GI) related to HEAFs involving aluminium. To date, the NRC has completed four tests (under NRC-HQ-60-15-C-0004) and are planning an additional 4-6 tests (under 31310019C0011) that support the pre-GI program. The two programs (international and domestic) represent a multi-year initiative that may be modified as lessons are learned. As such, this contract is constructed with a base task and multiple optional tasks that can be exercised, as needed. This contract covers 14 medium voltage and 12 low voltage tests.

All previous NRC sponsored HEAF testing has been performed at KEMA Powertest, LLC, located in Chalfont, PA (i.e., NRC Contract Nos. NRC-HQ-13-C-04-0012, NRC-HQ-60-15-C-0004, and 31310019C0011).

### **C.3 Objective**

The purpose of this contract is to provide HEAF testing facilities and services. The test facility shall provide the electrical energy, thermal measurement instrumentation and data acquisition, electrical measurement, equipment preparation facilities, and testing facility to perform high energy arcing fault testing. The work required includes tasks that provide the following: on-site short term storage, on-site work preparation area, electrical arc test power supply and delivery system, testing cell, documentation of test results, ASTM thermal instrumentation and disposal of tested equipment.

### **C.4 Scope of Work/Tasks**

The contractor shall provide all resources necessary to accomplish the tasks and deliverables described in this Statement of Work (SOW). The testing facility shall be an independent facility, accredited to the American Association of Laboratory Accreditation ISO 17025, that can conduct high power electrical tests. All tasks require delivery of a high power electrical supply capable of providing three phase ac power. The voltage levels for each test shall be representative of the rating for the equipment being tested. The nominal operating voltage of equipment being tested shall be between 440Vac and 15,000Vac and will be specified within 30-days prior to test by the NRC Contracting Officer's Representative (COR). The high power energy supply shall be capable of providing current capacity in the range between 10kA and 35kA at a nominal frequency of 60 Hertz. The test duration will be dependent on other test parameters, but be in the range of 2 to 8 seconds. Explicit voltage, current, X/R ratio, and fault time shall vary by the specific equipment tested.

The testing facility shall be capable of allowing the NRC to place instrumentation panels and video recording equipment at various locations and distances from the piece of test equipment. The contractor shall provide a location adjacent to test equipment and physically protected from the effects from the HEAF for the NRC locate an NRC Data

Acquisition System and the ability to route cables from the NRC Data Acquisition System to the instrumentation panel. The contractor shall have safety procedures in place for entry into electrically energized areas. In addition, the testing area shall allow for combustion of target materials for time duration up to 10 minutes.

The contractor shall provide the following facilities and services to complete the required high energy arcing fault testing. The tasks below are defined by the specific test type, quantity and support required to complete each task. Task 1 represents the base task with subsequent tasks being options.

#### **C.4.1 Task 1 – Medium Voltage Tests**

This task includes:

- a) Qty: 10, medium voltage test days shall be required to complete this task. Medium voltage equipment, not to exceed 15kV, shall be tested. Two technicians and one test engineer shall be available for each test day. The NRC shall identify and schedule the test days with the contractor and provide a 30-day draft test plan prior to the start of testing.
- b) Qty: 24 days, equipment storage and assembly area with a minimum 1,500 square feet usable floor area, 24-hour access, protection from the elements and climate controlled (heating, air conditioning).
- c) Qty: 100, provide arc energy slug calorimeters per ASTM Standard F1959. These devices shall be complete with copper slug, attached thermocouple and thermocouple leads with sufficient length to connect to the facilities data acquisition system and thermal protection of the leads. The insulative substrate (typically plywood or maranite) is not required. These devices shall be calibrated and delivered to NIST per the schedule identified in Section C.6. Measurements made by these devices during test shall be acquired, recorded, and documented in the test report.
- d) Qty: 1 day, test cell decontamination. This covers the resources needed to clean and decontaminate the test cell if the effluent from the tests renders the facility in-operable due to conductive coatings on electrical components.
- e) Qty: 1 day, non-use test cell day (occupancy)
- f) Qty: Test report. A draft test report shall be provided 6 weeks after the completion of the test series. The test report shall contain the following information for each test performed: electrical ratings, electrical characteristics, description of electrical circuit, description of test object, voltage and current waveforms, power supply characteristics, arc energy slug thermal and converted heat flux measurements, test observations, and supporting drawings or photographs. NRC COR shall provide comments on the draft report 30-days after receipt of the draft. A final test report shall be provided to the NRC COR 30-days after receipt of the NRC COR comments.

