

ORDER FOR SUPPLIES OR SERVICES

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

1. DATE OF ORDER 09/14/2023		2. CONTRACT NO. (If any) 31310023D0005		6. SHIP TO: a. NAME OF CONSIGNEE NUCLEAR REGULATORY COMMISSION	
3. ORDER NO. 31310023F0131		4. REQUISITION/REFERENCE NO. RES-23-0292		b. STREET ADDRESS 11555 ROCKVILLE PIKE	
5. ISSUING OFFICE (Address correspondence to) US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001				c. CITY ROCKVILLE	
				d. STATE MD	e. ZIP CODE 20852-2738
7. TO: PAUL MALDONADO				f. SHIP VIA	
a. NAME OF CONTRACTOR SOUTHWEST RESEARCH INSTITUTE				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE	<input checked="" type="checkbox"/> b. DELIVERY
c. STREET ADDRESS 6220 CULEBRA RD				REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any including delivery as indicated.	
d. CITY SAN ANTONIO		e. STATE TX	f. ZIP CODE 782385166		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITION NG OFFICE OFF OF NUCLEAR REG RESEARCH	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))					12. F.O.B. POINT
<input type="checkbox"/> a. SMALL	<input checked="" type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	
<input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED	<input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM	<input type="checkbox"/> h. EDWOSB			
13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 03/29/2025		16. DISCOUNT TERMS 30
a. INSPECTION Destination	b. ACCEPTANCE Destination				

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	The Contractor shall provide services in accordance with the Statement of Work entitled, "Review of Structural Design Codes and Standards to Inform the Updating of Current Regulatory Guidance" Continued ...					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:						
a. NAME	FISCAL ACCOUNTING PROGRAM				\$0.00	17(i) GRAND TOTAL
b. STREET ADDRESS (or P.O. Box)	ADMIN TRAINING GROUP AVERY STREET A3-G BUREAU OF THE FISCAL SERVICE PO BOX 1328					
c. CITY	d. STATE	e. ZIP CODE			\$609,355.00	
PARKERSBURG		WV	26106-1328			

22. UNITED STATES OF AMERICA BY (Signature)		09/14/2023		23. NAME (Typed) RICHARD W. ROBINSON TITLE: CONTRACTING/ORDER NG OFFICER	
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ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

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

DATE OF ORDER 09/14/2023	CONTRACT NO. 31310023D0005	ORDER NO. 31310023F0131
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>Option Period 1 is hereby exercised as part of the task order award.</p> <p>CONTRACTOR ACCEPTANCE OF TASK ORDER NO. 31310023F0131</p> <p>Acceptance of Task Order No. 31310023F0131 under contract No. 31310023D0005 should be made by having an official, authorized to bind your organization, execute two copies of this document in the space provided and return one copy to the Contracting Officer. You should retain the other copy for your records.</p> <p>Accepted Task Order No. 31310023F0131 under Contract No. 31310023D0005:</p> <p>_____ Signature</p> <p>_____ Name</p> <p>_____ Title</p> <p>_____ Date</p> <p>Task Order Base and All Options: \$609,355.00 Task Order Exercised Amount: ██████████ Task Order Obligation Amount: ██████████ Accounting Info: 2023-X0200-ADVRX-60-60D001-60B106-1061-1A-6-220-255B-1A-6-220-1061-ADVR Period of Performance: 09/15/2023 to 03/29/2025</p>					

TOTAL CARR ED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

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B - Supplies or Services/Prices

B.1 BRIEF PROJECT TITLE AND WORK DESCRIPTION (AUG 2011)

(a) The title of this project is: Review of Structural Design Codes and Standards to Inform the Updating of Current Regulatory Guidance

(b) Summary work description: The overall objective of this task order is to inform the NRC review and endorsement of the forthcoming revisions of civil/structural codes and standards for Safety-Related structures. The goal of this research is to review the updated codes and standards ACI 349 and ACI 359/ASME Section III, Division 2, that are expected to be published in 2023. These codes are endorsed by RG 1.136, 1.142, 1.199 and applicable for existing as well as new and advanced reactors.

B.2 CONSIDERATION AND OBLIGATION—COST-PLUS-FIXED-FEE (AUG 2023)

(a) The base and all option(s) value (total contract value) is: [\$609,355], of which the sum of [REDACTED] represents the estimated reimbursable costs, and of which [REDACTED] represents the fixed- fee.

