

Table of Changes for
 Fermi Forward Discovery Group, LLC
 Contract No. 89243024CSC000002
 Modification No. 009

The purpose of this modification is to update the following:

CONTRACT SECTION C
 DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

Clause No.	Title	Change and Explanation
C.4; (2) Business Management; (i) Human Resources Management (HR)	STATEMENT OF WORK	REMOVED: The Contractor also shall create and maintain at the Laboratory an environment that promotes equity, diversity, and inclusion (DEI); and fully utilizes the talents and capabilities of a diverse workforce. This includes but is not limited to: maintaining best practices in DEI space as they relate to science, technology, engineering, and math (STEM) disciplines; communicating frequently and clearly with community on these topics; evidence-based evaluation of existing program and policies; and establishing, developing, and maintaining effective relationships with institutions and individuals working to support traditionally underrepresented groups and improve inclusion in STEM fields. Per: SC DEI M&O Memorandum; dated 1/23/2025
C.4; (2) Business Management; (iii) Purchasing Management, 2 nd para.	STATEMENT OF WORK	REVISED TO STATE: The Contractor shall also place emphasis on the use of the types of businesses identified in the Small Business Subcontracting Plan clause of this contract, as well as full and open competition. Per: SC DEI M&O Memorandum; dated 1/23/2025
C.4; (e) University and Science Education Program for Workforce Development	STATEMENT OF WORK	REMOVED: The Contractor shall encourage participation by a diverse group of faculty and students in Laboratory programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. Per: SC DEI M&O Memorandum; dated 1/23/2025

CONTRACT SECTION I
 CONTRACT CLAUSES

Clause No.	Title	Change and Explanation
Clause I.141 DEAR 970.5226-1	Diversity Plan (DEC 2000)	Removed Per: SC DEI M&O Memorandum; dated 1/23/2025

CONTRACT SECTION J, ATTACHMENT J.1 - APPENDIX A

ADVANCE UNDERSTANDING ON HUMAN RESOURCES

Appendix A is replaced in its entirety. Advance Understanding on Human Resources incorporated upon award is hereby replaced with Advance Understanding on Human Resources dated February 3, 2025.

CONTRACT SECTION J, ATTACHMENT J.2 - APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

Appendix B is replaced in its entirety. FY 2025 Rev. 02 (January 1, 2025 – September 30, 2025) Performance Evaluation and Measurement Plan incorporated in Modification No. 006 is hereby replaced with the FY 2025 Rev. 3 (January 1, 2025 – September 30, 2025) Performance Evaluation and Measurement Plan.

CONTRACT SECTION J, ATTACHMENT J.4 - APPENDIX D

CONTRACTOR’S COMMITMENTS

Appendix D is replaced in its entirety. Contractor’s Commitments incorporated upon award is hereby replaced with the Contractor’s Commitments dated February 3, 2025.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF 1 of 2
2. AMENDMENT/MODIFICATION NO. 009	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable) N/A		
6. ISSUED BY CODE U.S. Department of Energy Office of Science/Fermi Site Office P.O. Box 2000, Wilson Hall – MS 118 Batavia, IL 60510		7. ADMINISTERED BY (If other than Item 6) Code See Block 6.			
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Fermi Forward Discovery Group, LLC Pine Street and Kirk Road; MS 213 Batavia, IL 60510-5011				(✓)	9.A. AMENDMENT OF SOLICITATION NO.
					9.B. DATED (SEE ITEM 11)
UEI: VLS6K3EVCMW5					10.A. MODIFICATION OF Contract/Order NO. 89243024CSC000002
CODE N/A	FACILITY CODE N/A	10.B. DATED (SEE ITEM 13) October 1, 2024			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

Not Applicable

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

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority)

Per Discussion with DDO and mandated by DOE HQ; 1.128 - DEAR 970.5204-2 LAWS, REGULATIONS AND DOE DIRECTIVES (DEC 2000) (DEVIATION) (MAY 2018) (SC ALTERNATE) (SEPT 2018); (b)

E. IMPORTANT: Contractor is required to sign this document and return copy to the issuing office.

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

SEE PAGE 2

15A. NAME AND TITLE OF SIGNER (Type or print) Young-Kee Kim, Interim President FermiForward Discovery Group LLC	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Robert M. Scott, Contracting Officer
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)
15C. DATE SIGNED	16C. DATE SIGNED

14. Description of Amendment/Modification:

The purpose of this modification is to update the following:

1. SECTION C, DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK, dated 2/3/2025, (attached hereto) is substituted for the previous SECTION C, DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK incorporated into this contract upon award.
2. SECTION I, CONTRACT CLAUSES, dated 2/3/2025, (attached hereto) is substituted for the previous, SECTION I, CONTRACT CLAUSES incorporated into this contract upon award.
3. ATTACHMENT J.1 - APPENDIX A – ADVANCE UNDERSTANDING ON HUMAN RESOURCES, (attached hereto) is substituted for the APPENDIX A – ADVANCE UNDERSTANDING ON HUMAN RESOURCES, previously incorporated into this contract upon award.
4. ATTACHMENT J.2 - APPENDIX B – PERFORMANCE EVALUATION AND MEASUREMENT PLAN FY25 Rev. 3 (January 1, 2025 – September 30, 2025), (attached hereto) is substituted for the APPENDIX B – PERFORMANCE EVALUATION AND MEASUREMENT PLAN FY25 Rev. 2 (January 1, 2025 – September 30, 2025), previously incorporated into this contract by Modification No. 006.
5. ATTACHMENT J.4 - APPENDIX D – CONTRACTOR’S COMMITMENTS, (attached hereto) is substituted for the APPENDIX D – CONTRACTOR’S COMMITMENTS, previously incorporated into this contract upon award.

All other terms and conditions remain unchanged.

END OF MODIFICATION

SECTION C

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

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C.1 INTRODUCTION

Fermi National Accelerator Laboratory (FNAL or the Laboratory) is one of the U.S. Department of Energy's (DOE or the Department) Office of Science (SC) single program laboratories. The Laboratory is a Federally Funded Research and Development Center (FFRDC) established in accordance with the Federal Acquisition Regulation (FAR) Part 35 and operated under this management and operating (M&O) contract, as defined in FAR 17.6 and DOE Acquisition Regulation (DEAR) 917.6.

The mission of the Laboratory is to deliver breakthrough science and technology in the area of high energy physics, and to drive discovery by building and operating world-leading accelerator and detector facilities, performing pioneering research with national and global partners, and developing new technologies for science that support U.S. industrial competitiveness. DOE programs are carried out in partnership with academia, the private sector, other DOE national laboratories, the international scientific community, and other government agencies. The Laboratory also performs work consistent with the DOE mission for entities other than DOE. The Contractor will advance the frontiers of science and technology through broad interdisciplinary R&D programs that answer fundamental questions, solve technical problems (locally, regionally, nationally, and internationally), and develop and apply technologies to address societal needs.

DOE employs a Performance Based Management Contract (PBMC) to enable the Contractor to achieve highly effective and efficient management of the Laboratory resulting in a safe and secure environment, outstanding science and technology results, more cost-effective operations, and enhanced Contractor accountability.

The Contractor has the responsibility for total performance under the contract, including determining the specific methods for accomplishing the work effort, performing quality control, and assuming accountability for accomplishing the work under the contract. Accordingly, this PBMC provides flexibility, within the terms and conditions of the contract, to the Contractor in managing and operating the Laboratory.

Desired results of this contract include improved Contractor operational efficiencies, allocations of Contractor oversight resources to direct mission work, and streamlined and more effective line management focused on a systems-based approach with increased reliance on the results obtained from certified, nationally recognized experts and other independent reviewers.

Under this PBMC, it is the Contractor's responsibility to develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the mission of the Laboratory. DOE expects the Contractor to employ effective and efficient management structures, systems, and operations that maintain high levels of quality, safety and security in accomplishing the work

required under this contract, and that, to the extent practicable and appropriate, rely on national, commercial, and industrial standards that can be verified and/or certified by independent experts.

C.2 IMPLEMENTATION OF DOE'S MISSION FOR FNAL

The Laboratory's mission focus is in high energy particle physics. FNAL brings specific strengths and competencies to the DOE laboratory system to produce excellent science and advanced technologies with the cooperation and involvement of the scientific and regional communities. In support of its SC mission, FNAL builds and operates major scientific facilities. These facilities serve not only the basic research of the DOE, but they reflect FNAL and DOE stewardship of national research infrastructure that is made available on a competitive basis to a wide range of university, industry, and government researchers.

C.3 CORE EXPECTATIONS

(a) General

The relationship between DOE and its national laboratory management and operating contractors is designed to bring best practices for research and development to bear on the Department's missions. Through application of these best practices, the Department seeks to assure both outstanding programmatic and operational performance of today's research programs and the long-term quality, relevance, and productivity of the laboratories against tomorrow's needs. Accordingly, DOE has substantial expectations of the Contractor in the areas of: program delivery (or development) and mission accomplishment; laboratory stewardship; and excellence in laboratory operations and operational business management.

(b) Program Development and Mission Accomplishment

The Contractor is expected to provide effective planning, management, and execution of assigned research and development programs. The Contractor is expected to execute assigned programs so as to strive for the greatest possible impact on achieving DOE's mission objectives, to aggressively manage the Laboratory's science and technology capabilities and intellectual property to meet these objectives, and to bring forward innovative concepts and research proposals that are well-aligned with DOE missions. The Contractor shall propose work that is aligned with, and likely to advance, DOE's mission objectives, and that is well matched to Laboratory capabilities. The Contractor shall strive to meet the highest standards of scientific quality and productivity, "on-time, on budget, as promised" delivery

of program deliverables, and first-rate service to the research community through user facility operation.

The Contractor is expected to demonstrate benefit to the nation from R&D investments by transferring technology to the private sector and supporting excellence in science and mathematics education to the extent such activities are consistent with achieving continuous progress towards DOE's core missions.

(c) Laboratory Stewardship

The Contractor shall be an active partner with DOE in assuring that the Laboratory is renewed and enhanced to meet future mission needs. Within the constraints of available resources and other contract requirements, the Contractor, in partnership with DOE, shall:

- (1) Maintain an understanding of DOE's evolving Laboratory vision and long-term strategic plan and address the evolution of Laboratory capabilities to meet anticipated DOE and national needs.
- (2) Attract, develop, and retain an outstanding work force, with the skills and capabilities to meet DOE's evolving mission needs.
- (3) Renew and enhance research facilities and equipment so that the Laboratory remains at the state-of-the-art over time and is well-positioned to meet future DOE needs.
- (4) Build and maintain a viable portfolio of research programs that generates the resources required to renew and enhance Laboratory research capabilities over time.
- (5) Build and maintain a positive relationship with the broader national and international research community, to enhance the intellectual vitality and research relevance of the Laboratory, and to bring the best possible capabilities to bear on DOE mission needs through partnerships.
- (6) Build a positive, supportive relationship founded on openness and trust with the regional community.

(d) Operational and Business Management

The Contractor shall effectively and efficiently manage and operate the Laboratory through best-in class management practices designed to foster world-class research. Contractor shall, at the same time, protect and properly maintain DOE property, facilities, and intellectual assets; as well as

ensure the health, safety and security of workers, the public and the environment. The Contractor shall operate the Laboratory in accordance with all applicable laws, regulations, and requirements. The Contractor shall manage the Laboratory cost-effectively, while providing the greatest possible research output per dollar of research investment, and, accordingly, develop, deploy and maintain integrated management systems and practices that are designed to enhance research quality, productivity and mission accomplishment consistent with meeting operational requirements.

C.4 STATEMENT OF WORK

(a) General

The Contractor shall, in accordance with the provisions of this contract, provide the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff Fermi National Accelerator Laboratory (FNAL) (also referred to as "Fermilab"); to accomplish the missions assigned by DOE to the Contractor; and, to perform all other work described in this Statement of Work (SOW). DOE missions are assigned through strategic planning, program coordination, and cooperation between the Contractor and DOE.

Inasmuch as the assigned missions of the Laboratory are dynamic, this SOW is not intended to be all-inclusive or restrictive, but it is intended to provide a broad framework and general scope of the work to be performed at FNAL during the term of this contract. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. All direct work will be authorized by DOE in accordance with the provisions of this contract.

All work under this contract shall be conducted in a manner that protects the environment, assures the safety, health, and security of employees and the public, and protects the safety and security of federal real, personal, and intellectual property. In performing the contract work, the Contractor shall implement appropriate program, operational and project management systems to ensure safe operations; track progress and maximize cost-effectiveness of work activities; develop integrated plans and schedules to achieve program objectives incorporating input from DOE and stakeholders; maintain sufficient technical expertise to manage activities and projects throughout the life of a program; utilize appropriate technologies and management systems to improve cost efficiency and performance; and, maintain Laboratory facilities and infrastructure as necessary to accomplish assigned missions.