- g) Following completion of testing and at the direction of the NRC COR, the contractor shall dispose of the electrical test equipment.

#### **C.4.2 Task 2 – Medium Voltage Tests (OPTIONAL TASK)**

This task includes:

- a) Qty: 4, medium voltage test days shall be required to complete this task. Medium Voltage equipment, not to exceed 15kV, shall be tested. Two technicians and one test engineer shall be available for each test day. The NRC shall identify and schedule the test days with the contractor and provide a 30-day draft test plan prior to the start of testing.
- b) Qty: 18 days, equipment storage and assembly area with a minimum 1,500 square feet usable floor area, 24-hour access, protection from elements and climate controlled (heating, air conditioning).
- c) Qty: 60, provide arc energy slug calorimeters per ASTM Standard F1959 These devices shall be complete with copper slug, attached thermocouple and thermocouple leads with sufficient length to connect to the facilities data acquisition system and thermal protection of the leads. The insulative substrate (typically plywood or maranite) is not required. These devices shall be calibrated and delivered to NIST per the schedule identified in Section C.6. Measurements made by these devices during test shall be acquired, recorded, and documented in the test report.
- d) Qty: 1 day, test cell decontamination. This covers the resources needed to clean and decontaminate the test cell if the effluent from the tests renders the facility in-operable due to conductive coatings on electrical components.
- e) Qty: 1 day, non-use test cell day (occupancy)
- f) Qty: Test report. A draft test report shall be provided 6 weeks after the completion of the test series. The test report shall contain the following information for each test performed: electrical ratings, electrical characteristics, description of electrical circuit, description of test object, voltage and current waveforms, power supply characteristics, arc energy slug thermal and converted heat flux measurements, test observations, and supporting drawings or photographs. NRC COR shall provide comments on the draft report 30-days after receipt of the draft. A final test report shall be provided to the NRC COR 30-days after receipt of the NRC COR comments.
- g) Following completion of testing and at the direction of the NRC COR, the contractor shall dispose of the electrical test equipment.

#### **C.4.3 Task 3 – Low Voltage Tests (OPTIONAL TASK)**

This task includes:

- a) Qty: 6, low voltage test days shall be required to complete this task. Low Voltage equipment, not to exceed 1.0kV, shall be tested. Two technicians and one test engineer shall be available for each test day. The NRC shall identify and schedule the test days with the contractor and provide a 30-day draft test plan prior to the start of testing.
- b) Qty: 18 days, equipment storage and assembly area with a minimum 1,500 square feet usable floor area, 24-hour access, protection from the elements and climate controlled (heating, air conditioning).
- c) Qty: 60, provide arc energy slug calorimeters per ASTM Standard F1959. These devices shall be complete with copper slug, attached thermocouple and thermocouple leads with sufficient length to connect to the facilities data acquisition system and thermal protection of the leads. The insulative substrate (typically plywood or maranite) is not required. These devices shall be calibrated and delivered to NIST per the schedule identified in Section C.6. Measurements made by these devices during test shall be acquired, recorded, and documented in the test report.
- d) Qty: 1 day, test cell decontamination. This covers the resources needed to clean and decontaminate the test cell if the effluent from the tests renders the facility in-operable due to conductive coatings on electrical components.
- e) Qty: 1 day, non-use test cell day (occupancy)
- h) Qty: Test report. A draft test report shall be provided 6 weeks after the completion of the test series. The test report shall contain the following information for each test performed: electrical ratings, electrical characteristics, description of electrical circuit, description of test object, voltage and current waveforms, power supply characteristics, arc energy slug thermal and converted heat flux measurements, test observations, and supporting drawings or photographs. NRC COR shall provide comments on the draft report 30-days after receipt of the draft. A final test report shall be provided to the NRC COR 30-days after receipt of the NRC COR comments.
- f) Following completion of testing and at the direction of the NRC COR, the contractor shall dispose of the electrical test equipment.

#### **C.4.4 Task 4 – Low Voltage Tests (OPTIONAL TASK)**

This task includes:

- a) Qty: 6, low voltage test days shall be required to complete this task. Low voltage equipment, not to exceed 1.0kV, shall be tested. Two technicians and one test engineer shall be available for each test day. The NRC shall identify and schedule the test days with the contractor and provide a 30-day draft test plan prior to the start of testing.
- b) Qty: 18 days, equipment storage and assembly area with a minimum 1,500 square feet usable floor area, 24-hour access, protection from the elements and climate controlled (heating, air conditioning).



