

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES 1 101	
2 CONTRACT NUMBER 31310020D0002		3 SOLICITATION NUMBER 31310020R0004	4 TYPE OF SOLICITATION <input type="checkbox"/> SEALED B D (FB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5 DATE ISSUED 03/18/2020	6 REQUISITION/PURCHASE NUMBER
7. ISSUED BY US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-07B20M WASHINGTON DC 20555-0001		CODE NRCHQ	8. ADDRESS OFFER TO (If other than Item 7)		

NOTE In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and _____ copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in _____ until _____ (Hour) local time _____ (Date)

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME JEFFREY R. MITCHELL	B. TELEPHONE (NO COLLECT CALLS)			C. E-MAIL ADDRESS Jeffrey.Mitchell@nrc.gov
		AREA CODE 301	NUMBER 415-5074	EXT.	

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OFFER (Must be fully completed by offeror)

NOTE Item 12 does not apply if the solicitation includes the provisions at 2.21 16, Minimum Bid Acceptance Period

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule

13. DISCOUNT FOR PROMPT PAYMENT <i>(See Section I, Clause No. 52.232.8)</i>	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
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14. ACKNOWLEDGEMENT OF AMENDMENTS <i>(The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):</i>	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE 621211259	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>
ENERGY RESEARCH INC ATTN MOHSEN KHATIB-RAHBAR PO BOX 2034 ROCKVILLE MD 208472034			


15B. TELEPHONE NUMBER	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE
AREA CODE NUMBER EXT.	<input type="checkbox"/>		

AWARD (To be completed by government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT \$10,000.00	21. ACCOUNTING AND APPROPRIATION See schedule
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input type="checkbox"/> 10 U.S.C. 2304 (c) () <input type="checkbox"/> 41 U.S.C. 253 (c) ()	23. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>
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24. ADMINISTERED BY (If other than Item 7) See Schedule G	25. PAYMENT WILL BE MADE BY See Schedule G
CODE NRCHQ	CODE NRCPAYMENTS

26. NAME OF CONTRACTING OFFICER (Type or print) JEFFREY R. MITCHELL	27. UNITED STATES OF AMERICA  <i>(Signature of Contracting Officer)</i>	28. AWARD DATE 08/03/2020
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CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
31310020D0002

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NAME OF OFFEROR OR CONTRACTOR
ENERGY RESEARCH INC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Enterprise Wide Contract (EWC) Multiple Award Indefinite Delivery Indefinite Quantity (IDIQ)</p> <p>The contractor shall provide the U.S. Nuclear Regulatory Commission with Technical Assistance in Support of the NRC Nuclear Regulatory Research for Materials, Waste, and Reactor Programs, as contained in the Statement of Work and Terms and Conditions attached to Multiple Award IDIQ Contract.</p> <p>Period of Performance: 08/01/2020 to 07/31/2025</p>				

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B - Supplies or Services/Prices

B.1 BRIEF DESCRIPTION OF WORK ALTERNATE I

(a) The title of this project is: TECHNICAL ASSISTANCE IN SUPPORT OF NRC NUCLEAR REGULATORY RESEARCH FOR MATERIALS, WASTE, AND REACTOR PROGRAMS

(b) Summary work description: The NRC activities applicable to this Statement of Work (SOW) for nuclear power reactors and non-commercial non-power production and utilization facilities may include providing support for the following: technical reviews of topical reports for reactor design certifications (DCs); early site permits (ESPs); combined license (COL) applications; reactor pre-application activities; limited work authorizations (LWAs); construction permits (CPs); operating licenses (OLs); license actions (i.e., amendments, facility operating license renewals, relief requests, and exemptions); supporting development of regulatory guides (RG) and research information letters (RILs); oversight; and staff infrastructure development. Other activities for materials and waste facilities include, but are not limited to, technical support for technical reviews of license applications, license renewals, license amendments, exemption requests, and decommissioning.

(c) Orders will be issued for work in accordance with FAR 52.216-18 – Ordering.

B.2 CONSIDERATION AND OBLIGATION—INDEFINITE-QUANTITY CONTRACT

(a) The estimated total quantity of this contract for the products/services under this contract is (\$42,000,000.00 Shared Multiple Award IDIQ Ceiling).

(b) The Contracting Officer will obligate funds on each task order issued.

(c) The minimum guarantee under this contract is \$10,000.00.

(d) The obligated amount for this contract is Obligated under Task Order No. 1.

(e) A total estimated cost and fee, if any, will be negotiated for each task order and will be incorporated as a ceiling in the resultant task order. The Contractor shall comply with the provisions of FAR 52.232-20 - Limitation of Cost for fully-funded task orders and FAR 52.232-22 - Limitation of Funds for incrementally-funded task orders, issued hereunder.

B.3 PRICE/COST SCHEDULE

CLIN	DESCRIPTION OF SUPPLIES/SERVICES	

0001	Contractor to provide Technical Assistance in accordance with Section C: DESCRIPTION/SPECIFICATIONS / STATEMENT OF WORK
	Total: \$42,000,000.00 Shared Multiple Award IDIQ Ceiling. Each task order under this IDIQ contract will be awarded on a competitive basis within the technical support service area vendor pool.

C - Description/Specifications

C.1 STATEMENT OF WORK

C.1 STATEMENT OF WORK

PROJECT TITLE: TECHNICAL ASSISTANCE IN SUPPORT OF NRC NUCLEAR REGULATORY RESEARCH FOR MATERIALS, WASTE, AND REACTOR PROGRAMS

1.0 BACKGROUND

U. S. Nuclear Regulatory Commission (NRC) regulates the licensing, construction and operation of commercial nuclear power facilities and commercial and non-commercial non-power production and utilization facilities (NPUFs). The Office of Nuclear Reactor Regulation (NRR) with support from the Office of Nuclear Security and Incident Response (NSIR), serves the public interest by enabling the safe, secure, and environmentally responsible use of nuclear power and technology in meeting the nation's energy and research needs. The Office of Nuclear Material Safety and Safeguards (NMSS) is responsible for regulating activities which provide for the safe and secure production of nuclear fuel used in commercial nuclear reactors (uranium recovery, conversion, and enrichment activities; fuel fabrication); and development; the safe storage, transportation and disposal of high-level radioactive waste and spent nuclear fuel; and the transportation of radioactive materials regulated under the Atomic Energy Act. NMSS ensures safety and security by implementing a regulatory program involving activities including licensing, inspections, assessments of licensee performance, events analysis, enforcement, and identification and resolution of generic issues. The Office of Nuclear Regulatory Research (RES) furthers the regulatory mission of the NRC by providing technical advice, technical tools, and information for identifying and resolving safety issues, making regulatory decisions, and promulgating regulations and guidance.

The NRC activities applicable to this SOW for nuclear power reactors and NPUFs may include providing support for the following: technical reviews of topical reports for reactor design certifications (DCs); early site permits (ESPs); combined license (COL) applications; reactor pre-application activities; limited work authorizations (LWAs); construction permits (CPs); operating licenses (OLs); license actions (i.e., amendments, facility operating license renewals, relief requests, and exemptions); supporting development of regulatory guides (RG) and research information letters (RILs); oversight; and staff infrastructure development. RES activities for materials and waste facilities include, but are not limited to, technical support for technical reviews of license applications, license renewals, license amendments, exemption requests, and decommissioning.

NRC anticipates the continued review of COL applications and operating and renewal reactor licensing actions over the next several years as well as a variety of applications for Non-Light Water (non-LWR) reactors. Due to the volume of new and advanced reactor applications as well as licensing actions for operating reactors and NPUFs, commercial contractor resources are needed to augment staff resources. Also, commercial contractor resources are needed to support reactor security reviews including, but not limited to: physical security, cyber security, access authorization, fitness for duty, materials control and accounting security, transportation security, independent spent fuel storage installation security and support in emergency preparedness.

2.0 WORK REQUIREMENTS

2.1 Contractor Technical Assistance

The Contractor shall provide technical assistance and expertise in NRC activities, including, but not limited to, the following:

- (a) Revising regulatory documents as assigned, to support application reviews (e.g., NUREG-0800, 10 CFR Parts 50, 51, 52, 54, 71, 72, 73 and related guidance including regulatory guides and research information letters);
- (b) Reviewing, assessing and evaluating submittals (e.g., License Applications, Technical Reports, Safety Analyses, Topical Reports, Amendments, and similar documents for New, Advanced, Operating, Or Renewal License Applications, and Materials and Waste Safety Reviews) and prepare requests for additional information (RAIs);
- (c) Preparing input to SERs by utilizing NRC provided templates and instructions;
- (d) Preparing for and traveling to NRC Headquarters, Regional offices, or plant sites for the purpose of participating in audits, inspections, as well as attending meetings at other NRC locations, with applicants, potential applicants, licensees, or vendors;
- (e) Conducting reviews, assisting in siting issues, any required regulatory development; and
- (f) Technical expertise and administrative support in rulemaking activities.
- (g) Guidance and technical report development.

2.2 Task Orders

The Task Orders will be awarded by the Contracting Officer (CO). The Contractor shall submit a technical and cost proposal in response to the Task Order Request for Proposal (RFTOP). The Contractor shall perform each Task Order in accordance with the final project plan approved by the COR.

2.3 Quality Control Plan

The Contractor shall follow a Quality Control Plan which outlines the procedures and system they will use for document version control, technical input tracking, change management, and technical and editorial reviews. The Contractor shall organize, track, and manage changes in a structured, systematic, and transparent manner, throughout the review and production of each deliverable.

3.0 SCOPE OF WORK

The Contractors shall provide technical assistance and expertise in a wide range of technical and scientific disciplines that are more fully-described in the Statement of Work Sections or Parts located below. These technical support services are necessary to accomplish work-related activities aimed at ensuring the overall safety, security and adequacy of nuclear power

plant and NPUF design, construction, operations and environmental protection.

3.1 Thermal Hydraulics Research Support

The Contractor shall provide technical assistance for simulations and analyses that include normal operations, anticipated operational occurrences, design basis accidents, and beyond design basis accidents relevant to all currently operating reactor types, as well as new and advanced reactor designs. Such assistance shall be accomplished using the NRC's computer codes designed to perform the respective simulations for the applicable technical disciplines, including thermal-hydraulics, computational fluid dynamics (CFD), neutronics, severe accidents, radiological consequences, and fuel behavior. Codes used for the thermal-hydraulic analysis of nuclear reactor systems and components contains (but is not limited to) the following NRC computer codes:

- TRAC/RELAP Advanced Computational Engine (TRACE): Reactor Systems Thermal-Hydraulics
- Purdue Advanced Reactor Core Simulator (PARCS)
- SNAP – Symbolic Nuclear Analysis Package: Analyses model management and documentation system
- Advanced Gas REactor Evaluation (AGREE): Core Thermal-Hydraulics
- Fuel Analysis under Steady-state and Transients (FAST): Thermal-Mechanical Fuel Performance

3.2 Nuclear Fuel and Core Neutronics Support

The Contractor shall update the architecture of the Fuel Analysis under Steady-state and Transients (FAST) code in order for the code to be parallelized, modern and be able to solve the major governing physics (such as heat conduction, diffusion and solid mechanics) on multiple types of geometries. The code shall include finite difference, finite element, and finite volume partial differential equation solvers and shall be written to ensure FAST is utilizing the most modern supported features of Fortran 2018. These code architecture updates are needed to support licensing reviews of advanced non-LWR designs and advanced fuel concepts.

Steady-state and transient nodal diffusion codes such as PARCS are used to predict the fission power and decay heat sources that arise under normal, off-normal, and accident conditions. Steady-state calculations of spatial core power and burnup distributions over multiple core operating cycles are used in analyzing (a) peak pin powers in relation to fuel thermal limits, (b) reactivity and power control, (c) safe shutdown margins, (d) slow spatial xenon transients and oscillations, and (e) the initial conditions of spatial reactivity feedback characteristics, fission power, stored heat, and decay power. Dynamically coupled transient calculations are especially important in analyzing the spatial kinetics of reactivity insertion transients (e.g., rod bank withdrawal, rod drop, rod ejection) and the core power surges and oscillations associated with transient over-cooling events (e.g., turbine trip), flow and boiling instabilities, and anticipated transients without scram (ATWS).

This predictive ability entails the use of three-dimensional (3-D) reactor physics codes such as PARCS, which has been continuously developed by RES since 1998. PARCS has been dynamically coupled to the system thermal hydraulic (T-H) code TRACE and is available as both an embedded module within TRACE and as a standalone code. TRACE/PARCS is used

for the analyses of normal operations and transients in operating reactors (control and power maneuvers), confirmation of licensee's analyses, and supporting analyses for the certification review of current reactor designs, and advanced reactor designs.

PARCS is a nodal reactor analysis code that calculates the transient and steady state core power (and other safety significant reactor parameters) through the numeric solution to a discretized formulation for the neutron diffusion equation. In standalone-maintained form, it is coupled to PATHS for thermal-hydraulic feedback during semi steady-state calculations for both BWR and PWR cores, and a simple mass energy balance for PWR analysis. The code system includes the main PARCS code, the cross-section processing interface for conversion into the PARCS format from lattice physics data (GenPMAXS). In addition to converting lattice physics-averaged cross sections, GenPMAXS also analytically solves for the flux discontinuity along the fuel reflector interface. In anticipation of license reviews of advanced designs and advanced fuel concepts, the Contractor shall provide technical assistance in the development, maintenance, and applications of the PARCS code.

3.3 Severe Accident and Consequence Analysis Support

The Contractor shall provide technical assistance and regulatory support associated with input model development, severe accident progression simulations, and benchmarking against selected test data for specific reactor technologies. The computer codes used include the integrated system level MELCOR computer code, MELCOR Accident Consequence Code System (MACCS) for consequence analysis, TEXAS code for fuel coolant interaction analysis, and computational fluid dynamics (CFD) codes to support system level codes.

3.4 Component Integrity and Materials Performance

The Contractor shall provide Technical assistance and support for confirmatory research on component integrity and materials performance on both the development of methodologies needed to support regulatory actions and supporting the technical bases for codes and standards development. A common theme in this work is a proactive approach to the management of aging degradation for operation beyond 60 years. The Contractor shall assemble technical information on aging phenomena that can affect materials in nuclear power plants (NPPs) and to develop technical assessment of subsequent license renewal (SLR) applications for the currently operating NPPs. In addition, Contractor shall provide technical support for confirmatory research on advanced light water and non-light water reactors that are expected in near future for regulatory considerations. Major areas of current interest are:

Piping Degradation:

To better understand how the reactor is influenced by the phenomenon of primary water stress corrosion cracking (PWSCC), the contractor shall provide technical assistance on the development of analysis methods and computational tools, and assess the impact of PWSCC on the overall safety of piping systems of the reactor coolant pressure boundary. The Contractor shall also assess impacts of PWSCC on the leak-before-break (LBB) behavior of piping systems.

Reactor Pressure Vessel (RPV) Integrity:

The Contractor shall provide technical assistance and support on maintaining the structural integrity of the reactor pressure vessel (RPV) during normal operations and also during postulated accident scenarios. The Contractor shall provide support for the assessment of RPV structural integrity to; (1) predict the behavior of cracked components under loading, and (2) predict the effects of irradiation embrittlement on the fracture toughness of RPV steels. In addition, the Contractor shall provide assistance on understanding the adequacy of existing approaches and on developing new models and predictive procedures to address the integrity of the RPVs.

Non-Destructive Evaluation (NDE):

The Contractor shall provide technical assistance on determining the effectiveness and reliability of NDE methods, assessment of NDE modeling tools, and evaluation of human factors on NDE performance. The contractor shall provide support for regulatory decisions associated with NDE and in-service inspection (ISI) of safety-related systems. In addition, the contractor shall provide support for review of relief requests and proposed changes to ASME (American Society of Mechanical Engineers) Boiler & Pressure Vessel Code (B&PVC) and code case requirements.

Storage and Transportation of Spent Nuclear Fuel:

The Contractor shall provide technical assistance to develop the technical bases for review of license renewal applications for continued storage and transportation of spent nuclear fuel. In addition, the contractor shall provide support for improved understanding of potential degradation modes that could affect safety significant structures, systems, and components in dry cask storage systems. Potential degradation modes include, but not limited to, chloride-induced stress corrosion cracking of stainless steel canisters.

Technical assistance and support may be needed in the following specific areas of materials performance and component integrity:

- Nuclear reactor pressure vessel and piping systems materials, environmental degradation, and fracture assessment.
- Finite element modeling and simulation including extended finite element method (XFEM) including, but not limited to, Simulia/ABAQUS FEM code.
- Fracture mechanics modeling and experimental validation.
- Weld residual stress modeling and measurement.
- Mechanical testing of structural materials (metals and non-metals) for NPP applications.
- Software maintenance, quality assurance, verification and validation.
- Applications, maintenance, and/or development of probabilistic fracture mechanics (PFM) modeling software such as: (1) eXtremely Low Probability of Rupture (xLPR) software for piping systems containing dissimilar metal welds that are subjected to primary-water stress corrosion cracking (PWSCC) and thermal stress-induced fatigue, (2) Fracture Analysis of

Vessels – Oak Ridge (FAVOR) software for RPV assessment, (3) Design Analysis Kit for Optimization and Terascale Applications (DAKOTA), (4) FES (Flaw Evaluation Software – NRC), (5) LEAPOR (Leak Analysis of Piping – Oak Ridge), and others.