(b) Research and Development (R&D)

The central mission of the Laboratory is to provide scientific leadership needed to carry out world class science and technological innovation to support the programs and missions of SC and DOE (<https://www.energy.gov/science/science-programs>). While the Laboratory is primarily involved with areas of high energy physics research, it also serves key roles in other programs sponsored by DOE through direct involvement or application of capabilities that potentially impact multiple disciplines. A central aspect of this mission, often involving all of its core competencies, is the conceptualization, design, construction, and operation of major scientific user facilities available to university, industry and government researchers.

(1) Mission Accomplishment

The science and technology delivered by the Laboratory is to have meaningful impacts on the relevant technical fields and provide quality leadership that advances the mission goals of the DOE, the sponsoring program, and the scientific community. The primary sponsor of work at the Laboratory is DOE Office of Science.

Additionally, the Contractor is authorized to pursue other DOE and non-DOE programs, subject to required approvals, such as Strategic Partnership Projects (SPP), Cooperative Research and Development Agreements (CRADA) and Laboratory Directed Research and Development (LDRD), that serve to integrate core capabilities and deploy science and technology to industry in support of the broader DOE mission. Other DOE program sponsors may include National Nuclear Security Administration (NNSA), Environmental Management (EM), Energy Efficiency and Renewable Energy (EERE), etc.

The Contractor is expected to maintain a forward-looking science and technology portfolio that is engaged with and cognizant of scientific priorities and emerging opportunities across SC, while also delivering world-leading research for its primary sponsors. This effort typically involves multi-institution collaborations, including universities, other national laboratories and research institutes, the international scientific community, and the private sector; thus, a strong cooperative approach with well-chosen leadership roles is highly desired. The current major programs and synergistic efforts are summarized below:

(i) SC High Energy Physics (HEP)

SC HEP is the largest sponsor of work at FNAL. The focus of this work targets frontier research in experimental and theoretical high energy physics and closely related fields such as cosmology; the contractor shall provide intellectual and technical leadership in international particle physics experiments; perform research and development in accelerator science, experimental detector design and computing for the SC HEP program, operate HEP sponsored user facilities, centers, and initiatives and carry out construction projects supporting high energy physics area as assigned.

(ii) SC Basic Energy Sciences (BES)

The Contractor shall support world-class major scientific user facilities in furtherance of BES research priorities. Principal efforts include the Linac Coherent Light Source-II and application of knowledge and capabilities to support the planning and delivery of future accelerators.

(iii) Other Programs

The Contractor is responsible for the conduct of such other programs and activities as the Parties may mutually agree, including:

- (A) The providing of the facilities of the Laboratory to the personnel of public and private institutions for the conduct of research, development, and demonstration work, either within the general plans, programs and budgets agreed upon from time to time between DOE and the Contractor, or as may be specifically approved by DOE. The Laboratory facilities shall be made available on such other general bases as DOE may authorize or approve;
- (B) The conduct of research and development work for non-DOE sponsors which is consistent with and complementary to the DOE's mission and the Laboratory's mission under the contract, and does not adversely impact or interfere with execution of DOE-assigned programs, does not place the facilities or Laboratory in direct competition with the private sector and for which the personnel or facilities of the Laboratory are particularly well adapted and available, as may be authorized, in

writing, by the Contracting Officer;

- (C) The dissemination and publication of unclassified scientific and technical data and operating experience developed in the course of the work;
- (D) The furnishing of such technical and scientific assistance (including training and other services, material, and equipment), which are consistent with and complementary to the DOE's and Laboratory's mission under this contract, both within and outside the United States, to the DOE and its installations, Contractors, and interested organizations and individuals.

(2) Research Facilities and Major Scientific User Facilities

Central to the Laboratory's leadership and research and development mission is the design, construction and operation of world-class major scientific user facilities and their utilization to provide impactful science and technology results to DOE, the scientific community, and industry. The Laboratory currently hosts major scientific user facilities for DOE serving thousands of scientists per year. The Contractor is responsible for simultaneously maintaining complementary capabilities critical to leadership and excellence in design, construction, and operation of scientific user facilities in continuous and close collaboration with DOE. Design ranges from upgrades of current facilities to conceptualizing new facilities that meet the evolving needs of state-of-the-art science with new instrumentation technologies. Construction is typically a multi-year, complex process requiring extremely detailed planning and execution to meet requirements on time and within resource limits. Operation requires efficient and effective integration of a wide range of activities including core research programs, research, and development to maintain the capabilities of the facilities, partnerships involving multiple organizations and funding sources, and user support; underpinned and enabled by excellence in safety, security, and business and operational management systems, and productivity. Operation also includes effectively managing the allocation of facility time to optimize the research program of the facility.

The operation of user facilities includes developing and maintaining user communities for the facilities. In addition to the scientific stewardship of the facilities, maintaining user communities requires stewarding the visiting scientists and

students that are guests of the Laboratory every year as well as management of the agreements to engage the user facilities. The Contractor shall maintain effective operations of existing and planned user facilities, onsite lodging (as available), other appropriate facilities, and provide effective customer service to ensure user facilities are well maintained, safe, secure, and user friendly.

(i) HEP User Facility

Fermilab Accelerator Complex is operated as a user facility and consists of four accelerators that work together to provide world-class particle beams for experiments.

Booster Neutrino Beam: The Booster accelerator is a ring 1,500 feet in circumference that receives 400 MeV protons from the linac and accelerates them to 8 GeV. These protons are used to generate secondary particle beams to serve the experimental program. The Booster Neutrino Beam is produced to serve several operating and planned Short-Baseline Neutrino (SBN) oscillation experiments.

Muon Campus: A portion of the proton beams are extracted to create muon beamlines serving the Fermilab Muon Campus beginning in 2016 where the presently-running Muon g-2 experiment is situated and the Muon-to-electron Conversion (Mu2e) experiment is under development.

Neutrinos at the Main Injector (NuMI): The Main Injector takes the 8 GeV energy protons from the Booster and accelerates them to 120 GeV. These highly energetic protons strike a carbon target to generate muons that subsequently decay to muon neutrinos, resulting in the most intense neutrino beam in the world. The muon neutrino beam is used for studies of both the disappearance of muon neutrinos and the appearance of electron and tau neutrinos. Two experiments currently gather data from the NuMI beam line, a third is starting operations, and a fourth is proposed.

Proton Improvement Plan-II (PIP-II): PIP-II comprises an 800 MeV linear accelerator, or linac, based on superconducting radio-frequency (SRF) technologies. Recent advancements in SRF technologies, both at Fermilab and at partner laboratories in the U.S. and around the world, allow the construction of this unique accelerator.

Upon completion, PIP-II will accelerate protons at up to 800 MeV, over its 215-meter length, with an instantaneous beam power of more than 1 megawatt.

(ii) HEP Scientific Areas and Experiments

MicroBooNE: This 170 ton experiment which began operations in 2015, measures low energy neutrino cross sections and investigates the unexpected excess events observed by the MiniBooNE experiment. The detector serves as the necessary next step in a phased program towards the construction of massive, kiloton scale liquid argon time projection chamber (LArTPC) detectors, the preferred technology for the future Deep Underground Neutrino Experiment (DUNE). Data taking with MicroBooNE has completed and several research papers have been published, with more analyses underway.

ICARUS: The ICARUS collaboration is investigating signs of physics that may point to a new kind of neutrino called the sterile neutrino. Other experiments have made measurements that suggest a departure from the standard three-neutrino model. ICARUS is also to be investigating the various probabilities of a neutrino interacting with different types of matter as well as neutrino-related astrophysics topics. Commissioning of the detector started in 2021 and initial data-taking has begun.

Short-Baseline Near Detector (SBND): The SBND will be one of two liquid argon neutrino detectors sitting in the Booster Neutrino Beam (BNB) at Fermilab as part of the Short-Baseline Neutrino Program. The ICARUS-T600 is the “far” detector in the program, a refurbished 760 ton LArTPC device 600 m downstream from the BNB neutrino source. SBND is a new 112 ton active volume LArTPC located only 110 m from the source employing many of the design features of the planned DUNE detectors. These activities are hosted at Fermilab involving large scale international collaboration. The SBND was recently completed and moved to the detector hall and is anticipated to begin installation and commissioning in 2023. SBND will record over a million neutrino interactions per year. By providing such a high statistics measurement of the un-oscillated content of the booster neutrino beam, SBND is a critical element in performing searches for neutrino oscillations at the Fermilab Short-Baseline Program.

Muon g-2: The Standard Model of Particle Physics makes detailed and very precise predictions about the behavior of muon particles in the presence of a strong magnetic field. The Muon g-2 experiment was designed to achieve world-record precision in measuring these behavior of muons (to one part in a billion). The experiment is a great test of the Standard Model and any deviation from the predictions will constitute a major discovery. After starting data collection in 2018, the experiment released its first results in spring 2021 and expects to announce results with 4X more data in 2023.

Mu2e: The Mu2e experiment searches for a very rare process called muon-to- electron conversion with a sensitivity almost 10,000 times greater than previous experiments, opening a significant window for new discoveries. Observing muon-to-electron conversion will remove a hurdle to understanding why particles in the same category, or family, decay from heavy to lighter, more stable mass states. Physicists have searched for this since the 1940s. Discovering this is central to understanding what physics lies beyond the Standard Model. The experiment is presently completing its construction phase and will be moving into installation and testing.

NOvA: The NOvA far detector in Ash River, MI utilizes the NuMI beam to directly observe and measure the transformation of muon neutrinos into electron neutrinos with great precision. NOvA will also make important indirect measurements of the mass ordering of the three known neutrino types, which will be a key piece of information in determining the currently unknown masses of neutrinos.

DUNE: DUNE is a leading- edge, international experiment for neutrino science and proton decay studies. DUNE will consist of two neutrino detectors placed in the world's most intense neutrino beam. One detector will record particle interactions near the source of the beam, at Fermilab in Illinois. A second, much larger, modular detector will be installed more than a kilometer underground at the Sanford Underground Research Laboratory in Lead, South Dakota – 1,300 kilometers downstream of the source. DUNE has three scientific thrusts: exploring whether and how neutrinos might be the reason the universe is made of

matter; using neutrinos as a probe of astrophysical objects ranging from our own Sun to distant supernovae; and moving closer to realizing Einstein's dream of a unified theory of matter and energy by searching for proton decay.

Quantum Science: Fermilab operates the Superconducting Quantum Materials System Center, one of five DOE National Quantum Information Science Research Centers, where FNAL is leading research in areas including: quantum computing applications and simulations, quantum sensing, quantum communications, electronics and controls for quantum information science.

MAGIS-100: The Matter-wave Atomic Gradiometer Interferometric Sensor, also known as MAGIS-100, is a pathfinder quantum instrument under construction at Fermilab that aims to explore fundamental physics with a 100- meter-long atom interferometer. This novel detector will search for ultralight dark matter, test quantum mechanics in new regimes and pave the way for future gravitational wave detectors. The detector will be housed in a 100- meter-deep shaft at Fermilab that was constructed for a neutrino experiment many years ago. To explore aspects of long-distance quantum entanglement, scientists will drop groups of atoms down a vacuum tube, probed by beams of laser light.

(iii) HEP International Collaborations

In accordance with DOE policies, and in consultation with DOE, the Contractor shall maintain a broad program of international collaboration in areas of research of interest to the Laboratory and to DOE. FNAL is the host laboratory for a number of experiments with large international participation, both ongoing and under construction, including the Deep Underground Neutrino Experiment and the Short Baseline Neutrino Program.

Fermilab routinely engages with the Large Hadron Collider (LHC) program at CERN, Geneva, Switzerland, including the Compact Muon Solenoid (CMS) experiment. FNAL serves as the lead laboratory for the planned US contributions to the LHC accelerator and the CMS detector. It also hosts a CMS remote control room and a very active research program for American researchers.

In support of these programs, the Contractor also performs high performance scientific computing and grid computing in support of Fermilab's major research facilities and international efforts as directed.

Working with DOE Office of Science, the Contractor is closely involved in developing and implementing many aspects of the international agreements that enable these collaborative programs, including overseeing day-to-day execution of US-based projects and research activities with a wide array of international partners and collaborators. The Contractor ensures safe and reliable access to facilities required to perform these activities.

(iv) Accelerator Research and Development

The primary technology of particle physics is that of accelerators, and the advance of the field has been closely tied to breakthroughs in accelerator development. Those advances have also driven new discoveries and enabled completely new capabilities in other leading research areas supported by the Office of Science. The Contractor is expected to continue to perform a significant role in research, development and fabrication support in these technologies, and broadly engages with other communities, for scientific applications across a broad spectrum of research.

