AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 15

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00003	See Block 16C	ZEROREQ-RES-25-0073	EWC

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
NRCHQ			

US NRC - HQ
ACQUISITION MANAGEMENT DIVISION
MAIL STOP TWFN-07B20M
WASHINGTON DC 20555-0001

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

SOUTHWEST RESEARCH INSTITUTE
ATTN PAUL MALDONADO
6220 CULEBRA RD
SAN ANTONIO TX 782385166

CODE PB11V1KH3KV4 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

X 10A. MODIFICATION OF CONTRACT/ORDER NO.
31310023D0004
31310023F0034

10B. DATED *(SEE ITEM 13)*
03/30/2023

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
N/A

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

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER *(Specify type of modification and authority)* 52.243-2 CHANGES - COST-REIMBURSEMENT ALTERNATE I

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The purpose of this task order modification is to revise the statement of work to make within scope changes at no cost impact. Refer to continuation pages for specific changes to the task order.

Task Order Ceiling (Base and All Options): $1,045,853.00 (Unchanged)
Task Order Exercised Ceiling: [redacted] (Unchanged)
Task Order Obligated Amount: [redacted] (Unchanged)

Period of Performance: 03/30/2023 to 12/31/2025

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 CONTRACTING OFFICER *(Type or print)*	
		RACHEL N. GLAROS	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		[redacted] *(Signature of Contracting Officer)*	02/13/2025

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

Summary of Clause Changes:

Clause titled **BRIEF PROJECT TITLE AND WORK DESCRIPTION (AUG 2023)** is incorporated as follows:

BRIEF PROJECT TITLE AND WORK DESCRIPTION (AUG 2023)

(a) The title of this project is: Technical Assessment of Waste Management Options for Advanced Reactor Fuel Cycles

(b) Summary work description: The overall objective of this task order is to obtain technical assistance from the contractor to support the NRC staff with (1) conducting a technical assessment of continued storage options for MSR salt waste; (2) understanding technical information and guidance needs for salt waste processing; (3) obtaining further insights into Advanced Non-Light Water Reactor (ANLWR) waste management through a workshop; and if required through performing a technical assessment; and (4) understanding storage challenges and options relating to chloride wastes from molten salt reactors.

Section C - Description/Specifications was revised as follows.

Summary of Clause Changes:

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

STATEMENT OF WORK

1. Project Title

Technical Assessment of Waste Management Options for Advanced Reactor Fuel Cycles

2. Background

With the increased activities in the development of commercial reactors using non-light water reactors (LWR) fuel, the NRC staff needs to have an understanding of the potential challenges associated with the storage and transportation of advanced reactor fuel types and their wastes, and to be prepared to undertake appropriate regulatory actions (e.g., revisions to guidance documents and regulations). A potential challenge is the technology for providing canisters and casks to be used for long-term storage and transportation of the waste from these new fuel types such as metal fuel, TRISO pebbles, and molten salt.

Salt waste management from fluid-fueled molten salt reactors in particular represents a fundamental challenge to the established infrastructure regarding managing radioactive waste, including spent fuel. Salts are highly hygroscopic, therefore will require active management after exiting the reactor, or immobilization for long term storage. Additionally, some proposed salts for use in these reactors contain beryllium (Be), which is a known toxic element and will need to be carefully managed. Additionally, salts may need to be processed to separate out the various constituents depending on the waste management strategy; for example, the salt may undergo a dehalogenation process to allow better encapsulation of the radioisotopes in a vitrified waste form (S. Tan, R. J. Hand, Incorporation and Phase Separation of Cl in Alkaline Earth

Aluminosilicate Glasses, J. Nucl. Mat. 507 (2018) 135).

With regard to molten salt reactors, there is no direct experience with converting the used salt into waste forms. In the case of the molten salt reactor experiment (MSRE), at shutdown, the fuel salt (LiF-BeF_2-ZrF4-UF4) was drained into three metal drain tanks in the late 1960's and has been actively managed since then. There is a relative paucity of data regarding chloride salts in the context of advanced reactors and associated waste management. There is very little known about how molten chloride salts will behave after being removed from the reactor, and what waste management protocols will be needed to manage the salts in the long term. In particular, the effects - if any - of radiolysis are unknown.