- Statistical analysis (e.g., sensitivity analysis, sampling convergence analysis, uncertainty analysis).
- Application of computational fluid dynamics to assess leakage from cracks to support LBB assessments.
- Application of computer programming including, but not limited to, Fortran programming.
- Technical assistance for evaluation of codes and standards and code cases that are being developed under ASME B&PVC, Section III (nuclear components), Division 5 (high-temperature reactors) for nuclear-grade graphite and metallic materials for use in high-temperature gas-cooled reactors (HTGRs), liquid metal (sodium, lead or lead-bismuth)-cooled fast reactors (LMRs) and molten-salt cooled reactors (MSRs).
- Support on development and assessment of high temperature flaw evaluations methodologies under steady-state and time-dependent loadings and materials' response such as in creep-fatigue.
- Technical assistance for evaluating the chemical compatibility and testing of molten salt reactor corrosion on structural materials and graphite.
- Technical assistance for assessing ASME B&PVC code cases for allowing piping repairs made with carbon fiber reinforced polymers (CFRP), support relief request allowing repair to safety-related piping (e.g., service water piping) with CFRP materials.
- Support on web-based public-facing application and programming for Radiation Embrittlement Archive Project (REAP) database developed at Oak Ridge National Laboratory for continued operation and maintenance of LWR surveillance testing.
- Support of NDE of advanced materials, human factors for NDE and, on computational modeling and simulation for NDE.
- Support on analyzing, assembling and review information presented at various international technical meetings and published in scientific journals concerning key emerging issues and recent progress related to plant chemistry/corrosion in pressurized water reactors (PWRs), boiling water reactors (BWRs), Russian VVER and CANDU (Canada) reactors.
- Support on technology advancement and regulatory acceptance of advanced manufacturing technology (AMT)-fabricated components, and identify AMTs that are likely to be used in new NPPs or in existing plants.
- Support on computational modeling and simulation of AMTs including, but not limited to, electron beam welding (EBW) and hot isostatic pressing (HIP) for application to fabrication of advanced light water reactor (LWR) and non-LWR primary system components.

- Support on compiling, analyzing and verifying mechanical properties, strength, fracture toughness, and microstructure characterization data for AMT-fabricated and subsequent heat treated test specimens that are representative of full-scale sub-assemblies and components.
- Support on identifying and qualifying NDE techniques to ensure the quality of AMT- fabricated parts.

3.5 Instrumentation and Controls (I&C) and Electrical Systems for NPP and NPUFs

The instrumentation and controls (I&C) area continues to evolve, and the NRC continues to refine its regulatory approach to comport with technological advancements in this area. As operating NPPs and NPUFs upgrade, analog equipment is being replaced with modern digital equipment including, but not limited to, flat screen operator interfaces and soft controls, embedded digital devices in even traditionally electromechanical systems such as relays, and reactor protections systems. In addition the way in which these systems are developed is advancing, such as the shift to systems engineering, the use of model based engineering, and modern hazard analysis methods. The NRC continues to perform research and licensing activities that supports development of licensing criteria to evaluate new digital I&C systems.

The NRC also continues to perform research and licensing activities into the operation of electrical systems. The topical areas for electrical engineering include offsite power sources, onsite electrical power distribution systems, emergency power supplies, electrical equipment qualification, and electrical cable and equipment aging.

The contractor shall provide technical assistance and support on one or more of the following areas:

- Assessment and licensing activities on analog and digital I&C and electrical systems and components.
- Assessment and licensing activities on I&C systems and components modernization and refurbishment.
- Assessment and licensing activities on Equipment qualification (EQ) of I&C systems and electrical system components.
- Assessment and licensing activities on field-programmable gate array (FPGA)-based instrumentation and control systems' applications in NPPs; design, programming, testing, integration, and verification and validation.
- Assessment and licensing activities on Cyber physical systems (CPS).
- Assessment and licensing activities on embedded digital devices.
- Assessment and licensing activities on Model Based Systems Engineering and associated methods, processes, tools, and their combined use as methodologies.
- Application and licensing activities of modern hazard analysis methodologies (e.g., Systems-Theoretic-Process-Analysis).

- Development and maintenance of databases on operational experience of digital instrumentation and controls in nuclear power plants, or other applications of similar safety significance.
- Assessment and licensing activities on offsite power sources.
- Assessment and licensing activities on onsite electrical power distribution systems.
- Assessment and licensing activities on emergency power supplies.
- Assessment and licensing activities on electrical equipment qualification.
- Assessment and licensing activities on electrical cable and equipment aging.

3.6 Risk Analysis

The NRC staff performs risk assessments of inspection findings and reactor incidents to determine their significance for appropriate regulatory response. The NRC recognizes that probabilistic risk assessment (PRA) has evolved to the point where it can be used as a tool in risk-informed regulatory decision-making. Consequently, confidence in the information derived from a PRA is an important issue. The accuracy of the technical content must be sufficient to justify the specific results and insights that are used to support the decision under consideration. The NRC continues to perform research that supports development of methods used for regulatory decision-making.

The contractor shall provide technical assistance and support on one or more of the following areas:

- Technical assistance for in-depth analyses and evaluations of significant operating events and safety issues to determine the root causes of these events, risk insights and lessons-learned.
- Technical assistance for the Risk Assessment Standardization Project (RASP) to establish standard procedures, improve the methods, and enhance risk models that are used in risk assessment in various risk-informed regulatory applications.
- Technical assistance in the development of consistent PRA/Risk-related terminology to ensure accurate communication and transfer of information in support of risk-informed decision-making (related to NUREG-2122).
- Support the development of PRA uncertainty (related to NUREG-1855) to foster an understanding of the uncertainties associated with PRA and their impact on the results of PRA and by providing a pragmatic approach to addressing these uncertainties in the context of the decision-making.
- Support the advancement of Standardized Plant Analysis Risk (SPAR) models used by NRC staff in support of risk-informed activities related to the inspection program, incident investigation program, license amendment reviews, performance indicator verification, accident sequence precursor program, generic safety issues, and special studies.

- Provide insights to support the Systems Analysis Programs for Hands-on Integrated Reliability Evaluation (SAPHIRE) software development program to advance the state of art in performing risk calculations accurately and efficiently in support of risk-informed regulatory activities.
- Technical assistance on the development of new Level 3 PRAs to enhance regulatory decision-making with the focus on issues directly related to the agency's mission to protect public health and safety.
- Support research programs related to human performance, personnel safety and security, and human reliability analysis (HRA) such as: technical support and on-going Part 26 implementation consultation, HRA data repository, HRA-informed tools for medical applications, and updating human factors engineering methods and tools to provide safety perspectives on the impact of human performance on nuclear power plants and other NRC-licensed facilities and their regulated activities.
- Technical assistance in support of fire PRA methodologies to evaluate the impact of fire to safety systems, failures in the fire defense in depth strategy, and safe operation of nuclear power plants (related to NUREG/CR-6850).
- Support the development of methods, data, standards, and modeling tools to assess the magnitude and effect of released radioactive material to the environment outside nuclear facilities.
- Support in experiments to better characterize and quantify fire safety risks and hazards in nuclear power plants.
- Support the development of fire HRA methods in support of fire PRA beyond those currently in NUREG/CR-6850 and to expand existing HRA methods to evaluate the impact of human failures in the fire protection defense-in-depth safety strategy.
- Technical assistance to improve, verify and validate fire modeling in NPPs used to analyze fire scenarios in risk assessments, determine damage to cables and other systems and components important to safety.
- Technical assistance in support of the development of Regulatory Guide and standards development for risk-informed decision-making.
- Support development of advanced risk-informed methods for non-reactor applications (e.g., Dry Cask Storage).
- Support to expand, update, review advanced PRA methods, tools and data used in nuclear regulatory activities to support implementation of risk-informed regulation.

3.7 Code Development and Code Support

Unless otherwise stated, these task areas may apply to any of the following codes: TRACE, PARCS (both standalone and coupled versions), RELAP5, AVScript, and ACAP, AGREE, SNAP, APTPlot, and GENPMAXS. Also included are component integrity and probabilistic

fracture mechanics related codes such as FAVOR (Fracture Analysis of Vessels – Oak Ridge), xLPR (extremely Low Probability of Rupture - piping), FES (Flaw Evaluation Software – NRC), LEAPOR (Leak Analysis of Piping – Oak Ridge), and other codes. PARCS-related application and development work necessary to support project objectives, as well as the use of commercially available lattice physics codes like HELIOS or CASMO. In addition, the stated codes may need support and maintenance and may be used for analysis under this contract.

The NRC may, at its discretion, issue task orders for work in any of the following areas:

1. Engineering analyses related to code errors, modeling gaps, or deficiencies and document those analyses and their safety significance.
2. Code and/or model development to add new modeling capabilities or features to the codes. This may include the integration of changes developed by others into official code update submittals (including all necessary SQA). All development will be performed according to accepted SQA practices.
3. Code and/or model development to change existing modeling capabilities or features in the codes. This may include the integration of changes developed by others into official code update submittals (including all necessary SQA). All development will be performed according to accepted SQA practices.
4. Typical code maintenance activities, such as (but not necessarily limited to) tracking & fixing bugs, version control and configuration management, developing and maintaining installation packages across multiple platforms, and maintaining documentation.
5. Evaluation of new experimental and/or assessment results and make recommendations to the NRC concerning their implementation.
6. Developmental assessment and documentation of (i.e. V&V) the codes against new or existing experimental data. This may involve assessing codes against a wide range of pre-existing test cases in an automated framework and documenting the results in an assessment addendum prior to code release. This may also include reviewing the assessment data base and expanding it with applicable test cases and automated validation frameworks, as appropriate.
7. Have new versions of codes tested or peer reviewed by independent organizations.
8. Maintenance and updates of code documentation, as appropriate. This may include converting documentation to different formats.
9. Specific technical studies and technical support related to the codes as requested by the NRC.
10. Development of input models to address issues that may arise from the NRC review of new or existing reactor designs and generic or safety issues related to operating reactors.
11. Maintenance and improvement of the NRC Data Bank. This may include (but is not limited to) such tasks as

- Converting raw data to the NRC PIB binary format and arranging for placement into the NRC's Agency-wide Documentation and Management System (ADAMS)
- Identifying and acquiring relevant technical reports and reference material for inclusion in the Data Bank
- Reorganizing electronic files already in the Data Bank to new hierarchical structures
- Migration of the Data Bank to a version control system
- Development of a queuing system to allow tracking of the file conversion process
- Changes to the conversion process or storage format

12. CAMP and Domestic User Group program management. Typical activities would include maintaining a current list of approved users/organizations, organizing and participating in bi-annual CAMP conferences, taking meeting minutes, maintaining a user support site, reviewing in-kind contributions, providing telephone and email assistance to code users, developing and distributing bi-annual newsletters, distributing codes to approved users, establishing CAMP licensing agreements with foreign commercial organizations on NRC's behalf, and handling invoicing and fee collection for domestic and international organizations.

13. Special development projects designed to improve the capabilities or maintenance of electronic tools used to support code users and the CAMP program.

14. Develop and/or conduct training courses for NRC T/H codes as well as general thermal-hydraulics and reactor safety topics (i.e. LBLOCA, SBLOCA, transients, stability analysis, two-phase flow fundamentals, etc.). Training materials may take the form of on-line web-based training videos as opposed to traditional classroom-based learning.

15. The contractor shall provide technical assistance for simulations and analyses that include normal operations, anticipated operational occurrences, design basis accidents, and beyond-design basis accidents relevant to all currently operating reactor types, as well as new and advanced reactor designs. Such assistance shall be accomplished using the principal computer codes designed to perform the respective simulations for the applicable technical disciplines, including thermal-hydraulics, neutronics, computational fluid dynamics (CFD), severe accidents, radiological consequences, and fuel behavior. This work includes the formulation of input models (aka input decks; e.g., the input model for the Browns Ferry Nuclear Plant), calculational notebooks that document formulation of the input models and any other associated documentation.

16. The contractor shall provide technical assistance for creation of constitutive relations and phenomenological models (e.g. a two-phase drag model; droplet models, entrainment models etc.) to support analysis needs of all currently operating reactor types, as well as new and advanced reactor designs. Such assistance shall be accomplished through modifications of the principal computer codes or the coupling methods that link the various codes and models. In addition, the contractor shall provide experimental data (preferably by obtaining the existing data from other facilities, or via experiments produced by building experimental facilities and operating them as part of this contract). Such data will be used in verification and validation activities that are part of this contract. The codes and their correlations must be verified and validated for their intended uses.

17. SNAP Development and Support activities.

- SNAP is written in Java, which itself it updated rather frequently. The contractor shall make sure that SNAP and its components fully function under the current version of Java; this may involve rewriting SNAP components to ensure compliance with the new Java versions.
- SNAP code plug-ins exist for the following NRC-developed analytical codes: TRACE, MELCOR (1.8.6, 2.1, and 2.2), PARCS, RADTRAD, FRAPCON, FRAPTRAN, and FAST. TRACE is a system-level thermal hydraulic code. MELCOR is a system-level severe accident code. PARCS is a three-dimensional (3D) reactor core simulator which solves the steady-state and time-dependent, multi-group neutron diffusion and transport equations. RADTRAD is a code that predicts dose to populations based on radiological release from various scenarios. FRAPCON and FRAPTRAN are fuel phenomena codes; FAST replaces the functionality of the “FRAP” codes with a modern architecture and updated models. The contractor shall maintain and extend these existing plug-ins to maintain compatibility with the current versions of these codes.
- SNAP also supports additional features through “feature” plug-ins. Feature plug-ins are also self-contained “jar” files. Feature plug-ins that are currently available for SNAP are: the “AVF” (auto-validation framework) plug-in and the “UQ” (uncertainty) plug-in. The AVF plug-in allows users to define validation and verification suites as well as code-to-code and code-to-data assessment cases. The UQ plug-in provides a framework for interfacing the analytical code plug-ins to the Design Analysis Kit for Optimizing and Terascale Applications (DAKOTA) code. DAKOTA is a multilevel parallel object-oriented framework for design optimization, parameter estimation, uncertainty quantification, and sensitivity analysis. The contractor shall maintain and extend these existing feature plug-ins to maintain compatibility with the underlying support codes (DAKOTA for UQ plug-in, and the AVScript for the AVF plug-in).
- The contractor shall also support the development of any changes to the existing user interfaces for the SNAP code plug-ins as well as developing bug fixes and providing user support activities including tutorial video development and user manual documents. The contractor may also be asked to modify the source code for analytical codes that support SNAP features.

3.8 Litigation Support

Litigation support may be needed for the seven (7) technical support services areas listed in 3.1 through 3.7.

The Contractor shall provide litigation support at hearings (mandatory or contested), and other similar processes. This effort includes, but is not limited to: providing written documentation of work performed during the subject technical reviews; providing expert testimony (written and oral) and reports; reviewing and analyzing expert testimony/reports provided by other parties in the litigation; and participate in evidentiary hearings.

4.0 TASK ORDER PLACEMENT PROCEDURES

Each task order under this IDIQ contract will be awarded on a competitive basis within the technical support service area vendor pool.

Under FAR 19.502-4 "Multiple-Award Contracts and Small business Set-Asides" in accordance with Section 1331 of Public Law 111-240 (15 U.S.C. 644(r)), Contracting Officers may, at their discretion, set aside orders for any of the small business concerns identified in 19.000(a)(3). When setting aside orders for small business concerns, the specific small business program eligibility requirements identified in Part 19 apply.

5.0 PERSONNEL QUALIFICATIONS

All personnel performing work under this contract shall have pertinent technical experience by discipline and technical area. Experience in these disciplines and technical areas must be related to the design, construction, operation, maintenance, security, inspection and environmental review of nuclear power plants and non-nuclear facilities licensed by the NRC. Emphasis is placed on experience that is related to safety, security and environmental impact where judgments are made as to whether applicable codes and federal regulations are being, or have been, implemented and/or followed. It is the responsibility of the Contractor to propose technical staff, employees, subcontractors or specialists who have the required educational background, experience, security clearance and/or access authorization or combination thereof, to meet both the technical and regulatory objectives of the work specified in the task order statement of work (SOW). The number of personnel required will vary during the course of the contract. The availability of qualified Contractor personnel who shall possess the minimum experience, educational background, and combination thereof, will be negotiated on each task order.

5.1 CONTRACTOR PROJECT MANAGER QUALIFICATIONS

The Contractor shall provide a responsible Project Manager who shall possess, at a minimum, a Bachelor's Degree in Engineering or Science and ten (10) years of direct project management experience in professional commercial nuclear support services. The Project Manager shall have experience that is related to safety, and/or security, and/or environmental impact where judgments are made as to whether applicable codes and federal regulations are being, or have been, implemented and/or followed. The Project Manager will have demonstrated capabilities to address highly complex issues. This individual shall also be considered as key personnel under the contract and serve as primary contact.

5.2 TECHNICAL DISCIPLINES AND SPECIALIZED TECHNICAL AREAS

The staffing plan of the technical personnel must at a minimum possess the education, qualifications and project experience for each technical support service area listed below:

The NRC encourages offerors to include education, qualifications and project experience on Artificial Intelligence and Data Science as an emerging future skill needed as the paradigm of the NRC is being a modern risk informed regulator.