Long-term research goals include developing technologies to enable breakthroughs in particle accelerator size, cost, beam intensity, and control, with research activities categorized into five thrust areas: 1) accelerator and beam physics; 2) advanced acceleration concepts; 3) particle sources and targetry; 4) radio-frequency acceleration technology; and 5) superconducting magnets and materials. The laboratory has unique or leading capabilities in several of these areas, including SRF cavity fabrication, testing and performance enhancement; high-field magnet development and testing; and high-power target development. These are critical testbeds that enable the national program in advanced accelerator technology R&D.

In addition, the mission of the Fermilab Accelerator Science and Technology (FAST) Facility is to develop a fully-equipped R&D accelerator chain intended to support

research and development of accelerator technology for the next generation of particle accelerators. The primary focus of this effort is the Integrable Optics Test Accelerator (IOTA) ring, which will be able to accept injection with either of the following:

- 150 MeV electrons from a photoinjector-based superconducting RF linear accelerator.
- 2.5 MeV protons (H+) from the IOTA proton injector.

(3) Scientific Program Management

The Contractor shall manage the resources and capabilities of the Laboratory and provide leadership for the Laboratory as a scientific institution supporting the DOE mission. Leadership is essential in methods of integrated line management to ensure intra- and inter-laboratory team building and cooperation while supplying a safe working environment. The Contractor is charged with maintaining and enhancing the intellectual resource base in order to avoid erosion of the scientific and engineering foundations at the Laboratory and to promote world leadership prominence in areas as mandated by SC. The Contractor is also responsible for the employment of the principal personnel engaged in the SOW efforts and for the readiness and training of all personnel and on-site facility users and collaborators.

Execution of the Laboratory's mission is built on its core capabilities that are each, in turn, an integration of Laboratory personnel, facilities and equipment. The current Laboratory core capabilities include Particle Physics, Large Scale User Facilities and Advanced Instrumentation, Accelerator Science and Technology, and Advanced Computer Science, Visualization and Data. These capabilities exist within the Laboratory and provide a foundation to deliver its mission and customer focus, to perform a complementary role in the DOE laboratory system, and to pursue its vision for scientific excellence and pre-eminence in support of the SC and DOE missions. The stewardship of these capabilities, involving continuous improvement and development of new capabilities where required, is thus a critical aspect of the Contractor's responsibility for scientific program management at the Laboratory. The Contractor shall direct these core capabilities into creative research projects for DOE in partnership(s) with universities, other federal laboratories and agencies, the international scientific community, and the private sector to meet the mission of the Laboratory and DOE objectives.

The Contractor shall develop and manage partnership activities in support of the DOE mission. Mechanisms for partnerships include strategic partnership projects, cooperative research and development agreements, direct assistance programs, employee temporary assignments, user facility agreements, memoranda of cooperation, memoranda of understanding, memoranda of agreement, license agreements, privately funded technology transfer, and other arrangements as approved by DOE in which research and development resources are leveraged with private sector partners. Efforts to develop broad based partnerships with academic research institutions, other agencies, other DOE laboratories, the international scientific community, and with the private sector are essential to the long-term viability of the Laboratory.

The Contractor shall ensure the Laboratory contributes to U.S. technological competitiveness by conducting basic and applied research, and through development and demonstration activities facilitating transfer and deployment of technologies into useful products and processes through partnerships with the private sector. The Contractor shall make it possible for the private sector to join in development/operation activities with the Laboratory to enhance teamwork and technology transfer. Cooperation with industrial partners may include long-term strategic partnerships aimed at commercialization of Laboratory inventions or the improvement of industrial products. The Contractor shall respond to specific near-term technological needs of industrial companies with special emphasis given to working with the types of businesses identified in the Small Business Subcontracting Plan clause of this contract. The Contractor may also capitalize on its location by developing productive relationships with regional and local companies and through forums such as conferences, workshops, and traveling presentations. It is anticipated that these organizations will be particularly effective participants in the Laboratory's technology transfer activities in promoting a mutually beneficial relationship between DOE and the communities surrounding the Laboratory.

(c) Protection of Workers, the Public, and the Environment

The safety and health of workers and the public and the protection and restoration of the environment are fundamental responsibilities of the Contractor. The Contractor shall establish an environment, safety and health (ES&H) program operated as an integral, but visible, part of how the organization conducts business, including prioritizing work and

allocating resources based on risk reduction. A key element is implementation and sustainment of an Integrated Safety Management System to ensure all work activities are performed in a manner that prevents disruption of the Laboratory's missions by preventing fatalities, minimizing injuries and illnesses, minimizing exposures to hazardous substances and materials, preventing environmental releases in excess of established limits, implements as-low-as-reasonably-achievable releases and exposures, and preventing property loss.

The Contractor shall maintain an organization that supports effective ES&H management by ensuring appropriate levels of ES&H staffing and competence at every level within FNAL. Specifically, the Contractor shall assure that employees are trained, qualified, and involved in aspects of the organization's activities, including providing input to the planning and execution of work, and identification, mitigation, or elimination of workplace hazards. The Contractor shall, similarly, assure that subcontractor employees are trained and qualified on job tasks, hazards, DOE and FNAL safety policies, expectations, and requirements, and shall flow down applicable ES&H requirements down to subcontractors. The Contractor shall, as appropriate, consider ES&H performance in selection of its subcontractors and incorporate ES&H requirements into subcontracts.

The Contractor shall perform all activities in compliance with applicable health, safety, and environmental laws, orders, regulations, national consensus standards, governing agreements and permits executed with regulatory and oversight government organizations.

Incorporating integrated line management, the Contractor shall put in place a system that clearly communicates the roles, responsibilities, and authorities of line managers. The Contractor shall hold line managers, including direct reports, accountable for implementing necessary controls for safe performance of work in their respective area of responsibility. The Contractor shall establish effective management systems to identify deficiencies, resolve them in a timely manner, ensure that corrective actions are implemented, (addressing the extent of conditions, root causes, and measures to prevent recurrence) and prioritize and track commitments and actions.

(d) Management and Operation of the Laboratory

The Contractor shall manage, operate, protect, maintain, and enhance the Laboratory's ability to function as a DOE national laboratory, provide the infrastructure and support activities, support the accomplishment of the Laboratory's missions, and assure the accountability to the DOE under the results-oriented, performance-based provisions of this

contract. The Contractor shall establish and maintain an integrated management system capable of producing implementation-level plans, programs and procedures for the management and operation of the Laboratory. The Contractor shall implement a broad scope contractor assurance program to assess the overall performance in and drive continuous improvement of Laboratory operations and management.

(1) Strategic Planning

The Contractor shall conduct a strategic planning process and develop institutional business plans and strategic facility plans in consideration of DOE provided planning guidance and strategic planning material to assure consistency with DOE missions and goals.

(2) Business Management

(i) Human Resources Management (HR)

The Contractor shall have an HR system designed to attract and retain outstanding employees in accordance with DOE expectations, policies, and procedures. The Contractor shall maintain a market-based system of compensation and benefit plans to motivate employees to achieve high productivity in scientific research and laboratory operation.

(ii) Financial Management

The Contractor shall maintain a financial management system responsive to the obligations of sound financial stewardship and public accountability. The overall system shall include an integrated accounting system suitable to collect, record, and report all financial activities; a budgeting system that includes the formulation and executions of all resource requirements needed to accomplish projected missions and formulate short- and long-range budgets; an internal control system for all financial and other business management processes; and a disbursements system for both employee payroll and supplier payments. The internal audit group for the Laboratory shall report to the most senior governing body of the Contractor's parent organization(s).

(iii) Purchasing Management

The Contractor shall have and manage a DOE-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by DOE, enter into subcontracts for the performance of any part of the work under this contract. The Contractor may also enter into subcontracts for the performance of any part of the work under this contract when authorized by DOE.

The Contractor shall also place emphasis on the use of the types of businesses identified in the Small Business Subcontracting Plan clause of this contract, as well as full and open competition.

(iv) Property Management

The Contractor shall have and manage a DOE-approved property management system that provides assurance that the Government-owned, contractor-held property is accounted for, safeguarded, and disposed of in accordance with DOE's expectations and policies. The Contractor shall perform overall integrated effective and compliant planning, acquisition, maintenance, operation, management, and disposition of Government-owned personal and real property, and any Contractor-leased facilities and infrastructure used by the Laboratory in accordance with DOE expectations.

(v) Legal Services

The Contractor shall maintain legal support for all contract activities including, but not limited to, those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; employee and labor relations; contractor ethics; and litigation and claims.

(vi) Information Technology Management

The Contractor shall maintain information systems necessary to meet Laboratory requirements, which includes activities involving general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, and cyber

security. The Contractor shall provide computer resource capacity and capability sufficient to support Laboratory-wide information management requirements.

(vii) Other Services

The Contractor shall provide other services necessary for Laboratory operations, including support to the DOE Fermi Site Office.

In addition, the Contractor shall perform all activities necessary resulting from the termination of Superconducting Super Collider Laboratory (SSCL) Contract No. DE-AC35-89ER40486.

(3) Project Management

The Contractor shall maintain a project management system, consistent with DOE project management requirements, to ensure that projects are completed within scope, budget, and schedule.

(4) Environmental Management

Unless otherwise directed by the Contracting Officer, the Contractor shall plan and execute the DOE's environmental program activities in accordance with DOE program goals, initiatives, strategies, guidance letters, and approved project baselines in areas such as:

- (i) Environmental remediation and facility deactivation, decommissioning, decontamination, and demolition in accordance with the site's Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Interagency Agreement and with DOE Orders;
- (ii) Construction and maintenance of facilities and infrastructure to provide adequate protection of the public, employees, the environment, and Government-owned materials, facilities, and equipment; and
- (iii) Tritium management.

The environmental management program shall be conducted in a safe and cost-effective manner leading to increasing DOE, regulatory and public confidence in cleanup efforts. Program elements will include:

- (i) Implementing comprehensive project management systems to track progress, maintain regulatory compliance, and increase cost effectiveness of work activities;
- (ii) Developing integrated plans and schedules for involving the participation of DOE, regulators, and other stakeholders in decision making and priority setting of environmental restoration activities; and
- (iii) Maintaining technical depth to propose and implement cleanup activities commensurate with commercial practices in the areas of cost, implementation, schedule, and public acceptability.

The Contractor shall establish and maintain systems to effectively manage and implement an environmental restoration program in accordance with goals and objectives set forth by the Department. The systems must ensure that the technical approach is consistent with DOE cleanup strategies to complete all Records of Decision in accordance with the current approved baseline; to implement an overall system to effectively and efficiently manage all groundwater and contaminated soil cleanup activities; to expedite final disposition of facilities awaiting decommissioning and decontamination; and to achieve delisting from the National Priority List. Contractor support shall be provided to DOE as directed by the Contracting Officer.

(5) Community Involvement

The Contractor shall maintain a systematic approach and commitment to engagement with the regional community. The Contractor's overall community involvement program shall:

- maintain a strong, integrated, proactive community involvement and communications program;
- appropriately address the community's substantive concerns;
- ensure the community's awareness of the importance of the long-term basic research supported by DOE and the SC;
- ensure the community has positive relationships with the Laboratory and confidence in its decision-making processes; and

- establish constructive external partnerships in support of DOE's overarching mission and strategic objectives.

(6) Safeguards and Security (S&S)

The Contractor shall provide a fully integrated safeguards and security program to ensure that laboratory sensitive information, property and other interests and activities are protected from theft, diversion, terrorist attack, industrial sabotage, radiological sabotage, chemical sabotage, biological sabotage, espionage, unauthorized access, compromise, and other acts that may have an adverse impact on national security; the environment; or pose significant danger to the health and safety of DOE Federal and contractor employees or the public. S&S programs must be based on the results of vulnerability and risk assessments which are used to design and provide graded protection in accordance with an asset's importance or the impact of its loss, destruction, or misuse. The Contractor shall provide a secure environment protecting property and other assets through the conduct of an integrated risk-based approach to security operations. The Contractor shall establish and maintain policies and procedures for operations in accordance with established DOE requirements. The Contractor shall establish a training program which ensures appropriate personnel are competently trained, and fully qualified to perform the tasks within their assigned responsibilities under both normal and emergency conditions.

(7) Cyber Security

The Contractor shall ensure the development, operation, management, and integration of an ongoing program for cyber security management consistent with DOE requirements. The Cyber Security Program must assess risks associated with computer and network security from both external and internal perspectives. The Contractor shall develop and maintain a structured Cyber Security risk management process to ensure that priorities are established and cyber security risks are managed through a process of identifying and assessing threats, vulnerabilities, asset value, and existing protection measures; developing and implementing appropriate policies and controls; promoting awareness of those policies and controls; and monitoring, evaluating, and improving the effectiveness of policies and controls.

(8) Emergency Management

The Contractor shall maintain an emergency management system in accordance with DOE requirements including, but not limited to, emergency preparedness plans, procedures, response, drills and exercises, occurrence notification and reporting, and operation of an Emergency Operations Center.