MSR waste management potentially represents a fundamental challenge to the established infrastructure because of its unique attributes. When considering the suitable waste form that needs to be used, several characteristics of the waste need to be considered:

· decay heat;
· concentrations of total halogen, alkali, alkaline earths, rare earths, transition metals, U, Pu, and other actinides;
· ratios of different halogens (e.g., Cl:F:I) and alkalis (e.g., Li:Na:K:Cs) and, to a lesser extent, alkaline earths, rare earths, and transition metals;
· concentration of long-lived isotopes (e.g., I-129, Cl-36, Se-79, Tc-99, Pu-242, Np-237); and
· fissile content (e.g., U-233, U-235, Pu-239, Pu-241).

Waste management will likely be unique to a particular reactor design, depending on the composition of the salt(s), the length of time in the reactor, and the fission products generated and their concentrations. The actual waste that will require subsequent treatment following MSR operation could vary significantly. However, with regard to waste forms, there are some high-level characteristics that the waste forms should consist of PNNL-30739 (S.T. Arm, D. E Holcomb, R. L. Howard and B. Riley, Status of Fast Spectrum Molten Salt Reactor Waste Management Practice, PNNL-30739, 2020) lists a number of considerations for specific waste forms. These should be addressed in the assessment:

- *Containment* - refers to the retention of radioactive material in such a way that it is effectively prevented from becoming dispersed into the environment.
- *Criticality control* - development of waste forms with integral criticality control should be considered, including consideration of moderator exclusion functions.
- *Chemical and physical durability* - Consideration should be given to the waste form's ability to withstand the effects of chemically induced processes such as corrosion, dissolution, phase transformations, as well as to maintain its configuration under expected mechanical loads during long term storage.
- *Thermal considerations* - The thermal power output of the packaged waste forms should be limited so that associated detrimental changes to physical, chemical and mechanical properties of the waste form, storage and transportation system components, waste package components, other engineered barriers and repository components can be addressed and mitigated.

3. Objective

The overall objective of this task order is to obtain technical assistance from the contractor to support the NRC staff with the following:

1. Conducting a technical assessment of continued storage options for MSR salt waste;
2. Understanding technical information and guidance needs for salt waste processing;
3. Obtaining further insights into Advanced non-LWR (ANLWR) waste management through a workshop; and if required through performing a technical assessment.
4. Understanding storage challenges and options relating to chloride wastes from molten salt reactors.

This work will provide NRC staff insights into characteristics of various advanced spent fuel types, and waste forms and loading with a view to informing future safety and licensing reviews related to storage and transportation of ANLWR waste and waste forms.

4. Scope of Work

Technical assistance required under this task order is identified below and driven by NRC's activities and priorities.

The scope of work under this task order will focus on technical considerations associated with waste processing and waste forms that could be utilized to manage salt wastes from molten salt reactors (both fluoride-fueled thermal and chloride-fueled fast reactors). The work will also focus on the unique technical considerations associated with chloride salt wastes from molten salt reactors. This work will build on insights identified in previous analyses regarding molten salt reactor waste and electrochemical reprocessing. These documents will be identified and, to the extent practicable, provided to the contractor by the COR electronically. There is an optional task that may be exercised that extends the analysis to other fuel types including TRISO and metal fuels. Any electronic content created by the contractor for sharing with the public shall be Section 508 Conformant.

The contractor shall perform the following tasks:

Task 1. Technical Assessment and Identification of Information Needs Regarding Salt Processing Operations

The contractor shall identify potential scenarios and waste management strategies - including waste form for molten salt reactor back-end processing techniques. The contractor shall make a technical assessment of technologies associated with these scenarios and strategies, with a view to identifying technical and safety considerations, and associated information needs for salt processing facility licensing reviews. The contractor should also identify methodologies to address any information needs. This would build on a previous report developed by ORNL for the NRC, "Review of Hazards Associated with Molten Salt Reactor Fuel Processing Operations," and other reports as directed by the COR. The contractor shall prepare a technical letter report (TLR) that documents the analyses and results from this task.

Task 2. Technical Assessment of Continued Storage Options

Molten salt reactor vendors may choose to actively manage salt waste (similar to how the MSRE salt waste was stored) or convert the salt to an interim chemical form. Based on the types of salt waste that needs to be managed (both fluoride and chloride salts), the contractor shall identify methods that could be used for continued storage of salt waste. The contractor

should provide a thorough rationale for the choices, including considerations such as waste loading and composition of the stored salt. The contractor should highlight any potential safety considerations and technical gaps pertaining to safe interim storage of salt wastes.