The minimum number of years listed below applies to the individual and not collective of individuals. The required experience is a collection of individuals and will be proposed in the staffing plan format found in Section L.

3.1 Thermal Hydraulics Research Support

Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S in Engineering or Science	Expertise in thermal-hydraulics and fluid dynamics related to accident progression	15 years
	Development of computer code plant specific input models.	10 years
	In-depth knowledge of nuclear power plant systems including reactor and containment systems for LWRs.	15 years
	Technical reviewer and interpretation of analytical and experimental work conducted domestically and internationally	10 years

3.2 Nuclear Fuel and Core Neutronics Support		
Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S. in Computer Science or Engineering Subject Matter Expert in Update to the Architecture of the Fuel Analysis under Steady-State and Transients.	Documented knowledge of heat transfer, fluid dynamics and solving PDEs in multi-dimension, geometrical-independent platforms	15 years
	Experience with code verification, testing and version control	10 years
	Experience in Fortran and C/C++	15 years
	Experience in the latest (2018) Fortran code development practice, including Object-Oriented Programming, Parallel programming and MPI	15 years
	Extensive experience with the Intel and gcc/gfortran compilers, GIT, cmake, and other relevant software development tools	10 years
	Experience with the FRAPCON/FRAPTRAN or FAST Nuclear Fuel Performance Codes	3 years
B.S. in Engineering Subject Matter Expert in Purdue Advanced Reactor	Graduate level courses in numerical methods, neutronic methods, reactor physics, and thermal-hydraulics	2 years

Core Simulator (PARCS)	Expert knowledge of: core nuclear analysis, nuclear analysis methods development, numerical algorithms for the solution of systems of equations, software engineering, and software quality assurance	4 years
	An understanding of nuclear core thermal-hydraulic analysis and experience in developing algorithms and coding for existing core nuclear thermal-hydraulic concepts	2 years
	Expert knowledge of the classes of codes to which PARCS, GenPMAXS, TRIPEN, AGREE belong (i.e., other nuclear engineering codes that resolve neutronics and thermal-fluidic properties at the core level)	2 years
	Expert knowledge of nuclear analysis code structure, algorithms, and code compilation/build systems	3 years
	Knowledge of modern FORTRAN standards and a working knowledge of MS-DOS, Linux, UNIX, and scripting languages such as Perl and Python	3 years
	Proficiency in the use of the following lattice physics packages: HELIOS, CASMO, SCALE/TRITON, SCALE/Polaris, SCALE/Shift, and Serpent	3 years

3.3 Severe Accident and Consequence Analysis Support

Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S. in Engineering or Science	Experience with light water reactor (LWR) and advanced reactor systems including non-light water reactors and small modular reactors	5 years

	Nuclear safety research and severe accident progression analysis	5 years
	Nuclear accident consequence analysis including radionuclide release, atmospheric transport, meteorology, emergency response and long-term protective actions, exposure pathways, dosimetry and health effects, economic factors, and uncertainty analysis	5 years
	Probabilistic risk and reliability analysis	5 years
M.S. or Ph.D. in Engineering or Science	Expertise in nuclear safety research and severe accident progression phenomenology	15 years
	In-depth knowledge of nuclear power plant systems including reactor and containment systems for LWRs and advanced designs (including accident tolerant fuels)	15 years
	Expertise in nuclear accident consequence analysis including radionuclide release, atmospheric transport, meteorology, emergency response and long-term protective actions, exposure pathways, dosimetry and health effects, economic factors, and uncertainty analysis	15 years
	Expertise in thermal-hydraulics and fluid dynamics related to accident progression	15 years
	Development of computer code plant specific input models and application of computational numerical methods	15 years
	Demonstrate experience in conducting severe accident phenomenological research including conducting experimental	15 years

	and analytical research activities	
	Technical reviewer and interpretation of analytical and experimental work conducted domestically and internationally	15 years
M.S. or Ph.D. in Engineering or Science Subject Matter Expert in Accident Consequence Analysis	Expertise in nuclear accident consequence analysis including radionuclide release, atmospheric transport, meteorology, emergency response and long-term protective actions, exposure pathways, dosimetry and health effects, economic factors, and uncertainty analysis	15 years
	In-depth knowledge of nuclear power plant accidents for LWRs and advanced designs	15 years
	Expertise in the development and application of computer code models for accident consequence analysis and communication of analyses to diverse audiences both written and orally	15 years
	Technical reviewer and interpretation of analytical and experimental work conducted domestically and internationally	15 years

3.4 Component Integrity and Materials Performance		
Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S. in Engineering or Science	Nuclear Power Plant (NPP) Related Mechanical Engineering Systems, Structures, or Components (SSCs) structural integrity analysis	10 years
	Structural Material Science	10 years
	Corrosion, Metallurgy, Fatigue	10 years
M.S. or Ph.D. in	Analysis of NPP SSCs, reactor	15 years

Engineering or Science	pressure vessels and piping systems under materials' environmental degradation, and fracture assessment	
	Finite element modeling and simulation including extended finite element method (XFEM) including use of, but not limited to, Simulia/ABAQUS FEM code and public sector (U.S. Government funded) codes	15 years
	Statistical analysis (e.g., sensitivity analysis, sampling convergence analysis, uncertainty analysis), application of probabilistic methods, risk and reliability assessment.	15 years
	Welding-induced residual stress computational modeling, verification and validation for NPP SSCs	10 years
	Structural integrity assessment-related computer code development, maintenance, quality assurance, verification and validation	10 years
	Analyzing, assembling and reviewing information presented at various international technical meetings and published in scientific journals concerning key emerging issues and recent progress related to plant chemistry/corrosion in pressurized water reactors (PWRs), boiling water reactors (BWRs), Russian VVER and CANDU (Canada) reactors	10 years
	Supporting codes and standards and code cases that are being developed under ASME B&PV Code, Section III (nuclear components), Division 5 (high-temperature reactors) for nuclear-grade graphite and metallic materials for use in high-temperature gas-cooled reactors (HTGRs), liquid metal (sodium, lead or lead-bismuth)-cooled fast reactors (LMRs)	5 years

	and molten-salt cooled reactors (MSRs)	
	Technical assistance for evaluating the chemical compatibility and corrosion of molten salt on structural materials and graphite in MSRs	3 years
	Development and assessment of high temperature flaw evaluations methodologies under steady-state and time-dependent loadings and materials' response such as in creep-fatigue for NPP SSCs	3 years
	Computational modeling and simulation for non-destructive examination (NDE), and supporting NDE of NPP SSCs materials, and human factors for NDE	3 years
	Assessing ASME B&PV code cases for allowing piping repairs made with carbon fiber reinforced polymers (CFRP), support relief request allowing repair to safety-related piping (e.g., service water piping) with CFRP materials	3 years
	Integrity assessment of components fabricated using advanced manufacturing technologies (additive/3D-printing and subtractive) containing metals, ceramics and/or polymers	3 years
	Support technology advancement and regulatory acceptance of advanced manufacturing technology (AMT)-fabricated components, and identifying AMTs that are likely to be used in new NPPs or in existing plants	3 years
B.S. or M.S. in Engineering or Science	Application of computer programming including, but not limited to, Fortran programming.	10 years

	Application of computational fluid dynamics codes to assess leakage from cracks to support leak-before-break assessments in NPP SSCs	3 years
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3.5 Instrumentation and Controls (I&C) and Electrical Systems for NPP		
Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S. in Engineering or Science	Expertise with the following in relation to digital I&C systems and components in safety critical systems in nuclear power plants or other applications of similar safety significance: · Model Based Systems Engineering and associated methods, processes, tools, and their combined use as methodologies. · Application of modern hazard analysis methodologies (e.g., Systems-Theoretic-Process-Analysis).	10 years
B.S. in Engineering or Science	Development and maintenance of databases on operational experience of digital instrumentation and controls in nuclear power plants, or other applications of similar safety significance.	5 years
B.S. in Engineering or Science	Expertise with electrical systems and components in safety critical systems in nuclear power plants or other applications of similar safety significance in: · Offsite power sources and onsite electrical power distribution systems · Emergency power supplies · Equipment qualification of electrical systems and components · Electrical cable and equipment aging	15 years
B.S. in Engineering or Science	Expertise in analog and digital I&C systems and components in nuclear power plants or other applications of similar safety significance in:	15 years

	<ul style="list-style-type: none"> •Modernization and refurbishment of I&C systems and components •Equipment qualification (EQ) of I&C systems •Field-programmable gate array (FPGA)-based instrumentation and control systems' applications; design, programming, testing, integration, and verification and validation •Cyber physical systems(CPS) •Embedded digital devices. 	
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3.6 Risk Analysis		
Educational Requirements	Required Experience	Minimum Number of Years of Experience
B.S. or M.S. in Engineering or Science	Probabilistic Risk and Reliability Assessments/Analysis	5 years
M.S. or Ph.D. in Fire Protection Engineering or Fire Safety Science	Nuclear Power Plant (NPP) Fire Protection Engineering Systems, Structures, or Components (SSCs), Fire Modeling, Fire Risk Quantification, and Fire Safety Testing	10 years
Ph.D. in Engineering or Science	Probabilistic Risk and Reliability Assessments/Analysis and Uncertainty Analysis	15 years
M.S. or Ph.D. in Nuclear and/or Electrical Engineering or Science	Documented in-depth knowledge of nuclear power electrical systems and critical safety-related systems	10 years
Ph.D. in Human Factors Engineering or Science	Junior Researcher's must have documented expertise in the areas of human factors, experimental psychology or relevant discipline (e.g. cognitive/social/ organizational psychology), human performance modeling/simulation, or human systems engineering along with demonstrating the ability to design and carry out simulation-based human performance experiments and tests.	10 years

	Senior Researcher's must have a documented high level of expertise in the areas of human factors, experimental psychology or relevant discipline (e.g. cognitive/social/organizational psychology), human performance modeling/simulation, or human systems engineering and must possess the credentials which qualify them to lead a multi-disciplinary team tasked with carrying out human performance research. An Senior Researcher is responsible for directing the work of additional staff and project management.	15 years
M.S. or B.S. degree in the areas central to Computer Science/Engineering or Electrical Engineering or possess a MS degree in other areas but developed and demonstrated equivalent skills to a MS degree in Computer Science/Engineering.	Simulation Engineer's must have documented expertise in developing simulation scenarios, programming human-system interfaces, and capturing/reducing data utilizing the programming languages programming human-system interfaces and capturing/reducing data utilizing the programming languages in the provided NPP simulator (C/C++ and JAVA).	5 years

3.7 Code Development and Code Support		
Educational Requirements	Required Experience	Minimum Number of Years of Experience
Subject Matter Expert in Symbolic Nuclear Analysis Package (SNAP)	Demonstrated code development experience with Java applications	5 years
	Demonstrated code development experience with Python applications	3 years
B.S. in Computer Science or Engineering	Experience in Fortran and C/C++	10 years
	Experience in the latest Fortran code development practice, including Object-Oriented Programming, Parallel programming and MPI	10 years

6.0 PERFORMANCE STANDARDS

- a. Contractor performance for each task order will be evaluated based on meeting the

performance standard established for each task order and shall be documented on the annual Contractor Performance Assessment Reporting (CPAR). It should be noted that award of subsequent task orders will be based on the assigned contractors' ability to meet the schedule, milestones, and deliverable requirements of the preceding task orders.

b. The deliverables will be identified on each Task Order of which outlines the performance requirements, deliverables, acceptable standards, surveillance method, and incentives and/or deductions applicable to the assigned task.

7.0 ADDITIONAL GUIDANCE

a. Some reports containing sensitive information will require the contractor to access NRC's Safeguards Information Local Area Network and Electronic Safe (SLES). The contractor shall coordinate with the Task Order COR (TO COR) for access to SLES.

b. For Safeguards and SLES access the following classes are required initially and annually: Computer Security Awareness (Web Based)
Information Security Awareness (Web Based) SLES Training for Designator Access (Web-Based)

Safeguards Information and Designator Course, Parts I and II (Web-based)

c. All contractors shall be required to take Safeguards Information and Designator Course, Parts I and II (Web-based) and become an SGI Designator.

8.0 MEETINGS AND TRAVEL

Each task order will specify any required meetings or travel plant sites throughout the United States; NRC offices in Rockville, Maryland; NRC regional offices; and any other location required for performance of the work detailed in the task order statement of work. Prior to any trip taken during the period of performance under this contract that is within the work scope limits, the Contractor shall obtain approval from the TO COR or Contracting Officer designated to that respective task order (TO CO).

9.0 NRC FURNISHED MATERIALS

Any reports, documents, equipment, and other materials required by the contractor to perform the work will be stated in the NRC Furnished Materials Section of the task order. The TO COR will provide those NRC documents related to the task order. Any additional NRC documentation needed will be provided by NRC or obtained directly by Contractor from Agencywide Document Access Management System (ADAMS), the NRC Public Document Room, or the NRC public web site.

10.0 LICENSE FEE

Plant specific licensing actions are fee recoverable. Each task order will state whether or not the work is license fee recoverable.

11.0 MONTHLY LETTER STATUS REPORTS

The contractor shall submit an electronic Monthly Letter Status Report (MLSR) by the 20th day of each month to the Contracting Officer's Representative (COR) and the Contracting Officer

(CO). If orders are issued under the contract, a separate MLSR must be provided for each order. MLSRs are not required once the NRC determines that work under the contract/order is complete, and the final costs are acceptable.

12.0 HOURS OF OPERATION

If the contractor is providing support at an NRC facility, the contractor shall provide support during normal business hours Monday through Friday, except Federal holidays or when the Government facility is closed due to local or national emergencies, administrative closings, or similar Government-directed facility closings. In the event that the Government facility is closed, working from a remote location may be an option. The Contractor shall obtain permission from the COR and the Contracting Officer prior to beginning telework.

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: None.

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 Reactor Regulation (NRR), Office of Nuclear Material Safety and Safeguards (NMSS) and Office of Regulatory Research (RES) and Office of Nuclear Security and Incident Response (NSIR), under Contract/order number 31310020D0002.

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.

Contract Deliverables:

1. As stated on individual Task Orders.
2. []
3. []
4. []
5. []

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

E.3 52.246-6 INSPECTION - TIME-AND-MATERIAL AND LABOR-HOUR. (MAY 2001)

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. Name: [REDACTED] (1 hard copy)

b. Contracting Officer's Representative (COR)

c. U.S. Nuclear Regulatory Commission

d. Address:

Mail Stop: (Email)

11555 Rockville Pike

Rockville, MD 20852

e. Electronic copies to:

f. (List names and email addresses)

g. Name: Jeffrey.Mitchell@nrc.gov (1 hard copy)

h. Contracting Officer (CO)

i. U.S. Nuclear Regulatory Commission

j. Address:

Mail Stop: (Email)

11555 Rockville Pike

Rockville, MD 20852

F.2 PERIOD OF PERFORMANCE ALTERNATE I

The ordering period for this contract shall commence on August 1, 2020 and will expire on July 31, 2025. Any orders issued during this period shall be completed within the time specified in the order, unless otherwise specified herein. (See FAR 52.216-18 - Ordering).

F.3 52.242-15 STOP-WORK ORDER. (AUG 1989) - ALTERNATE I (APR 1984)

F.4 52.242-17 GOVERNMENT DELAY OF WORK. (APR 1984)

F.5 52.247-34 F.O.B. DESTINATION. (JAN 1991)

G - Contract Administration Data

NRC Local Clauses Incorporated by Full Text

G.1 REGISTRATION IN FEDCONNECT® (JULY 2014)

The Nuclear Regulatory Commission (NRC) uses Unison Software Systems' secure and auditable two-way web portal, FedConnect®, to communicate with vendors and contractors. FedConnect® provides bi-directional communication between the vendor/contractor and the NRC throughout pre-award, award, and post-award acquisition phases. Therefore, in order to do business with the NRC, vendors and contractors must register to use FedConnect® at <https://www.fedconnect.net/FedConnect>. The individual registering in FedConnect® must have authority to bind the vendor/contractor. There is no charge for using FedConnect®. Assistance with FedConnect® is provided by Unison Software Systems, not the NRC. FedConnect® contact and assistance information is provided on the FedConnect® web site at <https://www.fedconnect.net/FedConnect>.

G.2 ELECTRONIC PAYMENT (DEC 2017)

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

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

G.3 ORDERING PROCEDURES FOR MULTIPLE-AWARD INDEFINITE-DELIVERY/INDEFINITE-QUANTITY CONTRACTS (MAR 2014)

[The contracting officer is responsible for providing further specificity to supplement the standard information contained in the ordering procedures set forth below to address the specific requirements of each contract.]

General.

This clause applies to solicitations and contracts for multiple-award Indefinite-Delivery contracts. For the work specified in the SOW, PWS or SOO, the CO may issue an order to one of the IDC contractors. The contractor agrees that issuance of an order in accordance with any of the procedures described below is deemed to have provided the contractor a "fair opportunity to be considered" as that phrase is used at FAR 16.505(b)(1).

Ordering Process.

Under this RFTOP this agency will follow the procedures set forth in FAR 16.505.

To the extent that the RFTOP requirements or aspects of the proposal that deviate from the government's requirements and are not within established scope or pricing of the IDC the contractor shall immediately contact the CO for appropriate guidance.

Task/Delivery Order Ombudsman.

