	ENT OF SOLICITATION/MODIFIC/		1. CONTRACT D CODE			PAGES	
					1	12	
2. AMENDME	NT/MODIFICATION NO.	3. EFFECTIVE DATE	4.	4. REQUISITION/PURCHASE REQ. NO. 5. PROJECT NO. (If ap			(If applicable)
P00001		See Block 16C	NN	4SS-21-0081			
6. ISSUED BY	Y CODE	NRCHQ	7.	ADMINISTERED BY (If other than Item 6)	CODE		
MAIL ST	- HQ TION MANAGEMENT DIVIS COP TWFN-07B20M STON DC 20555-0001	ION					
8. NAME AND	ADDRESS OF CONTRACTOR (No., street,	county, State and ZIP Code)	(x)	9A. AMENDMENT OF SOLICITATION NO.			
NUMARK A	ASSOCIATES INC						
ATTN NET	IL NUMARK			9B. DATED (SEE ITEM 11)			
1220 195	TH ST NW						
SUITE 50	00		-	10A MODIFICATION OF CONTRACT/ORDER	NO		
WASHING	TON DC 200362444		Х	10A. MODIFICATION OF CONTRACT/ORDER 31310020D0010			
				31310020F0109			
10 ¹				10B. DATED (SEE ITEM 13)			
CODE 78	38247377	FAC LITY CODE		08/11/2020			
9 		11. THIS ITEM ONLY APPLIES TO	AME	NDMENTS OF SOLICITATIONS			
Offers musi tems 8 and separate le RECEIVED OFFER. If <u>each letter</u> 12. ACCOUN	d 15, and returningcop etter or electronic communication which inclu DAT THE PLACE DESIGNATED FOR THE by virtue of this amendment you desire to or or electronic communication makes referen T NG AND APPROPRIATION DATA (<i>If requ</i> D200-LICAMEND-50-50D01	for to the hour and date specified in the specified of the specified of the specified of the specified of the specific the specific term of te	he soli Medgin d amer HE HO ch cha hent, a et 1 LA – 3	citation or as amended , by one of the following n ig receipt of this amendment on each copy of the indment numbers. FAILURE OF YOUR ACKNOV UR AND DATE SPECIFIED MAY RESULT IN RE ange may be made by letter or electronic commun is received prior to the opening hour and date Increase:	nethods: (a offer subn VLEDGEN JECTION JECTION ication, pr <u>specified.</u> 590,00	nitted ; or (c MENT TO B OF YOUR rovided	leting) By E
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED F ORDER NO. IN ITEM 10A.	URSUANT TO: (Specify authority) T	HE CH	IANGES SET FORTH IN ITEM 14 ARE MADE IN	THE CON	ITRACT	
	B. THE ABOVE NUMBERED CONTRAC appropriation data, etc.) SET FORTH	T/ORDER IS MODIF ED TO REFLEC N ITEM 14, PURSUANT TO THE AU	t the JTHO	E ADM NISTRATIVE CHANGES (such as change RITY OF FAR 43.103(b).	s in paying	g office,	
1 	C. THIS SUPPLEMENTAL AGREEMENT	IS ENTERED INTO PURSUANT TO	AUTH	IORITY OF:			
Х	52.243-2 CHANGES - CO	OST-REIMBURSEMENT.	(AU	G 1987) - ALTERNATE I (A	PR 19	84)	
(858) (3	D. OTHER (Specify type of modification	and authority)	80) 	64 ER		100	
E. IMPORTAN	IT Contractor ∏is not	IX is required to sign this document.	and re	turn 1 copies to the issu	ing office		

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) This action definitizes this task order issued on 08/10/2020 as a placeholder to hold the minimum guarantee of \$10,000.00 under IDIQ 31310020D0010 thereby awarding the first task order to NUMARK Associates, Inc. Therefore the total amount obligated for this task order is \$100,000.00 (\$10,000.00 minimum guarantee plus \$90,000.00 for this requirement).

At this time the NRC definitizes this action with project titled "Technical Assistance for the Development of an Environmental Impact Statement and Safety Evaluation Report Chapter for Environmental Protection for X-Energy LLC's License Application Request for a License to Construct, Operate, and Decommission a Fuel Fabrication Facility" for which a Statement of Work and applicable clauses are incorporated. The period of performance for this requirement is September 30, 2021 through September 30, 2024. Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (*Type or print*) 16A. NAME AND TITLE OF CONTRACT NG OFFICER (*Type or print*)

		MONIQUE B. WILLIAMS	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
2			09/28/2021
(Signature of person authorized to sign)		(Signature of Contracting Officer)	
Previous edition unusable		STAND	ARD FORM 30 (REV. 11/2016)

STANDARD FORM 30 (REV. 11/2016) Prescribed by GSA FAR (48 CFR) 53.243
 CONTINUATION SHEET
 REFERENCE NO. OF DOCUMENT BEING CONTINUED
 PAGE

 31310020D0010/31310020F0109/P00001
 2

NAME OF OFFEROR OR CONTRACTOR NUMARK ASSOCIATES INC

TEM NO. (A)	SUPPL ES/SERVICES (B)	QUANTITY U (C) (D)	UNIT PRICE (E)	AMOUNT (F)
	Total Obligated Amount: \$100,000.00 Total Base Task Order Ceiling Total Task Order Ceiling including All Options: \$1,062,248.25				
	Period of Performance: 09/30/2021 to 09/30/2024				

OF

12

Section B - Supplies or Services/Prices was revised as follows.

Summary of Clause Changes:

Clause titled BRIEF PROJECT TITLE AND WORK DESCRIPTION is incorporated as follows:

BRIEF PROJECT TITLE AND WORK DESCRIPTION

(a) The title of this project is: Technical Assistance for the Development of an Environmental Impact Statement and Safety Evaluation Report Chapter for X-Energy LLC's License Application Request for a License to Construct, Operate, and Decommission a Fuel Fabrication Facility

(b) Summary work description: The objective of this task order is to obtain Contractor technical assistance for the development of a Safety Evaluation Report Chapter related to environment protection and monitoring and an Environmental Impact Statement and to assist in NHPA Section 106 consultation activities, in support of the staff's environmental review for the license application request from XE to construct and operate a nuclear fuel fabrication facility for TRISO particle fuell at a proposed site in the staff's environmental as well as providing relevant Contractor expertise for a potential adjudicatory hearing on the licensing action.

Clause titled CONSIDERATION AND OBLIGATION—COST-PLUS-FIXED-FEE ALTERNATE I is incorporated as follows:

CONSIDERATION AND OBLIGATION—COST-PLUS-FIXED-FEE ALTERNATE I

(a) The total estimated cost to the Government for full performance of this contract is of which the sum of th

(b) There shall be no adjustment in the amount of the Contractor's fixed fee.

(c) The amount currently obligated by the Government with respect to this contract is \$100,000.00, of which the sum of \$100,000 represents the estimated reimbursable costs, and of which 100,000 represents the fixed-fee.

(d) It is estimated that the amount currently obligated will cover performance through June 30, 2022.

(e) This is an incrementally-funded contract and FAR 52.232-22 - "Limitation of Funds" applies.

(f) In accordance with FAR 52.216-8 - Fixed Fee, it is the policy of the NRC to withhold payment of fee after payment of 85 percent of the fee has been paid in order to protect the Government's interest. The amount of fixed-fee withheld from the contractor will not exceed 15 percent of the total fee or \$100,000, whichever is less. Accordingly, the maximum amount of fixed-fee that may be held in reserve is

Summary of Clause Changes:

Clause titled PRICE/COST SCHEDULE is incorporated as follows:

PRICE/COST SCHEDULE

Base Period of Performance: September 30, 2021 – September 30, 2024 CLIN 0001 includes the following Tasks: 1, 2, 3, 4, 5, 6, 7, 8, and 9 (Subtasks 9A and 9B)



Optional Task 4A: Date Exercised – September 30, 2024



Optional Task 9C: Date Exercised – September 30, 2024







Optional Task 9E: Date Exercised – September 30, 2024

Total Order Cost (Inclusive of Options)

Total Order Fixed Fee (Inclusive of Options) Total Order Ceiling (Inclusive of Options)



Section C - Description/Specifications was revised as follows.

Summary of Clause Changes:

Clause titled **STATEMENT OF WORK** is incorporated as follows:

STATEMENT OF WORK

Refer to Attachment 3 for Statement of Work

Section D - Packaging and Marking was revised as follows.

Summary of Clause Changes:

Clause titled **PACKAGING AND MARKING** is incorporated as follows:

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.

Clause titled **BRANDING** is incorporated as follows:

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 Material Safety and Safeguards, under Contract/order number 31310020D0010/31320F0109.

Section E - Inspection and Acceptance was revised as follows.

Summary of Clause Changes:

Clause titled **INSPECTION AND ACCEPTANCE BY THE NRC (SEP 2013)** is incorporated as follows:

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.

Contract Deliverables:

Refer to Attachment 3 - Statement of Work, Subsection 6

Section F - Deliveries or Performance was revised as follows.

Summary of Clause Changes:

Clause titled **PLACE OF DELIVERY-REPORTS** is incorporated as follows:

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): Refer to Section G - 2052.215-71 CONTRACTING OFFICER REPRESENTATIVE AUTHORITY. (OCT 1999)

b. Contracting Officer (1 electronic copy) - Monthly Letter Status Report (MLSR) Only

Clause titled **TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)** is incorporated as follows:

TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)

This order shall commence on September 30, 2021 and will expire on September 30, 2024.

Section G - Contract Administration Data was revised as follows.

NRCAR Clauses Incorporated By Full Text

Summary of Clause Changes:

Clause 2052.215-71 is incorporated as follows:

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: Jill Caverly Address: U.S. Nuclear Regulatory Commission Office Nuclear Material Safety and Safeguards Mail Stop: TWFN-04B16 Washington, DC 20555-0001 Phone No.: 301-415-7674 Email Address: jill.caverly@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)

Section H - Special Contract Requirements was revised as follows.

NRC Local Clauses Incorporated by Full Text

Summary of Clause Changes:

Clause titled Key personnel. (JAN 1993) is incorporated as follows:

KEY PERSONNEL. (JAN 1993)

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

*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

Summary of Clause Changes:

Clause 2052.215-78 is incorporated as follows:

2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) - ALTERNATE I (OCT 1999)

(a) Total expenditure for travel may not exceed without the prior approval of the contracting officer.

(b) All foreign travel must be approved in advance by the NRC on NRC Form 445, Request for Approval of Official Foreign Travel, and must be in compliance with FAR 52.247-63 Preference for U.S. Flag Air Carriers. The contractor shall submit NRC Form 445 to the NRC no later than 30 days prior to the commencement of travel. (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 FAR Limitations of Cost clause of this contract when, at any time, the contractor learns that travel expenses will cause the contractor to exceed the travel ceiling amount identified in paragraph (a) of this clause.

(e) Reasonable travel costs for research and related activities performed at State and nonprofit institutions, in accordance with Section 12 of Pub. L. 100-679, 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.