The rationale should address the benefits of using these storage methods and as appropriate, typical composition, physical, chemical, and mechanical properties; alteration in characteristics as a result of fabrication processes and interim storage. Any known information regarding radiation effects and decay heat should also be documented, as well as maximum loading of halogens, fissile material and fission products. Waste forms are not load bearing or structural materials; they must simply reside in a waste canister for a very long time.

The contractor shall perform a technical assessment of the interim waste forms. This assessment should document and/or answer the following:

(i) Factors that could affect the long-term performance of the interim waste form, including composition, fission products and environmental factors such as water ingress and/or temperature fluctuations
(ii) The potential for phase separation. Can the waste form separate out into layers, or some sort of stratified solid?
(iii) Is there a need for dehalogenation for the waste form to be suitable?
(iv) What is the effect of fluctuations in temperature and is it possible to get thermal fracturing?
(v) What is known about the thermal stress effects that are caused by decaying self-heating rates and local temperature gradients if there are waste form inhomogeneities?
(vi) Compatibility between some of the proposed waste forms and the canister/container in which they will be stored.
(vii) Any cracking of waste form due to radiation amorphization?

The contractor shall prepare a TLR that documents the analyses and results from this task.

Task 3. Support to Workshop on ANLWR Spent Fuel and Transportation

CNWRA shall assist the NRC staff in conducting two public workshops involving stakeholders such as researchers, vendors, regulators, and other Federal agencies regarding storage and transportation of ANLWR spent fuels. For each workshop, support shall include identifying and communicating with potential participants, identifying recommended topics for the workshop, providing input on planned workshop presentations, preparing workshop materials, preparing and sending a workshop invitation email to participants, assisting NRC with preparing written minutes to document presentations and discussions during the workshop, creating an event page on the SwRI website to promote the workshop and facilitate online registration. The information that CNWRA shall collect from participants in the workshop as part of registration shall include professional credentials such as, name, affiliated company/organization/agency, job title, business email address, and business phone number.

Also, if requested by the COR, CNWRA should coordinate and attend up to ten (10) virtual planning meetings for the two workshops that will include NRC staff and other stakeholders. The CNWRA shall also host the workshop virtually via a suitable platform as agreed upon with the COR, such as MS Teams.

Two workshops are currently planned to be held virtually that CNWRA shall attend. Preparations

for each workshop will begin approximately 3-5 months before the workshop.

The first workshop will tentatively be held in December of 2024 or January of 2025 and is anticipated to be up to three days and will be on Storage and Transportation of TRISO Spent Fuel and Metal Spent Fuel.

The second workshop will tentatively be held in May 2025 or June 2025 and is anticipated to be up to two days and will be on Storage and Transportation of Molten Salt Reactor Spent Fuel.

The outcomes of the workshop may inform other task TLRs as timing allows.

For each workshop, CNWRA shall prepare a proceedings document with the intent to help NRC for regulatory preparedness. The contractor can use the following examples of NRC workshop proceedings as guidance as to content and format:

- RIL 2021-02 Proceedings of the Workshop on Digital Twin Applications for Advanced Nuclear Technologies (ADAMS Accession No. ML21083A132).
- RIL 2021–01 Proceedings of the Fifth Annual Probabilistic Flood Hazard Assessment Workshop (ADAMS Accession No. ML21027A213).
- RIL 2020–09 International Workshop on Advanced Non-Light-Water Reactor – Materials and Component Integrity (ADAMS Accession No. ML20245E186).

Task 4. Implementing Recommendations Generated on Molten Salt under 31310018D0001/ 31310022F0082 (OPTION)

Deleted per Modification P00002

Task 5. Implementing Recommendations on Metal Fuel Generated under 31310018D0001/31310018F0113 (OPTION)

Deleted per Modification P00002

Task 6. Implementing Recommendations on TRISO Fuel Generated under 31310018D0001/ / 31310018F0113 (OPTION)

Deleted per Modification P00002

Task 7 Assessment of Management of Chloride Wastes from Molten Salt Reactors

The contractor shall perform a literature review of peer reviewed journals and publicly available technical reports with the aim of identifying information which will form the basis of an assessment of technical considerations relating to the management of chloride wastes from molten salt reactors. The literature review shall at a minimum, include reviewing documents which discuss the experience from other technologies regarding storage and management of chloride salts, including the solar industry and the management of salt wastes from electrochemical separations at Idaho National Laboratory.