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

(c) The base and exercised option(s) value is [REDACTED] of which the sum of [REDACTED] represents the estimated reimbursable costs, and of which [REDACTED] represents the fixed- fee.

(d) The amount obligated by the Government with respect to this contract is [REDACTED] of which the sum of [REDACTED] represents the estimated reimbursable costs, and of which [REDACTED] represents the fixed- fee.

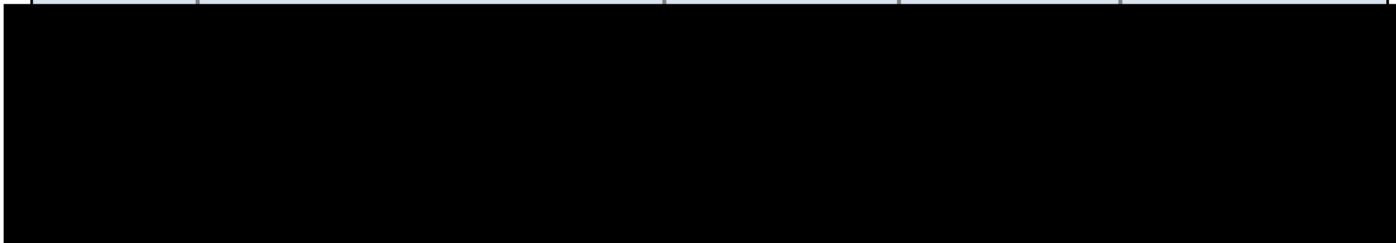
(e) This is a fully-funded contract and FAR 52.232-20 – “Limitation of Cost” applies.

(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 [REDACTED]

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

B.3 PRICE/COST SCHEDULE

CLIN	Description	Est Cost	Fixed Fee	Total Cost Plus Fixed Fee
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TOTAL			\$609,355

DESCRIPTION	Estimated Amount Base Period	Estimated Amount Option Period 1	Estimated Amount Option Period 2	Total Estimated Costs
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Total Estimated Costs and Fixed-Fee				\$609,355
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C - Description/Specifications

C.1 STATEMENT OF WORK

1. PROJECT TITLE

Review of Structural Design Codes and Standards to Inform the Updating of Current Regulatory Guidance

2. BACKGROUND

Structural Design codes and standards are being updated and their completed revisions are expected to be published in 2023. The updated codes and standards will include provisions that are important for the new commercial nuclear power plants (NPP) and for continued operation of the existing NPPs. After the publication of the revised codes and standards, the NRC's Regulatory Guides (RGs) that endorse them must be updated in a timely manner. There are plans to perform confirmatory reviews of several topics in the codes for reinforced concrete design, namely ACI 349, "Code Requirements for Nuclear Safety-Related Concrete Structures and Commentary," and 359/ASME Section III, Division 2, "Code for Concrete Containments," including, for example, the provisions related to the use of high strength reinforcing bars, load factors, special anchorage to concrete, and newer design provisions for impactive and impulsive loading. The RGs corresponding to such codes and standards are RG 1.142, "Safety-Related Concrete Structures for Nuclear Power Plants (Other Than Reactor Vessels and Containments)," RG 1.199, "Anchoring Components and Structural Supports in Concrete," and RG 1.136, "Design Limits, Loading Combinations, Materials, Construction, and Testing of Concrete Containments." The staff is planning to merge the updated provisions corresponding to RG 1.199 into RG 1.142.

3. OBJECTIVE

The overall objective of this task order is to inform the NRC review and endorsement of the forthcoming revisions of civil/structural codes and standards for Safety-Related structures. The goal of this research is to review the updated codes and standards ACI 349 and ACI 359/ASME Section III, Division 2, that are expected to be published in 2023. These codes are endorsed by RG 1.136, 1.142, and 1.199 and applicable for the existing as well as new and advanced reactors.

4. SCOPE OF WORK

The Contractor shall perform the following tasks:

Task 1 – Project Management

The contractor shall provide project management support during the entire period of performance of this project. This project management support is needed to ensure consistent reporting of activities and spending as well as ensure schedules are met. One annual meeting is anticipated each year for the contractor Project Manager (PM), NRC Task Order Contracting Officer's Representative (COR), and technical leads to discuss work being performed under the task order. Monthly letter status reports (MLSRs) will be required as discussed in Section C.4.