*To be incorporated into any resultant contract

(End of Clause)

Section I - Contract Clauses was revised as follows.

FAR Clauses Incorporated By Full Text

Summary of Clause Changes:

Clause 52.217-7 is incorporated as follows:

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 5 days of need within the period of performance. 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)

Section J - List of Documents, Exhibits and Other Attachments was revised as follows.

Number Attachment Title Date of Number Pages NRC Form 187 - Contract Security Classification 06/30/2021 1 2 Requirements Billing Instructions for Cost Plus Fixed Fee 2 09/01/2018 10 Contracts

Table has been revised and now reads as follows:

Attachment Number	Title	Date	Number of Pages
3	Statement of Work	09/27/2021	26

NRC FORM 187	UCLEAR REGL
(04-2019)	200
NRCMD 12	E DE
	5
	S area

CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

U.S. NUC	LEAR	REGUL	ATORY	COMMIS	SION

1. Type of Submission		3. Contractor Company Full Na	me and Complete Address (Pri	me Contracto	r)	
New		Numark Associates, Inc 1220 19th St., NW				
2. Type of Contract		Suite 500 Washington, DC 20036-2444				
Commercial		washington, DC 20050-2444				
4. Contract Number, IAA Number, or Job Code for	DOE Pr	ojects	5. Contract Start Date	6. Contract I	End Date	
31310020D0010/31310020F0109			September 30, 2021	Septembe	er 30, 2024	
7. Is this contract a follow-on contract? If "Yes", provide previous Contract Number, 8. Contractor Cage Code				OE Facility Co	ode	
Yes 🖌 No	AA Number, or Job Code. 3M7T8					
9. Contract Performance Requirements						
A. Will the contract require access to classified (information, systems, and/or material) (e.g.,		Part 2004 or MD 12.2)?	es (continue) 🖌 No (If "N	lo", proceed to	Block 9.E.)	
B. What is the highest level of classified matter	the con	tractor will need to access to per	form contract responsibilities?			
Select 1st Level of Classification		Select 2nd L	evel of Classification			
C. To carry out requirements of the contract, wil generate, or store classified matter at the cor			es (continue) 🖌 No (If "۱	No", proceed to	o Block 9.E.)	
D. Choose all that apply: In regards to classified	d matte	r, the contractor will require:				
1) Access to Foreign Intelligence Inform	nation	2) Receipt and	storage (i.e., safeguarding) of c	assified matt	er	
3) Access to cryptographic material or other classified COMSEC information		4) Access to cla another agen	assified matter or information p	processed by		
5) Use of a classified information techn processing system	ology	6) Generation o	f classified at Contractor facilit	y location		
7) Generation of classified matter at an	NRC fa	cility				
E. Will the contractor require access to Safegua Information (e.g., MD 12.7, 10 CFR 73.21, 73.2			rmation - Modified Handling	Yes	V No	
F. Will the contractor possess, generate, or stor	e SGI o	r SGI-M at the contractor facility?		Yes	Vo No	
G. Will the contractor require access to any Sen information technology (IT) Systems (e.g., MI			rmation (SUNSI) or sensitive	✓ Yes	No	
H. Will the contractor possess, generate, or stor contractor facility?	re SUNS	or have access to NRC sensitiv	e IT systems at the	✓ Yes	No	
I. Was, "Yes", checked to Block 9.A., or Block 9.C.? (If "Yes", then a Facility Clearance is required to be issued for the contractor and any known sub-contractors by the Facilities Security Branch before final contract award and before work can begin on the contract.)						
J. Choose all that apply:						
1) Unescorted Access is required to Nuclear Power Plants. 5) Require operation of government vehicles or transport passengers for the NRC.						
2) Access is required to Safeguards Information. 6) Will operate hazardous equipment at NRC facilities.						
3) Access is required to Sensitive IT Sy	stems a	and Data. 7) Req	uired to carry firearms.			
4) Unescorted Access to NRC Headquarters, Region, or Technical Training Facility. 8) Found to use or admit to use of illegal drugs.						

(04-2019)	ACT SECURITY AND/OR U.S. NUCLEAR REGULATORY COMMISSION N REQUIREMENTS (Continued)
	d by the COR if contractor will have access to SGI and/or Classified information).
 11. Does this contract contain any subcontractors? If "No", Leave area blank. (Note: It is the responsibility of the CO contract during the execution of the contract. The sub-contractors 	
Subcontractor Company name, address and Defense Security	y Service cage code. (if applicable)
12. Review of contractor/subcontractor reports, documents for c	classified, SGI, SGI-M, and/or SUNSI will be reviewed by:
Typed or Printed Name and Title of NRC Employee to review for 3	SUNSI
Jill S. Caverly, Senior Environmental Project Manager	
Typed or Printed Name and Title of a Qualified Designator for SG	GI and SGI-M (i.e., person must be qualified per MD 12,7)
Typed or Printed Name and Title of Authorized Derivative Classif	fier (for Classified Information)
13. Required Distribution of NRC Form 187 for Review (Check all	II appropriate boxes)
✓ 1) Originating NRC office or Division (Item 14A.)	3) Division of Facilities and Security (Item 14C.)
2) Information Security Branch Chief (If contractor has a	
to classified information and/or SGI) (Item 14B.)	
	14. Approvals
A. Typed or Printed Name of Director, Office or Division	Signature
John Tappert, Division Director, NMSS/REFS	
B. Typed or Printed Name of Chief, Information Security Branch	n Signature
C. Typed or Printed Name of Director, Division of Facilities and S	Security Signature
FOR/ Timothy Pulliam, Director, ADM/AMD	
D. Typed or Printed Name of Director, Acquisitions Managemeent	at Division Signature
Eleni Jernell, Director, ADM/AMD	
REMARKS	



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

<u>General</u>: 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 for any liability resulting from the Government's reliance on inaccurate or incomplete SAM data.

The contractor shall prepare invoices/vouchers for reimbursement of costs in the manner and format described herein. FAILURE TO SUBMIT INVOICES/VOUCHERS IN ACCORDANCE WITH THESE INSTRUCTIONS MAY RESULT IN REJECTION OF THE INVOICE/VOUCHER AS IMPROPER.

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

<u>Electronic Invoice/Voucher Submissions</u>: The preferred method of submitting invoices/vouchers is electronically to the Department of Treasury's Administrative Resource Center, via email to: <u>NRC@fiscal.treasury.gov</u>.

<u>Hard-Copy Invoice/Voucher Submissions</u>: If you submit a hard-copy of the invoice/voucher, a signed original and supporting documentation shall be submitted to the following address:

Fiscal Accounting Program, Admin & Training Group Avery Street A3-G Bureau of the Fiscal Service PO Box 1328 Parkersburg WV 26106-1328

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).

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

<u>Frequency</u>: The contractor shall submit requests for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

<u>Format</u>: Invoices/Vouchers shall be submitted in the format depicted on the attached sample form entitled "Invoice/Voucher for Purchases and Services Other Than Personal". Alternate formats are permissible only if they address all requirements of the Billing Instructions. The



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

instructions for preparation and itemization of the invoice/voucher are included with the sample form.

Task Order Contracts: The contractor must submit a separate invoice/voucher for each individual task order with detailed cost information. This includes all applicable cost elements and other items discussed in paragraphs (a) through (s) of the attached instructions. In addition, the invoice/voucher must specify the contract number, and the NRC-assigned task/delivery order number.

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

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

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

<u>Supersession</u>: These instructions supersede previous Billing Instructions for Cost-Reimbursement Type Contracts (FEB 2018).



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

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

1. Official Agency Billing Office

Fiscal Accounting Program, Admin & Training Group Avery Street A3-G Bureau of the Fiscal Service PO Box 1328 Parkersburg WV 26106-1328

2. Invoice/Voucher Information

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

b. <u>Taxpayer Identification Number</u>. The Payee shall include the Payee's taxpayer identification number (TIN) used by the Internal Revenue Service (IRS) in the administration of tax laws. (See IRS Web site:

http://www.irs.gov/Individuals/International-Taxpayers/Taxpayer-Identification-Numbers-(TIN)).

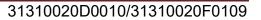
c. <u>Payee's Name and Address</u>. Show the name of the Payee as it appears in the contract and its correct address. Where the Payee is authorized to assign the proceeds of this contract in accordance with the clause at Federal Acquisition Regulation (FAR) <u>52.232-23 Assignment of Claims</u>, the Payee shall require as a condition of any such assignment, that the assignee shall register separately in the System for Award Management (SAM) database at <u>http://sam.gov</u> and shall be paid by EFT in accordance with the terms of this contract. See FAR <u>52.232-33</u> Payment by Electronic Funds Transfer-System for Award Management.

d. <u>Contract Number</u>. Insert the NRC contract number (including Enterprise-wide Contract (EWC)), GSA Federal Supply Schedule (FSS), Governmentwide Agency Contract (GWAC) number, or Multiple Agency Contract (MAC) number, as applicable.

e. <u>Task Order Number</u>. Insert the task/delivery order number (If Applicable). **Do not include** more than one task order per invoice or the invoice may be rejected as improper.

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

g. <u>Date of Invoice/Voucher</u>. Insert the date the invoice/voucher is prepared.





BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

h. <u>Billing Period</u>. Insert the beginning and ending dates (day, month, year) of the period during which costs were incurred and for which reimbursement is requested.

i. <u>Description of Deliverables</u>. Provide a brief description of supplies or services, quantity, unit cost, and total cost.

j. <u>Work Completed</u>. Provide a general summary description of the services performed or products submitted for the invoice period and specify the section or Contract Line Item Number (CLIN) or SubCLIN in the contract pertaining to the required deliverable(s).

k. Shipping. Insert weight and zone of shipment, if shipped by parcel post.

I. <u>Charges for freight or express shipments</u>. Attach prepaid bill if shipped by freight or express.

m. <u>Instructions</u>. Include instructions to consignee to notify the Contracting Officer of receipt of shipment.

n. For Indefinite Delivery contracts, the final invoice/voucher shall be marked "FINAL INVOICE" or "FINAL VOUCHER".

o. Final invoices must include the name of the NRC Contracting Officer's Representative (COR) and Contracting Officer.

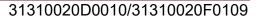
p. <u>Direct Costs</u>. Insert the amount billed for the following cost elements, adjustments, suspensions, and total amounts, for both the current billing period and for the cumulative period (from contract inception to end date of this billing period). The contractor shall not bill at rates that have not been incorporated into the contract by formal modification.

(1) Direct Labor. This consists of salaries and wages paid (or accrued) for direct performance of the contract itemized as follows:

Labor	Staff	Hours			Cumulative
<u>Category</u>	<u>Assigned</u>	Billed	Rate	<u>Total</u>	Hours Billed

(2) Fringe Benefits. This represents fringe benefits applicable to direct labor and billed as a direct cost. Where a rate is used indicate the rate. Fringe benefits included in direct labor or in other indirect cost pools should not be identified here.