(9) Waste Management

The Contractor shall maintain and manage a waste management program in an integrated manner such that waste is managed consistently and in compliance with all applicable regulatory requirements and DOE expectations. Waste management activities include: timely characterization, consolidation, segregation, and storage of waste; treatment that complies with storage and/or disposal criteria; efficient shipment of waste for treatment, storage, and/or disposal; maintaining sufficient and compliant waste storage space at the Laboratory to accommodate waste generation and waste backlog; and implementation of an effective waste minimization and pollution prevention programs.

(10) Laboratory Facilities and Infrastructure

The Contractor shall manage and maintain government-owned buildings and facilities at the Laboratory, together with the utilities and associated infrastructure. Recognizing that these facilities are a national resource, they may also be made available, with appropriate agreements, to private and public sector entities including universities, industry, and local, state, and other government agencies. The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased, or controlled facilities and real property accountable to the Laboratory. The Contractor shall strive to employ facilities management practices that are best-in-class and integrated with mission assignments and business operations. The maintenance management program shall strive to maintain Government property in a manner that promotes and continuously improves operational safety, worker protection, environmental protection and compliance, property preservation, and cost effectiveness; ensures continuity and reliability of operations, fulfillment of program requirements, and protection of life and property from potential hazards; and ensures the condition of the assets will be maintained or improved using risk-benefit analysis tools and processes. Adequate investment will be applied to prevent degradation and assure appropriate operation.

The Contractor will implement a capital renewal program to revitalize and/or replace facilities and infrastructure that cannot meet the required functionality in support of mission accomplishment or is inefficient or cannot be adequately maintained.

(11) Sustainability

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings, including goals and objectives contained in Executive Orders. The Contract will support DOE's use of Energy Savings Performance Contracts (ESPC) and Utility Energy Services Contracts (UESC). The Contractor shall maintain and update, as appropriate, its Site Plan to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives.

(e) University and Science Education Program for Workforce Development

The Contractor shall help ensure that DOE has a sustained pipeline for the science, technology, engineering, and mathematics (STEM) workforce.

To this end, the Contractor shall seek to facilitate the laboratory workforce of tomorrow by working with colleges and universities, with special emphasis on Historically Black Colleges and Universities/Minority Institutions and initiate new programs to enhance science and mathematics education at all levels. The Contractor shall encourage participation by a group of faculty and students in Laboratory programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. The Contractor shall also conduct programs for students and faculty to enrich mathematics and science education. A particular purpose of these programs is to encourage members of under-represented societal groups to enter careers in science and engineering needed by the laboratory.

The Contractor shall maintain its programs of cooperation with the academic and educational community and with nonprofit research institutions for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and the laboratory workforce needs. This cooperation may include, but is not limited to, such activities as:

- (1) Operation of the U.S. Particle Accelerator School;
- (2) Joint experimental programs with colleges, universities, and nonprofit research institutions;
- (3) Interchange of college and university faculty and Laboratory staff;
- (4) Student/teacher educational research programs at the pre-collegiate and collegiate level;
- (5) Post-doctoral programs;
- (6) Arrangement of regional, national, or international professional, meetings or symposia;
- (7) Use of special Laboratory facilities by colleges, universities, and nonprofit research institutes; or,
- (8) Provision of unique experimental materials to colleges, universities, or nonprofit research institutions or to qualified members of their staffs.

All work in this area must align to mission and workforce needs, funding availability, and appropriate controls to assure responsible execution.

C.5 PLANS AND REPORTS

The Contractor shall submit periodic plans and reports, in such form and substance as required by the Contracting Officer. These periodic plans and reports shall be submitted at the intervals, to the addresses, and in the quantities as specified by the Contracting Officer. Where specific forms are required for individual plans and reports, the Contracting Officer shall provide such forms to the Contractor. The Contractor shall require subcontractors to provide reports that correspond to data requirements the Contractor shall be responsible for submitting to DOE. Plans and reports submitted in compliance with this provision are in addition to any other reporting requirements found elsewhere in other clauses of this contract. It is the intent of DOE to consult with the Contractor to determine the necessity, form, and frequency of any reports required to be submitted by the Contractor to DOE under this contract.

SECTION I

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I.117	DEAR 952.208-7	TAGGING OF LEASED VEHICLES (APR 1984)
I.118	DEAR 952.209-72	ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) ALTERNATE I (AUG 2009)
I.119	DEAR 952.211-71	PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008)
I.120	DEAR 952.215-70	KEY PERSONNEL (DEC 2000)
I.121	DEAR 952.235-71	RESEARCH MISCONDUCT (JUL 2005)
I.122	DEAR 952.242-70	TECHNICAL DIRECTION (DEC 2000)
I.123	DEAR 952.250-70	NUCLEAR HAZARDS INDEMNITY AGREEMENT (AUG 2016)
I.124	DEAR 952.251-70	CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009)
I.125	DEAR 970.5203-1	MANAGEMENT CONTROLS (JUN 2007) (SC ALTERNATE) (APR 2018) (DEVIATION) (PF 2022-23) (OCT 2021)
I.126	DEAR 970.5203-2	PERFORMANCE IMPROVEMENT AND COLLABORATION (MAY 2006)

CLAUSE NO.	FAR/DEAR REFERENCE	TITLE OF CLAUSE
I.127	DEAR 970.5203-3	CONTRACTOR'S ORGANIZATION (DEC 2000)
I.128	DEAR 970.5204-2	LAWS, REGULATIONS AND DOE DIRECTIVES (DEC 2000) (DEVIATION) (MAY 2018) (SC ALTERNATE) (SEPT 2018)
I.129	DEAR 970.5204-3	ACCESS TO AND OWNERSHIP OF RECORDS (OCT 2014) (DEVIATION: PF 2015-23)
I.130	DEAR 970.5211-1	WORK AUTHORIZATION (MAY 2007)
I.131	DEAR 970.5215-1	TOTAL AVAILABLE FEE: BASE FEE AMOUNT AND PERFORMANCE FEE AMOUNT (DEC 2000) (ALTERNATES II AND III) (DEC 2000) (DEVIATION)
I.132	DEAR 970.5215-3	CONDITIONAL PAYMENT OF FEE, PROFIT, OR INCENTIVES-FACILITY MANAGEMENT CONTRACTS (AUG 2009)
I.133	DEAR 970.5216-7	ALLOWABLE COST AND PAYMENT (OCT 2021) (DEVIATION) (PF 2022-23) (OCT 2021)
I.134	DEAR 970.5217-1	STRATEGIC PARTNERSHIP PROJECTS PROGRAM (NON-DOE FUNDED WORK) (April 23, 2015)
I.135	DEAR 970.5222-1	COLLECTIVE BARGAINING AGREEMENTS-MANAGEMENT AND OPERATING CONTRACTS (DEC 2000)
I.136	DEAR 970.5222-2	OVERTIME MANAGEMENT (DEC 2000) (SC ALTERNATE) (APR 2018)
I.137	DEAR 970.5223-1	INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)
I.138	DEAR 970.5223-4	WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2010)
I.139	DEAR 970.5223-7	SUSTAINABLE ACQUISITION PROGRAM (OCT 2010) (SC ALTERNATE) (SEP 2018)
I.140	DEAR 970.5225-1	COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS (EXPORT CLAUSE) (NOV 2015)
I.141	RESERVED	RESERVED
I.142	DEAR 970.5227-2	RIGHTS IN DATA-TECHNOLOGY TRANSFER (DEC 2000) (DEVIATION) (AL 2021-04)

CLAUSE NO.	FAR/DEAR REFERENCE	TITLE OF CLAUSE
I.143	DEAR 970.5227-3	TECHNOLOGY TRANSFER MISSION (AUG 2002) (DEVIATION) (AL 2022-01)
I.144	DEAR 970.5227-4	AUTHORIZATION AND CONSENT (AUG 2002) (DEVIATION) (AL 2021-04)
I.145	DEAR 970.5227-5	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2000) (DEVIATION) (AL 2021-04)
I.146	DEAR 970.5227-6	PATENT INDEMNITY-SUBCONTRACTS (DEC 2000)
I.147	DEAR 970.5227-8	REFUND OF ROYALTIES (AUG 2002)
I.148	DEAR 970.5227-10	PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (DEC 2000) (DEVIATION) (AL 2022-01)
I.149	DEAR 970.5228-1	INSURANCE-LITIGATION AND CLAIMS (JUL 2013)
I.150	DEAR 970.5229-1	STATE AND LOCAL TAXES (DEC 2000)
I.151	DEAR 970.5231-4	PREEXISTING CONDITIONS (DEC 2000) (ALTERNATE II) (DEC 2000)
I.152	DEAR 970.5232-1	REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 2000)
I.153	DEAR 970.5232-2	PAYMENTS AND ADVANCES (DEC 2000) (ALTERNATE II) (DEC 2000) (PF 2022-23 DEVIATION) (OCT 2021)
I.154	DEAR 970.5232-3	ACCOUNTS, RECORDS AND INSPECTION (DEC 2010) (DEVIATION)(PF 2022-23) (OCT 2021)
I.155	DEAR 970.5232-4	OBLIGATION OF FUNDS (DEC 2000)
I.156	DEAR 970.5232-5	LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000)
I.157	DEAR 970.5232-6	STRATEGIC PARTNERSHIP PROJECT FUNDING AUTHORIZATION (April 23, 2015)
I.158	DEAR 970.5232-7	FINANCIAL MANAGEMENT SYSTEM (DEC 2000) (DEVIATION) (PF 2022-23) (OCT 2021)
I.159	DEAR 970.5232-8	INTEGRATED ACCOUNTING (DEC 2000) (DEVIATION) (PF 2022-23) (OCT 2021)

CLAUSE NO.	FAR/DEAR REFERENCE	TITLE OF CLAUSE
I.160	DEAR 970.5235-1	FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2010)
I.161	DEAR 970.5236-1	GOVERNMENT FACILITY SUBCONTRACT APPROVAL (DEC 2000) (SC ALTERNATE) (APR 2018)
I.162	DEAR 970.5243-1	CHANGES (DEC 2000)
I.163	DEAR 970.5244-1	CONTRACTOR PURCHASING SYSTEM (AUG 2016) (DEVIATION) (PF 2015-17) (MAR 2015) (DEVIATION) (PF 2022-23) (OCT 2021)
I.164	DEAR 970.5245-1	PROPERTY (AUG 2016) (ALTERNATE I) (AUG 2016)

SECTION I

CONTRACT CLAUSES

CLAUSE I.1 - FAR 52.202-1 DEFINITIONS (JUN 2020); MODIFIED BY DEAR 952.202-1

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless-

(a) The solicitation, or amended solicitation, provides a different definition;

(b) The contracting parties agree to a different definition;

(c) When a solicitation provision or contract clause uses a word or term that is defined in the Department of Energy Acquisition Regulation (DEAR) (48 CFR chapter 9), the word or term has the same meaning as the definition in 48 CFR 902.101 or the definition in the part, subpart, or section of 48 CFR chapter 9 where the provision or clause is prescribed in effect at the time the solicitation was issued, unless an exception in (a) applies;

(d) The word or term is defined in FAR part 31, for use in the cost principles and procedures; or

(e) The word or term defines an acquisition-related threshold, and if the threshold is adjusted for inflation as set forth in FAR 1.109(a), then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment; see FAR 1.109(d).

When a solicitation provision or contract clause uses a word or term that is defined in the Department of Energy Acquisition Regulation (DEAR) (48 CFR chapter 9), the word or term has the same meaning as the definition in 48 CFR 902.101 or the definition in the part, subpart, or section of 48 CFR chapter 9 where the provision or clause is prescribed in effect at the time the solicitation was issued, unless an exception in (a) applies.

CLAUSE I.2 - FAR 52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative:

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer,

official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction

(c) If this contract is terminated under paragraph (a) above, the Government is entitled:

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than three (3) nor more than ten (10) times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

CLAUSE I.3 - FAR 52.203-5 COVENANT AGAINST CONTINGENT FEES (MAY 2014)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency", as used in this clause, means an established commercial or selling agency, maintained by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee", as used in this clause, means a person, employed by a Contractor and subject to the Contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee", as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has

in securing a Government contract.

"Improper influence", as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

CLAUSE I.4 - FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUN 2020)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

CLAUSE I.5 - FAR 52.203-7 ANTI-KICKBACK PROCEDURES (JUN 2020)

(a) Definitions.

Kickback, as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

Person, as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

Prime contract, as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

Prime Contractor as used in this clause, means a person who has entered into a prime contract with the United States.

Prime Contractor employee, as used in this clause, means any officer, partner,

employee, or agent of a prime Contractor.