Task 2 – Confirmatory review of ACI 349

The contractor shall perform a confirmatory review of ACI 349 and provide technical justification input of all updated provisions, including but not limited to the provisions related to the use of high strength reinforcing bars, load factors, special anchorage to concrete, and new design provisions for impactive and impulsive loading. This code is endorsed in RG 1.142 and RG 1.199. The contractor shall complete a technical report, in the format of a NUREG/CR, with all updates and findings of this confirmatory review including recommendations for updating of RG 1.142 which is expected to include the updated provisions of RG 1.199.

The contractor shall prepare and submit interim progress reports during the base period and option periods if exercised, documenting the results of the confirmatory review. A Final Draft NUREG/CR report shall be prepared that includes research results, recommendations, and conclusions. The COR will provide comments to the interim progress report and the draft of the final report within 45 calendar days from date of receipt.

A final NUREG/CR report that is Section 508 conformant shall be submitted resolving and incorporating comments by the COR which has been thoroughly reviewed (technical and editorial).

Task 3 – Confirmatory review of ACI 359/ASME Section III, Division 2

The contractor shall perform a confirmatory review of ACI 359/ASME Section III, Division 2 and provide technical justification input of all updated provisions, including the provisions related to the use of high strength reinforcing bars, load factors, special anchorage to concrete, and new design provisions for impactive and impulsive loading. This code is endorsed in RG 1.136. The contractor shall complete a technical report, in the format of a NUREG/CR, with all updates and findings of this confirmatory review including recommendations for updating of RG 1.136.

The contractor shall prepare and submit interim progress reports during the base period and option periods if exercised, documenting the results of the confirmatory review. A draft NUREG/CR report shall be prepared and submitted that includes all research results, recommendations, and conclusions. The NRC will provide comments to the interim progress report and the final report draft within 45 calendar days from date of receipt.

A Final NUREG/CR report that is Section 508 conformant shall be prepared and submitted resolving and incorporating comments by the COR, which has been thoroughly reviewed (technical and editorial).

Task 4 – Briefings and Meetings

The following briefings and meetings will be required during the base period and option years if exercised:

- a. Kickoff Meeting – The contractor shall participate in a kick-off meeting during the base period with the COR and other NRC technical staff at a time to be agreed with the COR but no later than 30 calendar days after the date of award. The contractor shall present the execution plan for the project to NRC staff at this meeting. The COR and the contractor's project manager will jointly plan the meeting
- b. Monthly Status Briefing – The contractor shall present the status of the ongoing work to NRC staff around 20th day of each month following the submission of the MLSR per Section 5.
- c. Results Review Briefing – The contractor shall present the results of the research at key

stages of the project and the development of the report (Interim Progress Reports, Draft Final Report, and Final Report) to the NRC staff at a time to be agreed upon with the COR but not later than one month after the submittal of each stage of the report (See Table in Section 6).

d. External/Internal Related Briefings – The contractor shall prepare slide presentations (e.g., power point) for NRC staff to support external and internal related briefings, meetings as directed by the COR. Any electronic content created by the contractor for sharing with the public shall be Section 508 conformant.

5. REPORTING REQUIREMENTS

5.1 Monthly Letter Status Report (MLSR)

The contractor shall provide a Monthly Letter Status Report (MLSR) per Section C.6 of the Base Contract. If no work was performed during the prior month, the contractor shall not prepare and submit an MLSR. The MLSR shall be provided electronically to the COR and the Contracting Officer (CO) by the 20th calendar day of the following month.

5. 2 Final Report

The contractor shall provide a final report summarizing the work performed and the results and conclusions under this task order. NRC will provide the style and format requirement for the NUREG/CR report.

6. DELIVERABLES AND DELIVERY SCHEDULE

The contractor shall submit the following deliverables under this task order:

Task No.	Deliverable	Due Date	Format	Submit to
1	Monthly Letter Status Report	20 th of the following month	MS Word or Adobe PDF	COR/Alt. COR/CO
2	Interim Progress Report (Review of ACI 349).	No later than 6 months after the kick-off meeting or after the updated version of the code(s)/standard(s) are available. Then at 6 months interval.	MS Word	COR
2	Final Report Draft (Review of ACI 349).	Approximately 4 months before the project end date.	MS Word.	COR
2	Final Report (Review of ACI 349).	1 month after receiving comments from the COR on the Final Report Draft.	MS Word and PDF	COR
3	Interim Progress Report (Review of ACI 359/ASME Section	No later than 6 months after the kick-off meeting or after the updated version of the	MS Word	COR