(3) Contractor-acquired property (\$50,000 or more). List each item costing \$50,000 or more and having a life expectancy of more than one year. List only those items of equipment for which reimbursement is requested. For each such item, list the following (as applicable): (a) an item description, (b) manufacturer, (c) model number, (d) serial





BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

number, (e) acquisition cost, (f) date of purchase, and (g) a copy of the purchasing document.

(4) Contractor-acquired property (under \$50,000), Materials, and Supplies. These are equipment other than that described in (3) above, plus consumable materials and supplies. List by category. List items valued at \$1,000 or more separately. Provide the item number for each piece of equipment valued at \$1,000 or more.

(5) Premium Pay. This enumeration in excess of the basic hourly rate. (Requires written approval of the Contracting Officer.)

(6) Consultant Fee. The supporting information must include the name, hourly or daily rate of the consultant, and reference the NRC approval (if not specifically approved in the original contract).

(7) Travel. Total costs associated with each trip must be shown in the following format:

<u>Start D</u>	ate	Destina	ation	<u>Costs</u>
From	То	From	То	\$

(Must include separate detailed costs for airfare, per diem, and other transportation expenses. All costs must be adequately supported by copies of receipts or other documentation.)

(8) Subcontracts. Include separate detailed breakdown of all costs paid to approved subcontractors during the billing period.

(9) Other Costs. List all other direct costs by cost element and dollar amount separately.

q. <u>Indirect Costs (Overhead and General and Administrative Expense)</u>. Cite the formula (rate and base) in effect in accordance with the terms of the contract, during the time the costs were incurred and for which reimbursement is requested. The contractor shall not bill at rates that have not been incorporated into the contract by formal modification.

r. <u>Fixed-Fee</u>. If the contract provides for a fixed-fee, it must be reimbursed as indicated in the contract. Cite the formula or method of computation. Include this information as it applies to individual task orders as well.

(1) The NRC will withhold payment of 15% of the negotiated contract fixed-fee amount, not to exceed \$100,000.



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

- (2) If the fee withholding amount has reached \$100,000, the contractor may resume billing the NRC for the balance of its fee under subsequent invoices for work completed.
- (3) Any fee amounts withheld by the NRC will be paid to the contractor during contract closeout in increments, following the submission/settlement of indirect rate proposals in accordance with FAR 52.216-8, "Fixed Fee" (JUN 2011).

s. Total Amount Billed. Insert columns for total amounts for the current and cumulative periods.

t. <u>Adjustments</u>. Insert columns for any adjustments, including outstanding suspensions for deficient or defective products or nonconforming services, for the current and cumulative periods.

u. Grand Totals.



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

3. Sample Invoice/Voucher Information

Sample Invoice/Voucher Information (Supporting Documentation must be attached)

This invoice/voucher represents reimbursable costs for the billing period from_____through____

			Amount Billed			
			Current Period	<u>Cumulative</u>		
(a)	Direct	<u>t Costs</u>				
	(1)	Direct labor	\$	\$		
	(2)	Fringe benefits (% of direct labor)	\$	\$		
	(3) (4)	Government property (\$50,000 or more) Government property, Materials, and	\$	\$		
		Supplies (under \$50,000 per item)	\$	\$		
	(5)	Premium pay (NRC approved overtime)	\$	\$		
	(6)	Consultants Fee	\$	\$		
	(7)	Travel	\$	\$		
	(8)	Subcontracts Other costs	\$ \$	৯ \$		
	(9)	Other costs	Φ	Φ		
		Total Direct Costs:	\$	\$		
(b)	Indire	ect Costs (provide the rate information applic	able to your firm)			
	(10)	Overhead% of	•	•		
		(Indicate Base)	\$	\$		
	(11)					
	of	(Indicate Base)	\$	\$		
		Total Indirect Costs:	\$	\$		
(c)	Fixed	<u>-Fee</u> :				
	 (12) Fixed-Fee Calculations: i. Total negotiated contract fixed-fee percent and amount \$					

<u>Note</u>: The fee balance withheld by NRC may <u>not</u> exceed \$100,000.



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

		Total Fixed-Fee:	\$ \$
(d)	Total Amount Bille	d	\$ \$
(e)	Adjustments (+/-)		\$ \$
(f)	Grand Total		\$ \$

(The invoice/voucher format provided above must include information similar to that included below in the following to ensure accuracy and completeness.)

SAMPLE SUPPORTING INFORMATION

The budget information provided below is for format purposes only and is illustrative.

Cost Elements:

1) <u>Direct Labor - \$2,400</u>

Labor <u>Category</u>	Staff <u>Assigned</u>	Hours <u>Billed</u>	<u>Rate</u>	<u>Total</u>	Cumulative <u>Hours Billed</u>
Senior Engineer I Engineer Computer Analyst	Pete Smith Rob Johnson John Roberts		\$14.00 \$10.00 \$ 5.00	\$1,400 \$ 500 <u>\$ 500</u> \$2,400	975 465 <u>320</u> 1,760 hrs.

2) Fringe Benefits - \$480

Fringe @ 20% of Direct Salaries

Labor <u>Category</u>	<u>Salaries</u>	Fringe <u>Amount</u>
Senior Engineer I Engineer Computer Analyst	\$1,400 \$500 <u>\$500</u> \$2,400	\$280 \$100 <u>\$100</u> \$480

3) <u>Government-furnished and contractor-acquired property (\$50,000 or more) - \$60,000</u>

Prototype Spectrometer - item number 1000-01 = \$60,000

4) <u>Government-furnished and contractor-acquired property (under \$50,000), Materials, and</u>



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

Supplies - \$2,000

10 Radon tubes @ \$110.00	=	\$1	,100
6 Pairs Electrostatic gloves @ \$150.00	=	<u>\$</u>	900
		\$2	,000

5) <u>Premium Pay - \$150</u>

Walter Murphy - 10 hours @ 10.00 Per Hour (Reg. Pay) = 100×1.5 OT rate = 150 (EX: Premium pay for this individual was approved and authorized under this contract by the NRC Contracting Officer by letter dated 6/1/2011.)

6) <u>Consultants' Fee - \$100</u>

Dr. Carney - 1 hour fully-burdened @ \$100 = \$100

7) <u>Travel - \$2,640</u>

(i) Airfare: (2 Roundtrip trips for 1 person @ \$300 per r/t ticket)

Start Date	End Date	<u>Days</u>	<u>From</u>	<u>To</u>	<u>Cost</u>
4/1/2011	4/7/2011	7	Philadelphia, PA	Wash, D.C.	\$300
7/1/2011	7/8/2011	8	Philadelphia, PA	Wash, D.C.	\$300

(ii) Per Diem: \$136/day x 15 days = \$2,040

8) Subcontracting - \$30,000

Company A	= \$10,000
Company B	= \$20,000
	\$30,000

(EX: Subcontracts for Companies A & B were consented to by the Contracting Officer by letter dated 6/15/2011.)

9) <u>Other Costs - \$5,100</u>

Honorarium for speaker at American Nuclear Society conference = \$5,000 *Nuclear Planet Journal* subscription fee = \$100

10) Overhead Expense - \$41,148

Overhead @ 40% of Total Direct Costs

11) General and Administrative (G&A) Expense - \$22,784



BILLING INSTRUCTIONS FOR COST-REIMBURSEMENT TYPE CONTRACTS (SEPTEMBER 2018)

G&A @ 20% of Total Costs, excluding subcontracts and consultants

12) <u>Fixed-Fee - \$8,218</u>

Fixed-Fee applied to Total Costs @ <u>5</u>%

Fixed-Fee Calculations:

- i. Total contract fixed-fee <u>\$100,000</u>
- ii. 85% allowable fee <u>\$85,000</u>
- iii. Cumulative fee billed on prior invoices <u>\$85,000</u>
- iv. Fee due this invoice (not to exceed 85% of fee earned based upon negotiated contract fee percentage) <u>\$8,218</u>

Total Amount Billed	\$175,020
Adjustments (+/-)	<u>- \$8,218</u>
Grand Total	\$166,802

STATMENT OF WORK

1. PROJECT TITLE

Technical Assistance for the Development of an Environmental Impact Statement and Safety Evaluation Report Chapter for Environmental Protection for X-Energy LLC's License Application Request for a License to Construct, Operate, and Decommission a Fuel Fabrication Facility

2. BACKGROUND

The applicant, X-energy (XE), is expected to submit a license application to the U.S. Nuclear Regulatory Commission (NRC) in January 2022, to construct, operate, and decommission a fuel fabrication facility (FFF) on a site in the NRC, the proposed of project would be a facility to construct a tri-structural isotropic (TRISO) type FFF.

The NRC's review of the XE's license application request falls under the purview of the Office of Nuclear Material Safety and Safeguards (NMSS) for regulating activities which provide for the construction, operation and decommissioning of a fuel fabrication facility under the Atomic Energy Act.

The NRC staff finds that the proposed action is a major Federal action significantly affecting the quality of the human environment, which pursuant to 10 CFR § 51.20(a)(7), requires the NRC to prepare an Environmental Impact Statement (EIS) to meet the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), and pursuant to the National Historic Preservation Act of 1966 (NHPA), is also federal undertaking pursuant to 36 CFR 800. In addition, the NRC typically coordinates reviews required by other statutes, such as the NHPA and Endangered Species Act of 1973 (ESA), with its NEPA reviews. Furthermore, given the unique nature of the application, the XE's FFF license application request may gather a moderate level of interest from potential interveners who live near the site and the licensing action could potentially be adjudicated (i.e., a contested hearing to be conducted by the NRC's Atomic Safety and Licensing Board (ASLB)).

3. OBJECTIVE

The objective of this task order is to obtain Contractor technical assistance to the NRC staff for the development of an SER Chapter associated with environmental protection and monitoring, and an EIS and to assist in NHPA Section 106 consultation activities, in support of the staff's environmental review for the license application request from XE to construct and operate a nuclear fuel fabrication facility for TRISO particle fuell at a proposed site in as well as providing relevant Contractor expertise for a potential adjudicatory hearing on the licensing action.

4. SCOPE OF WORK

The Contractor shall provide all technical assistance including technical review, coordination and editing for all phases of the review that will conclude with the preparation of a SER Chapter and an EIS that the NRC will use to document its review of XE's license application

request to construct and operate a TRISO FFF in CFR Part 51.

The resource/impact areas to be examined in the EIS — in terms of the affected human environment and the potential impacts to that environment – shall include: land use; transportation; geology, seismology and soils; water resources (ground water and surface water); ecological resources (including threatened and endangered species); climatology; meteorology and air quality; climate change; noise; historic and cultural resources; visual and scenic resources; socioeconomics; public and occupational health (non-radiological and radiological); environmental consequences from accidents; waste management; and environmental justice. Both direct and cumulative impacts shall be evaluated in the impacts determination.