To further ensure that all contractors are afforded a fair opportunity to be considered to task or delivery orders pursuant to FAR 16.505, the NRC has an Ombudsman. The purpose of the Ombudsman is not to diminish the authority of the CO, but to receive on behalf of and to communicate to the appropriate Government personnel concerns and disagreements of contractors not receiving a specific order and to work to resolve the matter. When requested, the Ombudsman will maintain strict confidentiality as to the source of the concern. The Ombudsman does not participate in the original selection of contractors or in the evaluation or determination of the issuance of task or delivery orders under the applicable IDC contract. He/She does not act in the capacity of a CO and does not participate in the adjudication of contract disputes in regard to multiple award task or delivery order contracts awarded pursuant to FAR Subpart 16.5. Interested parties may contact the Ombudsman with concerns or disagreements. Issues or concerns to the NRC task/delivery order Ombudsman may be forwarded to:

U.S. Nuclear Regulatory Commission

Acquisition Management Division

Attn: Ombudsman

Washington, DC 20555

NRCAR Clauses Incorporated By Full Text

G.4 2052.215-77 TRAVEL APPROVALS AND REIMBURSEMENT. (OCT 1999)

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

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

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

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

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

Governments; OMB Circular A-122, Cost Principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

(End of Clause)

G.5 2052.216-71 INDIRECT COST RATES. (JAN 1993)

(a) Pending the establishment of final indirect rates which must be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs as follows:

Provisional Indirect Rates		
Day of Award through Contract Expiration		
Cost Center	Rate	Allocation Base
██████████	██████	██████████████████
██████	██████	██████████████████

(b) The contracting officer may adjust these rates as appropriate during the term of the contract upon acceptance of any revisions proposed by the contractor. It is the contractor's responsibility to notify the contracting officer in accordance with FAR 52.232-20, Limitation of Cost, or FAR 52.232-22, Limitation of Funds, as applicable, if these changes affect performance of work within the established cost or funding limitations.

*To be incorporated into any resultant contract.

(End of Clause)

G.6 2052.216-72 TASK ORDER PROCEDURES. (OCT 1999)

(a) Task order request for proposal. When a requirement within the scope of work for this contract is identified, the contracting officer shall transmit to the contractor a Task Order Request for Proposal (TORFP) which may include the following, as appropriate:

- (1) Scope of work/meetings/travel and deliverables;
- (2) Reporting requirements;
- (3) Period of performance - place of performance;
- (4) Applicable special provisions;
- (5) Technical skills required; and
- (6) Estimated level of effort.

(b) Task order technical proposal. By the date specified in the TORFP, the contractor shall deliver to the contracting officer a written or verbal (as specified in the TORFP technical proposal submittal instructions) technical proposal that provides the technical information required by the TORFP.

(c) Cost proposal. The contractor's cost proposal for each task order must be fully supported by cost and pricing data adequate to establish the reasonableness of the proposed amounts. When the contractor's estimated cost for the proposed task order exceeds \$100,000 and the period of performance exceeds six months, the contractor may be required to submit a Contractor Spending Plan (CSP) as part of its cost proposal. The TORP indicates if a CSP is required.

(d) Task order award. The contractor shall perform all work described in definitized task orders issued by the contracting officer. Definitized task orders include the following:

- (1) Statement of work/meetings/travel and deliverables;
- (2) Reporting requirements;
- (3) Period of performance;
- (4) Key personnel;
- (5) Applicable special provisions; and
- (6) Total task order amount including any fixed fee.

(End of Clause)

G.7 2052.216-73 ACCELERATED TASK ORDER PROCEDURES. (JAN 1993)

(a) The NRC may require the contractor to begin work before receiving a definitized task order from the contracting officer. Accordingly, when the contracting officer verbally authorizes the work, the contractor shall proceed with performance of the task order subject to the monetary limitation established for the task order by the contracting officer.

(b) When this accelerated procedure is employed by the NRC, the contractor agrees to begin promptly negotiating with the contracting officer the terms of the definitive task order and agrees to submit a cost proposal with supporting cost or pricing data. If agreement on a definitized task order is not reached by the target date mutually agreed upon by the contractor and contracting officer, the contracting officer may determine a reasonable price and/or fee in accordance with Subpart 15.8 and Part 31 of the FAR, subject to contractor appeal as provided in 52.233-1, Disputes. In any event, the contractor shall proceed with completion of the task order subject only to the monetary limitation established by the contracting officer and the terms and conditions of the basic contract.

(End of Clause)

H - Special Contract Requirements

NRC Local Clauses Incorporated by Full Text

H.1 SECURITY REQUIREMENTS FOR BUILDING ACCESS APPROVAL (SEP 2013)

The Contractor shall ensure that all its employees, subcontractor employees or consultants who are assigned to perform the work herein for contract performance for periods of more than 30 calendar days at NRC facilities, are approved by the NRC for unescorted NRC building access.

The Contractor shall conduct a preliminary federal facilities security screening interview or review for each of its employees, subcontractor employees, and consultants and submit to the NRC only the names of candidates for contract performance that have a reasonable probability of obtaining approval necessary for access to NRC's federal facilities. The Contractor shall pre-screen its applicants for the following:

(a) felony arrest in the last seven (7) years; (b) alcohol related arrest within the last five (5) years; (c) record of any military courts-martial convictions in the past ten (10) years; (d) illegal use of narcotics or other controlled substances possession in the past year, or illegal purchase, production, transfer, or distribution of narcotics or other controlled substances in the last seven (7) years; and (e) delinquency on any federal debts or bankruptcy in the last seven (7) years.

The Contractor shall make a written record of its pre-screening interview or review (including any information to mitigate the responses to items listed in (a) - (e)), and have the applicant verify the pre-screening record or review, sign and date it. Two (2) copies of the pre-screening signed record or review shall be supplied to the Division of Facilities and Security, Personnel Security Branch (DFS/PSB) with the Contractor employee's completed building access application package.

The Contractor shall further ensure that its employees, any subcontractor employees and consultants complete all building access security applications required by this clause within fourteen (14) calendar days of notification by DFS/PSB of initiation of the application process. Timely receipt of properly completed records of the Contractor's signed pre-screening record or review and building access security applications (submitted for candidates that have a reasonable probability of obtaining the level of access authorization necessary for access to NRC's facilities) is a contract requirement. Failure of the Contractor to comply with this contract administration requirement may be a basis to cancel the award, or terminate the contract for default, or offset from the contract's invoiced cost or price the NRC's incurred costs or delays as a result of inadequate pre-screening by the Contractor. In the event of cancellation or termination, the NRC may select another firm for contract award.

A Contractor, subcontractor employee or consultant shall not have access to NRC facilities until he/she is approved by DFS/PSB. Temporary access may be approved based on a favorable NRC review and discretionary determination of their building access security forms. Final building access will be approved based on favorably adjudicated checks by the Government. However, temporary access approval will be revoked and the Contractor's employee may subsequently be denied access in the event the employee's investigation cannot be favorably determined by the NRC. Such employee will not be authorized to work under any NRC contract requiring building access without the approval of DFS/PSB. When an individual receives final

access, the individual will be subject to a review or reinvestigation every five (5) or ten (10) years, depending on their job responsibilities at the NRC.

The Government shall have and exercise full and complete control and discretion over granting, denying, withholding, or terminating building access approvals for individuals performing work under this contract. Individuals performing work under this contract at NRC facilities for a period of more than 30 calendar days shall be required to complete and submit to the Contractor representative an acceptable OPM Standard Form 85 (Questionnaire for Non-Sensitive Positions), and two (2) FD 258 (Fingerprint Charts). Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than five (5) years residency in the U.S. will not be approved for building access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB.

DFS/PSB may, among other things, grant or deny temporary unescorted building access approval to an individual based upon its review of the information contained in the OPM Standard Form 85 and the Contractor's pre-screening record. Also, in the exercise of its authority, the Government may, among other things, grant or deny permanent building access approval based on the results of its review or investigation. This submittal requirement also applies to the officers of the firm who, for any reason, may visit the NRC work sites for an extended period of time during the term of the contract. In the event that DFS/PSB are unable to grant a temporary or permanent building access approval, to any individual performing work under this contract, the Contractor is responsible for assigning another individual to perform the necessary function without any delay in the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. The Contractor is responsible for informing those affected by this procedure of the required building access approval process (i.e., temporary and permanent determinations), and the possibility that individuals may be required to wait until permanent building access approvals are granted before beginning work in NRC's buildings.

CANCELLATION OR TERMINATION OF BUILDING ACCESS/ REQUEST

The Contractor shall immediately notify the COR when a Contractor or subcontractor employee or consultant's need for NRC building access approval is withdrawn or the need by the Contractor employee's for building access terminates. The COR will immediately notify DFS/PSB (via e-mail) when a Contractor employee no longer requires building access. The Contractor shall be required to return any NRC issued badges to the COR for return to DFS/FSB (Facilities Security Branch) within three (3) days after their termination.

H.2 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY LEVEL I OR LEVEL II ACCESS APPROVAL (JUL 2016)

The contractor must identify all individuals selected to work under this contract. The NRC Contracting Officer's Representative (COR) shall make the final determination of the level, if any, of IT access approval required for all individuals working under this contract/order using the following guidance. The Government shall have full and complete control and discretion over granting, denying, withholding, or terminating IT access approvals for contractor personnel performing work under this contract/order.

The contractor shall conduct a preliminary security interview or review for each employee requiring IT level I or II access and submit to the Government only the names of candidates that have a reasonable probability of obtaining the level of IT access approval for which the employee has been proposed. The contractor shall pre-screen its applicants for the following:

(a) felony arrest in the last seven (7) years; (b) alcohol related arrest within the last five (5) years; (c) record of any military courts-martial convictions in the past ten (10) years; (d) illegal use of narcotics or other controlled substances possession in the past year, or illegal purchase, production, transfer, or distribution of narcotics or other controlled substances in the last seven (7) years; and (e) delinquency on any federal debts or bankruptcy in the last seven (7) years.

The contractor shall make a written record of its pre-screening interview or review (including any information to mitigate the responses to items listed in (a) - (e)), and have the employee verify the pre-screening record or review, sign and date it. The contractor shall supply two (2) copies of the signed contractor's pre-screening record or review to the NRC Contracting Officer's Representative (COR), who will then provide them to the NRC Office of Administration, Division of Facilities and Security, Personnel Security Branch with the employee's completed IT access application package.

The contractor shall further ensure that its personnel complete all IT access approval security applications required by this clause within fourteen (14) calendar days of notification by the NRC Contracting Officer's Representative (COR) of initiation of the application process. Timely receipt of properly completed records of the pre-screening record and IT access approval applications (submitted for candidates that have a reasonable probability of obtaining the level of security assurance necessary for access to NRC's IT systems/data) is a requirement of this contract/order. Failure of the contractor to comply with this requirement may be a basis to terminate the contract/order for cause, or to offset from the contract's invoiced cost or price the NRC's incurred costs or delays as a result of inadequate pre-screening by the contractor.

SECURITY REQUIREMENTS FOR IT LEVEL I

Performance under this contract/order will involve contractor personnel who perform services requiring direct access to or operation of agency sensitive information technology systems or data (IT Level I). The IT Level I involves responsibility for: (a) the planning, direction, and implementation of a computer security program; (b) major responsibility for the direction, planning, and design of a computer system, including hardware and software; (c) the capability to access a computer system during its operation or maintenance in such a way that could cause or that has a relatively high risk of causing grave damage; or (d) the capability to realize a significant personal gain from computer access.

Contractor personnel shall not have access to sensitive information technology systems or data until they are approved by DFS/PSB and they have been so informed in writing by the NRC Contracting Officer's Representative (COR). Temporary IT access may be approved by DFS/PSB based on a favorable review or adjudication of their security forms and checks. Final IT access may be approved by DFS/PSB based on a favorably review or adjudication of a completed background investigation. However, temporary access authorization approval will be revoked and the employee may subsequently be denied IT access in the event the employee's investigation cannot be favorably adjudicated. Such an employee will not be authorized to work under any NRC contract/order requiring IT access without the approval of DFS/PSB, as communicated in writing to the contractor by the NRC Contracting Officer's Representative

(COR). Where temporary access authorization has been revoked or denied by DFS/PSB, the contractor shall assign another contractor employee to perform the necessary work under this contract/order without delay to the contract/order performance schedule, or without adverse impact to any other terms or conditions of the contract/order. When an individual receives final IT access approval from DFS/PSB, the individual will be subject to a reinvestigation every ten (10) years thereafter (assuming continuous performance under contracts/orders at NRC) or more frequently in the event of noncontinuous performance under contracts/orders at NRC.

CORs are responsible for submitting the completed access/clearance request package as well as other documentation that is necessary to DFS/PSB. The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) copies of the Contractor's signed pre-screening record, and two (2) FD 258 fingerprint charts, to DFS/PSB for review and adjudication, prior to the individual being authorized to perform work under this contract/order requiring access to sensitive information technology systems or data. Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than seven (7) years residency in the U.S. will not be approved for IT Level I access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB. The contractor shall ensure that all forms are accurate, complete, and legible. Based on DFS/PSB review of the contractor employee's security forms and/or the receipt of adverse information by NRC, the contractor individual may be denied access to NRC facilities and sensitive information technology systems or data until a final determination is made by DFS/PSB. The contractor individual's clearance status will thereafter be communicated to the contractor by the NRC Contracting Officer's Representative (COR) regarding the contractor person's eligibility.

In accordance with NRCAR 2052.204-70 "Security," IT Level I contractors shall be subject to the attached NRC Form 187 and SF-86. Together, these furnish the basis for providing security requirements to contractors that have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems, remote development and/or analysis of sensitive information technology systems or data, or other access to such systems and data; access on a continuing basis (in excess more than 30 calendar days) to NRC buildings; or otherwise requires issuance of an unescorted NRC badge.

SECURITY REQUIREMENTS FOR IT LEVEL II

Performance under this contract/order will involve contractor personnel that develop and/or analyze sensitive information technology systems or data or otherwise have access to such systems or data (IT Level II).

The IT Level II involves responsibility for the planning, design, operation, or maintenance of a computer system and all other computer or IT positions.

Contractor personnel shall not have access to sensitive information technology systems or data until they are approved by DFS/PSB and they have been so informed in writing by the NRC Contracting Officer's Representative (COR). Temporary access may be approved by DFS/PSB based on a favorable review of their security forms and checks. Final IT access may be approved by DFS/PSB based on a favorably adjudication. However, temporary access

authorization approval will be revoked and the contractor employee may subsequently be denied IT access in the event the employee's investigation cannot be favorably adjudicated. Such an employee will not be authorized to work under any NRC contract/order requiring IT access without the approval of DFS/PSB, as communicated in writing to the contractor by the NRC Contracting Officer's Representative (COR). Where temporary access authorization has been revoked or denied by DFS/PSB, the contractor is responsible for assigning another contractor employee to perform the necessary work under this contract/order without delay to the contract/order performance schedule, or without adverse impact to any other terms or conditions of the contract/order. When a contractor employee receives final IT access approval from DFS/PSB, the individual will be subject to a review or reinvestigation every ten (10) years (assuming continuous performance under contract/order at NRC) or more frequently in the event of noncontinuous performance under contract/order at NRC.

CORs are responsible for submitting the completed access/clearance request package as well as other documentation that is necessary to DFS/PSB. The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) copies of the Contractor's signed pre-screening record and two (2) FD 258 fingerprint charts, to DFS/PSB for review and adjudication, prior to the contractor employee being authorized to perform work under this contract/order. Non-U.S. citizens must provide official documentation to the DFS/PSB, as proof of their legal residency. This documentation can be a Permanent Resident Card, Temporary Work Visa, Employment Authorization Card, or other official documentation issued by the U.S. Citizenship and Immigration Services. Any applicant with less than seven (7) years residency in the U.S. will not be approved for IT Level II access. The Contractor shall submit the documents to the NRC Contracting Officer's Representative (COR) who will give them to DFS/PSB. The contractor shall ensure that all forms are accurate, complete, and legible. Based on DFS/PSB review of the contractor employee's security forms and/or the receipt of adverse information by NRC, the contractor employee may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made by DFS/PSB regarding the contractor person's eligibility.

In accordance with NRCAR 2052.204-70 "Security," IT Level II contractors shall be subject to the attached NRC Form 187, SF-86, and contractor's record of the pre-screening. Together, these furnish the basis for providing security requirements to contractors that have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems, remote development and/or analysis of sensitive information technology systems or data, or other access to such systems or data; access on a continuing basis (in excess of more than 30 calendar days) to NRC buildings; or otherwise requires issuance of an unescorted NRC badge.

CANCELLATION OR TERMINATION OF IT ACCESS/REQUEST

When a request for IT access is to be withdrawn or canceled, the contractor shall immediately notify the NRC Contracting Officer's Representative (COR) by telephone so that the access review may be promptly discontinued. The notification shall contain the full name of the contractor employee and the date of the request. Telephone notifications must be promptly confirmed by the contractor in writing to the NRC Contracting Officer's Representative (COR), who will forward the confirmation to DFS/PSB. Additionally, the contractor shall immediately notify the NRC Contracting Officer's Representative (COR) in writing, who will in turn notify DFS/PSB, when a contractor employee no longer requires access to NRC sensitive automated

information technology systems or data, including the voluntary or involuntary separation of employment of a contractor employee who has been approved for or is being processed for IT access.