Subcontract, as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

Subcontractor, as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

Subcontractor employee, as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from-

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c) (1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when

the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c)(5) but excepting paragraph (c)(1) of this clause, in all subcontracts under this contract that exceed the threshold specified in Federal Acquisition Regulation 3.502-2(i) on the date of subcontract award.

CLAUSE I.6 - FAR 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (MAY 2014)

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C.2102-2104, Restrictions on Obtaining and Disclosing Certain Information, the Government may-

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which-

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C.2102 for the purpose of either-

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C.2105(a).

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

CLAUSE I.7 - FAR 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (MAY 2014)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting

activity or designee determines that there was a violation of 41 U.S.C.2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be-

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts-

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may-

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the statute by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

CLAUSE I.8 - FAR 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 2020)

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

Agency means “*executive agency*” as defined in Federal Acquisition Regulation (FAR) 2.101.

Covered Federal action means any of the following actions:

- (1) Awarding any Federal contract.
- (2) Making any Federal grant.
- (4) Entering into any cooperative agreement.
- (5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

Indian tribe and “tribal organization” have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b) and include Alaskan Natives.

Influencing or attempting to influence means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

Local government means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

Officer or employee of an agency includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.

(3) A special Government employee, as defined in section 202, Title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

Person means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Reasonable compensation means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

Reasonable payment means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

Recipient includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and *are* permitted by other Federal law.

Regularly employed means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

State means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) *Prohibition.* 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352 the Contractor shall not use appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term *appropriated funds* does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) *Exceptions.* The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) *Agency and legislative liaison by Contractor employees.*

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern-

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an

unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(2) *Professional and technical services.* (i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in paragraph (c)(2) of this clause, "professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(d) *Disclosure.* (1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure

Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(e) *Penalties.* (1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) *Cost allowability.* Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) *Subcontracts.* (1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract under this contract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in any subcontract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award.

CLAUSE I.9 - FAR 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (NOV 2021)

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

Agent means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

Full cooperation-

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from-

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

United States , means the 50 States , the District of Columbia, and outlying areas.

(b) *Code of business ethics and conduct.*

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall—

(i) Have a written code of business ethics and conduct; and

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) *The Contractor shall-*

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3) (i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed-

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial product or commercial service as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals and employees , and as appropriate, the Contractor's agents and subcontractors .

(2) An internal control system.

(i) The Contractor's internal control system shall—

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including-

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as

necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies , the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies ' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that exceed the threshold specified in FAR 3.1004(a) on the date of subcontract award and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

**CLAUSE I.10 - FAR 52.203-14 DISPLAY OF HOTLINE POSTER(S) (NOV 2021);
MODIFIED BY DEAR 903.1004**

(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
Hotline Poster	http://ig.energy.gov/hotline.htm

(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 the subcontract award, except when the subcontract--

- (1) Is for the acquisition of a commercial product or commercial service; or
- (2) Is performed entirely outside the United States.

CLAUSE I.11 - FAR 52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS (NOV 2023)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies established at 41 U.S.C. 4712 and Federal Acquisition Regulation (FAR) 3.900 through 3.905.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in FAR 3.900 through 3.905.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts.

CLAUSE I.12 - FAR 52.203-19 PROHIBITION ON REQUIRING CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS OR STATEMENTS (JAN 2017)

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

Internal confidentiality agreement or statement means a confidentiality agreement or any other written statement that the contractor requires any of its employees or subcontractors to sign regarding nondisclosure of contractor information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that contractor employees or subcontractors sign at the behest of a Federal agency.

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

Subcontractor means any supplier, distributor, vendor, or firm (including a consultant) that furnishes supplies or services to or for a prime contractor or another subcontractor.

(b) The Contractor shall not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency

authorized to receive such information (e.g., agency Office of the Inspector General).

(c) The Contractor shall notify current employees and subcontractors that prohibitions and restrictions of any preexisting internal confidentiality agreements or statements covered by this clause, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this clause, are no longer in effect.

(d) The prohibition in paragraph (b) of this clause does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(e) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015, (Pub. L. 113-235), and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions) use of funds appropriated (or otherwise made available) is prohibited, if the Government determines that the Contractor is not in compliance with the provisions of this clause.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), in subcontracts under such contracts.

CLAUSE I.13 - FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POST CONSUMER FIBER CONTENT PAPER (MAY 2011)

(a) Definitions. As used in this clause— Postconsumer fiber means—

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

(b) The Contractor is required to submit paper documents, such as offers, letters, or reports that are printed or copied double-sided on paper containing at least 30 percent postconsumer fiber, whenever practicable, when not using electronic commerce methods to submit information or data to the Government.

CLAUSE I.14 - FAR 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)

(a) The Contractor shall comply with agency personal identity verification procedures

identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee's employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

CLAUSE I.15 - FAR 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUN 2020)

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

Executive means officers, managing partners, or any other employees in management positions.

First-tier subcontract means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect costs.

Month of award means the month in which a contract is signed by the Contracting Officer or the month in which a first-tier subcontract is signed by the Contractor.

Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

(1) *Salary and bonus.*

(2) *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (FASB ASC) 718, Compensation-Stock Compensation.

(3) *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

(4) *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

(5) *Above-market earnings on deferred compensation which is not tax-qualified.*

(6) Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

(b) Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

(c) Nothing in this clause requires the disclosure of classified information

(d) (1) Executive compensation of the prime contractor. As a part of its annual registration requirement in the System for Award Management (SAM) (Federal Acquisition Regulation (FAR) provision 52.204-7), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if-

(i) In the Contractor's preceding fiscal year, the Contractor received-

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

(2) *First-tier subcontract information.* Unless otherwise directed by the Contracting Officer, or as provided in paragraph (g) of this clause, by the end of the month following the month of award of a first-tier subcontract valued at or above the threshold specified in FAR 4.1403(a) on the date of subcontract award, the Contractor shall report the following information at <http://www.fsrs.gov> for that first-tier subcontract. (The Contractor shall follow the instructions at <http://www.fsrs.gov> to report the data.)

(i) Unique entity identifier for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) Subcontract number (the subcontract number assigned by the Contractor).

(vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

- (ix) The prime contract number, and order number if applicable.
- (x) Awarding agency name and code.
- (xi) Funding agency name and code.
- (xii) Government contracting office code.
- (xiii) Treasury account symbol (TAS) as reported in FPDS.
- (xiv) The applicable North American Industry Classification System code (NAICS).

(3) Executive compensation of the first-tier subcontractor. Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract valued at or above the threshold specified in FAR 4.1403(a) on the date of subcontract award, and annually thereafter (calculated from the prime contract award date), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for that first-tier subcontractor for the first-tier subcontractor's preceding completed fiscal year at <http://www.fsrc.gov>, if-

(i) In the subcontractor's preceding fiscal year, the subcontractor received-

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/excomp.htm>.)

(e) The Contractor shall not split or break down first-tier subcontract awards to a value below the threshold specified in FAR 4.1403(a), on the date of subcontract award, to avoid the reporting requirements in paragraph (d) of this clause.

(f) The Contractor is required to report information on a first-tier subcontract covered by paragraph (d) when the subcontract is awarded. Continued reporting on the same subcontract is not required unless one of the reported data elements changes during

the performance of the subcontract. The Contractor is not required to make further reports after the first-tier subcontract expires.

(g) (1) If the Contractor in the previous tax year had gross income, from all sources, under \$300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under \$300,000, the Contractor does not need to report awards for that subcontractor.

(h) The FSRS database at <http://www.fsrs.gov> will be prepopulated with some information from SAM and the FPDS database. If FPDS information is incorrect, the contractor should notify the contracting officer. If the SAM information is incorrect, the contractor is responsible for correcting this information.

CLAUSE I.16 - FAR 52.204-13 SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (OCT 2018)

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

“Electronic Funds Transfer (EFT) indicator” means a four-character suffix to the unique entity identifier. The suffix is assigned at the discretion of the commercial, nonprofit, or Government entity to establish additional System for Award Management (SAM) records for identifying alternative EFT accounts (see subpart 32.11) for the same entity.

“Registered in the System for Award Management (SAM)” means that—

(1) The Contractor has entered all mandatory information, including the unique entity identifier and the EFT indicator (if applicable), the Commercial and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14), into the SAM;

(2) The Contractor has completed the Core, Assertions, Representations and Certifications, and Points of Contact sections of the registration in the SAM;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The Contractor will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and

(4) The Government has marked the record “Active”.

“System for Award Management (SAM)” means the primary Government repository for prospective Federal awardee and Federal awardee information and the centralized

Government system for certain contracting, grants, and other assistance-related processes. It includes—

(1) Data collected from prospective Federal awardees required for the conduct of business with the Government;

(2) Prospective contractor-submitted annual representations and certifications in accordance with FAR subpart 4.12; and

(3) Identification of those parties excluded from receiving Federal contracts, certain subcontracts, and certain types of Federal financial and non-financial assistance and benefits.

“Unique entity identifier” means a number or other identifier used to identify a specific commercial, nonprofit, or Government entity. See www.sam.gov for the designated entity for establishing unique entity identifiers.

(b) If the solicitation for this contract contained the provision 52.204-7 with its Alternate I, and the Contractor was unable to register prior to award, the Contractor shall be registered in SAM within 30 days after award or before three days prior to submission of the first invoice, whichever occurs first.

(c) The Contractor shall maintain registration in SAM during contract performance and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement. The Contractor is responsible for the currency, accuracy and completeness of the data within SAM, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in SAM after the initial registration, the Contractor is required to review and update on an annual basis, from the date of initial registration or subsequent updates, its information in SAM to ensure it is current, accurate and complete. Updating information in SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(d) (1)

(i) If a Contractor has legally changed its business name or “doing business as” name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to--

(A) Change the name in the SAM;

(B) Comply with the requirements of subpart 42.12 of the FAR; and

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor shall provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (d)(1)(i) of this clause, or fails to perform the agreement at paragraph (d)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see FAR subpart 32.8, Assignment of Claims). Assignees shall be separately registered in SAM. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the EFT clause of this contract.

(3) The Contractor shall ensure that the unique entity identifier is maintained with the entity designated at www.sam.gov for establishment of the unique entity identifier throughout the life of the contract. The Contractor shall communicate any change to the unique entity identifier to the Contracting Officer within 30 days after the change, so an appropriate modification can be issued to update the data on the contract. A change in the unique entity identifier does not necessarily require a novation be accomplished.

(e) Contractors may obtain additional information on registration and annual confirmation requirements at <https://www.sam.gov>.

CLAUSE I.17 - FAR 52.204-18 COMMERCIAL AND GOVERNMENT ENTITY CODE MAINTENANCE (AUG 2020)

(a) *Definition.* As used in this clause—

Commercial and Government Entity (CAGE) code means—

(1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location; or

(2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA Commercial

and Government Entity (CAGE) Branch records and maintains in the CAGE master file. This type of code is known as a NATO CAGE (NCAGE) code.

(b) Contractors shall ensure that the CAGE code is maintained throughout the life of the contract, for each location of the contract, including subcontract, performance. For contractors registered in the System for Award Management (SAM), the DLA Commercial and Government Entity (CAGE) Branch shall only modify data received from SAM in the CAGE master file if the contractor initiates those changes via update of its SAM registration. Contractors undergoing a novation or change-of-name agreement shall notify the contracting officer in accordance with subpart 42.12. The contractor shall communicate any change to the CAGE code to the contracting officer within 30 days after the change, so that a modification can be issued to update the CAGE code on the contract.

(c) Contractors located in the United States or its outlying areas that are not registered in SAM shall submit written change requests to the DLA Commercial and Government Entity (CAGE) Branch. Requests for changes shall be provided at <https://cage.dla.mil>. Change requests to the CAGE master file are accepted from the entity identified by the code.

(d) Contractors located outside the United States and its outlying areas that are not registered in SAM shall contact the appropriate National Codification Bureau (points of contact available at <http://www.nato.int/structur/AC/135/main/links/contacts.htm>) or NSPA at <https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx> to request CAGE changes.

(e) Additional guidance for maintaining CAGE codes is available at <https://cage.dla.mil>.

(f) If the contract includes Federal Acquisition Regulation clause 52.204-2, Security Requirements, the contractor shall ensure the subcontractors maintain their CAGE code(s) throughout the life of the contract.

CLAUSE I.18 - FAR 52.204-19 INCORPORATION BY REFERENCE OF REPRESENTATIONS AND CERTIFICATIONS (DEC 2014)

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

CLAUSE I.19 - FAR 52.204-21 BASIC SAFEGUARDING OF COVERED CONTRACTOR INFORMATION SYSTEMS (NOV 2021)

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

Covered contractor information system means an information system that is owned

or operated by a contractor that processes, stores, or transmits Federal contract information.

Federal contract information means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public Web sites) or simple transactional information, such as necessary to process payments.