The EIS shall provide a comparative analysis of the potential environmental impacts from the applicant's proposed action and from reasonable alternatives to that action, including, but not necessarily limited to, the no-action alternative. The EIS shall also document the purpose and need for the applicant's proposed action, the applicable statutory and regulatory requirements (including and in addition to those of the NRC), mitigation measures to avoid or minimize environmental impacts, environmental measurement and monitoring programs, an analysis of cumulative impacts, and a cost-benefit analysis.

The proposed action may generate external stakeholder interest. Development of the EIS, therefore, will involve a public outreach, scoping and facilitation program. Preparation of the EIS may involve other federal agencies in the role of cooperating agencies, with the NRC as the lead federal agency. The NRC will coordinate the role of the cooperating agencies, if any, in the schedule for EIS preparation. These cooperating agencies will provide input to and comments on working copies of the EIS.

The Contractor shall prepare the EIS in accordance with the NRC's applicable NEPAimplementing regulations in 10 CFR Part 51 and associated NRC staff guidance in NUREG-1748 and appropriate safety review guidance for those technical areas that overlap the safety review. Also, the NRC typically coordinates reviews required by other statutes, such as the NHPA and ESA, with its NEPA reviews. Therefore, the Contractor is expected to be cognizant of other statutes that the NRC will need to comply with during its licensing review of the proposed action. In addition, the Contractor shall provide the NRC staff with relevant expertise for a potential adjudicatory hearing on environmental issues.

In addition, the Contractor shall provide support for the NHPA Section 106 consultation process, potentially including research, facilitation, survey assistance, development of recommendations, survey and form reports, assessment of effects, and support in developing mitigation plans. In the Section 106 process, the Contractor shall obtain and leverage any information from consultations performed for other applications that are relevant to the current review (i.e. in the region of the proposed XE FFF site).

Prior to license application submittal to the NRC, the contractor is authorized to participate in a kick-off meeting and other discussions with the NRC COR upon request, and perform activities required to process security access for personnel performing under the task order. Any additional work that the contractor needs to perform after award of contract and before NRC receipt of license application must be approved in writing in advance by the NRC COR.

SPECIFIC TASKS

The specific tasks and deliverables required for the Contractor to complete the EIS, the NHPA consultation process, and provide support for a potential adjudicatory hearing on environmental issues and to complete an SER Chapter associated with environmental protection and monitoring are described in detail below. The NRC will issue a modification authorizing the contractor to begin work on optional tasks as required. See also Section 6 of this SOW for a summary of required deliverables and the deliverable/milestone scheduleand Section 12.1 for travel requirements for the task order.

In preparing the EIS, the Contractor shall use the information provided by the NRC and additional information obtained by the Contractor in the course of preparing the EIS, as described in the tasks/subtasks below. In addition, the Contractor shall incorporate into the EIS other relevant information and conclusions developed during the NRC staff's safety review of XE's license application request, as will be documented in the NRC's Safety Evaluation Report (SER), such as potential public and occupational health impacts, and environmental consequences from accidents. Furthermore, the Contractor shall also use any additional information as provided by the NRC, which either supplements or replaces XE's original license application request. For example, the additions to the application may come in the form of an application supplement(s), and/or XE's responses to NRC's requests for additional information. The Contractor shall leverage information and experiences from other environmental reviews performed for nearby facilities for this review, if possible and appropriate.

Task 1 - Project Management and Document Management Throughout Task Order Duration

This task shall last for the entire duration of the EIS development, the NHPA consultation process, and, if needed, the adjudicatory hearing. It may involve travel for the Contractor Project Manager to meet with the NRC Contracting Officer's Representative (COR), if needed. The following activities will be included in performance of this task and throughout the life of the task order:

Schedule Development

Following task order authorization, in consultation with the NRC COR, the Contractor's Project Manager shall develop and maintain a detailed project schedule electronically in MS Project. This schedule shall be updated as necessary and provided to the NRC COR periodically upon request.

Communication

Prior to the initiation of work, the NRC will conduct a "kick-off meeting" via teleconference call with the contractor to discuss the project.

The NRC expects that a weekly status call or face-to-face meeting between the NRC COR and the Contractor Project Manager will be held to discuss the current status of the project (e.g., technical issues, contract monitoring, file management). However, communication may occur more or less often depending on the need. NRC anticipates that quarterly progress meetings with the NRC COR may be necessary.

File Management

The Contractor shall work with the staff to develop a file sharing and management process that meets NRC security requirements. This process will be agreed upon by both parties and will be used to transmit all project-related documents, correspondence, and all working and final files.

Comment Management

The Contractor shall use the Pacific Northwest National Laboratory's Comment Response Database to sort and respond to comments during the EIS scoping and the draft EIS comment periods. All comments and responses shall be updated in the database.

Quality Assurance Program

The Contractor Project Manager shall have overall responsibility for ensuring that a robust and comprehensive quality assurance program is adequately implemented for all aspects of the contract including, but not limited to, the quality of technical input as well as the editing of technical documents. The Contractor Project Manager shall ensure that all deliverables have been prepared in accordance with quality assurance standards and shall review all deliverables for adequacy, accuracy, and consistency in technical content. The Contract Project Manager shall assure that all NRC publishing requirements identified in Task 5 are met.

Technical Editing and Publishing Preparation

The Contractor shall provide technical editing for all documents it develops associated with the environmental review and EIS preparation including but not limited to draft and final EIS reports, draft and final SER Chapter, requests for additional information, site visit reports, comment reports and meeting summaries.

Task 2 – Information Collection and Review Throughout Task Order Duration

Contractor and NRC COR Communications

The Contractor shall keep the NRC COR informed (via email, phone, or other correspondence) on at least a weekly basis, describing the information collected, reviewed, and analyzed under this task including, but not limited to, deficiencies found in XE submitted information (i.e., the license application, including the safety analysis report (SAR) and environmental report (ER), and any other supplemental information provided in support of the application); other information deficiencies; and any portions of other NEPA documents and other environmental reviews for activities at the proposed FFF site and in the vicinity of the proposed project that can be either adopted, tiered, and/or incorporated by reference into the NRC's EIS. The Contractor (anticipated to be the Project Manager, but maybe a technical reviewer as needed) may meet in person with the NRC at its offices in Rockville, Maryland when requested by the NRC COR.

Data Collection and Analysis

The contractor will collect and analyze information to support the final impact conclusions in the EIS. The Contractor's independent data collection shall include, among other available data and information sources, references cited in the applicant's license application, SAR, and ER, and relevant documents found through a comprehensive search and utilization of the NRC's publicly available Agency-Wide Documents Access and Management System (ADAMS), at http://www.nrc.gov/reading-rm/adams.html. Relevant documents in ADAMS may be found by the Contractor by searching, under the docket number assigned by NRC to the XE license application request. Additional information may be obtained by interactions with other Federal, State and Local entities.

As part of this information collection and review task, the NRC COR, with the assistance of the NRC safety/licensing project manager, will facilitate the Contractor's coordination with the members of the NRC's safety review team for the project who are preparing the SER.

The NRC safety review team members and their contact information will be identified by the NRC COR following task order authorization. The purpose of this coordination is for Contractor and NRC safety review staff counterparts to familiarize themselves with each other, establish an understanding for initial and ongoing coordination and discussions as needed, and identify and exchange information as needed for the ongoing environmental and safety reviews. Contacts may be by phone, email, or other correspondence, as necessary and appropriate. Contacts between Contractor staff and NRC safety review staff shall be made with the knowledge of the NRC COR and the NRC safety/licensing project manager and may be arranged by the NRC COR when necessary.

In addition, as requested by the NRC COR, the Contractor shall provide support for NRC consultations, i.e., NHPA Section 106 consultation and the ESA Section 7 consultation, as well as support for NRC coordination with other Federal, State, and local agencies. This support may include identification of agencies to contact, providing supporting information/documentation for consultations/coordination, input to and review of NRC letters/emails to agencies, etc. To these ends, the Contractor shall compile a list of federal, tribal, state, and local statutes, laws, and permits that are applicable to the project, with an accompanying short description of each statue, law, or permit. Information resulting from NRC's consultations/coordination with other agencies will be provided to the Contractor for use in the EIS analyses, as well as for summary, referencing, and reproduction, as necessary, in the EIS documents. These activities and contacts may have to be updated as necessary based on the development of the EIS.

The Contractor shall collect and review information throughout the duration of the project, as necessary and as additional information may be identified or otherwise become available, to support the development and completion of the EIS and to provide support for a potential adjudicatory hearing on environmental issues. Coordination and discussions between the Contractor, the NRC COR, and the NRC safety review staff are also expected to be ongoing throughout the duration of the task order.

The Contractor shall develop and maintain a bibliographic listing of all documents collected (reports, maps, papers, data files, etc.), including ADAMS Accession Numbers or web links where applicable, and shall also maintain on file electronic copies of all collected documents. The Contractor shall include in the listing a short description of each document and an accompanying brief discussion of how the document will be used in the EIS. The bibliographic document list shall be in a format suitable for use in the EIS reference lists; and all references ultimately cited in both the EIS (cited references and maps, drawings, tables, etc.) must be already publicly available in ADAMS or elsewhere in the public record or can be made publicly available in ADAMS. The Contactor shall make the document list and electronic copies of documents, including periodic updates, available to the NRC COR upon request. The Contractor shall be responsible for obtaining and providing the NRC COR with appropriate permissions for use of any copyrighted materials and reference documents in the EIS. The contractor will develop a complete reference list and index for the EIS.

Task 3 – Initial Technical Review of Application

The Contractor shall conduct the Subtasks below concurrently as necessary.

Subtask 3A – Perform Acceptance Review of Application

As required by the COR, the contractor shall conduct an acceptance review of the documents provided by XE in its license application. This review shall identify if there is sufficient information to perform a detailed technical review in support of the EIS preparation. The contractor shall perform this activity using guidance provided by the NRC COR and in accordance with information from NUREG-1748. The contractor shall develop Requests for Supplemental Information if the application is lacking sufficient information to allow commencement of the detailed technical review. The results of this review activity and any deficiencies shall be reported in writing to the NRC. Acceptance review of the application is complete when NRC issues acceptance letter.

Subtask 3B – Collect and Review Information

After completion of the acceptance review and as the initial step in the EIS development, the Contractor shall review project-related information and shall also independently collect and review additional information related to the proposed FFF project area and its environs and to the activities proposed by XE in its license application request, as needed for preparation of the comprehensive Draft EIS. The information initially provided by the NRC COR includes XE's license application, SAR, and ER and the other documentation submitted to the NRC. The NRC COR will provide additional relevant documents to the Contractor as they become available throughout the duration of the task order. The Contractor's independent data collection shall include, among other available data and information sources, references cited in the applicant's license application, SAR, and ER, and televant documents found through a comprehensive search and utilization of the NRC's publicly available Agency-Wide Documents Access and Management System (ADAMS), at http://www.nrc.gov/reading-rm/adams.html, relevant document provided by the applicant under the docket assigned to the review and information from public resources and local government entities.