- c) Qty: 60, provide arc energy slug calorimeters per ASTM Standard F1959. These devices shall be complete with copper slug, attached thermocouple and thermocouple leads with sufficient length to connect to the facilities data acquisition system and thermal protection of the leads. The insulative substrate (typically plywood or maranite) is not required. These devices shall be calibrated and delivered to NIST per the schedule identified in Section C.6. Measurements made by these devices during test shall be acquired, recorded, and documented in the test report.
- d) Qty: 1 day, test cell decontamination. This covers the resources needed to clean and decontaminate the test cell if the effluent from the tests renders the facility in-operable due to conductive coatings on electrical components.
- e) Qty: 1 day, non-use test cell day (occupancy)
- f) Qty: Test report. A draft test report shall be provided 6 weeks after the completion of the test series. The test report shall contain the following information for each test performed: electrical ratings, electrical characteristics, description of electrical circuit, description of test object, voltage and current waveforms, power supply characteristics, arc energy slug thermal and converted heat flux measurements, test observations, and supporting drawings or photographs. NRC COR shall provide comments on the draft report 30-days after receipt of the draft. A final test report shall be provided to the NRC COR 30-days after receipt of the NRC COR comments.
- g) Following completion of testing and at the direction of the NRC COR, the contractor shall dispose of the electrical test equipment.

#### **C.4.5 Task 5 – Stakeholder Meeting Support (OPTIONAL TASK)**

Under this task the contractor shall support a NRC public meeting to communicate facilities capability, test findings and answer specific questions related to the test facility. The meeting has not yet been planned, but will be held at the NRC Headquarter Offices in Rockville, Maryland. The level of effort is not expected to exceed three (3) staff for 2 full working days.

### **C.5 Reporting Requirements**

#### **C.5.1 Test Reports**

The contractor shall provide test reports summarizing the work performed and the results and conclusions under this contract/order. Draft and final test reports shall be provided for each Task 1 - 4 as described above.

**C.6 List of Deliverables**

<b>Section #</b>	<b>Deliverable</b>	<b>Due Date</b>	<b>Format</b>	<b>Submit to</b>
C.4 Task 1	10 Medium Voltage Test Reports	60 days after each test	Word	COR
C.4 Task 1.c	100 Calorimeters	45 days prior to each test	Delivery of calorimeters	NIST
C.4 Task 2 OPTION	6 Medium Voltage Test Reports	60 days after each test	Word	COR
C.4 Task 2.c OPTION	60 Calorimeters	45 days prior to each test	Delivery of calorimeters	NIST
C.4 Task 3 OPTION	6 Low Voltage Test Report	60 days after each test	Word	COR
C.4 Task 3.c OPTION	60 Calorimeters	45 days prior to each test	Delivery of calorimeters	NIST
C.4 Task 4 OPTION	6 Low Voltage Test Reports	60 days after each test	Word	COR
C.4 Task 4.c OPTION	60 Calorimeters	45 days prior to each test	Delivery of calorimeters	NIST

Calorimeters can be shipped to:  
National Institute of Standard and Technology (NIST)  
100 Bureau Drive  
MS 8661  
Gaithersburg, MD 20899  
Attn: Scott Bareham

**C.7 Required Materials, Facilities, Hardware/Software**

The contractor shall provide the following materials and facilities required for this contract:

- 1) Testing facility
- 2) Equipment storage / assembly area
- 3) ASTM slug calorimeters in quantities specified

**C.8 Release of Publications**

Any documents generated by the contractor under this contract/order shall not be released for publication or dissemination without CO and COR prior written approval.

**C.9 Place of Performance**

The work to be performed under this contract/order will be primarily performed at the contractor's facilities.

**C.10 Recognized Holidays**

N/A

**C.11 Hours of Operation**

N/A

**C.12 Certification and License Requirements**

Facility shall be ISO 17025 certified.

**C.13 Key Personnel and Qualification Requirements**

The following positions have been designated as key personnel:

1. Test engineer – a degree in engineering with knowledge and ability to perform testing described in the statement of work.
2. Two technicians – shall have the knowledge and ability to perform the testing required in the statement of work.

**C.14 Contractor Travel**

It is expected that one (1), three (3) person trip to NRC HQ in Rockville, MD will be needed to communicate facility capabilities and test findings.

Contractor will be authorized travel expenses consistent with the Federal Travel Regulation (FTR) and the limitation of funds specified in the travel line item of this contract/order. All travel requires prior written Government approval from the CO, unless otherwise delegated to the COR.