Information means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

Safeguarding means measures or controls that are prescribed to protect information systems.

(b) *Safeguarding requirements and procedures.* (1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.

(v) Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

(ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.

(x) Monitor, control, and protect organizational communications (*i.e.*, information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.

(xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.

(xii) Identify, report, and correct information and information system flaws in a timely manner.

(xiii) Provide protection from malicious code at appropriate locations within organizational information systems.

(xiv) Update malicious code protection mechanisms when new releases are available.

(xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) *Other requirements.* This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) *Subcontracts.* The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial products or commercial services, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

CLAUSE I.20 - FAR 52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB COVERED ENTITIES (DEC 2023)

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

Kaspersky Lab covered article means any hardware, software, or service that—

- (1) Is developed or provided by a Kaspersky Lab covered entity;
- (2) Includes any hardware, software, or service developed or provided in whole or in part by a Kaspersky Lab covered entity; or
- (3) Contains components using any hardware or software developed in whole or in part by a Kaspersky Lab covered entity.

Kaspersky Lab covered entity means—

- (1) Kaspersky Lab;
- (2) Any successor entity to Kaspersky Lab, including any change in name, e.g., “Kaspersky”;
- (3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or
- (4) Any entity of which Kaspersky Lab has a majority ownership.

(b) *Prohibition.* Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits Government use of any Kaspersky Lab covered article. The Contractor is prohibited from—

- (1) Providing any Kaspersky Lab covered article that the Government will use on or after October 1, 2018; and
- (2) Using any Kaspersky Lab covered article on or after October 1, 2018, in the development of data or deliverables first produced in the performance of the contract.

(c) *Reporting requirement.*

(1) In the event the Contractor identifies a Kaspersky Lab covered article provided to the Government during contract performance, or the Contractor is notified of such by a subcontractor at any tier or any other source, the Contractor shall report, in writing, to the Contracting Officer or, in the case of the Department of Defense, to the website at <https://dibnet.dod.mil>. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at <https://dibnet.dod.mil>.

(2) The Contractor shall report the following information pursuant to paragraph (c)(1) of this clause:

(i) Within 3 business days from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; brand; model number (Original Equipment Manufacturer (OEM) number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the report pursuant to paragraph (c)(1) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a Kaspersky Lab covered article, any reasons that led to the use or submission of the Kaspersky Lab covered article, and any additional efforts that will be incorporated to prevent future use or submission of Kaspersky Lab covered articles.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts including subcontracts for the acquisition of commercial products or commercial services.

CLAUSE I.21 - FAR 52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021)

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

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means—

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) *Prohibition.*

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.

(c) *Exceptions.* This clause does not prohibit contractors from providing—

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) *Reporting requirement.*

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is

notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at <https://dibnet.dod.mil>. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at <https://dibnet.dod.mil>.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause

(i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services.

CLAUSE I.22 - FAR 52.204-27 PROHIBITION ON A BYTEDANCE COVERED APPLICATION (JUN 2023)

(a) Definitions. As used in this clause—

Covered application means the social networking service TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited.

Information technology, as defined in 40 U.S.C. 11101(6)—

(1) Means any equipment or interconnected system or subsystem of equipment, used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency, if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency that requires the use—

(i) Of that equipment; or

(ii) Of that equipment to a significant extent in the performance of a service or the furnishing of a product;

(2) Includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including support services), and related resources; but

(3) Does not include any equipment acquired by a Federal contractor incidental to a Federal contract.

(b) Prohibition. Section 102 of Division R of the Consolidated Appropriations Act, 2023 (Pub. L. 117-328), the No TikTok on Government Devices Act, and its implementing guidance under Office of Management and Budget (OMB) Memorandum M-23-13, dated February 27, 2023, “No TikTok on Government Devices” Implementation Guidance, collectively prohibit the presence or use of a covered application on executive agency information technology, including certain equipment used by Federal contractors. The Contractor is prohibited from having or using a covered application on any information technology owned or managed by the Government, or on any information technology used or provided by the Contractor under this contract, including equipment provided by the Contractor’s employees; however, this prohibition does not apply if the Contracting Officer provides written notification to the Contractor that an exception has been granted in accordance with OMB Memorandum M-23-13.

(c) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts, including subcontracts for the acquisition of commercial products or commercial services.

CLAUSE I.23 - FAR 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (NOV 2021)

(a) Definition.

Commercially available off-the-shelf (COTS) item, as used in this clause-

(1) Means any item of supply (including construction material) that is-

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" in Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debar Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract in excess of the threshold specified in FAR 9.405-2(b) on the date of subcontract award, with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed the threshold specified in FAR 9.405-2(b) on the date of subcontract award, other than a subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial products or commercial services, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that—

(1) Exceeds the threshold specified in FAR 9.405-2(b) on the date of subcontract award; and

(2) Is not a subcontract for commercially available off-the-shelf items.

CLAUSE I.24 - FAR 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (OCT 2018)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management via <https://www.sam.gov>.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consist of two segments—

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by—

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

CLAUSE I.25 - FAR 52.209-10 PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS (NOV 2015)

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

Inverted domestic corporation means a foreign incorporated entity that meets the definition of an inverted domestic corporation under 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

Subsidiary means an entity in which more than 50 percent of the entity is owned—

- (1) Directly by a parent corporation; or
- (2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, the Government may be prohibited from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the

event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-2.

(d) In the event the Contractor becomes either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation during contract performance, the Contractor shall give written notice to the Contracting Officer within five business days from the date of the inversion event.

CLAUSE I.26 - FAR 52.210-1 MARKET RESEARCH (NOV 2021)

(a) Definition. As used in this clause—

Commercial product, commercial service, and nondevelopmental item have the meaning contained in Federal Acquisition Regulation (FAR) 2.101.

(b) Before awarding subcontracts for other than commercial acquisitions, where the subcontracts are over the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, the Contractor shall conduct market research to—

(1) Determine if commercial products, commercial services, or, to the extent commercial products suitable to meet the agency's needs are not available, nondevelopmental items are available that—

(i) Meet the agency's requirements;

(ii) Could be modified to meet the agency's requirements; or

(iii) Could meet the agency's requirements if those requirements were modified to a reasonable extent; and

(2) Determine the extent to which commercial products, commercial services, or nondevelopmental items could be incorporated at the component level.

CLAUSE I.27 - FAR 52.211-5 MATERIAL REQUIREMENTS (AUG 2000)

(a) Definitions.

As used in this clause --

"New" means composed of previously unused components, whether manufactured from virgin material, recovered material in the form of raw material, or materials and by-products generated from, and reused within, an original manufacturing process; provided that the supplies meet contract requirements, including but not limited to, performance,

reliability, and life expectancy.

"Reconditioned" means restored to the original normal operating condition by readjustments and material replacement.

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

"Remanufactured" means factory rebuilt to original specifications. "Virgin material" means --

(1) Previously unused raw material, including previously unused copper, aluminum, lead, zinc, iron, other metal or metal ore; or

(2) Any undeveloped resource that is, or with new technology will become, a source of raw materials.

(b) Unless this contract otherwise requires virgin material or supplies composed of or manufactured from virgin material, the Contractor shall provide supplies that are new, reconditioned, or remanufactured, as defined in this clause.

(c) A proposal to provide unused former Government surplus property shall include a complete description of the material, the quantity, the name of the Government agency from which acquired, and the date of acquisition.

(d) A proposal to provide used, reconditioned, or remanufactured supplies shall include a detailed description of such supplies and shall be submitted to the Contracting Officer for approval.

(e) Used, reconditioned, or remanufactured supplies, or unused former Government surplus property, may be used in contract performance if the Contractor has proposed the use of such supplies, and the Contracting Officer has authorized their use.

CLAUSE I.28 - FAR 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT (OCT 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

- (a) The Schedule (excluding the specifications).
- (b) Representations and other instructions.

- (c) Contract clauses.
- (d) Other documents, exhibits, and attachments.
- (e) The specifications.

CLAUSE I.29 - FAR 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA (JUN 2020)

(a) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under 15.403-1(b) applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-4(a)(1) is adjusted for inflation as set forth in FAR 1.109(a), then pursuant to FAR 1.109(d) the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that, when entered into, exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-4(a)(1), the Contractor shall insert either—

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of certified cost or pricing data for the subcontract;
or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Certified Cost or Pricing Data-Modifications.

CLAUSE I.30 - FAR 52.215-13 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA-MODIFICATIONS (JUN 2020)

(a) The requirements of paragraphs (b) and (c) of this clause shall—

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-4(a)(1) on the date of execution of the modification; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-1(b) applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-4(a)(1) is adjusted for inflation as set forth in FAR 1.109(a), then pursuant to FAR 1.109(d) the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-4(a)(1) on the date of agreement on price or the date of award, whichever is later.

CLAUSE I.31 - FAR 52.215-14 INTEGRITY OF UNIT PRICES (NOV 2021)

(a) Any proposal submitted for the negotiation of prices for items of supplies shall distribute costs within contracts on a basis that ensures that unit prices are in proportion to the items' base cost (e.g., manufacturing or acquisition costs). Any method of distributing costs to line items that distorts unit prices shall not be used. For example, distributing costs equally among line items is not acceptable except when there is little or no variation in base cost. Nothing in this paragraph requires submission of certified

cost or pricing data not otherwise required by law or regulation.

(b) When requested by the Contracting Officer, the Offeror/Contractor shall also identify those supplies that it will not manufacture or to which it will not contribute significant value.

(c) The Contractor shall insert the substance of this clause, less paragraph (b) of this clause, in all subcontracts for other than: acquisitions at or below the simplified acquisition threshold, as defined in Federal Acquisition Regulation (FAR) 2.101 on the date of subcontract award; construction or architect-engineer services under FAR part 36; utility services under FAR part 41; services where supplies are not required; commercial products and commercial services; and petroleum products.

CLAUSE I.32 - FAR 52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2010)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be-

(1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) ; and

(2) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) , except the numerator of the fraction at 48 CFR 9904.413-50(c)(12) (vi) shall be the sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) subpart 31.2 or for which certified cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which certified cost or pricing data were submitted or that are subject to FAR subpart 31.2.

(d) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(g).

CLAUSE I.33 - FAR 52.215-17 WAIVER OF FACILITIES CAPITAL COST OF MONEY (OCT 1997)

The Contractor did not include facilities capital cost of money as a proposed cost of this contract. Therefore, it is an unallowable cost under this contract.

CLAUSE I.34 - FAR 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 cost-reimbursement 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 on the date of subcontract award.

CLAUSE I.35 - FAR 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (OCT 2022)

(a) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) When the two highest rated offerors are a HUBZone small business concern and a large business, and the evaluated offer of the HUBZone small business concern is equal to the evaluated offer of the large business after considering the price evaluation preference, award will be made to the HUBZone small business concern.

(b) *Waiver of evaluation preference.* A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes.

Offeror elects to waive the evaluation preference.

(c) *Joint venture.* A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business parties to the joint venture must be more than administrative functions.

CLAUSE I.36 - FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (SEP 2023)

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

HUBZone small business concern means a small business concern that meets the requirements described in 13 CFR 126.200, certified by the Small Business Administration (SBA) and designated by SBA as a HUBZone small business concern in the Dynamic Small Business Search (DSBS) and SAM.

Service-disabled veteran-owned small business concern—

(1) Means a small business concern-

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans 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 service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C.101(2), with a disability that is service-connected, as defined in 38 U.S.C.101(16).

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation and qualified as a small business under the criteria and size standards in 13 CFR part 121, including the size standard that corresponds to the NAICS code assigned to the contract or subcontract.

Small disadvantaged business concern, consistent with 13 CFR 124.1001, 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 the threshold at 13 CFR 124.104(c)(2) 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) (1) A joint venture qualifies as a small business concern if—

(i) Each party to the joint venture qualifies as small under the size standard for the solicitation; or

(ii) The protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under a SBA mentor-protégé program.

(2) A joint venture qualifies as—

(i) A service-disabled veteran-owned small business concern if it complies with the requirements in 13 CFR part 125; or

(ii) A HUBZone small business concern if it complies with the requirements in 13 CFR 126.616(a) through (c).

(d) 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.

(e) (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, 126.900, 127.700, and 128.600, 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 SAM or by accessing DSBS at https://web.sba.gov/pro-net/search/dsp_dsbs.cfm. If the subcontractor is a joint venture, the Contractor shall confirm that at least one party to the joint venture is certified by SBA as a HUBZone small business concern. The Contractor may confirm the representation by accessing SAM.

CLAUSE I.37 - FAR 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (SEP 2023)

(a) This clause does not apply to small business concerns.

(b) *Definitions.* As used in this clause—

Alaska Native Corporation (ANC) means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, *et seq.*) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial products and commercial services sold by either the entire company or a portion thereof (*e.g.*, division, plant, or product line).