Subtask 3C – Technical Review of License Application, SAR and ER and Submittal of the Initial Technical Review Report

To aid in the potential development of formal requests for additional information (RAIs) to the applicant (i.e, XE), the Contractor shall also review XE's ER for completeness and acceptability in accordance with NUREG-1748, and in consideration of other available information available. In conjunction with this review, the Contractor shall also review the applicant's license application and SAR to determine if any identified information deficiencies in the ER are instead addressed in those documents.

The Contractor shall provide an Initial Technical Review Report to the NRC COR. As necessary, the areas in the Initial Technical Review Report shall include, but not be limited to, the following:

- purpose and need for the proposed action;
- applicable statutory and regulatory requirements, permits, and consultations;

- descriptions of the proposed action and reasonable alternatives to the proposed action to be evaluated in detail in the EIS;
- descriptions of other alternatives considered, but eliminated, and reasons for elimination;
- applicable information on the affected environment and on environmental impacts of the proposed action and reasonable alternatives (in the following subject areas: site location and description, land use, transportation, geology, minerals and soils, water resources (ground water and surface water – water use and water quality), ecological resources, climatology, meteorology and air quality, climate change, noise, historic and cultural resources, visual and scenic resources, socioeconomics, public and occupational health (non-radiological and radiological), accidents, waste management, and environmental justice);
- mitigation measures to avoid or minimize any potential adverse effects of the proposed action and reasonable alternatives;
- environmental measurement and monitoring programs; and cost-benefit analysis of the proposed action and reasonable alternatives.

The report shall include <u>Information Needs</u> for preparation of the site visit and scoping process. This information shall summarize the review and include a preliminary list in tabular format, by topical area, of information either not provided or not adequately provided in XE's license application, SAR, and ER (i.e., information needs) and which will be required for the preparation of the EIS and which will need to be obtained from the applicant (i.e., information which is not available from other available information sources). The listing shall also provide a brief discussion of the EAIs, the list of information needs will be used by the NRC and the Contractor for discussion purposes with the applicant and other agencies and organizations during the site visit and information gathering meetings and discussions during the scoping and information gather stages.

The report shall also include a <u>List of Required Consultations</u> that includes identification of and information on any required consultations and coordination necessary with Federal, State, and local government agencies to cover permits, laws and regulations other than NEPA for which XE will need to apply or obtain, and to obtain information to complete the EIS. The report shall make use of information gathered in previous subtasks concerning applicable federal, tribal, state, and local statutes, laws, and permits.

The Contractor shall submit an <u>updated List of Permits and Laws</u> that is a list of federal, tribal, state, and local statutes, laws, and permits that are applicable to the project, with an accompanying short description of each statue, law, or permit. Information resulting from NRC's consultations/coordination with other agencies will be provided to the Contractor for use in the EIS analyses, as well as for summary, referencing, and reproduction, as necessary, in the EIS documents.

The report shall also include both a <u>preliminary Statement of the Purpose and Need and a</u> <u>List of Alternatives</u>. The specifics of the list of alternatives shall be included to the extent possible at the time of submittal. The contractor shall also provide an <u>Initial EIS Outline</u> and be prepared to discuss the proposed level of review for each of the subject areas listed in the outline.

Subtask 3D - EIS Scoping Activities, Site Visit, Scoping Comment Review and, Scoping Comment Review Report

The Contractor shall assist the NRC staff in preparing for, organizing, and implementing the EIS scoping process. The Contractor also shall support the NRC staff in preparing for and attending the site visit and other information gathering meetings with federal, tribal, state, and local organizations, public interest groups, and members of the public. General scoping activities would include:

Scoping Meeting(s)

The Contractor is required to attend and support the EIS in-person (or virtual if travel is not allowed due to the COVID-19 public health emergency) scoping meeting(s) for the project. The scoping meeting(s) shall be attended by the Contractor's Project Manager and up to five (5) Contractor technical staff members (subject matter experts). The Contractor's meeting attendees shall be determined in consultation with the NRC COR in advance of the scoping meeting(s). Two (2) public scoping meetings near the proposed FFF site are anticipated to be held by the NRC during the public scoping comment period; an additional virtual webinar meeting also is possible. In addition, the Contractor may be requested by the NRC COR to provide information for and to review and provide comments on the PowerPoint (or similar format) presentation prepared by the NRC staff for the meeting(s), advertisement materials, handouts and assist the NRC staff in the preparation of anticipated questions and responses to those questions as well as other materials for the meeting(s).

Site Visit and information Gathering Meetings/Discussions

The Contractor shall accompany the NRC staff on a visit of the proposed project site and vicinity as required by the NRC COR and shall conduct a detailed survey of the site and environs. The NRC COR will coordinate the site visit with the applicant. The site visit shall also include pre-arranged meetings with other Federal, State and local agencies. Meeting may also include Tribal government agencies, private sector organizations, public interest groups, and individuals, to be determined in consultation between the Contractor and the NRC COR. The duration of the site visit trip is presently anticipated to be up to five (5) days, with the trip possibly conducted during the same week as the EIS Scoping meeting(s). In advance of the site visit and information gathering meetings, the Contractor shall provide the NRC COR with a compilation of the questions and issues that the Contractor plans to use in its survey of the site and environs, and in the meetings with the applicant and other organizations. The Contractor shall revise this compilation in response to comments from the NRC COR, if provided. The Contractor's Project Manager and up to five (5) Contractor technical staff members (subject matter experts) shall attend the site visit and related meetings. The Contractor shall coordinate with the NRC COR regarding which Contractor technical staff shall participate in the site visit and related meetings in advance of the trip. At the NRC COR's request, the Contractor shall provide necessary security information (name of individual, citizenship, etc.) of the Contractor staff that will be participating prior to the site visit.

Following the trip, the Contractor shall document the site visit and associated meetings in concise draft and final Site Visit Trip Reports. The Draft and Final Site Visit Trip Reports shall describe any relevant information that was learned, requested, or obtained from the applicant and other agencies, organizations, and individuals with which meetings were held, as well as relevant observations from the reconnaissance of the FFF project area and

vicinity. The final Site Trip Report shall reflect and address comments, if any, received from the NRC COR on the draft Site Trip Report.

Following the site visit, compilation of information for the EIS input may require additional contacts with and interviewing of the applicant personnel and its contractors as well as other stakeholders by the NRC and the Contractor, including, but not necessarily limited to: Federal, State, and local resource agency staff and other government officials; Tribal government agencies; local elected officials; local economic development organizations; public interest groups; and members of the public. Any needed contacts shall be coordinated through the NRC COR, in advance. These contacts may be made in person or by email, phone, or other correspondence, as necessary. Such additional contacts may continue throughout the duration of the task order, as necessary. The Contractor shall document the additional contacts made and the information gathered in a manner that allows use as reference in the EIS.

Draft and Final Scoping Summary Reports

In cooperation with the NRC COR, the Contractor shall identify, sort and bin, review, and analyze all public comments presented at the scoping meeting(s) and or otherwise provided to the NRC during the EIS scoping process (either by writing, email or regulations.gov). The Contractor shall use the comment response database on the EARRTH platform to help develop responses to the scoping comments received. The Contractor shall prepare a Draft and Final Scoping Summary Report. The Final Scoping Summary Report shall satisfy the requirements of 10 CFR § 51.29(b). Specifically, the report shall summarize the public comments received by topical area and shall present a concise summary of the determinations and conclusions reached from the EIS scoping process, including the significant issues identified. The Draft and Final Scoping Summary Reports shall be submitted to the NRC COR.

Task 4 - Development of Requests for Additional Information.

After completing scoping activities associated with development of the EIS, the Contractor shall develop Requests for Additional Information (RAIs). The RAIs will be based on the Contractor's review of the XE license application, SAR, and ER; issues and concerns raised by commenters during the scoping process; the site visit and information gathering meetings; and the Contractor's Initial Technical Review Report. The preparation of the RAIs shall be conducted concurrently with preparation of the Preliminary Draft EIS chapters/sections (as discussed in tasks below), such that the RAIs shall be developed in consideration of the additional information needed from the applicant to complete the EIS. However, the RAI responses from the applicant are not expected to be available in time for inclusion in the Preliminary Draft EIS. Nevertheless, all of the Preliminary Draft EIS chapters/sections shall be as near complete and thorough as possible based on all other available data and information sources from Task 3, the site visit and information gathering meetings/discussions in Subtask 3D, and shall contain place holders for information expected in the applicant's response to the RAIs.

The Contractor shall prepare draft RAIs that will be documented in a report to the NRC COR, with each RAI stating by topical area what information is sought, the basis for requesting the information (e.g., to support the analysis of potential environmental impacts), and the expected use of the requested information in the EIS analysis. The RAIs shall be both clear and concise to elicit the necessary information from the applicant. It is noted that should XE be unable to provide certain information, the Contractor shall be able to define

(separate from the draft RAIs) what information could be developed by the Contractor versus information that must come from the applicant.

The NRC will review the draft RAIs and provide any comments to the Contractor, either in writing or through an electronic writing session (e.g., via webinar). The Contractor shall revise the draft RAIs to incorporate comments from the NRC's review and submit the final RAIs to the NRC COR. The NRC will transmit final RAIs to XE for response.

Following the applicant's receipt of the RAIs, discussions between XE, the NRC, and the Contractor regarding the RAIs shall be conducted as necessary to respond to the applicant's questions and to provide clarification.

Following the NRC's receipt and subsequent acceptance review of the applicant's RAI responses, discussions by the NRC and the Contractor with XE regarding the RAI responses shall be conducted as necessary to obtain clarification of the responses. Additionally, based on the review of XE's RAI responses, the Contractor (in coordination with the NRC) shall determine if there is still insufficient information in any areas to complete the EIS. If it is determined that additional RAIs are required, then the Contractor (in coordination with the NRC) shall identify the specific information needed in additional draft RAIs and shall provide the additional draft RAIs to the NRC COR in a letter report. Preparation of the final additional RAIs, transmittal to the applicant, and subsequent discussions with the applicant as necessary will be conducted as for the initial round of RAIs.

OPTIONAL Subtask 4A – Second and Additional Rounds of Requests for Additional Information (RAIs)

(Option shall be exercised via a bilateral task order modification)

If the Contractor determines that the information provided by applicant (i.e., in the license application, SAR, and ER) and the information collected and reviewed during other subtasks is not sufficient to allow the Contractor to complete the EIS, the Contractor shall inform the NRC COR and subsequently, as directed by the NRC COR, prepare and provide the NRC COR with draft additional RAIs in a letter report. The NRC COR will provide the required RAI format and guidance on drafting the RAIs to the Contractor. The draft RAIs shall cover all topical areas needed to complete the EIS.

Task 5 - Plan, Develop, and Complete Draft EIS

The Contractor shall continue to plan, develop, and complete a Draft EIS that will document the NRC staff's evaluation of the potential environmental impacts of the construction and operation of the FFF as proposed by XE. The EIS shall be completed in accordance with the requirements specified in following subtasks. The Contractor shall format the EIS to meet NRC standards in NUREG-0650, *"Preparing NUREG-Series Publications*," current revision, and NUREG-1379, *"NRC Editorial Style Guide.*" Graphics for the EIS shall be prepared by the Contractor in consideration that the NRC's published hardcopy versions of the EIS documents will be printed in black and white.