	III, Division 2).	code(s)/standard(s) are published. Then at 6 months interval.		
3	Final Report Draft (Review of ACI 359/ASME Section III, Division 2).	4 months before the project end date.	MS Word	COR
3	Final Report (Review of ACI 359/ASME Section III, Division 2).	1 month after receiving comments from the COR on the Final Report Draft.	MS Word and PDF	COR

7. SECTION 508 - ACCESSIBILITY

7.1. Introduction

In December 2000, the Architectural and Transportation Barriers Compliance Board (Access Board) pursuant to Section 508(2)(A) of the Rehabilitation Act Amendments of 1998, established electronic and information technology (EIT) accessibility standards for the federal government.

The Standards for Section 508 of the Rehabilitation Act (codified at 36 CFR § 1194) were revised by the Access Board, published on January 18, 2017 and minor corrections were made on January 22, 2018, effective March 23, 2018.

The revised 508 standards have replaced the term EIT with ICT (Information and Communication Technology). ICT is information technology (as defined in [40 U.S.C. 11101\(6\)](#)) and other equipment, systems, technologies, or processes, for which the principal function is the creation, manipulation, storage, display, receipt, or transmission of electronic data and information, as well as any associated content. Examples of ICT include, but are not limited to: Computers and peripheral equipment; information kiosks and transaction machines; telecommunications equipment; customer premises equipment; multifunction office machines; software; applications; Web sites; videos; and electronic content.

Note: Applicable electronic content includes:

1. *Public Facing* content
2. *Agency Official Communication*. Electronic content that is not public facing, when such content constitutes official business and is communicated through one or more of the following:
 - a. An emergency notification;
 - b. An initial or final decision adjudicating an administrative claim or proceeding;
 - c. An internal or external program or policy announcement;
 - d. A notice of benefits, program eligibility, employment opportunity, or personnel action;
 - e. A formal acknowledgement of receipt;
 - f. A survey questionnaire;
 - g. A template or form;
 - h. Educational or training materials; or
 - i. Intranet content designed as a Web page.

The text of the Standards for Section 508 of the Rehabilitation Act can be found in 36 CFR § 1194.1 and in Appendices A, C and D to Part 1194 (<https://www.ecfr.gov/current/title-36/chapter-XI/part-1194?toc=1>).

7.2. General Requirements

To help the NRC comply with Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794d) (Section 508), the Contractor shall ensure that its deliverables (both products and services) within the scope of this contract/order are

1. in conformance with, and
2. support the requirements of the Standards for Section 508 of the Rehabilitation Act, as set forth in 36 CFR § 1194.1 and in Appendices A, C and D to Part 1194.

7.3. Applicable Provisions of the Standards for Section 508 of the Rehabilitation Act

The following is an outline of the standards that identifies what provisions are always applicable and which ones may be applicable.

Applicable to the Contract/Order?	Provision of 36 CFR Part 1194
Yes	1) Revised 508 Standards
Yes	a) Appendix A to Part 1194 – Section 508 of the Rehabilitation Act: Application and Scoping Requirements
Yes	i) 508 Chapter 1: Application and Administration-sets forth general application and administration provisions
Yes	ii) 508 Chapter 2: Scoping Requirements - containing scoping requirements (which, in turn, prescribe which ICT – and, in some cases, how many – must comply with the technical specifications)
Yes (see the Exceptions section below)	(1) E202 General Exceptions
No (see the Other section below)	(2) E203.2 User Needs
Yes (see the Accessibility of Electronic Content section below)	(3) E205 Electronic Content
See below	b) Appendix C to Part 1194 – Functional Performance Criteria and Technical Requirements
Yes	i) Chapter 3: Functional Performance Criteria– applies to ICT where required by 508 Chapter 2 (Scoping Requirements) and where otherwise referenced in any other chapter of the Revised 508 Standards
No	ii) Chapter 4: Hardware
No	iii) Chapter 5: Software
No	iv) Chapter 6: Support Documentation and Services (applicable to, but not limited to, help desks, call centers, training services, and automated self-service technical support)
Yes	v) Chapter 7: Referenced Standards - the standards referenced here apply to ICT where required by Section 508 Chapter 2 (Scoping Requirements) and where referenced in any other chapter of the Revised 508 Standards
No (see the Legacy ICT section below)	2) Appendix D to Part 1194 – Electronic and Information Technology Accessibility Standards as Originally Published on December 21, 2000

Refer to 508 Chapter 2 (Scoping Requirements) first to confirm what provisions in Appendix C apply in a particular case.