**C.15 Data Rights**

The NRC shall have unlimited rights to and ownership of all deliverables provided under this contract/order, including reports, recommendations, briefings, work plans and all other deliverables. All documents and materials, to include the source codes of any software, produced under this contract/order are the property of the Government with all rights and privileges of ownership/copyright belonging exclusively to the Government. These documents and materials may not be used or sold by the contractor without prior written authorization from the CO. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. This right does not abrogate any other Government rights.

**C.16 Incremental Development for Software**

N/A

**C.17 Section 508 – Information and Communication Technology Accessibility**

N/A

**C.18 Applicable Publications (Current Editions)**

N/A

**31310020C0013**  
**ATTACHMENT 2**

**BILLING INSTRUCTIONS FOR  
FIXED-PRICE TYPE CONTRACTS (JULY 2017)**

**General:** During performance and through final payment of this contract, the contractor is responsible for the accuracy and completeness of data within the System for Award Management (SAM) database and the Invoice Processing Platform (IPP) system and for any liability resulting from the Government's reliance on inaccurate or incomplete SAM and/or IPP data.

The contractor shall prepare invoices/vouchers for payment of deliverables identified in the contract, in the manner described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

**Electronic Invoice/Voucher Submissions:** Invoices/vouchers shall be submitted electronically to the U.S. Nuclear Regulatory Commission (NRC) through the Invoice Processing Platform (IPP) at [www.ipp.gov](http://www.ipp.gov).

**Purchase of Capital Property:** (*\$50,000 or more with life of one year or longer*)

Contractors must report to the Contracting Officer, electronically, any capital property acquired with contract funds having an initial cost of \$50,000 or more, in accordance with procedures set forth in NRC [Management Directive \(MD\) 11.1](#), NRC Acquisition of Supplies and Services.

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

**Frequency:** The contractor shall submit invoices/vouchers for payment once each month, unless otherwise authorized by the Contracting Officer.

**Supporting Documentation:** Any supporting documentation required to substantiate the amount billed shall be included as an attachment to the invoice created in IPP. If the necessary supporting documentation is not included, the invoice will be rejected.

**Task Order Contracts:** The contractor must submit a separate invoice/voucher for each individual task order with pricing information.

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

**Currency:** Invoices/Vouchers must be expressed in U.S. Dollars.

**Supersession:** These instructions supersede previous Billing Instructions for Fixed-Price Type Contracts (JAN 2015).

**BILLING INSTRUCTIONS FOR  
FIXED-PRICE TYPE CONTRACTS (JULY 2017)**

***Does my company need to register in IPP?***

If your company is currently registered in IPP and doing business with other Federal Agencies in IPP, you will not be required to re-register.

If your company is not currently registered in IPP, please note the following:

- You will be receiving an invitation to register for IPP from IPP Customer Support, [STLS.IPPHELPDESK@stls.frb.org](mailto:STLS.IPPHELPDESK@stls.frb.org).
- IPP Customer Support will send you two emails: the first email will contain the initial administrative IPP User ID and the second email, sent within 24 hours of receipt of the first email, will contain a temporary password.
- Please add the Customer Support email address ([STLS.IPPHELPDESK@stls.frb.org](mailto:STLS.IPPHELPDESK@stls.frb.org)) to your address book so you do not disregard these emails or mistake them for spam.
- During registration, one initial administrative user account will be created for your company and this user will be responsible for setting up all other user accounts including other administrators.
- Registration is complete when the initial administrative user logs into the IPP web site with the User ID and password provided by Treasury and accepts the rules of behavior.

***What type of is training provided?***

Vendor training materials, including a first time login tutorial, user guides, a [quick reference guide](#), and [frequently asked questions](#) are available on Treasury's IPP [website](#). **Individuals within your company responsible for submitting invoices should review these materials before work begins on the contract.**

***How do I receive assistance with IPP?***

Treasury's IPP Customer Support team provides vendor assistance related to the IPP application, and is also available to assist IPP users and to answer any questions related to accessing IPP or completing the registration process. IPP application support is also available via phone at (866) 973-3131, Monday through Friday from 8:00 am to 6:00 pm ET, and via email at [IPPCustomerSupport@fiscal.treasury.gov](mailto:IPPCustomerSupport@fiscal.treasury.gov).

Specific questions regarding your contract or task order should be directed to the appropriate NRC Contracting Officer.