Prior to submission to the NRC, the Contractor shall review all versions of the EIS for adequacy, accuracy, and consistency in technical content. In addition, reviews of the EIS shall be conducted by the Contractor's technical editor. To the maximum extent possible, the EIS shall read as if written by a single author, rather than seeming to be a compilation of

individual articles written by multiple authors in differing styles. Additionally, the EIS shall be written in "plain language," meeting the intent of NRC's plain writing philosophy, techniques, and guidance (see http://www.nrc.gov/public-involve/open/plain-writing/nrc-philosophy.html#guidance).

The Contractor shall provide a Preliminary Draft EIS that is consistent with 10 CFR Part 51 (see 10 CFR 51.70, 51.71, and 51.80) and the guidance provided in NUREG-1748. Subtasks involved in the development and preparation of the Preliminary Draft EIS by the Contractor include (1) a site visit and additional information gathering meetings / discussions with other federal, state, local, and tribal agencies], (2) development of requests for additional information (RAIs), (3) preparation of a revised annotated EIS outline, a revised purpose and need, and a revised description of the proposed action and alternatives, and (4) preparation of all other preliminary draft chapters/sections of the EIS.

Subtask 5 A–Revised EIS Outline, Draft Chapter 1, and List of Alternatives

The Contractor shall provide a Revised EIS Outline to the NRC COR to use as the basis for preparing the Preliminary Draft EIS. The Revised EIS Outline shall update the initial EIS Outline to include information reflecting (1) NRC review of the preliminary outline, (2) comments and other information from the EIS scoping process, and (3) new information from the site visit and other sources, as appropriate. The Contractor shall also provide a draft version of Chapter One and a list of alternatives incorporating any new information The NRC COR will provide comments on the task deliverables.

Subtask 5B – Preliminary Draft EIS

For the proposed action and each of the reasonable alternatives described in the Revised Description of the Proposed Action and Alternatives, the Contractor shall provide an early preliminary draft of the EIS that includes: (1) a Preliminary Proposed Action & Alternatives, (2) Preliminary Purpose and Need, (3) Preliminary Affected Environment, and (4) Preliminary Impacts on the affected environment and also the impacts for each of the resource areas. This version of the report shall provide the potential environmental impacts of normal operating conditions, including direct, indirect and cumulative impacts, as well as climate change and accident scenarios (as appropriate). Mitigation measures committed to and proposed by the applicant to avoid or minimize environmental impacts shall be identified and taken into consideration in the impact evaluation. The assessment of the impacts shall be based on the guidance provided in NUREG-1748, and shall be conducted for the following resource/impact areas, as appropriate: land use, transportation, geology, minerals and soils, water resources (groundwater and surface water – water use and water quality), ecological resources, air quality, climate change, noise, historic and cultural resources, visual and scenic resources, socioeconomics, public and occupational health (nonradiological and radiological), accidents, waste management, and environmental justice.

In consultation with the NRC COR, the Contractor shall limit impact descriptions to those resource areas that are reasonably impacted by the proposed action or alternatives. Additionally, the length and level of detail of the description of the impacts for each resource area shall be commensurate with the significance of the impacts to that resource area. For the impact discussion for resource areas other than environmental justice, historic and cultural resources, and threatened and endangered species, the Contractor shall make use of the impact significance levels (SMALL / MODERATE / LARGE) in Section 4.2.5.3 of NUREG-1748. The focus of the impact evaluation for those resource areas is to be on the

important attributes of the resource and whether the environmental effects alter and separately destabilize those attributes. For environmental justice evaluations, impacts to historic and cultural resources, and impacts to threatened and endangered species, the Contractor shall use the impact wording specific to those resources (e.g., "disproportionately high and adverse impact," "adversely effect," "adversely affect").

The Contractor shall coordinate development of impacts from any accident scenarios with the NRC COR. If accident scenarios and their impacts, if any, are developed by NRC safety staff in preparation of the NRC's SER for the license application, they will be provided, as necessary, to the Contractor for inclusion (and modification as necessary) in the EIS. Note, however, that if the accident scenarios and impacts (if any) are not yet available for inclusion in the Preliminary Draft EIS, they will be provided by the NRC COR for inclusion by the Contractor in a subsequent version of the Draft EIS. The accident scenario and impact information included in the Draft EIS (and later in the Final EIS) must be presented in a form that can be made publicly available.

The Contractor shall also develop and provide all additional materials necessary for a complete Preliminary Draft EIS including, but not necessarily limited to: EIS introductory information; a description of the purpose and need for the proposed action; a description of the scope of the analysis in the EIS; information on applicable statutory and regulatory requirements, permits and consultations; identification of the applicant's proposed mitigation strategies, if any, and identification of any additional "NRC recommended" mitigation measures that may be necessary to avoid or minimize the impacts, as appropriate; a description of XE's environmental measurement and monitoring programs; a cost-benefit analysis of the proposed action and alternatives; and a summary of environmental consequences. A copy of the Preliminary Draft EIS shall be transmitted securely to the NRC.

Subtask 5C – Revised Preliminary Draft EIS

After receiving comments on Preliminary Draft EIS from the NRC staff, the Contractor shall prepare and provide the NRC COR with a Revised Preliminary Draft EIS in accordance with the NRC's technical and publication guidance, the NRC–approved Revised Annotated EIS Outline, and NRC staff comments. A copy of the Revised Preliminary Draft EIS also shall be transmitted securely to the NRC.

Subtask 5D – Writing Session for the Draft EIS

The NRC will conduct a writing session of up to five (5) days in length with the Contractor on the Revised Preliminary Draft EIS. This writing session shall take place either at the NRC Headquarters offices in Rockville, MD or at the Contractor's office. The purpose of the writing session shall be for the NRC to present its comments on the Preliminary Draft EIS and to provide clarification of the comments, as needed. The Contractor shall make available staff involved in the preparation of the Preliminary Draft EIS to take part in the writing session, either in person or by telephone or other appropriate medium. The writing session agenda and schedule shall be determined in consultation with the NRC COR in advance of the meeting.

Subtask 5E – Prepare Draft EIS (Concurrence Version)

The Contractor shall revise the Preliminary Draft EIS consistent with (1) NRC comments received at the Preliminary Draft EIS writing session, (2) NRC resolution of any cooperating agency comments (if there are one or more agencies cooperating with the NRC in the preparation of the EIS), and (3) the applicant's RAI responses. This concurrence version of the Draft EIS shall be securely transmitted to the NRC COR... Versions of this working copy of the draft report maybe be transmitted between the NRC reviewers and the contractor as agreed upon to meet the final schedule for publication of the draft EIS.

Subtask 5F – Final Draft EIS – (Publication Ready Version)

The Contractor shall incorporate comments from the Draft EIS (concurrence version) and writing session to produce the "final" Draft EIS. The Contractor will work with the COR to address any open item or unresolved issues prior to submitting the final Draft EIS. The Contractor shall securely submit this final Draft EIS to the NRC COR.

As directed by the NRC COR, the Contractor shall incorporate any comments generated during the NRC and cooperating agency (if any) internal and legal review of the Draft EIS. During this time, to facilitate the review process and expedite subsequent revision of the Draft EIS, the Contractor shall assist in promptly addressing and responding to NRC and cooperating agency management, legal, and technical reviewer comments, as requested by the NRC COR. Within two (2) business days of the NRC COR's direction (or longer at the NRC COR's discretion), the Contractor shall securely transmit a "revised final" Draft EIS that addresses the comments received and notify the NRC COR. Subsequently, there may be up to two (2) additional versions of the revised final Draft EIS requested from the Contractor by the NRC COR, with each of these two versions incorporating additional revisions that are presently anticipated to be relatively minor and editorial in nature. Each of these additional versions shall be transmitted on a secure server by the Contractor within one (1) business day of receiving direction from the NRC COR (or longer at the NRC COR's discretion).

Following the resolution of comments received during the pre-Draft EIS issuance document review and concurrence periods, the Contractor shall submit a "publication-ready" version of the Draft EIS to the NRC COR. The publication ready version of the report should be complete with all changes, updates, hyperlinks, figures and tables complete and in a format identified by the NRC publication guidance documents and COR direction.

TASK 6 - Post Draft EIS Publication Activities

The contractor shall revise the Draft EIS to incorporate comments from federal state and public and the NRC review to produce the final EIS. The contractor shall submit the final EIS to the NRC COR as indicated below. Specific subtasks include:

Subtask 6A – Support for Draft EIS public comment meetings

The Contractor is required to attend and support the Draft EIS public comment meeting(s) for the project. The Draft EIS public meeting(s) shall be attended by the Contractor's Project Manager and up to five (5) Contractor technical staff members (subject matter experts). The Contractor's meeting attendees shall be determined in consultation with the NRC COR in advance of the scoping meeting(s). The NRC anticipates holding one virtual and two (2) in-

person public meetings in the project area after publishing the draft EIS and before the final EIS during the public comment period and will require a one-week trip to the project site area.

In addition, the Contractor may be requested by the NRC COR to provide information for and to review and provide comments on the PowerPoint (or similar format) presentation prepared by the NRC staff for the meeting(s), and to assist the NRC staff in the preparation of anticipated questions and responses to those questions as well as other materials for the meeting(s).

Subtask 6B - Compilation of Comments (Comment Binning)

The contractor shall identify individual comments on the Draft EIS made during the comment period from all comment gathering platforms (i.e., regular mail, <u>www.regulations.gov</u> website, email and meetings transcripts) and organize (i.e., bin) the comments according to topic area. This activity shall be in coordination with the NRC Comment Response Database on the EARRTH platform. Currently, the NRC (estimates the number of comments identified at less than or equal to 100 comments, according to the guidelines provided to the NRC COR. The NRC COR will review and approve the binning of the comments prior to the contractor developing the comment responses. The Contractor may have to revise the binning of the comments based on NRC CORs feedback. The NRC expects that some comments will be submitted to the NRC prior to the end of the public comment period on the Draft EIS. Therefore, the contractor shall begin this subtask upon receipt of the first set of comment submittals, which will be provided to the contractor by the NRC COR. The comment submittals from the NRC COR. The contractor shall be binned within 14 calendar days of receiving the final set of comment submittals from the NRC COR. The contractor shall submit the binned comments database report to the NRC COR.

Subtask 6C - Comment Response Report

The Contractor shall prepare a Draft Comment Response Report that provides responses to the comments made on the Draft EIS. The Contractor shall revise the comment response report in response to the NRC's review and produce the final comment response report. The Contractor shall submit the Final Comment Response Report to the NRC COR.

Optional Subtask 6D - Significant Comments Received on Draft EIS

In the event that significantly larger numbers of comment submissions are received (>100 comments) and the level of effort is exceeded for responding to these comments, the contractor shall provide the same level of detailed response for Subtask 6B and shall update the report in Subtask 6C to include additional comments. If comments require additional analysis and/or significant revision to the draft EIS, the contractor shall update the COR and get direction.