The contractor shall flow the requirements of this clause down into all subcontracts and agreements with consultants for work that requires them to access NRC IT resources.

H.3 INFORMATION TECHNOLOGY (IT) SECURITY REQUIREMENTS – GENERAL (JUL 2016)

Basic Contract IT Security Requirements

The contractor agrees to insert terms that conform substantially to the language of the IT security requirements, excluding any reference to the Changes clause of this contract, into all subcontracts under this contract.

For unclassified information used for the effort, the contractor shall provide an information security categorization document indicating the sensitivity of the information processed as part of this contract if the information security categorization was not provided in the statement of work. The determination shall be made using National Institute of Standards and Technology (NIST) Special Publication (SP) 800-60 and must be approved by the Office of the Chief Information Officer (OCIO). The NRC contracting officer (CO) and Contracting Officer's Representative (COR) shall be notified immediately before the contractor begins to process information at a higher sensitivity level.

If the effort includes use or processing of classified information, the NRC CO and COR shall be notified before the contractor begins to process information at a more restrictive classification level.

All work under this contract shall comply with the latest version of policy, procedures and standards. Individual task orders will reference latest versions of standards or exceptions as necessary. These policy, procedures and standards include: NRC Management Directive (MD) volume 12, Security; Computer Security Office policies, procedures and standards; National Institute of Standards and Technology (NIST) guidance and Federal Information Processing Standards (FIPS); and Committee on National Security Systems (CNSS) policy, directives, instructions, and guidance. This information is available at the following links:

NRC Policies, Procedures and Standards (OCIO/ISD – Director, Information Security Directorate, internal website):

<http://www.internal.nrc.gov/CSO/policies.html>

All NRC Management Directives (public website):

<http://www.nrc.gov/reading-rm/doc-collections/management-directives/>

NIST SP and FIPS documentation is located at:

<http://csrc.nist.gov/>

CNSS documents are located at:

<http://www.cnss.gov/>

When e-mail is used, the contractors shall only use NRC provided e-mail accounts to send and receive sensitive information (information that is not releasable to the public) or mechanisms to protect the information during transmission to NRC that have been approved by OCIO/ISD.

All contractor employees must sign the NRC Agency-Wide Rules of Behavior for Authorized Computer Use prior to being granted access to NRC computing resources.

The contractor shall adhere to following NRC policies, including but not limited to:

Must meet all federally mandated and NRC defined cybersecurity requirements.

- Management Directive 12.5, NRC Cybersecurity Program
- Computer Security Policy for Encryption of Sensitive Data When Outside of Agency Facilities
- Policy for Copying, Scanning, Printing, and Faxing SGI & Classified Information
- Computer Security Information Protection Policy
- Remote Access Policy
- Laptop Security Policy
- Computer Security Incident Response Policy

Contractor will adhere to NRC's use of personal devices to process and store NRC sensitive information. The NRC's BYOD program allows NRC employees and contractors to conduct official government business using supported personal smart phones and tablets.

All work performed at non-NRC facilities shall be in facilities, networks, and computers that have been accredited by NRC for processing information at the sensitivity level of the information being processed.

Contract Performance and Closeout

The contractor shall ensure that the NRC data processed during the performance of this contract shall be purged from all data storage components of the contractor's computer facility, and the contractor will retain no NRC data within 30 calendar days after contract is completed. Until all data is purged, the contractor shall ensure that any NRC data remaining in any storage component will be protected to prevent unauthorized disclosure.

When a contractor employee no longer requires access to an NRC system, the contractor shall notify the COR within 24 hours.

Upon contract completion, the contractor shall provide a status list of all contractor employees who were users of NRC systems and shall note if any users still require access to the system to perform work if a follow-on contract or task order has been issued by NRC.

Control of Information and Data

The contractor shall not publish or disclose in any manner, without the CO's written consent, the details of any security controls or countermeasures either designed or developed by the contractor under this contract or otherwise provided by the NRC.

Any IT system used to process NRC sensitive information shall:

- Include a mechanism to require users to uniquely identify themselves to the system before beginning to perform any other actions that the system is expected to provide.
- Be able to authenticate data that includes information for verifying the claimed identity of individual users (e.g., passwords).
- Protect authentication data so that it cannot be accessed by any unauthorized user.
- Be able to enforce individual accountability by providing the capability to uniquely identify each individual computer system user.
- Report to appropriate security personnel when attempts are made to guess the authentication data whether inadvertently or deliberately.

Access Controls

Any contractor system being used to process NRC data shall be able to define and enforce access privileges for individual users. The discretionary access controls mechanisms shall be configurable to protect objects (e.g., files, folders) from unauthorized access.

The contractor system being used to process NRC data shall provide only essential capabilities and specifically prohibit and/or restrict the use of functions, ports, protocols, and/or services, as specified in the contract/grant.

The contractors shall only use NRC approved methods to send and receive information considered sensitive or classified. Specifically,

- Classified Information - All NRC Classified data being transmitted over a network shall use NSA approved encryption and adhere to guidance in MD 12.2, NRC Classified Information Security Program; MD 12.5, NRC Cybersecurity Program; and any classified encryption guidance provided by the Committee on National Security Systems. Classified processing shall be only within facilities, computers, and spaces that have been specifically approved for classified processing. All NRC personnel who have been or will be granted an account to access any system or network (to include a stand-alone system or network) on which classified information resides must be an NRC authorized classifier. Contractors must follow the above guidance and procedures when requiring access to or handling classified information. Only designated and authorized classifiers of the contractor may have access to classified information or systems.
- SGI Information – All SGI being transmitted over a network shall adhere to guidance in MD 12.7, NRC Safeguards Information Security Program; and MD 12.5, NRC Cybersecurity Program. SGI processing shall be only within facilities, computers, and spaces that have been specifically approved for SGI processing. Cryptographic modules provided as part of the system shall be validated under the Cryptographic Module Validation Program to conform to NIST FIPS 140-2 overall level 2 and must be operated in FIPS mode. The contractor shall provide the FIPS

140-2 cryptographic module certificate number and a brief description of the encryption module that includes the encryption algorithm(s) used, the key length, and the vendor of the product.

- All NRC personnel who have been or will be granted an account to access any system or network (to include a stand-alone system or network) on which SGI resides must be an NRC authorized classifier.

The most restrictive set of rights/privileges or accesses needed by users (or processes acting on behalf of users) for the performance of specified tasks must be enforced by the system through assigned access authorizations.

Separation of duties for contractor systems used to process NRC information must be enforced by the system through assigned access authorizations.

The mechanisms within the contractor system or application that enforces access control and other security features shall be continuously protected against tampering and/or unauthorized changes.

Configuration Standards

All systems used to process NRC sensitive information shall meet NRC configuration standards available at: <http://www.internal.nrc.gov/CSO/standards.html>.

Information Security Training and Awareness Training

Contractors shall ensure that their employees, consultants, and subcontractors that have significant IT responsibilities (e.g., IT administrators, developers, project leads) receive in-depth IT security training in their area of responsibility. This training is at the employer's expense.

In compliance with OMB policy, individuals with significant cybersecurity responsibilities (e.g., ISSOs, System Administrators) must complete required role-based training before assuming the role. NRC contractors must ensure that their staff receives the requisite role-based cybersecurity training at the contractor's expense.

Media Handling

All media used by the contractor to store or process NRC information shall be controlled in accordance with the sensitivity level.

The contractor shall not perform sanitization or destruction of media approved for processing NRC information designated as SGI or Classified. The contractor must provide the media to NRC for destruction.

Vulnerability Management

The Contractor must adhere to NRC patch management processes for all systems used to process NRC information. Patch Management reports will be made available to the NRC upon request for following security categorizations and reporting timeframes:

- 5 calendar days after being requested for a high sensitivity system

- 10 calendar days after being requested for a moderate sensitivity system
- 15 calendar days after being requested for a low sensitivity system

For any contractor system used to process NRC information, the contractor must ensure that information loaded into the system is scanned for viruses prior to posting; servers are scanned for malware, including viruses, adware, and spyware, on a regular basis; and virus signatures are updated at the following frequency:

- 1 calendar day for a high sensitivity system
- 3 calendar days for a moderate sensitivity system
- 7 calendar days for a low sensitivity system

For any contractor deliverables or information loaded on external hard drives or other electronic devices, the contractor must ensure that, prior to delivery to the NRC, the device, including software and files, is free of malware, including computer viruses, worms, trojan horses, ransomware, spyware, adware, scareware, browser hijacking software, mobile code, or other malicious code.

H.4 INFORMATION TECHNOLOGY (IT) SECURITY REQUIREMENTS – GENERAL EXCEPTIONS (JUL 2016)

All purchases shall comply with the latest version of policy, procedures and standards. Individual task orders will reference latest versions of policy, procedures, standards or exceptions as necessary. These policy, procedures and standards include: NRC Management Directive (MD) volume 12 Security, Information Security Directorate policies, procedures and standards, National Institute of Standards and Technology (NIST) guidance and Federal Information Processing Standards (FIPS), and Committee on National Security Systems (CNSS) policy, directives, instructions, and guidance. The applicable management directives can be found on NRC's website here: <https://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-12.html>.

All procurements must be certified and accredited prior to being placed into an operational state.

All electronic processing of NRC sensitive information, including all system development and operations and maintenance activities performed at non-NRC facilities shall be in facilities, networks, and computers that have been accredited by NRC for processing information at the highest sensitivity of the information that is processed or will ultimately be processed.

Exceptions to or deviations from MD 12.5 may be granted by the NRC DAA, except for those areas in which the responsibility or authority is vested solely with the EDO or ADM and cannot be delegated, or for matters specifically required by law, Executive Order, or directive to be referred to other management officials. For national security systems, nothing in MD 12.5 shall supersede any authority of the DNI, NSA, Secretary of Defense, or other agency head, as authorized by law and as directed by the President, with regard to the operation, control, or management of national security systems. Nothing in this directive or handbook shall supersede any requirement made by or under the Atomic Energy Act of 1954. Restricted data or formerly restricted data shall be handled, protected, classified, downgraded, and declassified in conformity with the Atomic Energy Act of 1954.

H.5 IT SECURITY REQUIREMENTS – NRC AND CONTRACTOR (NON-NRC) FACILITIES (APR 2014)

Backups

The contractor shall ensure that backup media is created, encrypted (in accordance with information sensitivity) and verified to ensure that data can be retrieved and is restorable to NRC systems based on information sensitivity levels. Backups shall be executed to create readable media that allows successful file/data restoration at the following frequencies:

- At least every 1 calendar day for a high sensitivity system
- At least every 1 calendar day for a moderate sensitivity system
- At least every 7 calendar days for a low sensitivity system

Perimeter Protection

The Contractor must employ perimeter protection mechanisms, such as firewalls and routers, to deny all communications unless explicitly allowed by exception.

The contractor must deploy and monitor intrusion detection capability and have an always deployed and actively engaged security monitoring capability in place for systems placed in operation for the NRC. Intrusion detection and monitoring reports will be made available to the NRC upon request for following security categorizations and reporting timeframes:

- 5 calendar days after being requested for a high sensitivity system
- 10 calendar days after being requested for a moderate sensitivity system
- 15 calendar days after being requested for a low sensitivity system

H.6 DEFINITION AND HANDLING OF EXPORT CONTROLLED INFORMATION

Definition of Export Controlled Information

Export Controlled Information (ECI) is unclassified information concerning certain items, commodities, technology, software, or other information whose export could reasonably be expected to adversely affect the United States national security and nonproliferation objectives, to include dual use items; items identified in export administration regulations, international traffic in arms regulations and the munitions list; license applications; and sensitive nuclear technology information.

ECI is a sub-category of Controlled Unclassified Information (CUI). ECI is defined in the CUI Registry, which is maintained by the National Archives, (<https://www.archives.gov/cui/registry/category-list>). The CUI Registry itself resides in 32 CFR 2002 (https://ecfr.io/Title-32/cfr2002_main). Executive Order 13556 establishes the program for managing CUI and designates the National Archives as the Executive Agent for this program.

The program for managing CUI/ECI exists within the framework of a larger body of export control laws, regulations and directives that include but are not limited to: the Atomic Energy Act

of 1954, as amended; the Arms Export Control Act (22 U.S.C. § 2751 et seq.); the Export Administration Act of 1979 as continued under the International Emergency Economic Powers Act (Title II of Pub.L. 95-223, 91 Stat. 1626, October 28, 1977); Trading with the Enemy Act (50 U.S.C. App. 5(b) as amended by the Foreign Assistance Act of 1961); Assistance to Foreign Atomic Energy Activities (10 CFR part 810); Export and Import of Nuclear Equipment and Material (10 CFR part 110); International Traffic in Arms Regulations (22 CFR parts 120 through 130); Export Administration Regulations (15 CFR part 730 through 734); Foreign Assets Control Regulations (31 CFR parts 500 through 598); and the Espionage Act (37 U.S.C. 791 et seq.)

Who can access ECI?

All contractor personnel eligible to access ECI information must have either US Citizenship

Status or Permanent Resident Alien status (i.e., Green Card holder status). Individuals having neither US Citizenship status nor Permanent Resident Alien status are ineligible to participate in the technical work of this contract or task order effort.

Handling of ECI:

If the contractor has any questions/concerns regarding handling of ECI material they should contact their cognizant Contracting Officer's Representative (COR) for guidance.

ECI Processing

(a) Electronic processing (including storage and transmission) of ECI shall only be performed on NRC equipment. The NRC-provided laptop will have the capability to connect to the NRC network using a Virtual Private Network along with the user's valid NRC credentials. The NRC-provided laptop must remain in the continental United States at all times and must not be accessed by a foreign national (non-U.S. citizen).

(b) Electronic ECI must be encrypted when not in use.

(c) Electronic messaging regarding the ECI shall only be performed between the user's NRC email account and an NRC email account of another person that has been determined to have a need-to-know the ECI.

(d) ECI must only be shared with individuals that have a need to know the information and must be verified to be a U.S. citizen (i.e., not a foreign national) or Permanent Resident Alien (Green Card holder).

(e) Printed ECI shall be controlled as follows:

(1) ECI must not be exposed in public environments (e.g., trains, airplanes) or to a foreign national.

(2) Physical storage of printed sensitive information must be in a locked cabinet or drawer when not under the physical control of the user.

(3) Physical transmission of ECI must only be performed using one of the following methods:

a. U.S. Postal Service: First Class Mail, Registered Mail, Express Mail, Certified Mail.

b. Hand-carried by any individual authorized access to the ECI. That individual shall retain the ECI in his or her possession to the maximum extent possible unless they place the document in the custody of another person authorized access to the ECI in question.

c. Approved commercial express carriers. Transmit in single opaque envelope.

(f) ECI must not be taken outside of the continental United States, regardless of whether it is in electronic or printed form.

(g) ECI must not be shown, discussed, shared, transmitted, or otherwise provided to any person without first verifying that they are either a U.S. citizen (e.g., foreign nationals cannot have access to ECI) or have Permanent Resident Alien status (Green Card holder).

(h) In the event that the contractor violates or fails to comply with these requirements, the contractor shall notify the designated contract or task order Contracting Officer, the designated contract or task order COR, and the IDIQ COR (if applicable) within three calendar days of the occurrence. Notification shall take the form of an e-mail containing information sufficient to describe the occurrence.

(i) NRC contractors shall ensure that their employees, subcontractor employees, and consultants who have been granted access to ECI comply with the requirements of this clause. Failure to timely report the required information could result in revocation of IT-II Clearance status of contractor (or subcontractor) employee(s) and revocation of NRC system access; removal of contractor (or subcontractor) employee(s) from the contract or task order in question; termination of the contract or task order; as well as a negative CPARS evaluation.

H.7 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 annually. 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.8 RULES OF BEHAVIOR FOR AUTHORIZED COMPUTER USE

In accordance with Appendix III, "Security of Federal Automated Information Resources," to Office of Management and Budget (OMB) Circular A-130, "Management of Federal Information Resources," NRC has established rules of behavior for individual users who access all IT computing resources maintained and operated by the NRC or on behalf of the NRC. In response to the direction from OMB, NRC has issued the "Agency-wide Rules of Behavior for Authorized Computer Use" policy, hereafter referred to as the rules of behavior. The rules of behavior for authorized computer use will be provided to NRC computer users, including contractor personnel, as part of the annual computer security awareness course.

The rules of behavior apply to all NRC employees, contractors, vendors, and agents (users) who have access to any system operated by the NRC or by a contractor or outside entity on behalf of the NRC. This policy does not apply to licensees. The next revision of Management Directive 12.5, "NRC Automated Information Security Program," will include this policy. The rules of behavior can be viewed at <https://www.nrc.gov/docs/ML1724/ML17244A084.pdf>

or use NRC's external Web-based ADAMS at <https://www.nrc.gov/reading-rm/adams.html>.

The rules of behavior are effective immediately upon acknowledgement of them by the person who is informed of the requirements contained in those rules of behavior. All current contractor users are required to review and acknowledge the rules of behavior as part of the annual computer security awareness course completion. All new NRC contractor personnel will be required to acknowledge the rules of behavior within one week of commencing work under this contract and then acknowledge as current users thereafter. The acknowledgement statement can be viewed at <https://www.nrc.gov/docs/ML1724/ML17244A086.pdf>

or use NRC's external Web-based ADAMS at <https://www.nrc.gov/reading-rm/adams.html>.