7.4. Exceptions to the Standards

7.4.1. Legacy ICT

N/A

7.4.2. National Security Systems

Based on the definition at [40 U.S.C. 11103\(a\)](#), the *National Security Systems* general exception (section E202.3 of 36 CFR § 1194) is not applicable to this contract/order.

7.4.3. Incidental ICT

ICT acquired by the Contractor incidental to this contract/order shall not be required to conform to the revised 508 standards.

Note: This only applies when the Contractor is procuring the ICT, only the Contractor personnel will access or use the ICT, and ownership of the ICT will remain with the Contractor upon completion of the contract/order.

7.4.4. ICT Functions Located in Maintenance or Monitoring Spaces

N/A

7.4.5. Undue Burden

The *Undue Burden* general exception (section E202.6 of 36 CFR § 1194) is not expected to be applicable to work performed by the Contractor. If there are questions about potential application of this exception, please discuss with the CO.

7.4.6. Fundamental Alteration or Best Meets

If the Contractor wishes to use the *Fundamental Alteration* (section E202.6 of 36 CFR § 1194) or *Best Meets* (section E202.7 of 36 CFR § 1194) general exceptions the Contractor shall do the following:

1. provide the COR with information necessary to support the agency's documentation requirements, as identified in sections E202.6.2 and E202.7.1 of 36 CFR § 1194, respectively
2. request and obtain written approval from the COR for development and/or use, as applicable to the scope of the contract/order, of an alternative means for providing individuals with disabilities access to and use of the information and data, as specified in sections E202.6.3 and E202.7.2 of 36 CFR § 1194, respectively.

7.5. Additional Accessibility Requirements

7.5.1. Notification Due to Impact from NRC Policies, Procedures, Tools and/or ICT Infrastructure

If and when 1) the Contractor is dependent upon NRC policies, procedures, tools and/or ICT infrastructure for standards-conformant delivery of any of the products or services under this acquisition, and 2) the Contractor is aware that conformance of products or services will be negatively impacted by capability gaps in NRC policies, procedures, tools and/or ICT infrastructure, the Contractor shall inform the COR so that the NRC can both be aware and take

corrective action.

7.5.2. Accessibility of Electronic Content

For electronic content (as defined in section E103 of 36 CFR § 1194) deliverables of this contract/order:

1. If a deliverable is either *Public Facing* or *Agency Official Communication* (as defined in sections E103 and E205.3 of 36 CFR § 1194, respectively) and therefore required to be conformant with section E205.4 of 36 CFR § 1194 then
 - a. The NRC may choose, for its own reasons, to take responsibility for the final conformance of the deliverable or its class of deliverables by explicitly identifying the deliverable or class of deliverables through one of the following means:
 - i. Identified in this contract/order, or
 - ii. Identified in writing to the Contractor by the COR, with a copy to the CO.
2. Otherwise, the NRC may still have a requirement that the deliverable be conformant with section E205.4 of 36 CFR § 1194, but only if the deliverable is explicitly identified in this contract/order as having that requirement.

7.5.3. Other

It is desirable that the Contractor address the applicable provisions of the Revised 508 Standards throughout product and service lifecycles rather than only performing a conformance check toward the end of a process.

8. APPLICABLE DOCUMENTS AND STANDARDS

1. ACI 349 - Code Requirements for Nuclear Safety-Related Concrete Structures and Commentary
2. PRC- (349-359) - Guidelines for Design of Nuclear Safety-Related Structures for Impactive and Impulsive Loads Using ACI 349 and ASME SECTION III, DIV 2 Provisions
3. 359/ASME Section III, Division 2 - Code for Concrete Containments
4. RG 1.142 - Safety-Related Concrete Structures for Nuclear Power Plants
5. RG 1.199 - Anchoring Components and Structural Supports in Concrete
6. RG 1.136 - Design Limits, Loading Combinations, Materials, Construction, and Testing of Concrete Containments

9. PERSONNEL QUALIFICATIONS

The Contractor shall provide an appropriate number of qualified personnel who shall be responsible for the performance of the work and the task assignments for this order. The contractor shall provide senior personnel with specific expertise in structural engineering including an understanding of NRC civil/structural regulations and guidance. At least one of the senior personnel must be the Principal Investigator and considered key personnel.