TASK 7 -Develop and Complete the Final EIS

The contractor shall finalize the EIS based on additional information and comments from the NRC staff, public and federal agencies.

Subtask 7A - Preliminary Final EIS

Based on addition information obtained since the publication of the draft EIS and public comments , the contractor shall revise the draft EIS by incorporating necessary documentation regarding consultations over Section 7 of Endangered Species Act (ESA) and Section 106 of NHPA, and in response to public comments, as needed, based on developed responses under Task 6. The revised draft EIS now called the Preliminary Final EIS shall be reviewed by a technical editor formatted to NRC standards and reviewed for technical content. The "Preliminary Final EIS" shall be submitted to the NRC COR. A writing session may be required after NRC staff have reviewed the Preliminary Final EIS deliverable.

Subtask 7B - Writing Session for Preliminary Final EIS

The NRC may conduct a writing session of up to five (5) days in length with the Contractor on the Preliminary Final EIS. This writing session may take place either at the NRC Headquarters offices in Rockville, MD or at the Contractor's office. The purpose of the writing session would be to discuss and resolve the NRC comments on the Preliminary Final EIS. The Contractor shall make available staff involved in the preparation of the Preliminary Draft EIS to take part in the writing session, either in person or by telephone or other appropriate medium. The writing session agenda and schedule will be determined in consultation with the NRC COR in advance of the meeting.

Subtask 7C - Final EIS

The Contractor shall revise the preliminary final EIS in response to NRC's review comments received from the NRC COR. This final EIS shall be submitted to the NRC COR. Reports shall be transmitted securely and, in a format, directed by the NRC COR which could include Word and Adobe formats.

As directed by the NRC COR, the Contractor shall incorporate any comments generated during the NRC and cooperating agency (if any) internal and legal review of the Draft Final EIS. During this time, to facilitate the review process and expedite subsequent revision of the Draft Final EIS, the Contractor shall assist in promptly addressing and responding to NRC and cooperating agency management, legal, and technical reviewer comments, as requested by the NRC COR.

The Contractor shall submit a "publication-ready" version of the Draft Final EIS to the NRC COR. The publication ready version of the report shall be complete with all changes, updates, hyperlinks, figures and table complete and in a format identified by the NRC publication guidance documents and COR direction.

Task 8 – Hearing Support

It is presently anticipated that petitioners may submit written contentions on the XE license application and/or NRC's proposed licensing action for consideration by the NRC's Atomic Safety Licensing Board (ASLB). If the ASLB grants standing to any of the petitioners and admits any of the proffered contentions, the ASLB will hold a "contested" hearing held on the project. If needed and as directed by the NRC COR, the Contractor shall support the NRC staff by reviewing the submitted contentions on environmental issues and providing written responses (including copies of reference materials, as necessary) to these contentions, as

well as other written materials in response to interrogatories from the ASLB on the contentions and related matters, as required. If needed and as requested by the NRC COR, the Contractor shall also review and provide written comments on any written materials submitted by the applicant and other parties relevant to the submitted contentions. It shall be assumed that up to ten (10) contentions on environmental issues will be submitted by petitioners.

Task 9 - NHPA SECTION 106 REVIEW

As needed, the Contractor shall coordinate meetings, site visits, and communication between all parties (Tribes, Tribal Historic Preservation Offices [THPOs], **State** Historic Preservation Office [SHPO], NRC, the Advisory Council on Historic Preservation [ACHP], etc).

Subtask 9A – Assistance with Section 106 Activities

The Contractor shall plan, coordinate, and conduct activities relating to the NHPA Section 106 review, as needed and in consultation with the NRC COR. The schedule and timing of the consultation activities, review, and required findings shall be coordinated with the schedule of the NEPA review so that the Section 106 process, to the extent possible, is completed along with the NEPA review. That is, the NEPA and Section 106 reviews shall be coordinated together to leverage site visits, information gathering meetings, public involvement, among other opportunities, as appropriate.

Activities to be completed by the Contractor may include:

- Conducting research, sharing expertise, and providing technical assistance to the NRC COR;
- Assisting with development, delineation and graphical representation for the Areas of Potential Effect;
- Participating in discussions with NRC experts as well as with the ACHP and the Licensee's consultants to resolve conflicts and to help move the Section 106 process along; and
- Review of application and other documents that support the licensing action and provide feedback to COR.

The Contractor shall:

- Develop reports and recommendations complying with SHPO guidelines for cultural reports;
- Participate in discussions with NRC and stakeholders to facilitate the Section 106 consultation process;
- Interact with all Tribes involved, as established by the NRC, and ensure adequate communication is maintained between all parties; and
- Provide final reports and documentation for concurrence of finding with the SHPO.

If necessary and as directed by the NRC COR, the Contractor shall prepare a summary report(s) documenting the Section 106 consultation activities performed including details such as personnel involved, and decisions made. Prior to initiation of this Task, the NRC COR will provide more direction on the details of the Section 106 Review Summary Report.

Subtask 9B - Tribal Meetings

For at least one and up to three meetings, and at the direction of the NRC COR, the Contractor shall prepare for and attend in-person, multi-Tribe meetings in locations to be determined. Tasks may include:

Arrange and facilitate meeting

- Contact Tribes (including confirmation and response to questions);
- Coordinate approval for meeting materials;
- Provide logistics for meeting (select meeting location, provide necessary maps and other materials, instrumentation, and any other support including on site transportation, as needed);
- Support COR in all activities for the meeting;
- Prepare summary of tribal meeting for NRC and stakeholder review; and
- Follow-up with any action items.

Prepare for, attend and follow-up for teleconferences (at least 2 calls), including:

- Arranging teleconferences and providing for all logistics;
- Contacting Tribes, including confirmation and response to questions; and
- Preparing summary of teleconference for NRC review and approval.

OPTIONAL Subtask 9C - Ethnographic Study (Option shall be exercised via a bilateral task order modification)

The Contractor shall conduct an ethnographic study. The scope of the study may include assembly and review of existing cultural resource records and other primary and secondary sources and require a site visit.

Sources may include:

- General environmental data sources (e.g., plant, animal, water, mineral) that may provide information regarding traditional cultural uses of the landscape;
- Existing historic, ethnohistoric, and ethnographic studies for the landscape available from regional studies and academic libraries;
- Tribal historical resources, local libraries, historical societies, and other repositories;
- Archaeological site reports and records for the landscape and its environs;
- Tribal representatives (e.g., THPOs) as well as Tribal elder interviews (interview questions shall also be part of the record keeping); and
- Any other resources that would contain useful historical context regarding historical properties that might have cultural and religious significance to interested Tribes near the proposed project.

OPTIONAL Subtask 9D - Traditional Cultural Property Survey and Report (Option shall be exercised via a bilateral task order modification)

The Contractor shall provide Traditional Cultural Property (TCP) survey and report assistance to tribes, as directed by the NRC COR. Assistance may include:

- Work with NRC COR and tribes to coordinate site survey and logistics
- Provide Tribes with record keeping;
- Work with Tribes with TCP identification and documentation efforts (this might require the Contractor to be onsite with affected Tribes for the duration of the study);
- Provide materials for use in site surveys including maps;
- Provide logistics and support to tribes including site transport,
- Assist Tribes in developing the TCP study summary report; and
- Provide overall management of the TCP survey and report development. If the Contractor becomes aware of any issues (e.g., communication, technical, schedule), the Contractor shall inform the COR within one business day by email.

OPTIONAL Subtask 9E - Additional Support to Conduct Required Analyses (Option shall be exercised via a bilateral task order modification)

At the direction of the NRC COR, the Contractor shall provide resources for additional support for Section 106 Consultation activities listed in Subtask 9A. Prepare documentation and/or report to SHPO based on interaction, independent analysis, and tribal site survey information. All documentation shall be consistent with SHPO guidelines

TASK 10 – Development Safety Evaluation Report Chapter – Environmental Protection

The Contractor will evaluate the application material for requirements associated with the environmental protection for the NRC Safety Evaluation Report. This activity includes reviewing relevant information and application materials, developing RAIs and reviewing RAI responses and producing a draft and final version of the SER chapter. These activities will be completed in accordance with the staff's guidance in NUREG-1520, "Standard Review Plan for Fuel Cycle Facilities License Applications".

5. APPICABLE DOCUMENTS AND STANARDS

The documents listed below are relevant to the requirement and shall be used by the Contractor in the performance of the task order. The documents are publicly available and may be obtained by the Contractor from ADAMS or will be provided by the NRC COR. The NRC COR will continue to identify and provide necessary documents to the Contractor as they become available throughout the period of performance of this task order.

The Contractor shall be familiar with and shall rely upon the most current version of the following documents in the performance of this effort:

- XE's license application, SAR, and ER
- XE's responses to RAIs and any other supplemental information provided by XE
- NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs"
- Guidance documents related to NEPA and consultation activities

- NUREG-1520, "Standard Review Plan for Fuel Cycle Facilities License Applications"
- NUREG-1379, "NRC Editorial style Guide"
- NUREG-0650, "Preparing NUREG-Series Publications" "

6. DELIVERABLES AND DELIVERY SCHEDULE

The presently anticipated schedule for deliverables/milestones required under this task order is identified in Table 1 below. All deliverables shall be provided electronically to the NRC COR in MS Word format. The MS Word documents shall be saved such that they are compatible with previous MS Word versions. In addition, certain deliverables (primarily the "final" and "revised final" versions of the Draft EIS, but others if requested) shall also be provided electronically in PDF format, upon request from the NRC COR.