The NRC Computer Security Office will review and update the rules of behavior annually beginning in FY 2011 by December 31st of each year. Contractors shall ensure that their personnel to which this requirement applies acknowledge the rules of behavior before beginning contract performance and, if the period of performance for the contract lasts more than one year, annually thereafter. Training on the meaning and purpose of the rules of behavior can be provided for contractors upon written request to the NRC Contracting Officer's Representative (COR).

The contractor shall flow down this clause into all subcontracts and other agreements that relate to performance of this contract/order if such subcontracts/agreements will authorize access to NRC electronic and information technology (EIT) as that term is defined in FAR 2.101.

H.9 FOREIGN OWNERSHIP, CONTROL, OR INFLUENCE OVER CONTRACTOR

The National Industrial Security Program Operating Manual (NISPOM) implements the provisions of E.O. 12829, "National Industrial Security Program." A company is considered to be under FOCI whenever a foreign interest has the power, direct or indirect, whether or not exercised, and whether or not exercisable through the ownership of the U.S. company's securities, by contractual arrangements or otherwise, to direct or decide matters affecting the management or operations of that company in a manner that may result in unauthorized access to classified information or may adversely affect the performance of classified information contracts. (See NRC Management Directive 12.2 – "NRC Classified Information Security Program")

(a) For purposes of this clause, a foreign interest is defined as any of the following:

(1) A foreign government or foreign government agency;

(2) Any form of business enterprise organized under the laws of any country other than the United States or its possessions;

(3) Any form of business enterprise organized or incorporated under the laws of the U.S., or a State or other jurisdiction within the U.S., which is owned, controlled, or influenced by a foreign government, agency, firm, corporation or person; or

(4) Any person who is not a U.S. citizen.

(b) A U.S. company determined to be under FOCI is not eligible for facility clearance (FCL). If a company already has an FCL, the FCL shall be suspended or revoked unless security measures are taken to remove the possibility of unauthorized access to classified information.

(c) For purposes of this clause, subcontractor means any subcontractor at any tier and the term "contracting officer" shall mean NRC contracting officer. When this clause is included in a subcontract, the term "contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

(d) The contractor shall complete and submit and SF-328, DD-441 and DD-441-1 forms, prior to contract award. The information contained in these forms may be used in making a determination as to whether a contractor is eligible to participate in the National Industrial Security Program and have a facility security clearance.

(e) The contractor shall immediately provide the contracting officer written notice of any changes in the extent and nature of FOCI over the contractor which would affect the answers to the questions presented in SF-328, "Certificate Pertaining to Foreign Interest". Further, notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice shall also be furnished concurrently to the contracting officer.

(f) In those cases where a contractor has changes involving FOCI, the NRC must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, the contracting officer shall consider proposals made by the contractor to avoid or mitigate foreign influences.

(g) The contractor agrees to insert terms that conform substantially to the language of this clause including this paragraph (g) in all subcontracts under this contract that will require access

to classified information and shall require such subcontractors to submit completed SF-328, DD-441 and DD-441-1 forms prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the contracting officer.

(h) Information submitted by the contractor or any affected subcontractor as required pursuant to this clause shall be treated by NRC to the extent permitted by law, as business or financial information submitted in confidence to be used solely for purposes of evaluating FOCI.

(i) The requirements of this clause are in addition to the requirement that a contractor obtain and retain the security clearances required by the contract. This clause shall not operate as a limitation on NRC's rights, including its rights to terminate this contract.

(j) The contracting officer may terminate this contract for default either if the contractor fails to meet obligations imposed by this clause, e.g., provide the information required by this clause, comply with the contracting officer's instructions about safeguarding classified information, or make this clause applicable to subcontractors, or if, in the contracting officer's judgment, the contractor creates a FOCI situation in order to avoid performance or a termination for default. The contracting officer may terminate this contract for convenience if the contractor becomes subject to FOCI and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the FOCI problem.

H.10 REPORTING FOREIGN TRAVEL (MAY 2018)

(a) Unofficial (personal) foreign travel to certain designated countries, as described in paragraph (b) below, must be reported by NRC contractors that have been granted any of the following security clearances:

- (1) "Q" clearance with Sensitive Compartmented Information(SCI) access;
- (2) "Q" clearance;
- (3) "L (H)" clearance; or
- (4) "L" clearance.

See NRC Management Directive 12.3, NRC Personnel Security Program, for detailed information on each clearance level.

(b) Unofficial (personal) foreign travel to countries designated as Level 3 (Reconsider Travel) and Level 4 (Do Not Travel), by the Department of State in its travel warning system at <https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories.html> must be reported to the Office of Administration, Division of Facilities and Security, Personnel Security Branch (by email to PSBReporting.Resource@nrc.gov), prior to departure or within 5 days of return. Travel to countries designated as Level 1 (Exercise Normal Precautions) and Level 2 (Exercise Increased Precautions) need not be reported.

(c) NRC contractors shall ensure that their employees, subcontractor employees, and consultants who have been granted any of the clearances listed in paragraph (a) above comply with the requirements of this clause. Failure to timely report the required information could result in disciplinary action and/or affect eligibility for a security clearance.

(d) The Contractor shall flow this clause down into all subcontracts and agreements related to this contract under which personnel with one of the security clearances identified in paragraph (a) above are performing.

H.11 SECURITY REQUIREMENTS FOR ACCESS TO CLASSIFIED MATTER OR INFORMATION (SEP 2013)

Performance under this contract will require access to classified matter or information (National Security Information or Restricted Data) in accordance with the attached NRC Form 187 (See List of Attachments). Prime Contractor personnel, subcontractors or others performing work under this contract shall require a "Q" security clearance (allows access to Top Secret, Secret, and Confidential National Security Information and Restricted Data) or an "L" security clearance (allows access to Secret and Confidential National Security Information and/or Confidential Restricted Data).

The Contractor must identify all individuals to work under this contract. The NRC sponsoring office shall make the final determination of the type of security clearance required for all individuals working under this contract.

The Contractor shall conduct a preliminary security interview or review for each of its employees, subcontractor employees and consultants, and submit to the Government only the names of candidates that have a reasonable probability of obtaining the level of security clearance for which the candidate has been proposed. The Contractor will pre-screen applicants for the following:

(a) pending criminal charges or proceedings; (b) felony arrest records including alcohol related arrest within the last seven (7) years; (c) record of any military courts-martial charges and proceedings in the last seven (7) years and courts-martial convictions in the last ten (10) years; (d) any involvement in hate crimes; (e) involvement in any group or organization that espouses extra-legal violence as a legitimate means to an end; (f) dual or multiple citizenship including the issuance of a foreign passport in the last seven (7) years; (g) illegal use possession, or distribution of narcotics or other controlled substances within the last seven (7) years; (h) financial issues regarding delinquent debts, liens, garnishments, bankruptcy and civil court actions in the last seven (7) years.

The Contractor will make a written record of their pre-screening interview or review (including any information to mitigate the responses to items listed in (a) - (h)), and have the candidate verify the record, sign and date it. Two (2) copies of the signed interview record or review will be supplied to DFS/PSB with the applicant's completed security application package.

The Contractor will further ensure that all Contractor employees, subcontractor employees and consultants for classified information access approval complete all security applications required by this clause within fourteen (14) calendar days of notification by DFS/PSB of initiation of the application process. Timely receipt of properly completed security applications (submitted for candidates that have a reasonable probability of obtaining the level of security clearance for which the candidate has been proposed) is a contract requirement. Failure of the Contractor to comply with this condition may be a basis to cancel the award, or terminate the contract for default, or offset from the contract's invoiced cost or price the NRC's incurred costs or delays as a result of inadequate pre-screening by the Contractor. In the event of termination or cancellation, the Government may select another firm for contract award.

Such Contractor personnel shall be subject to the NRC Contractor personnel security requirements of NRC Management Directive (MD) 12.3, Part I and 10 CFR Part 10.11, which is hereby incorporated by reference and made a part of this contract as though fully set forth herein, and will require a favorably adjudicated Single Scope Background Investigation (SSBI) for "Q" clearances or a favorably adjudicated Access National Agency Check and Inquiries (ANACI), or higher level investigation depending on the position the individual will occupy, for "L" clearances.

A Contractor employee shall not have access to classified information until he/ she is granted a security clearance by DFS/PSB, based on a favorably adjudicated investigation. In the event the Contractor employee's investigation cannot be favorably adjudicated, any interim access approval could possibly be revoked and the individual could be subsequently removed from performing under the contract. If interim approval access is revoked or denied, the Contractor is responsible for assigning another individual to perform the necessary work under this contract without delay to the contract's performance schedule, or without adverse impact to any other terms or conditions of the contract. The individual will be subject to a reinvestigation every five (5) years for "Q" clearances and every ten (10) years for "L" clearances.

CORs are responsible for submitting the completed access/clearance request package as well as other documentation that is necessary to DFS/PSB. The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) copies of the Contractor's signed pre-screening record and two (2) FD 258 fingerprint charts, to DFS/PSB for review and adjudication, prior to submission to the Office of Personnel Management for investigation. The individual may start working under this contract before a final clearance is granted if a temporary access determination can be made by DFS/PSB after the review of the security package. If the individual is granted a temporary access authorization, the individual may not have access to classified information under this contract until DFS/PSB has granted them the appropriate security clearance, and the Contractor has read, understood, and signed the SF 312, "Classified Information Nondisclosure Agreement." The Contractor shall assure that all forms are accurate, complete, and legible (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the Contractor in a sealed envelope), as set forth in NRC MD 12.3. Based on DFS/PSB review of the applicant's investigation, the individual may be denied his/her security clearance in accordance with the due process procedures set forth in MD 12.3, E.O. 12968, and 10 CFR Part 10.11.

In accordance with NRCAR 2052.204-70 cleared Contractors shall be subject to the attached NRC Form 187 (See Section J for List of Attachments), MD 12.3, SF- 86 and Contractor's signed record or review of the pre-screening which furnishes the basis for providing security requirements to prime Contractors, subcontractors or others who have or may have an NRC contractual relationship which requires access to classified information.

CANCELLATION OR TERMINATION OF SECURITY CLEARANCE ACCESS/REQUEST

When a request for clearance investigation is to be withdrawn or canceled, the Contractor shall immediately notify the COR by telephone so that the investigation may be promptly discontinued. The notification shall contain the full name of the individual, and the date of the request. Telephone notifications must be promptly confirmed in writing by the Contractor to the COR who will forward the confirmation via email to DFS/PSB. Additionally, DFS/PSB must be immediately notified in writing when an individual no longer requires access to Government

classified information, including the voluntary or involuntary separation of employment of an individual who has been approved for or is being processed for access under the NRC "Personnel Security Program."

H.12 NRC INFORMATION TECHNOLOGY SECURITY TRAINING (MAY 2016)

NRC contractors shall ensure that their employees, consultants, and subcontractors with access to the agency's information technology (IT) equipment and/or IT services complete NRC's online initial and refresher IT security training requirements to ensure that their knowledge of IT threats, vulnerabilities, and associated countermeasures remains current. Both the initial and refresher IT security training courses generally last an hour or less and can be taken during the employee's regularly scheduled work day.

Contractor employees, consultants, and subcontractors shall complete the NRC's online annual, "Computer Security Awareness" course on the same day that they receive access to the agency's IT equipment and/or services, as their first action using the equipment/service. For those contractor employees, consultants, and subcontractors who are already working under this contract, the on-line training must be completed in accordance with agency Network Announcements issued throughout the year, within three weeks of issuance of this modification.

Additional annual required online NRC training includes but is not limited to the following:

- (1) Information Security (INFOSEC) Awareness
- (2) Continuity of Operations (COOP) Awareness
- (3) Defensive Counterintelligence and Insider Threat Awareness
- (4) No FEAR Act
- (5) Personally Identifiable Information (PII) and Privacy Act Responsibilities Awareness

Contractor employees, consultants, and subcontractors who have been granted access to NRC information technology equipment and/or IT services must continue to take IT security refresher training offered online by the NRC throughout the term of the contract. Contractor employees will receive notice of NRC's online IT security refresher training requirements through agency-wide notices.

Contractor Monthly Letter Status Reports (MLSR) must include the following information for all completed training:

- (1) the name of the individual completing the course;
- (2) the course title; and
- (3) the course completion date.

The MLSR must also include the following information for those individuals who have not completed their required training:

- (1) the name of the individual who has not yet completed the training;

- (2) the title of the course(s) which must still be completed; and
- (3) the anticipated course completion date(s).

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

H.13 SECURITY REQUIREMENTS RELATING TO THE PRODUCTION OF REPORTS OR THE PUBLICATION OF RESULTS UNDER CONTRACTS, AGREEMENTS, AND GRANTS (JUL 2016)

Review and Approval of Reports

(a) Reporting Requirements. The contractor/grantee shall comply with the terms and conditions of the contract/grant regarding the contents of the draft and final report, summaries, data, and related documents, to include correcting, deleting, editing, revising, modifying, formatting, and supplementing any of the information contained therein, at no additional cost to the NRC. Performance under the contract/grant will not be deemed accepted or completed until it complies with the NRC's directions, as applicable. The reports, summaries, data, and related documents will be considered draft until approved by the NRC. The contractor/grantee agrees that the direction, determinations, and decisions on approval or disapproval of reports, summaries, data, and related documents created under this contract/grant remain solely within the discretion of the NRC.

(b) Publication of Results. Prior to any dissemination, display, publication, or release of articles, reports, summaries, data, or related documents developed under the contract/grant, the contractor/grantee shall submit them to the NRC for review and approval. The contractor/grantee shall not release, disseminate, display or publish articles, reports, summaries, data, and related documents, or the contents therein, that have not been reviewed and approved by the NRC for release, display, dissemination or publication. The contractor/grantee agrees to conspicuously place any disclaimers, markings or notices, directed by the NRC, on any articles, reports, summaries, data, and related documents that the contractor/grantee intends to release, display, disseminate or publish to other persons, the public, or any other entities. The contractor/grantee agrees, and grants, a royalty-free, nonexclusive, irrevocable worldwide license to the government, to use, reproduce, modify, distribute, prepare derivative works, release, display or disclose the articles, reports, summaries, data, and related documents developed under the contract/grant, for any governmental purpose and to have or authorize others to do so.

(c) Identification/Marking of Sensitive Unclassified Non-Safeguards Information (SUNSI) and Safeguards Information (SGI). The decision, determination, or direction by the NRC that information possessed, formulated or produced by the contractor/grantee constitutes SUNSI or SGI is solely within the authority and discretion of the NRC. In performing the contract/grant, the contractor/grantee shall clearly mark SUNSI and SGI, to include for example, OUO-Allegation Information or OUO-Security Related Information on any reports, documents, designs, data, materials, and written information, as directed by the NRC. In addition to marking the information as directed by the NRC, the contractor shall use the applicable NRC cover sheet (e.g., NRC Form 461 Safeguards Information) in maintaining these records and documents. The

contractor/grantee shall ensure that SUNSI and SGI is handled, maintained and protected from unauthorized disclosure, consistent with NRC policies and directions. The contractor/grantee shall comply with the requirements to mark, maintain, and protect all information, including documents, summaries, reports, data, designs, and materials in accordance with the provisions of Section 147 of the Atomic Energy Act of 1954 as amended, its implementing regulations (10 CFR 73.21), Sensitive Unclassified Non-Safeguards and Safeguards Information policies, and NRC Management Directives and Handbooks 12.5, 12.6 and 12.7.

(d) Remedies. In addition to any civil, criminal, and contractual remedies available under the applicable laws and regulations, failure to comply with the above provisions, and/or NRC directions, may result in suspension, withholding, or offsetting of any payments invoiced or claimed by the contractor/grantee.

(e) Flowdown. If the contractor/grantee intends to enter into any subcontracts or other agreements to perform this contract/grant, the contractor/grantee shall include all of the above provisions in any subcontracts or agreements.

H.14 DRUG FREE WORKPLACE TESTING: UNESCORTED ACCESS TO NUCLEAR FACILITIES, ACCESS TO CLASSIFIED INFORMATION OR SAFEGUARDS INFORMATION, OR PERFORMING IN SPECIALLY SENSITIVE POSITIONS (OCT 2014)

All contractor employees, subcontractor employees, applicants, and consultants proposed for performance or performing under this contract shall be subject to pre-assignment, random, reasonable suspicion, and post-accident drug testing applicable to: (1) individuals who require unescorted access to nuclear power plants, (2) individuals who have access to classified or safeguards information, (3) individuals who are required to carry firearms in performing security services for the NRC, (4) individuals who are required to operate government vehicles or transport passengers for the NRC, (5) individuals who are required to operate hazardous equipment at NRC facilities, or (6) individuals who admit to recent illegal drug use or those who are found through other means to be using drugs illegally.

The NRC Drug Program Manager will schedule the drug testing for all contractor employees, subcontractor employees, applicants, and consultants who are subject to testing under this clause. The consequences of refusing to undergo drug testing or a refusal to cooperate in such testing, including not appearing at the scheduled appointment time, will result in the Agency's refusal of the contractor employee to work under any NRC contract. Any NRC contractor employee found to be using, distributing or possessing illegal drugs, or any contractor employee who fails to receive a verified negative drug test result under this program while in a duty status will immediately be removed from working under the NRC contract. The contractor's employer will be notified of the denial or revocation of the individual's authorization to have access to information and ability to perform under the contract. The individual may not work on any NRC contract for a period of not less than one year from the date of the failed, positive drug test and will not be considered for reinstatement unless evidence of rehabilitation, as determined by the NRC "drug testing contractor's" Medical Review Officer, is provided.