Commercial product means a product that satisfies the definition of “commercial product” in Federal Acquisition Regulation (FAR) 2.101.

Commercial service means a service that satisfies the definition of “commercial service” in FAR 2.101.

Electronic Subcontracting Reporting System (eSRS) means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at <http://www.esrs.gov>.

Indian tribe means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

Individual subcontracting plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master subcontracting plan means a subcontracting plan that contains all the required elements of an individual subcontracting plan, except goals, and may be incorporated into individual subcontracting plans, provided the master subcontracting plan has been approved.

Reduced payment means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

Total contract dollars means the final anticipated dollar value, including the dollar value of all options.

Untimely payment means a payment to a subcontractor that is more than 90 days past due under the terms and conditions of a subcontract for supplies and services for which the Government has paid the prime contractor.

(c) (1) The Offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses

subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the Offeror is submitting an individual subcontracting plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The subcontracting plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the Offeror ineligible for award of a contract.

(2) (i) 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.

(ii) 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—

(A) The subcontractor is registered in SAM; and

(B) 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.

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

(iv) In accordance with 13 CFR 121.411, 126.900, 127.700, and 128.600 a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(d) The Offeror's subcontracting plan shall include the following:

(1) Separate goals, expressed in terms of total dollars subcontracted, and as a percentage of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. For individual subcontracting plans, and if required by the Contracting Officer, goals shall also be expressed in

terms of percentage of total contract dollars, in addition to the goals expressed as a percentage of total subcontract dollars. The Offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626:

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe; and

(ii) Where one or more subcontractors are in the subcontract tier between the prime Contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate Contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.

(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of—

(i) Total dollars planned to be subcontracted for an individual subcontracting plan; or the Offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts, including all indirect costs except as described in paragraph (g) of this clause, to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

(v) Total dollars planned to be subcontracted to HUBZone small business concerns;

(vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and

(vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to-

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns; and

(vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, SAM, veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the Offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

- (i) Small business concerns (including ANC and Indian tribes);
- (ii) Veteran-owned small business concerns;
- (iii) Service-disabled veteran-owned small business concerns;
- (iv) HUBZone small business concerns;
- (v) Small disadvantaged business concerns (including ANC and Indian tribes); and
- (vi) Women-owned small business concerns.

(7) The name of the individual employed by the Offeror who will administer the Offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the Offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the Offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the Offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of the applicable threshold specified in FAR 19.702(a) on the date of subcontract award, with further subcontracting possibilities to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the Offeror will—

- (i) Cooperate in any studies or surveys as may be required;
- (ii) Submit periodic reports so that the Government can determine the extent of compliance by the Offeror with the subcontracting plan;
- (iii) After November 30, 2017, include subcontracting data for each order when reporting subcontracting achievements for indefinite-delivery, indefinite-quantity *contracts with* individual subcontracting plans *where the contract is intended* for use by multiple agencies;

(iv) Submit the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at <http://www.esrs.gov>. The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs and Indian tribes that have not been certified by the Small Business Administration as small disadvantaged businesses), women-owned small business concerns, and for NASA only, Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

(v) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;

(vi) Provide its prime contract number, its unique entity identifier, and the e-mail address of the Offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and

(vii) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own unique entity identifier, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (e.g., SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, indicating-

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and, if not, why not;

(F) Whether women-owned small business concerns were solicited and, if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact-

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, service-disabled veteran-owned, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through-

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business

size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(12) Assurances that the Offeror will make a good faith effort to acquire articles, equipment, supplies, services, or materials, or obtain the performance of construction work from the small business concerns that it used in preparing the bid or proposal, in the same or greater scope, amount, and quality used in preparing and submitting the bid or proposal. Responding to a request for a quote does not constitute use in preparing a bid or proposal. The Offeror used a small business concern in preparing the bid or proposal if—

(i) The Offeror identifies the small business concern as a subcontractor in the bid or proposal or associated small business subcontracting plan, to furnish certain supplies or perform a portion of the subcontract; or

(ii) The Offeror used the small business concern's pricing or cost information or technical expertise in preparing the bid or proposal, where there is written evidence of an intent or understanding that the small business concern will be awarded a subcontract for the related work if the Offeror is awarded the contract.

(13) Assurances that the Contractor will provide the Contracting Officer with a written explanation if the Contractor fails to acquire articles, equipment, supplies, services or materials or obtain the performance of construction work as described in (d)(12) of this clause. This written explanation must be submitted to the Contracting Officer within 30 days of contract completion.

(14) Assurances that the Contractor will not prohibit a subcontractor from discussing with the Contracting Officer any material matter pertaining to payment to or utilization of a subcontractor.

(15) Assurances that the offeror will pay its small business subcontractors on time and in accordance with the terms and conditions of the underlying subcontract, and notify the contracting officer when the prime contractor makes either a reduced or an untimely payment to a small business subcontractor (see 52.242-5).

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable

effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing SAM or by accessing the Dynamic Small Business Search (DSBS) at https://web.sba.gov/pro-net/search/dsp_dsbs.cfm.

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(6) For all competitive subcontracts over the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, prior to award of the subcontract the Contractor must inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror and if the successful subcontract offeror is a small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concern.

(7) Assign each subcontract the NAICS code and corresponding size standard that best describes the principal purpose of the subcontract.

(f) A master subcontracting plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the Offeror by this clause; provided-

(1) The master subcontracting plan has been approved;

(2) The Offeror ensures that the master subcontracting plan is updated as necessary and provides copies of the approved master subcontracting plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master subcontracting plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial products and commercial services. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial product or commercial service. A Contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. A Contractor authorized to use a commercial subcontracting plan shall include in its subcontracting goals and in its SSR all indirect costs, with the exception of those such as the following: Employee salaries and benefits; payments for petty cash; depreciation; interest; income taxes; property taxes; lease payments; bank fees; fines, claims, and dues; original equipment manufacturer relationships during warranty periods (negotiated up front with the product); utilities and other services purchased from a municipality or an entity solely authorized by the municipality to provide those services in a particular geographical region; and philanthropic contributions. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) A contract may have no more than one subcontracting plan. When a contract modification exceeds the subcontracting plan threshold in FAR 19.702(a), or an option is exercised, the goals of the existing subcontracting plan shall be amended to reflect any new subcontracting opportunities. When the goals in a subcontracting plan are amended, these goal changes do not apply retroactively.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at FAR 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders-Commercial Products and Commercial Services, or when the subcontractor provides a commercial product or commercial service subject to the clause at FAR 52.244-6, Subcontracts for Commercial Products and Commercial Services, under a prime contract.

(k) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns;" or (2) an approved plan required by this clause, shall be a material breach of the contract and may be considered in any past performance evaluation of the Contractor.

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at <http://www.esrs.gov>. Purchases from a corporation, company, or subdivision that is an affiliate of the Contractor or subcontractor are not included in these reports. Subcontract awards by affiliates shall be treated as subcontract awards by the Contractor. Subcontract award data reported by the Contractor and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors, unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the exception of subcontracts under a contract awarded by the State Department or any other agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas.

(1) *ISR*. This report is not required for commercial plans. The report is required for each contract containing an individual subcontracting plan.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period. When the Contracting Officer rejects an ISR, the Contractor shall submit a corrected report within 30 days of receiving the notice of ISR rejection.

(ii) (A) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(B) If a subcontracting plan has been added to the contract pursuant to 19.702 a)(1)(iii) or 19.301-2(e), the Contractor's achievements must be reported in the ISR on a cumulative basis from the date of incorporation of the subcontracting plan into the contract.

(iii) When a subcontracting plan includes indirect costs in the goals, these costs must be included in this report.

(iv) The authority to acknowledge receipt or reject the ISR resides—

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) SSR. (i) Reports submitted under individual contract plans—

(A) This report encompasses all subcontracting under prime contracts and subcontracts with an executive agency, regardless of the dollar value of the subcontracts. This report also includes indirect costs on a prorated basis when the indirect costs are excluded from the subcontracting goals.

(B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If the Contractor or a subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over the applicable threshold specified in FAR 19.702(a), and the contractand contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime contractors.

(D) The report shall be submitted annually by October 30 for the twelve month period ending September 30. When a Contracting Officer rejects an SSR, the Contractor shall submit a revised report within 30 days of receiving the notice of SSR rejection.

(E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

(ii) *Reports submitted under a commercial plan-*

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year and all indirect costs.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

CLAUSE I.38 - FAR 52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (SEP 2021)

(a) "Failure to make a good faith effort to comply with the subcontracting plan," as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion, or in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan (see 19.705-7), established in accordance with the clause in this contract entitled, "Small Business Subcontracting Plan", the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled, Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

CLAUSE I.39 - FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (SEP 2023)

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

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern—

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (d) of this clause.

(2) *Affiliates*, as used in this definition, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

(b) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, upon occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts-

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, when the Contracting Officer explicitly requires it for an order issued under a multiple-award contract.

(d) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code(s) assigned to this contract. The small business size standard corresponding to this NAICS code(s) can be found at <https://www.sba.gov/document/support--table-size-standards>.

(e) The small business size standard for a Contractor providing an end item that it does not manufacture, process, or produce itself, for a contract other than a construction or service contract, is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition—

(1) Was set aside for small business and has a value above the simplified acquisition threshold;

(2) Used the HUBZone price evaluation preference regardless of dollar value, unless the Contractor waived the price evaluation preference; or

(3) Was an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.

(f) Except as provided in paragraph (h) of this clause, the Contractor shall make the representation(s) required by paragraph (b) and (c) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause, or with its offer for an order (see paragraph (c) of this clause), that the data have been validated or updated, and provide the date of the validation or update.

(g) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (f) or (h) of this clause.

(h) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

(1) The Contractor represents that it is, is not a small business concern under *NAICS Code* _____ assigned to *contract number* _____.

(2) [*Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.*] The Contractor represents that it is, is not, a small disadvantaged business concern as defined in 13 CFR 124.1001..

(3) [*Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.*] The Contractor represents that it is, is not a women-owned small business concern.

(4) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The Contractor represents that it is, is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [*The Contractor shall enter the name and unique entity identifier of each party to the joint venture: ___.*]

(5) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The Contractor represents that it is, is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [*The Contractor shall enter the name and unique entity identifier of each party to the joint venture: ___ .*]

(6) [*Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.*] The Contractor represents that it is, is not a veteran-owned small business concern.

(7) [*Complete only if the Contractor represented itself as a veteran-owned small business concern in paragraph (h)(6) of this clause.*] The Contractor represents that it is, is not a service-disabled veteran-owned small business concern.

(8) [*Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.*] The Contractor represents that—

(i) It is, is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business

Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR part 126; and

(ii) It is, is not a HUBZone joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (h)(8)(i) of this clause is accurate for each HUBZone small business concern participating in the HUBZone joint venture. *[The Contractor shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: _____.]* Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

[Contractor to sign and date and insert authorized signer's name and title. _____]

CLAUSE I.40 - FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

CLAUSE I.41 - FAR 52.222-3 CONVICT LABOR (JUN 2003)

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons –

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if –

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(i) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

CLAUSE I.42 - FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS-OVERTIME COMPENSATION (MAY 2018)

(a) *Overtime requirements.* No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate specified at 29 CFR 5.5(b)(2) per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37). In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 2461 Note), the Department of Labor adjusts this civil monetary penalty for inflation no later than January 15 each year.

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute.

(d) *Payrolls and basic records.*

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) *Subcontracts.* The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

CLAUSE I.43 - FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (MAY 2014)

(a) *Definition.* "Construction, alteration or repair," as used in this clause means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation --

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of the work" definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the “site of the work” definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the “site of the work” definition).

(b) The Contractor or subcontractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled—

(1) Construction Wage Rate Requirements;

(2) Contract Work Hours and Safety Standards -- Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination – Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

(11) Certification of Eligibility.

(c) The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d) (1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor’s signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

CLAUSE I.44 - FAR 52.222-19 CHILD LABOR-COOPERATION WITH AUTHORITIES AND REMEDIES (NOV 2023)

(a) Applicability. This clause does not apply to the extent that the Contractor is supplying end products mined, produced, or manufactured in-

(1) Israel, and the anticipated value of the acquisition is \$50,000 or more;

(2) Mexico, and the anticipated value of the acquisition is \$92,319 or more; or

(3) Armenia, Aruba, Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, New Zealand, North Macedonia, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, Ukraine, or the United Kingdom and the anticipated value of the acquisition is \$183,000 or more.

(b) Cooperation with Authorities. To enforce the laws prohibiting the manufacture or importation of products mined, produced, or manufactured by forced or indentured child labor, authorized officials may need to conduct investigations to determine whether forced or indentured child labor was used to mine, produce, or manufacture any product furnished under this contract. If the solicitation includes the provision 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products, or the equivalent at 52.212-3(i), the Contractor agrees to cooperate fully with authorized officials of the contracting agency, the Department of the Treasury, or the Department of Justice by providing reasonable access to records, documents, persons, or premises upon reasonable request by the authorized officials.