The contractor shall develop a TLR summarizing what is known to date about chloride salts and storage using the literature review to inform the report development. The TLR should discuss the

potential for radiolysis of stored chloride salts and use expert judgement to identify potential radiolysis products and consequences to materials utilized for storage, such as in tanks and canisters. The report should highlight areas which need more information regarding the long-term storage and management of chloride wastes. The contractor shall identify in the TLR all references that was used to develop the input. The Contractor shall address NRC comments on the report.

The following option task maybe exercised via a modification to the task order.

Task 8. Support for Technical Assessment for Spent Metallic (Fast Reactor) and TRISO Fuel (OPTION)

The contractor shall provide subject matter expertise to support NRC's efforts to develop a technical assessment of safety and risk considerations of long-term storage of spent metallic and TRISO fuels. The technical assessment shall be based upon research conducted and the recommendations from previous CNWRA reports submitted to the NRC. This work may be needed to inform the development of updated or new regulatory guidance needs identified through the workshops described in Task 3.

The contractor shall prepare a TLR that documents the analyses and results from this task.

5. Reporting Requirements

Monthly Letter Status Report (MLSR)

The contractor shall provide a Monthly Letter Status Report (MLSR) per Section C.4 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.

6. Deliverables and Delivery Schedule

The contractor shall submit the following deliverables under this task order electronically.

The contractor shall provide the deliverables by the anticipated due dates stated below.

TASK	DELIVERABLE	DUE DATE
1	Draft Technical Letter Report (TLR) documenting salt processing technologies and information needs	NLT than 4 months after start of Task 1
	Draft Final TLR documenting salt processing technologies and information needs that incorporates NRC comments	NLT than 3.5 months after receiving NRC comments.

	Final TLR on salt processing technologies and information needs incorporating final comments from NRC	2 weeks after receiving final comments from NRC
2	Draft TLR documenting technical assessment of continued storage options	March 28, 2025
	Draft Final TLR documenting technical assessment of continued storage options that incorporates NRC comments	NLT than 1 month after receiving NRC comments.
	Final TLR on technical assessment of continued storage options incorporating final comments from NRC	2 weeks after receiving final comments from NRC
3	Recommendations for Workshop Topics and Subject Matter Expert Attendees	4 months prior to Workshop
	Workshop Materials	3 months before Workshop
	Invitation Email for Attendees	3 months before Workshop
	Input to Workshop Presentations	2 weeks before the Workshop
	Workshop Minutes Input	2 weeks after Workshop
	Draft Workshop Proceedings	9 weeks after workshop
	Final Draft Workshop Proceedings incorporating final comments from NRC	2 weeks after receiving final comments from NRC
4 OPTION	Deleted Per Modification P00002	
5 OPTION	Deleted Per Modification P00002	

6 OPTION	Deleted Per Modification P00002	
7	Draft TLR documenting assessment of chloride salt storage and waste management	August 1, 2025
	Final Draft TLR Report incorporating NRC comments	1 month after receiving 1st round of NRC comments
	Final TLR Report incorporating 2nd round of NRC comments	1 month after receiving 2nd round of NRC comments
8 OPTION	Draft TLR documenting assessment of spent TRISO and metallic spent fuel	4 months after start date
	Final Draft TLR incorporating NRC Comments	1 month after receiving 1st round of NRC comments
	Final TLR incorporating 2nd round of NRC comments	1 month after receiving 2nd round of NRC comments.
All	MLSR per Section 5	20th Calendar day of the following month. NOTE: If now work was performed during the prior calendar month, the Contractor shall not prepare and submit a MLSR

7. Section 508 – Information and Communication Technology 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.

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
No	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
Yes	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

Unless a deliverable of this contract/order is identified in this contract/order as Legacy ICT, use by the Contractor of the *Legacy ICT* general exception (section E202.2 of 36 CFR § 1194) shall only be permitted on a case-by-case basis for applicable legacy ICT and with advance written approval from the COR.

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
The Contractor shall confirm with the COR that an ICT deliverable of this contract/order will be located in maintenance or monitoring spaces before assuming that the *ICT Functions Located in Maintenance or Monitoring Spaces* general exception (section E202.5 of 36 CFR § 1194) applies.

Note that this exception does not apply to features of the ICT (such as Web interfaces) that can be accessed remotely, outside the maintenance or monitoring space where the ICT is located.

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.