Contractor drug testing records are protected under the NRC Privacy Act Systems of Records, System 35, "Drug Testing Program Records - NRC" found at: <http://www.nrc.gov/reading-rm/foia/privacy-systems.html>

H.15 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

H.16 AWARD NOTIFICATION AND COMMITMENT OF PUBLIC FUNDS

(a) All offerors will receive preaward and postaward notices in accordance with FAR 15.503.

(b) It is also brought to your attention that the contracting officer is the only individual who can legally obligate funds or commit the NRC to the expenditure of public funds in connection with this procurement. This means that unless provided in a contract document or specifically authorized by the contracting officer, NRC technical personnel may not issue contract modifications, give formal contractual commitments, or otherwise bind, commit, or obligate the NRC contractually. Informal unauthorized commitments, which do not obligate the NRC and do not entitle the contractor to payment, may include:

(1) Encouraging a potential contractor to incur costs prior to receiving a contract;

(2) Requesting or requiring a contractor to make changes under a contract without formal contract modifications;

(3) Encouraging a contractor to incur costs under a cost-reimbursable contract in excess of those costs contractually allowable; and

(4) Committing the Government to a course of action with regard to a potential contract, contract change, claim, or dispute.

H.17 CONTRACTOR CONDUCT (DEC 2019)

The contractor shall ensure that all contractor staff receive anti-harassment training before being granted facility access. The Government reserves the right to deny or restrict facility access for any Contractor employee who engages in any conduct that the agency believes adversely affects the work place. The imposition of a restriction or prohibition shall not excuse the Contractor from performance of obligations under the contract.

H.18 COMPLIANCE WITH INTERNET PROTOCOL VERSION 6 (IPV6) IN ACQUIRING ELECTRONIC AND INFORMATION TECHNOLOGY (EIT) (OCT 2012)

(a) This procurement involves the acquisition of electronic and information technology (EIT), as defined in FAR 2.101, that uses the Internet Protocol (IP).

(b) As used in this clause, "IPv6 Capable Products" means any product that meets the minimum set of mandatory requirements, appropriate to its Product Class, necessary for it to interoperate with other IPv6 products employed in IPv6 networks.

(c) In its quotation or proposal, the offeror shall provide a complete and signed USGv6 Suppliers Declaration of Conformity (SDOC) for all IPv6 capable products. See Internet site at

www.nist.gov/itl/antd/usgv6.cfm. The offeror's submitted SDOC should address all of the IPv6 capabilities/stacks claimed for the specific product being offered and report appropriate conformance and interoperability testing results obtained from an accredited USGv6 testing laboratory. If an offeror does not have an SDOC, the firm should sufficiently address the path forward relating to IPv6 certification.

(d) If the offeror plans to offer a deliverable that involves EIT that may not comply with IPv6 requirements at the time of delivery and receives the award for the contract/order, then the contractor shall obtain the Contracting Officer's written approval before commencing work on the deliverable.

(e) Should the offeror find that the Statement of Work/Specifications of this contract/order does not conform to IPv6 standards, it must notify the contracting officer in a timely manner of such nonconformance.

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

(g) The contractor shall ensure that all deliverables that involve EIT that use IP (products, services, software, etc.) comply with IPv6 standards and interoperate with both IPv6 and IPv4 systems and products.

H.19 ORDERING PROCEDURES FOR MULTIPLE-AWARD INDEFINITE-DELIVERY/INDEFINITE-QUANTITY CONTRACTS (MAR 2014)

[The contracting officer is responsible for providing further specificity to supplement the standard information contained in the ordering procedures set forth below to address the specific requirements of each contract.]

General.

This clause applies to solicitations and contracts for multiple-award Indefinite-Delivery contracts. For the work specified in the SOW, PWS or SOO, the CO may issue an order to one of the IDC contractors. The contractor agrees that issuance of an order in accordance with any of the procedures described below is deemed to have provided the contractor a "fair opportunity to be considered" as that phrase is used at FAR 16.505(b)(1).

Ordering Process.

Under this RFTOP this agency will follow the procedures set forth in FAR 16.505.

To the extent that the RFTOP requirements or aspects of the proposal that deviate from the government's requirements and are not within established scope or pricing of the IDC the contractor shall immediately contact the CO for appropriate guidance.

Task/Delivery Order Ombudsman.

To further ensure that all contractors are afforded a fair opportunity to be considered to task or delivery orders pursuant to FAR 16.505, the NRC has an Ombudsman. The purpose of the Ombudsman is not to diminish the authority of the CO, but to receive on behalf of and to communicate to the appropriate Government personnel concerns and disagreements of

contractors not receiving a specific order and to work to resolve the matter. When requested, the Ombudsman will maintain strict confidentiality as to the source of the concern. The Ombudsman does not participate in the original selection of contractors or in the evaluation or determination of the issuance of task or delivery orders under the applicable IDC contract. He/She does not act in the capacity of a CO and does not participate in the adjudication of contract disputes in regard to multiple award task or delivery order contracts awarded pursuant to FAR Subpart 16.5. Interested parties may contact the Ombudsman with concerns or disagreements. Issues or concerns to the NRC task/delivery order Ombudsman may be forwarded to:

U.S. Nuclear Regulatory Commission

Acquisition Management Division

Attn: Ombudsman

Washington, DC 20555

H.20 SECURITY REQUIREMENTS FOR UNESCORTED ACCESS TO NUCLEAR POWER PLANTS (SEP 2013)

Performance under this contract may involve unescorted access to protected and vital areas of nuclear power plants or access to unclassified Safeguards Information (SGI).

Individual contractors requiring access to protected and vital areas of nuclear power plants or access to unclassified SGI will be approved for access in accordance with the following procedures:

A. Interim Approval

(a) The contractor shall submit a completed security forms packet, including the OPM Standard Form (SF) 86 (online Questionnaire for National Security Positions), two (2) FD 258 fingerprint charts, copies of the contractor's five-year employment and education history checks, including verification of the highest degree obtained, a reference from at least one additional person not provided by the individual, results of a psychological evaluation, and a certification that the contractor has found all checks acceptable, through the Project Officer to PSB/DFS for review and favorable adjudication, prior to the individual performing work under this contract. Interim access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of PSB/DFS. A signed NRC form 570, "Access Authorization Acknowledgment," from the individual that he or she understands his or her responsibility to report to the NRC, PSB/DFS, any information bearing on his or her continued eligibility for access authorization as specified in 10 CFR Part 10, Section 10.11 "Criteria" must also be included. The results of a psychological examination, which uses a reliable written personality test or any other professionally accepted clinical evaluation procedure, will be used to evaluate a subject's trustworthiness, reliability, and stability. The contractor shall review all required information for accuracy, completeness, and legibility, except Part 2 of the SF 86 which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope. Failure of the contractor to comply with this clause may be a basis to void the notice of selection. In that event, the Government may select another firm for award.

Or,

(b) The individual will arrange to be fingerprinted by the subject utility, and the contractor will submit to the utility's access authorization program.

In Section A above, PSB/DFS will conduct criminal history and credit checks and a security assurance interview with the individual.

Based on the result of these checks, PSB/DFS will determine the individual's eligibility for interim access and provide an objection or no objection to the sponsoring Office pending completion of the required background investigation by OPM. Interim access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of PSB/DFS.

B. Final Approval

(a) The required investigation on the individual has been completed, and is satisfactory, resulting in NRC's endorsement of the individual's unescorted access at all nuclear facilities.

Or,

(b) The contractor has obtained unescorted access authorization (other than temporary access) at the specific facility through that utility's access authorization program,

Or,

(c) The individual possesses a valid government issued clearance as verified by PSB/DFS. A valid government issued clearance is defined as a U.S. Government issued security clearance equivalent or higher than an NRC "L" clearance (e.g., Secret) based on a comparable investigation not more than five years old.

If an NRC contract is let to a foreign owned company employing foreign nationals, PSB/DFS will attempt to obtain security assurance from the respective government that a comparable investigation has been conducted on the individual. If an acceptable assurance is obtained, PSB/DFS will provide a NO SECURITY OBJECTION without further investigative checks.

The investigation in Section B above may involve Access National Agency Check with Inquiries (ANACI) or other investigation as deemed necessary by PSB/DFS in accordance with 10 CFR Part 10 and NRC Management Directive and Handbook 12.3. Any questions regarding the individual's eligibility for unescorted access to protected or vital areas of nuclear power facilities will be resolved in accordance with the provisions specified in 10 CFR Part 10, which is incorporated into the contract by reference as though fully set forth herein.

Any questions regarding the individual's eligibility for access to nuclear power reactor SGI will be resolved in accordance with the provisions set forth in Management Directive 12.3. Based on the review of the applicant's security forms by PSB/DFS and/or the receipt of adverse information by NRC, the individual may be denied access to nuclear power reactor SGI until a final determination of his or her eligibility for access is made under the provisions of 10 CFR Part 10. During the processing by PSB/DFS of new individuals for access to nuclear power reactor SGI, access may be granted under licensee programs.

C. Fitness for Duty

Pursuant to NRC policy, all contract individuals proposed for performance of task orders requiring unescorted access to nuclear power plants will be subject to the requirements of the licensee's Fitness for Duty program.

D. Basic Exposure Control and Personnel Dosimetry Training Requirements

The contractor shall certify that personnel utilized under the scope of work herein have completed basic exposure control and personnel dosimetry training sufficient to meet the requirements of commercial nuclear power plants for unescorted access. Training will be provided on a one time basis, upon issuance of the applicable task order(s), for those individual(s) for whom the contractor cannot certify as to having completed the above training within the past year. Site specific training obtained at each site will still be required during the performance of individual task orders in addition to the basic training.@

H.21 KEY PERSONNEL. (JAN 1993)

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

[REDACTED]

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

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

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

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

NRCAR Clauses Incorporated By Full Text

H.22 2052.204-71 SITE ACCESS BADGE REQUIREMENTS. (JAN 1993)

During the life of this contract, the rights of ingress and egress for contractor personnel must be made available as required. In this regard, all contractor personnel whose duties under this contract require their presence on-site shall be clearly identifiable by a distinctive badge furnished by the Government. The Project Officer shall assist the contractor in obtaining the badges for contractor personnel. It is the sole responsibility of the contractor to ensure that each employee has proper identification at all times. All prescribed identification must be immediately delivered to the Security Office for cancellation or disposition upon the termination of employment of any contractor personnel. Contractor personnel shall have this identification in their possession during on-site performance under this contract. It is the contractor's duty to assure that contractor personnel enter only those work areas necessary for performance of contract work and to assure the safeguarding of any Government records or data that contractor personnel may come into contact with.

(End of Clause)

H.23 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)

H.24 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:

Primary EWC COR:

[REDACTED]

[REDACTED]

(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)

H.25 2052.242-70 RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)

(a) The Nuclear Regulatory Commission's (NRC) policy is to support the contractor's expression of professional health and safety related concerns associated with the contractor's work for NRC that may differ from a prevailing NRC staff view, disagree with an NRC decision or policy position, or take issue with proposed or established agency practices. An occasion may arise when an NRC contractor, contractor's personnel, or subcontractor personnel believes that a conscientious expression of a competent judgement is required to document such concerns on matters directly associated with its

performance of the contract. The NRC's policy is to support these instances as Differing Professional Views (DPVs).

(b) The procedure that will be used provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns associated with the mission of the agency by NRC contractors, contractor personnel or subcontractor personnel on matters directly associated with its performance of the contract. This procedure may be found in Attachments to this document. The contractor shall provide a copy of the NRC DPV procedure to all of its employees performing under this contract and to all subcontractors who shall, in turn, provide a copy of the procedure to its employees. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(End of Clause)

H.26 2052.242-71 PROCEDURES FOR RESOLVING DIFFERING PROFESSIONAL VIEWS. (OCT 1999)

(a) The following procedure provides for the expression and resolution of differing professional views (DPVs) of health and safety related concerns of NRC contractors and contractor personnel on matters connected to the subject of the contract. Subcontractor DPVs must be submitted through the prime contractor. The prime contractor or subcontractor shall submit all DPV's received but need not endorse them.

(b) The NRC may authorize up to eight reimbursable hours for the contractor to document, in writing, a DPV by the contractor, the contractor's personnel, or subcontractor personnel. The contractor shall not be entitled to any compensation for effort on a DPV which exceeds the specified eight hour limit.

(c) Before incurring costs to document a DPV, the contractor shall first determine whether there are sufficient funds obligated under the contract which are available to cover the costs of writing a DPV. If there are insufficient obligated funds under the contract, the contractor shall first request the NRC contracting officer for additional funding to cover the costs of preparing the DPV and authorization to proceed.

(d) Contract funds shall not be authorized to document an allegation where the use of this NRC contractor DPV process is inappropriate. Examples of such instances are: allegations of wrongdoing which should be addressed directly to the NRC Office of the Inspector General (OIG), issues submitted anonymously, or issues raised which have already been considered, addressed, or rejected, absent significant new information. This procedure does not provide anonymity. Individuals desiring anonymity should contact the NRC OIG or submit the information under NRC's Allegation Program, as appropriate.

(e) When required, the contractor shall initiate the DPV process by submitting a written statement directly to the NRC Office Director or Regional Administrator responsible for the contract, with a copy to the Contracting Officer, Division of Contracts and Property Management, Office of Administration. Each DPV submitted will be evaluated on its own merits.

(f) The DPV, while being brief, must contain the following as it relates to the subject matter of the contract:

(1) A summary of the prevailing NRC view, existing NRC decision or stated position, or the proposed or established NRC practice.

(2) A description of the submitter's views and how they differ from any of the above items.

(3) The rationale for the submitter's views, including an assessment based on risk, safety and cost benefit considerations of the consequences should the submitter's position not be adopted by NRC.

(g) The Office Director or Regional Administrator will immediately forward the submittal to the NRC DPV Review Panel and acknowledge receipt of the DPV, ordinarily within five (5) calendar days of receipt.

(h) The panel will normally review the DPV within seven calendar days of receipt to determine whether enough information has been supplied to undertake a detailed review of the issue. Typically, within 30 calendar days of receipt of the necessary information to begin a review, the panel will provide a written report of its findings to the Office Director or Regional Administrator and to the Contracting Officer, which includes a recommended course of action.

(i) The Office Director or Regional Administrator will consider the DPV Review Panel's report, make a decision on the DPV and provide a written decision to the contractor and the Contracting Officer normally within seven calendar days after receipt of the panel's recommendation.

(j) Subsequent to the decision made regarding the DPV Review Panel's report, a summary of the issue and its disposition will be included in the NRC Weekly Information Report submitted by the Office Director. The DPV file will be retained in the Office or Region for a minimum of one year thereafter. For purposes of the contract, the DPV shall be considered a deliverable under the contract. Based upon the Office Director or Regional Administrator's report, the matter will be closed.

(End of Clause)

I - Contract Clauses

NRC Local Clauses Incorporated by Full Text

I.1 COMPLIANCE WITH SECTION 508 OF THE REHABILITATION ACT OF 1973, AS AMENDED (SEP 2013)

In 1998, Congress amended the Rehabilitation Act of 1973 (29 U.S.C. §794d) as amended by the Workforce Investment Act of 1998 (P.L. 105 - 220), August 7, 1998 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. Inaccessible technology interferes with an ability to obtain and use information quickly and easily. Section 508 was enacted to eliminate barriers in information technology, open new opportunities for people with disabilities, and encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508 (29 U.S.C. §794d), agencies must give disabled employees and members of the public access to information that is comparable to access available to others.

Specifically, Section 508 of that Act requires that when Federal agencies develop, procure, maintain, or use EIT, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. (36 C.F.R. §1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at: <http://www.access-board.gov/sec508/standards.htm>)

Exceptions.

All EIT that the government acquires by purchase or by lease/rental under this contract must meet the applicable accessibility standards at 36 C.F.R. Part 1194, unless one or more of the following exceptions at FAR 39.204 applies to this acquisition (applicable if checked):

The EIT is for a national security system.

The EIT is acquired by a contractor incidental to a contract.

The EIT is located in spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment.

Compliance with the applicable 36 C.F.R. Part 1194 provisions would impose an undue burden on the agency.

Applicable Standards.

The following accessibility standards from 36 C.F.R. Part 1194 have been determined to be applicable to this contract/order. See www.section508.gov for more information:

1194.21 Software applications and operating systems.

1194.22 Web-based intranet and internet information and applications. 16 rules.

1194.23 Telecommunications products.

- 1194.24 Video and multimedia products.
- 1194.25 Self contained, closed products.
- 1194.26 Desktop and portable computers.
- 1194.31 Functional performance criteria.
- 1194.41 Information, documentation, and support.

Note: Under the Exceptions paragraph, the Contracting Officer should check the boxes for any exceptions that apply. If no exceptions apply, then the Contracting Officer should, under the Applicable Standards paragraph, check the boxes that indicate which of the standards apply. See FAR Subpart 39.2 and www.section508.gov for additional guidance.