Task	Subtask	Deliverable/Milestone	Anticipated Schedule		
1		Project Manager Detailed Project Schedule in MS Project	Provided to NRC COR upon request		
2	-	Bibliographic listing of all documents collected and file of electronic copies. Permissions for use of copyrighted materials and reference documents	Provided to NRC COR as needed		
2		List of federal, tribal, state, and local statutes, laws, and permits that are applicable to the project	As directed by NRC COR		
3	А	Acceptance Review Report and Request for Supplemental Information (if necessary)	30 days after receipt of the application		
	В	Collect and Review Information	No deliverable		
	С	 Initial Technical Review Report to include: information needs, list of required consultations list of permits and laws initial EIS outline materials and information for focused information meetings with local government and public organizations, Statement of Purpose and Need and List of Alternatives 	30 days after NRC Acceptance of the Application		
	D	Scoping Meeting materials and preparations	14 days prior to scoping meeting and site visit trip		
	D	Compilation of questions and issues for focused scoping meetings (information needs) and site visit	 14 days prior to scoping meeting and site visit trip Draft: 7 days after site visit Final: 7 days after receipt of comments from NRC COR 45 days after scoping meetings Within 14 days from receipt of the last comments from the NRC COR on the draft scooping summary report 		
		Draft and Final Site Visit Trip Reports			
	D	Draft Scoping Summary Report (include Scoping Comment Response Report)			
	D	Final Scoping Summary Report			
		Interim versions of the Scoping Summary Report	ort As directed by the NRC COR		

Table 1. Deliverable/Milestone Schedule

4		Draft and Final RAIs	Draft: 30 days from end of site visit Final: 45 days from end of the site visit		
		Interim versions of the Draft and final RAIs	As directed by the NRC COR		
4 (Optional)	А	Second and Additional Rounds of RAIs	As directed by the NRC COR		
5 A		Revised EIS Outline, Draft Chapter 1 and List of Alternatives	As directed by NRC COR		
	В	Draft Description of Affected Environment and Environmental Impacts	60 days after conclusion of site visit		
	В	Preliminary Draft EIS (for internal review)	120 days after conclusion of site visit trip		
	С	Revised Preliminary Draft EIS	As directed by NRC COR		
	E	Draft EIS (Concurrence Version)	14 days from the receipt of NRC's final comments and resolution of comments from cooperating agencies (if applicable) on Preliminary Draft EIS		
	F	Final Draft EIS (Publication Ready Version)	7 days after staff publication review		
		Interim versions of the EIS	As directed by NRC COR		
6	В	Draft EIS comment binning database report.	Within 14 days of closing of the comment period and final comment transmittal		
	A	Materials in support of Draft EIS public meetings	At least 14 days in advance of scheduled meetings		
	С	Draft comment Response Report	Within 30 days of end of comment period		
	С	Final Comment Response report	Within 5 days of NRC comments		
		Interim versions of draft Comment Response report	As directed by NRC COR		
7	А	Preliminary Final EIS	Within 90 days of end of comment period		
	В	Working version EIS	As directed by NRC COR		
	С	Final EIS Publication version	Within 150 days of end of comment period		
		Interim versions of the Final EIS	As directed by the NRC COR		
8		Hearing Support (Reponses and/or Comments_	As directed by NRC COR (based on direction from ASLBP)		
9	А	Summary Reports of Section 106 Consultation Activities	As needed, with schedule to be agreed to between NRC COR and Contractor		
	А	Comments and review of cultural resource report for NHPA Section 106 consultation	Within 10 business days from initiation of Section 106 consultation		
	В	Site visit report and/or meeting summary	Within 10 business days of site visit/meeting		
	В	Teleconference Summary	Within 10 business days of teleconference		
	В	Documentation/Reports	Schedule to be agreed upon between NRC COR and Contractor		

(Optional)	с	Ethnographic Report	Schedule to be agreed to between NRC COR and Contractor		
(Optional)	D	TCP site survey	Within 10 days of tribal input and after last survey		
10		"Environmental Protection" Chapter in Safety Evaluation Report RAIs: As directed by NRC CC Draft Chapter: As directed by Final Chapter: As directed by			
All	I	Monthly Letter Status Report	NLT 20th calendar day of the following Month		

Note: All days are calendar days unless otherwise specified.

7. REPORTING REQUIRMENTS

Monthly Letter Status Report (MLSR)

The contractor shall provide a Monthly Letter Status Report in accordance with the base contract which consists of a technical progress report and financial status report by the 20th day of the following month. This report will be used by the Government to assess the adequacy of the resources proposed by the contractor to accomplish the work contained in this SOW and provide status of contractor progress in achieving activities and producing deliverables. The report shall include order summary information, work completed during the specified period, milestone schedule information, problem resolution, travel plans, and staff hour summary. If no work was performed during the prior month, the contractor shall not prepare and submit an MLSR.

8. PERSONNEL QUALIFICATIONS

Labor Category	Qualification Requirements		
Project Manager	Minimum Qualifications		
	Bachelor of Engineering or Science		
	General understanding of the range of issues in preparing an EIS and SER Chapter		
	5 years of experience in Project Management and implementing and overseeing National Environmental Policy Act (NEPA) environmental reviews, National Historic Preservation Act (NHPA) Section106 reviews, and Endangered Species Act (ESA) Section 7.		
*Sr. Technical Staff/Subject	Minimum Qualifications		
Matter Expert (SME)	Bachelor's Degree in Engineering or Science		
	Significant understanding of the depth of review generally required for preparing an EIS and an SER chapter on environmental protection and monitoring, and specifically for the technical areas assigned to evaluate.		

	 10 years of technical experience in conducting environmental reviews in one or more of the specific technical areas assigned to complete the environmental review including: Land Use Transportation Geology/seismology, minerals and soils water resources (groundwater and surface water) ecological resources climatology, meteorology and air quality, climate change noise historic and cultural resources socioeconomics public and occupational health (non-radiological and radiological), accidents waste management environmental justice cumulative impacts assessment mitigation measures environmental measurements and monitoring Staff working on NHPA 106 Reviews must meet the professional standards under the regulations developed by the Secretary (see 36 CFR 800.2(a)(1)) Experience presenting technical information both oral and written Desired but not Required Qualifications		
*Sr. Technical Reviewer	Minimum Qualifications		
	Bachelor's Degree in Engineering or Science		
	Substantial understanding of the depth of review generally required for preparing an EIS and an SER chapter on environmental protection and monitoring, and specifically for the technical areas assigned to evaluate.		
	5 years of technical experience in conducting environmental reviews in one or more of the specific technical areas assigned to complete the environmental review including:		
	 Land Use Transportation Geology/seismology, minerals and soils water resources (groundwater and surface water) ecological resources climatology, meteorology and air quality, climate change noise historic and cultural resources 		

	-			
	 visual and scenic resources socioeconomics 			
	 public and occupational health (non-radiological and radiological), 			
	accidents			
	waste management			
	environmental justice			
	 cumulative impacts assessment mitigation measures environmental measurements and monitoring 			
	Staff working on NHPA 106 Reviews must meet the professional standards under the regulations developed by the Secretary (see 36 CFR 800.2(a)(1))			
	Experience presenting technical information both oral and written			
	Desired but not Required Qualifications			
	Experience providing written and oral testimony at adjudicatory hearings			
*Technical Reviewer	Minimum Qualifications			
	Bachelor's Degree in Engineering or Science			
	Understanding of the depth of review generally required for preparing an EIS and an SER chapter on environmental protection and monitoring, and specifically for the technical areas assigned to evaluate.			
	3 years of technical experience in conducting environmental reviews in one or more of the specific technical areas assigned to complete the environmental review including:			
	Land Use			
	Transportation			
	 Geology/seismology, minerals and soils 			
	 water resources (groundwater and surface water) 			
	ecological resources			
	 climatology, meteorology and air quality, climate change noise 			
	 historic and cultural resources 			
	visual and scenic resources			
	socioeconomics			
	 public and occupational health (non-radiological and radiological), accidents 			
	waste management			
	environmental justice			
	cumulative impacts assessment			
	mitigation measures environmental measurements and monitoring			
	Staff working on NHPA 106 Reviews must meet the professional standards under the regulations developed by the Secretary (see 36 CFR 800.2(a)(1))			
	Experience presenting technical information both oral and written			

	Desired but not Required Qualifications Experience providing written and oral testimony at adjudicatory hearings
Technical Editor/Publication	Minimum Qualifications
Support	Bachelor of Science or Bachelor of Arts
	Understanding of the NRC's publication and editorial requirements
	5 years of experience in technical editing

The Contractor shall ensure that the technical staff performing under this task order possess the necessary experience and expertise in the technical areas assigned to them.

*The NRC requires that technical team of Sr. Technical Staff/SME, Sr. Technical Reviewer, and Technical Reviewer as a whole meets all the specific technical areas listed above.

9. GOVERNMENT-FURNISHED PROPERTY

The COR will facilitate the Contractor's access to PNNL's EARRTH SharePoint site. The Comment Response Database is also found on the EARRTH website.

10. PERIOD OF PERFROMANCE

The period of performance for this task order is September 30, 2021 through September 30, 2024.

11. PLACE OF PERFORMANCE

Except as otherwise indicated in Section 4 and Section 12.1 of this SOW, the work shall be performed at the Contractor's facilities.

12. SPECIAL CONSIDERATIONS

12.1 Travel

The contractor shall be authorized and reimbursed for travel expenses consistent with the Federal Travel Regulation (FTR) and the limitation of funds for this task order. All travel requires prior written COR approval. Meetings and other activities that may require Contractor travel are summarized in Table 2 below. At the NRC COR's discretion, some of these meetings may be held in the form of teleconferences or webinars or at the contractor's site.

Task	Purpose	Location	Number of Trips	Days per Trip	Contractor Staff Members per Trip
2	Quarterly Progress Meetings (as needed and requested by NRC COR)	Rockville, MD	8	3	1
4	RAI Meetings	Rockville, MD	1		2
3D	Scoping public meetings and site visit	XE site vicinity	1	5	5
5D	Revised Preliminary Draft EIS Writing Session	Rockville, MD	1	5	2
6A	Draft EIS comment public meetings	XE site vicinity	1	5	5
7B	Preliminary Final EIS (Writing Session)	Rockville, MD	1	5	2
8	Hearing Preparation (as needed and requested by NRC COR)	Rockville, MD	1	4	2
9B	Tribal Meetings (as needed and requested by NRC COR)	XE site vicinity	3	4	1
9C optional	Ethnographic Study	XE site vicinity	1	5	2
9D optional	Tribal survey	XE site vicinity	3	5	2

Table 2. Meetings and Travel

12.2 Security

Work on this task order will involve the handling of documents that contain proprietary information. The contractor shall safeguard documents containing proprietary information against unauthorized disclosure. After completion of work, the contractor must either destroy the documents or return them to the NRC. If they are destroyed, please confirm this in an e- mail to the COR with a copy to the CO and include the date and manner in which the documents were destroyed.

12.3 License Fee Recovery

The EIS preparation work and the NHPA Section 106 work are fee-recoverable.

The Hearing Support work is not fee-recoverable.

12.4 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 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. The definition of "unlimited rights" is contained in Federal Acquisition Regulation (FAR) 27.401, "Definitions." FAR clause at FAR 52.227-14, "Rights in Data-General," is hereby incorporated by reference and made a part of this contract/order.

12.5 Quality Control Program

The Contractor's approach to quality control shall focus on project management and document production processes and tools that assure the quality of the deliverables and integrity of the environmental review process.

The Contractors' project manager will serve as the focal point for coordinating the project activities and will be responsible for assuring the timely and high-quality submittal of deliverables. All information shall be accurate and complete. The project management responsibilities include verifying quality requirements and deliverables specifications, responding satisfactorily and in a timely manner to feedback, and continuously improving products and services by communicating to the necessary personnel and applying lessons learned. The Contractor's project manager shall also ensure that scientific and technical reports are developed in accordance with established practices for publishing scientific and technical information.

Project deliverables will be reviewed by someone other than the project manager to ensure that they are technically accurate and complete.

Document version control is critical to the document production process. The Contractor shall ensure that previous versions are kept so the Contractor will be able to return to any earlier version of a document and be able to track the changes and the basis for those changes.

12.6 Key Personnel

Refer to Section H - KEY PERSONNEL. (JAN 1993)