The Contractor shall provide a Project Manager who shall be responsible for the performance of the work. The Project Manager shall have full authority to act for the Contractor on all contract/order matters relating to daily operation of this order. The Project Manager shall have at a minimum, B.S. in science or engineering with at least 6 years of project management experience or M.S. in science or engineering with at least 4 years of project management

experience, and experience in NRC civil/structural guidance and process. The Project Manager shall also have significant experience with NRC regulatory requirements. The Project Manager will support all the Tasks.

Administrative Support Staff (Clerical) shall have experience in providing office support, such as word processing to generate technical reports.

Key personnel will be the Project Manager, if they contribute substantively to the task order, and the Principal Investigator(s).

10. PLACE OF PERFORMANCE

Work shall be performed at the contractor’s facilities, except for travel as identified in Section 11.

11. TRAVEL

Travel maybe required during the task order performance as directed by the COR. For purposes of preparing a proposal, assume the following travel for meetings and include as part of the base period.

Task	Purpose	# of trips	# of travelers	# of days
4	Meeting at NRC HQ or elsewhere within USA for technical meeting	3	2	3
4	Meeting at San Antonio or elsewhere within USA	1	2	3

The contractor shall request and obtain written approval from the COR before incurring any travel costs. The contractor shall be authorized travel expenses consistent with the Federal Travel Regulations and the limitation of funds for this task order.

12. SECURITY REQUIREMENTS

Work under this task order will be UNCLASSIFIED. This task order does not involve the contractor to access, possess, store, or generate Sensitive Unclassified Information (SUNSI).

D - Packaging and Marking

D.1 PACKAGING AND MARKING

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

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

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

D.2 BRANDING

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

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Regulatory Research , under Contract/order number 31310023D0005/31310023F0131.

E - Inspection and Acceptance

E.1 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.

F - Deliveries or Performance

F.1 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 H.3 2052.215-71 CONTRACTING OFFICER REPRESENTATIVE
AUTHORITY. (OCT 1999)

b. Contracting Officer (CO) (1 electronic copy)

(End of Clause)

F.2 TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)

This order shall commence on September 15, 2023 and will expire on March 29, 2025. The term of this task order may be extended at the option of the Government for one additional Option Period.

Base Period: September 15, 2023 through March 29, 2024

Option Periods:

Option Period One: March 30, 2024 through March 29, 2025 (Exercised)

Option Period Two: March 30, 2025 through March 29, 2026

G - Contract Administration Data

G.1 2052.215-78 TRAVEL APPROVALS AND REIMBURSEMENT (OCT 1999) - ALTERNATE I (OCT 1999)

(a) Total expenditure for travel may not exceed [REDACTED] 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)

H - Special Contract Requirements

H.1 ANNUAL AND FINAL CONTRACTOR PERFORMANCE EVALUATIONS

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

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

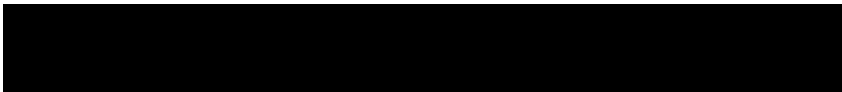
Where a contractor concurs with, or takes no exception to an annual performance evaluation, the Contracting Officer will consider such evaluation final and releasable for source selection purposes. Disagreements between the parties regarding a performance evaluation will be referred to an individual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

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

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

H.2 2052.215-70 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.

(End of Clause)

H.3 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:

NRC Primary COR:

Name: Madhumita Sircar
Address: U.S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington, DC 20555
Phone: 301-415-1804
E-mail: madhumita.sircar@nrc.gov

NRC Alternate COR:

Name: Marcos Rolon Acevedo
Address: U.S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington, DC 20555
Phone: (301) 415-2208
E-mail: marcos.rolonacevedo@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)

I - Contract Clauses

I.1 2052.209-72 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST. (JAN 1993)

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

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

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

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

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe, with respect to itself or any employee, that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

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

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

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

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

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

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

(d) Disclosure after award.

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

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

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

(e) Access to and use of information.

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

(i) Use this information for any private purpose until the information has been released to the public;

(ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;

(iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or

(iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

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

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

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

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

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

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

(1) If the contractor under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to

perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

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

(End of Clause)

I.2 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT. (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within the period of performance ; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 15 days before the contract expires. The preliminary notice does not commit the Government to an extension.

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

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 2 years, 6.5 months.

(End of clause)