NRCAR Clauses Incorporated By Full Text

I.2 2052.222-70 NONDISCRIMINATION BECAUSE OF AGE. (JAN 1993)

(a) Contractors and subcontractors engaged in the performance of Federal contracts may not, in connection with the employment, advancement, or discharge of employees or in connection with the terms, conditions, or privileges of their employment, discriminate against persons because of their age except upon the basis of a bona fide occupational qualification, retirement plan, or statutory requirement; and

(b) That contractors and subcontractors, or persons acting on their behalf, may not specify, in solicitations or advertisements for employees to work on Government contracts, a maximum age limit for employment unless the specified maximum age limit is based upon a bona fide occupational qualification, retirement plan, or statutory requirement.

(End of Provision)

FAR Clauses Incorporated By Reference

I.3 52.202-1 DEFINITIONS. (JUN 2020)

I.4 52.203-3 GRATUITIES. (APR 1984)

I.5 52.203-5 COVENANT AGAINST CONTINGENT FEES. (MAY 2014)

I.6 52.203-7 ANTI-KICKBACK PROCEDURES. (JUN 2020)

I.7 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY. (MAY 2014)

I.8 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY. (MAY 2014)

I.9 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS. (JUN 2020)

- I.10 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT. (JUN 2020)**
- I.11 52.203-16 PREVENTING PERSONAL CONFLICTS OF INTEREST. (JUN 2020)**
- I.12 52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS. (JUN 2020)**
- I.13 52.204-2 SECURITY REQUIREMENTS. (AUG 1996)**
- I.14 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER. (MAY 2011)**
- I.15 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL. (JAN 2011)**
- I.16 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS. (JUN 2020)**
- I.17 52.204-13 SYSTEM FOR AWARD MANAGEMENT MAINTENANCE. (OCT 2018)**
- I.18 52.204-15 SERVICE CONTRACT REPORTING REQUIREMENTS FOR INDEFINITE-DELIVERY CONTRACTS. (OCT 2016)**
- I.19 52.204-18 COMMERCIAL AND GOVERNMENT ENTITY CODE MAINTENANCE. (JUL 2016)**
- I.20 52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB AND OTHER COVERED ENTITIES. (JUL 2018)**
- I.21 52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT. (AUG 2019)**
- I.22 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT. (JUN 2020)**
- I.23 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS. (OCT 2018)**
- I.24 52.209-10 PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS. (NOV 2015)**
- I.25 52.210-1 MARKET RESEARCH. (JUN 2020)**
- I.26 52.215-2 AUDIT AND RECORDS - NEGOTIATION. (JUN 2020)**
- I.27 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT. (OCT 1997)**
- I.28 52.215-10 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA. (AUG 2011)**

- I.29 52.215-11 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (JUN 2020)**
- I.30 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA. (JUN 2020)**
- I.31 52.215-13 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (JUN 2020)**
- I.32 52.215-14 INTEGRITY OF UNIT PRICES. (JUN 2020)**
- I.33 52.215-17 WAIVER OF FACILITIES CAPITAL COST OF MONEY. (OCT 1997)**
- I.34 52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (JUN 2020)**
- I.35 52.216-8 FIXED FEE. (JUN 2011)**
- I.36 52.216-26 PAYMENTS OF ALLOWABLE COSTS BEFORE DEFINITIZATION. (DEC 2002)**
- I.37 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN. (JUN 2020)**
- I.38 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN. (JUN 2020) - ALTERNATE II (NOV 2016)**
- I.39 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN. (JAN 1999)**
- I.40 52.222-3 CONVICT LABOR. (JUN 2003)**
- I.41 52.222-21 PROHIBITION OF SEGREGATED FACILITIES. (APR 2015)**
- I.42 52.222-26 EQUAL OPPORTUNITY. (SEP 2016)**
- I.43 52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (JUN 2020)**
- I.44 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES. (JUN 2020)**
- I.45 52.222-37 EMPLOYMENT REPORTS ON VETERANS. (JUN 2020)**
- I.46 52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT. (DEC 2010)**
- I.47 52.222-50 COMBATING TRAFFICKING IN PERSONS. (JAN 2019)**
- I.48 52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION. (OCT 2015)**
- I.49 52.223-6 DRUG-FREE WORKPLACE. (MAY 2001)**
- I.50 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING. (JUN 2020)**
- I.51 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES. (JUN 2008)**

- I.52 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014)**
- I.53 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE IV (DEC 2007)**
- I.54 52.228-7 INSURANCE - LIABILITY TO THIRD PERSONS. (MAR 1996)**
- I.55 52.230-2 COST ACCOUNTING STANDARDS. (JUN 2020)**
- I.56 52.230-3 DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES. (JUN 2020)**
- I.57 52.230-5 COST ACCOUNTING STANDARDS - EDUCATIONAL INSTITUTION. (JUN 2020)**
- I.58 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS. (JUN 2010)**
- I.59 52.232-1 PAYMENTS. (APR 1984)**
- I.60 52.232-8 DISCOUNTS FOR PROMPT PAYMENT. (FEB 2002)**
- I.61 52.232-11 EXTRAS. (APR 1984)**
- I.62 52.232-17 INTEREST. (MAY 2014)**
- I.63 52.232-18 AVAILABILITY OF FUNDS. (APR 1984)**
- I.64 52.232-20 LIMITATION OF COST. (APR 1984)**
- I.65 52.232-22 LIMITATION OF FUNDS. (APR 1984)**
- I.66 52.232-23 ASSIGNMENT OF CLAIMS. (MAY 2014)**
- I.67 52.232-25 PROMPT PAYMENT. (JAN 2017)**
- I.68 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - SYSTEM FOR AWARD MANAGEMENT. (OCT 2018)**
- I.69 52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS. (JUN 2013)**
- I.70 52.233-1 DISPUTES. (MAY 2014)**
- I.71 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM. (OCT 2004)**
- I.72 52.237-3 CONTINUITY OF SERVICES. (JAN 1991)**
- I.73 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS. (APR 1984)**
- I.74 52.242-3 PENALTIES FOR UNALLOWABLE COSTS. (MAY 2014)**
- I.75 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS. (JAN 1997)**
- I.76 52.242-5 PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS. (JAN 2017)**

I.77 52.242-13 BANKRUPTCY. (JUL 1995)

I.78 52.243-2 CHANGES - COST-REIMBURSEMENT. (AUG 1987)

I.79 52.243-2 CHANGES - COST-REIMBURSEMENT. (AUG 1987) - ALTERNATE I (APR 1984)

I.80 52.243-2 CHANGES - COST-REIMBURSEMENT. (AUG 1987) - ALTERNATE II (APR 1984)

I.81 52.243-2 CHANGES - COST-REIMBURSEMENT. (AUG 1987) - ALTERNATE V (APR 1984)

I.82 52.243-3 CHANGES - TIME-AND-MATERIALS OR LABOR-HOURS. (SEP 2000)

I.83 52.244-5 COMPETITION IN SUBCONTRACTING. (DEC 1996)

I.84 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS. (JUN 2020)

I.85 52.245-1 GOVERNMENT PROPERTY. (JAN 2017)

I.86 52.245-9 USE AND CHARGES. (APR 2012)

I.87 52.246-25 LIMITATION OF LIABILITY - SERVICES. (FEB 1997)

I.88 52.248-1 VALUE ENGINEERING. (JUN 2020)

I.89 52.249-5 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS). (AUG 2016)

I.90 52.249-6 TERMINATION (COST-REIMBURSEMENT). (MAY 2004)

I.91 52.253-1 COMPUTER GENERATED FORMS. (JAN 1991)

FAR Clauses Incorporated By Full Text

I.92 52.203-14 DISPLAY OF HOTLINE POSTER(S). (JUN 2020)

(a) Definition.

United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display of fraud hotline poster(s). Except as provided in paragraph (c)-

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites-

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause;
and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Poster(s) Obtain from

<https://www.nrc.gov/docs/ML1226/ML12268A243.pdf>

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Federal Acquisition Regulation 3.1004(b)(1) on the date of subcontract award, except when the subcontract-

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

(End of clause)

I.93 52.215-23 LIMITATIONS ON PASS-THROUGH CHARGES. (JUN 2020)

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

Added value means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

Excessive pass-through charge, with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

No or negligible value means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

Subcontract means any contract, as defined in Federal Acquisition Regulation (FAR) 2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor, as defined in FAR 44.101, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) *General*. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) *Reporting*. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if--

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) *Recovery of excessive pass-through charges*. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR subpart 31.2; and

(2) For applicable DoD fixed-price contracts, as identified in 15.408(n)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) *Access to records*. (1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract

award, except if the contract is with DoD, then insert in all costreimbursement subcontracts and fixed-price subcontracts, except those identified in FAR 15.408(n)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in FAR 15.403-4(a)(1) on the date of subcontract award.

(End of clause)

I.94 52.216-7 ALLOWABLE COST AND PAYMENT. (AUG 2018)

(a) *Invoicing.* (1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) subpart 31.2 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30 day after the designated billing office receives a proper payment request.

In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) *Reimbursing costs.* (1) For the purpose of reimbursing allowable costs (except as provided in paragraph (b)(2) of the clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term *costs* includes only-

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for-

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made-

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(B) Materials issued from the Contractor's inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check, or other forms of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless-

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) below, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) below.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractor's expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) *Small business concerns.* A small business concern may receive more frequent payments than every 2 weeks.

(d) *Final indirect cost rates.* (1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by

the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractor's actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor's proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

(A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.

(B) General and Administrative expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).

(C) Overhead expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.

(D) Occupancy expenses (intermediate indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.

(E) Claimed allocation bases, by element of cost, used to distribute indirect costs.

(F) Facilities capital cost of money factors computation.

(G) Reconciliation of books of account (i.e., General Ledger) and claimed direct costs by major cost element.

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

(I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.

(J) Subcontract information. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the subcontractor name, address, and point of contact information).

(K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.

(L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.

(M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.

(N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).

(O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

(A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.

(B) General organizational information and limitation on allowability of compensation for certain contractor personnel. See 31.205-6(p). Additional salary reference information is available at <https://www.whitehouse.gov/wp-content/uploads/2017/11/ContractorCompensationCapContractsAwardedBeforeJune24.pdf> and <https://www.whitehouse.gov/wp-content/uploads/2017/11/ContractorCompensationCapContractsAwardedAfterJune24.pdf>.

(C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changed from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc.).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(I) of this section, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify (i) the agreed-upon final annual indirect cost rates, (ii) the bases to which the rates apply, (iii) the periods for which the rates apply, (iv) any specific indirect cost items treated as direct costs in the settlement, and (v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates. The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, the Contractor shall submit a completion invoice or

voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may-

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) *Billing rates.* Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates-

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) *Quick-closeout procedures.* Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) *Audit.* At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be (1) reduced by amounts found by the Contracting Officer not to constitute allowable costs or (2) adjusted for prior overpayments or underpayments.

(h) *Final payment.* (1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver-

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except-

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

(End of clause)

I.95 52.216-18 ORDERING. (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from Day of Award through Contract Expiration.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

I.96 52.216-22 INDEFINITE QUANTITY. (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the *maximum*. The Government shall order at least the quantity of supplies or services designated in the Schedule as the *minimum*.

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; *provided*, that the Contractor shall not be required to make any deliveries under this contract after January 31, 2027.

(End of clause)

I.97 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE. (MAR 2020)

(a) *Definition*.

Small business concern, as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) *Applicability*. This clause applies only to-

(1) Contracts that have been totally set aside for small business concerns; and

(2) Orders set aside for small business concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).

(c) *General*. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(End of clause)

I.98 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS. (OCT 2018)

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

HUBZone small business concern means a small business concern, certified by the Small Business Administration, that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern, consistent with 13 CFR 124.1002, means a small business concern under the size standard applicable to the acquisition, that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by-

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13.CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

Veteran-owned small business concern means a small business concern-

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern-

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(b) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major

systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(c) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(d)(1) The Contractor may accept a subcontractor's written representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.

(2) The Contractor may accept a subcontractor's representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business in the System for Award Management (SAM) if-

(i) The subcontractor is registered in SAM; and

(ii) The subcontractor represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.

(3) The Contractor may not require the use of SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.

(4) In accordance with 13 CFR 121.411, 124.1015, 125.29, 126.900, and 127.700, a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(5) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management or by contacting the SBA. Options for contacting the SBA include-

(i) HUBZone small business database search application Web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm; or <http://www.sba.gov/hubzone>;

(ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or

(iii) The SBA HUBZone Help Desk at hubzone@sba.gov.

(End of clause)

I.99 52.219-14 LIMITATIONS ON SUBCONTRACTING. (MAR 2020)

- (a) This clause does not apply to the unrestricted portion of a partial set-aside.
- (b) Applicability. This clause applies only to-
- (1) Contracts that have been set aside for small business concerns or 8(a) participants;
 - (2) Part or parts of a multiple-award contract that have been set aside for small business concerns or 8(a) participants;
 - (3) Orders set aside for small business concerns or 8(a) participants under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F); and
 - (4) Orders issued directly to small business concerns or 8(a) participants under multiple-award contracts as described in 19.504(c)(1)(ii).
- (c) *Limitations on subcontracting.* By submission of an offer and execution of a contract, the Contractor agrees that in performance of the contract in the case of a contract for-
- (1) *Services (except construction).* At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.
 - (2) *Supplies (other than procurement from a non-manufacturer of such supplies).* The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.
 - (3) *General construction.* The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.
 - (4) *Construction by special trade contractors.* The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.
- (d) The Contractor shall comply with the limitations on subcontracting as follows:
- (1) For contracts, in accordance with paragraph (b)(1) and (2) of this clause-
(*Contracting Officer check as appropriate.*)
- By the end of the base term of the contract and then by the end of each subsequent option period; or
- By the end of the performance period for each order issued under the contract.

(2) For orders, in accordance with paragraphs (b)(3) and (4) of this clause, by the end of the performance period for the order.

(End of clause)

I.100 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE II (DEC 2007)

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

Computer database or database means a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

Computer software- (1) Means (i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and

(ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.

Computer software documentation means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

Data means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

Form, fit, and function data means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

Limited rights means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

Limited rights data means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

Restricted computer software means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

Restricted rights, as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

Technical data, means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases. (See 41 U.S.C. 116).

Unlimited rights means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) *Allocation of rights.* (1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in-

(i) Data first produced in the performance of this contract;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to-

(i) Assert copyright in data first produced in the performance of this contract to the extent provided in paragraph (c)(1) of this clause;

(ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;

(iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) *Copyright-* (1) Data first produced in the performance of this contract. (i) Unless provided otherwise in paragraph (d) of this clause, the Contractor may, without prior approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Contracting Officer is required to assert copyright in all other data first produced in the performance of this contract.

(ii) When authorized to assert copyright to the data, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).

(iii) For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without the prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the Contractor-

(i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.

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

(d) *Release, publication, and use of data.* The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except-

- (1) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);
- (2) As expressly set forth in this contract; or
- (3) If the Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(e) *Unauthorized marking of data.* (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 4703, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer will make written inquiry to the Contractor affording the Contractor 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Contracting Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor will be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer will furnish the Contractor a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

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

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

(f) *Omitted or incorrect markings.* (1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2) If the unmarked data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Contractor's expense. The Contracting Officer may agree to do so if the Contractor-

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

(3) If data has been marked with an incorrect notice, the Contracting Officer may-

- (i) Permit correction of the notice at the Contractor's expense if the Contractor identifies the data and demonstrates that the correct notice is authorized; or
- (ii) Correct any incorrect notices.

(g) *Protection of limited rights data and restricted computer software.* (1) The Contractor may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Contractor shall-

- (i) Identify the data being withheld; and
- (ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

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

LIMITED RIGHTS NOTICE (DEC 2007)

(a) These data are submitted with limited rights under Government Contract No. 31310020D0002 (and subcontract [_____], if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Contractor, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any; provided that the Government makes such disclosure subject to prohibition against further use and disclosure: [](Agencies may list additional purposes as set forth in 27.404-2(c)(1) or if none, so state.)

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

(End of notice)

(h) *Subcontracting*. The Contractor shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government those rights, the Contractor shall promptly notify the Contracting Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Contracting Officer.

(i) *Relationship to patents or other rights*. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

I.101 52.244-2 SUBCONTRACTS. (JUN 2020) - ALTERNATE I (JUN 2020)

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

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds-

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: All subcontract or consultant shall have approval by the Contracting Officer.

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting-

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c) or (d) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds either the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (iv) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination-

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: Advanced Technologies and Laboratories International (ATL)

Dade Moeller and Associates

Global Research for Safety (GRS)

NRG Consultancy and Services

Prometheus Global, Inc.

Purdue University

(End of clause)

I.102 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

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

<https://www.nrc.gov/about-nrc/contracting/48cfr-ch20.html>

(End of clause)

J - List of Documents, Exhibits and Other Attachments

Attachment Number	Title	Date	Number of Pages
1	31310020D0002 Organizational Conflicts of Interest	07/21/2020	8
2	31310020D0002 Billing Instructions for Cost Plus Fixed Fee Contracts	07/21/2020	10
3	31310020D0002 Billing Instructions for Labor-Hour or Time-and-Materials Contracts	07/21/2020	7
4	31310020D0002 Contractor Spending Plan	07/21/2020	3
5	31310020D0002 Monthly Letter Status Report (MLSR) Instructions & Template	07/21/2020	10
6	31310020D0002 NRC 187 Solicitation	07/21/2020	4