If and when the Contractor provides custom ICT development services pursuant to this acquisition, the Contractor shall ensure the ICT products and services fully support the applicable provisions of the Revised 508 Standards prior to delivery and before final acceptance.

If and when the Contractor provides installation, configuration or integration services for ICT products (equipment and/or software) pursuant to this acquisition, the Contractor shall not install, configure or integrate the ICT equipment and software in a way that reduces the level of conformance with the applicable provisions of the Revised 508 Standards.

If and when the scope of this contract/order includes work by the Contractor to collect, directly from NRC employees or the Public, requirements for the procurement, development, maintenance or use of ICT the Contractor shall identify the needs of users with disabilities in conformance to section E203.2.

7.6. ICT Accessibility Deliverables
The Contractor shall provide the following ICT accessibility deliverables, when within the scope of this contract/order.

7.6.1. Accessibility Conformance Report (ACR)
This report shall be submitted for ICT products, systems or application deliverables. A written ACR shall be based on the Voluntary Product Accessibility Template (VPAT®), as specified at https://www.itic.org/policy/accessibility/vpat or provide equivalent information. This report has the purpose to document the state of conformance to the Revised 508 Standards for the subject product, system, or application.

7.6.2. Supplemental Accessibility Report (SAR)
This report shall be submitted for ICT products, systems or application deliverables that have been custom developed or integrated by the Contractor to meet contract/order requirements. A written SAR shall contain:

a) Description of evaluation methods used to produce the ACR, to demonstrate due diligence in supporting conformance claims;
b) Information on core functions that can't be used by persons with disabilities; and,
c) Information on how to configure and install the ICT item to support accessibility

7.6.3. ICT Support Documentation
Where the contractor provides support documentation or services for ICT, the contractor shall include the following deliverables:

a) Documentation of features that help achieve accessibility and compatibility with assistive technology for persons with disabilities (as required by section 602 of 36 CFR § 1194);

b) For authoring tools that generate content (documents, reports, videos, multimedia, web content, etc.): Information on how the tool enables the creation of accessible electronic content that conforms to the Revised 508 Standards (see section 504 of 36 CFR § 1194), including the range of accessible user interface elements the tool can create;

c) For platform software (as defined in section E103.4 of 36 CFR § 1194) and software tools that are provided by a platform developer: Documentation on the set of accessibility services that support applications running on the platform to interoperate with assistive technology, as required by section 502.3 of 36 CFR § 1194.

7.6.4. ICT Support Documentation (Alternate Formats)
Where the contractor provides support documentation or services for ICT, the contractor shall (upon request) provide (as required by section 602.4 of 36 CFR § 1194) alternate formats for non-electronic support documentation.

7.6.5. Electronic Content Accessibility Checklist
If the requirement is specified elsewhere in this acquisition that testing of electronic content be performed, the Contractor shall submit a completed accessibility checklist to document the conformance of the tested content. The checklist shall summarise the subject deliverable's state of conformance to the applicable WCAG 2.0 Level A and AA Success Criteria (as referenced in section E205.4 and 702.10 of 36 CFR § 1194).

7.6.6. Communication to ICT Users
When the Contractor is providing ICT support services (including, but not limited to help desks, call centers, training services, and automated self-service technical support), any communication to ICT users shall accommodate the communication needs of individuals with disabilities (see section 603.3 of 36 CFR § 1194) and include information on accessibility and compatibility features (see 603.2 of 36 CFR § 1194).

8. Personnel Qualifications

The key personnel working on this project should collectively have advanced knowledge in the areas of material science, corrosion science, chemistry, radionuclide transport, health physics, and criticality.

The key personnel should have experience on conducting analyses and performance

assessment of waste form(s) and supporting development of regulatory approaches and guidance documents.

The key personnel should also be familiar with the requirements for licensing and certification of transportation packages and dry storage systems, per 10 CFR Part 71 and 10 CFR Part 72 requirements, and the fuel cycle regulations at 10 CFR Part 70. Additionally, key personnel should be familiar with the Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157).

9. Place of Performance

The work will take place at the contractor's site. Teleconferences and videoconferences shall be conducted with the NRC staff, as needed.

10. Travel

No travel is expected to occur during the task order period of performance.

11. Applicable Publications (Current Editions)

The contractor shall comply with the following applicable regulations, publications, manuals, and local policies and procedures:

NRC Editorial Style Guide (NUREG-1379, Revision 3)

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).