(c) Violations. The Government may impose remedies set forth in paragraph (d) for the following violations:

(1) The Contractor has submitted a false certification regarding knowledge of the use of forced or indentured child labor for listed end products.

(2) The Contractor has failed to cooperate, if required, in accordance with paragraph (b) of this clause, with an investigation of the use of forced or indentured child labor by an Inspector General, Attorney General, or the Secretary of the Treasury.

(3) The Contractor uses forced or indentured child labor in its mining, production, or manufacturing processes.

(4) The Contractor has furnished under the contract end products or components that have been mined, produced, or manufactured wholly or in part by forced or indentured child labor. (The Government will not pursue remedies at paragraph (d)(2) or paragraph (d)(3) of this clause unless sufficient evidence indicates that the Contractor knew of the violation.)

(d) Remedies.

(1) The Contracting Officer may terminate the contract.

(2) The suspending official may suspend the Contractor in accordance with procedures in FAR subpart 9.4.

(3) The debarring official may debar the Contractor for a period not to exceed 3 years in accordance with the procedures in FAR subpart 9.4.

CLAUSE I.45 - FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (APR 2015)

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

Gender identity has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

Segregated facilities means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

Sexual orientation has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

CLAUSE I.46 - FAR 52.222-26 EQUAL OPPORTUNITY (SEP 2016)

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

Compensation means any payments made to, or on behalf of, an employee or offered to an applicant as remuneration for employment, including but not limited to salary, wages, overtime pay, shift differentials, bonuses, commissions, vacation and holiday pay, allowances, insurance and other benefits, stock options and awards, profit sharing, and retirement.

Compensation information means the amount and type of compensation provided to employees or offered to applicants, including, but not limited to, the desire of the Contractor to attract and retain a particular employee for the value the employee is perceived to add to the Contractor's profit or productivity; the availability of employees with like skills in the marketplace; market research about the worth of similar jobs in the relevant marketplace; job analysis, descriptions, and evaluations; salary and pay structures; salary surveys; labor union agreements; and Contractor decisions, statements and policies related to setting or altering employee compensation.

Essential job functions means the fundamental job duties of the employment position an individual holds. A job function may be considered essential if—

(1) The access to compensation information is necessary in order to perform that function or another routinely assigned business task; or

(2) The function or duties of the position include protecting and maintaining the privacy of employee personnel records, including compensation information.

Gender identity has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

Sexual orientation has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

United States means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b)(1) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000,

the Contractor shall comply with this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor's activities (41 CFR 60-1.5).

(c)(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(5)(i) The Contractor shall not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This prohibition against discrimination does not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(ii) The Contractor shall disseminate the prohibition on discrimination in paragraph (c)(5)(i) of this clause, using language prescribed by the Director of the Office of Federal Contract Compliance Programs (OFCCP), to employees and applicants by—

(A) Incorporation into existing employee manuals or handbooks; and

(B) Electronic posting or by posting a copy of the provision in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(7) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(8) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(9) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(10) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(11) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(12) The Contractor shall take such action with respect to any subcontract or purchase order as the Director of OFCC P may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; *provided*, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(d) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR part 60-1.

CLAUSE I.47 - FAR 52.222-29 NOTIFICATION OF VISA DENIAL (APR 2015)

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

Gender identity has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

Sexual orientation has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

(b) *Requirement to notify.* (1) It is a violation of Executive Order 11246 for a Contractor to refuse to employ any applicant or not to assign any person hired in the United States, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, or Wake Island, on the basis that the individual's race, color, religion, sex, sexual orientation, gender identity, or national origin is not compatible with the policies of the country where or for whom the work will be performed (41 CFR 60-1.10).

(2) The Contractor shall notify the U.S. Department of State, Assistant Secretary, Bureau of Political-Military Affairs (PM), 2201 C Street NW., Room 6212, Washington, DC 20520, and the U.S. Department of Labor, Deputy Assistant Secretary for Federal Contract Compliance, when it has knowledge of any employee or potential employee being denied an entry visa to a country where this contract will be performed, and it believes the denial is attributable to the race, color, religion, sex, sexual orientation, gender identity, or national origin of the employee or potential employee.

CLAUSE I.48 - FAR 52.222-35 EQUAL OPPORTUNITY FOR VETERANS (JUN 2020)

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

“Active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,” “disabled veteran,” “protected veteran,” “qualified disabled veteran,” and “recently separated veteran” have the meanings given at Federal Acquisition Regulation (FAR) 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1303(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

CLAUSE I.49 - FAR 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUN 2020)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of the threshold specified in Federal Acquisition Regulation (FAR) 22.1408(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

CLAUSE I.50 - FAR 52.222-37 EMPLOYMENT REPORTS ON VETERANS (JUN 2020)

(a) *Definitions*. As used in this clause, “active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,” “disabled veteran,” “protected veteran,” and “recently separated veteran,” have the meanings given in Federal Acquisition Regulation (FAR) 22.1301.

(b) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on-

(1) The total number of employees in the contractor's workforce, by job category and hiring location, who are protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans);

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans); and

(3) The maximum number and minimum number of employees of the Contractor or subcontractor at each hiring location during the period covered by the report.

(c) The Contractor shall report the above items by filing the VETS-4212 "Federal Contractor Veterans' Employment Report" (see "VETS-4212 Federal Contractor Reporting" and "Filing Your VETS-4212 Report" at <http://www.dol.gov/vets/vets4212.htm>).

(d) The Contractor shall submit VETS-4212 Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause shall reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report. Contractors may select an ending date-

(1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or

(2) As of December 31, if the Contractor has prior written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(f) The number of veterans reported must be based on data known to the contractor when completing the VETS-4212. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C.4212.

(g) The Contractor shall insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1303(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor.

CLAUSE I.51 - FAR 52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)

(a) During the term of this contract, the Contractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2(d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any Web site that is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers".

(b) This required employee notice, printed by the Department of Labor, may be –

(1) Obtained from the Division of Interpretations and Standards, office of Labor-Management Standards, U. S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-Management Standards Web site at <http://www.doe.gov/olms/regs/compliance/EO13496.thm>; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds \$10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

CLAUSE I.52 - FAR 52.222-50 COMBATING TRAFFICKING IN PERSONS (NOV 2021)

(a) Definitions. As used in this clause—

“Agent” means any individual, including a director, an officer, an employee, or an independent contractor, authorized to act on behalf of the organization.

“Coercion” means—

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

“Commercial sex act” means any sex act on account of which anything of value is given to or received by any person.

“Commercially available off-the-shelf (COTS) item”--

(1) Means any item of supply (including construction material) that is—

(i) A commercial product (as defined in paragraph (1) of the definition of “commercial product” at Federal Acquisition Regulation (FAR) 2.101;

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

“Debt bondage” means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

“Employee” means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

“Forced Labor” means knowingly providing or obtaining the labor or services of a person—

(1) By threats of serious harm to, or physical restraint against, that person or another person;

(2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

(3) By means of the abuse or threatened abuse of law or the legal process.

“Involuntary servitude” includes a condition of servitude induced by means of—

(1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

(2) The abuse or threatened abuse of the legal process.

"Recruitment fees" means fees of any type, including charges, costs, assessments, or other financial obligations, that are associated with the recruiting process, regardless of the time, manner, or location of imposition or collection of the fee.

(1) Recruitment fees include, but are not limited to, the following fees (when they are associated with the recruiting process) for—

(i) Soliciting, identifying, considering, interviewing, referring, retaining, transferring, selecting, training, providing orientation to, skills testing, recommending, or placing employees or potential employees;

(ii) Advertising;

(iii) Obtaining permanent or temporary labor certification, including any associated fees;

(iv) Processing applications and petitions;

(v) Acquiring visas, including any associated fees;

(vi) Acquiring photographs and identity or immigration documents, such as passports, including any associated fees;

(vii) Accessing the job opportunity, including required medical examinations and immunizations; background, reference, and security clearance checks and examinations; and additional certifications;

(viii) An employer's recruiters, agents or attorneys, or other notary or legal fees;

(ix) Language interpretation or translation, arranging for or accompanying on travel, or providing other advice to employees or potential employees;

(x) Government-mandated fees, such as border crossing fees, levies, or worker welfare funds;

(xi) Transportation and subsistence costs—

(A) While in transit, including, but not limited to, airfare or costs of other modes of transportation, terminal fees, and travel taxes associated with travel from the country of origin to the country of performance and the return journey upon the end of employment; and

(B) From the airport or disembarkation point to the worksite;

(xii) Security deposits, bonds, and insurance; and

(xiii) Equipment charges.

(2) A recruitment fee, as described in the introductory text of this definition, is a recruitment fee, regardless of whether the payment is—

(i) Paid in property or money;

(ii) Deducted from wages;

(iii) Paid back in wage or benefit concessions;

(iv) Paid back as a kickback, bribe, in-kind payment, free labor, tip, or tribute;
or

(v) Collected by an employer or a third party, whether licensed or unlicensed, including, but not limited to—

(A) Agents;

(B) Labor brokers;

(C) Recruiters;

(D) Staffing firms (including private employment and placement firms);

(E) Subsidiaries/affiliates of the employer;

(F) Any agent or employee of such entities; and

(G) Subcontractors at all tiers.

“Severe forms of trafficking in persons” means—

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

“Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

“Subcontract” means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) Policy. The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Contractors, contractor employees, and their agents shall not—

(1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

(2) Procure commercial sex acts during the period of performance of the contract;

(3) Use forced labor in the performance of the contract.

(4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;

(5) (i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language

understood by the employee or potential employee, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant costs to be charged to the employee or potential employee, and, if applicable, the hazardous nature of the work;

(ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;

(6) Charge employees or potential employees recruitment fees;

(7) (i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment--

(A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or

(B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that--

(ii) The requirements of paragraphs (b)(7)(i) of this clause shall not apply to an employee who is--

(A) Legally permitted to remain in the country of employment and who chooses to do so; or

(B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;

(iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of employment, or for a witness in an enforcement action related to trafficking in persons. The contractor shall provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the contractor shall not only offer return transportation to a witness at a time when the witness is still

needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.

(8) Provide or arrange housing that fails to meet the host country housing and safety standards; or

(9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document shall be in a language the employee understands. If the employee must relocate to perform the work, the work document shall be provided to the employee at least five days prior to the employee relocating. The employee's work document shall include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.

(c) Contractor requirements. The Contractor shall—

(1) Notify its employees and agents of—

(i) The United States Government's policy prohibiting trafficking in persons, described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees, agents, or subcontractors that violate the policy in paragraph (b) of this clause.

(d) Notification.

(1) The Contractor shall inform the Contracting Officer and the agency Inspector General immediately of—

(i) Any credible information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-13(b)(3)(i)(A), if that clause is included in the solicitation or contract, which requires disclosure to the agency Office of the Inspector General when the Contractor has credible evidence of fraud); and

(ii) Any actions taken against a Contractor employee, subcontractor, subcontractor employee, or their agent pursuant to this clause.

(2) If the allegation may be associated with more than one contract, the Contractor shall inform the contracting officer for the contract with the highest dollar value.

(e) Remedies. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in—

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

(3) Suspension of contract payments until the Contractor has taken appropriate remedial action;

(4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;

(5) Declining to exercise available options under the contract;

(6) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

(7) Suspension or debarment.

(f) Mitigating and aggravating factors. When determining remedies, the Contracting Officer may consider the following:

(1) Mitigating factors. The Contractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.

(2) Aggravating factors. The Contractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the Contracting Officer to do so.

(g) Full cooperation. (1) The Contractor shall, at a minimum—

(i) Disclose to the agency Inspector General information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;

(ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;

(iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and

(iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and shall not prevent or hinder the ability of these employees from cooperating fully with Government authorities.

(2) The requirement for full cooperation does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not—

(i) Require the Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;

(ii) Require any officer, director, owner, employee, or agent of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or

(iii) Restrict the Contractor from—

(A) Conducting an internal investigation; or

(B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

(h) Compliance plan. (1) This paragraph (h) applies to any portion of the contract that—

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds \$550,000.

(2) The Contractor shall maintain a compliance plan during the performance of the contract that is appropriate—

(i) To the size and complexity of the contract; and

(ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.

(3) Minimum requirements. The compliance plan must include, at a minimum, the following:

(i) An awareness program to inform contractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the website for the Department of State's Office to Monitor and Combat Trafficking in Persons at <http://www.state.gov/j/tip/>.

(ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.

(iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employees or potential employees, and ensures that wages meet applicable host-country legal requirements or explains any variance.

(iv) A housing plan, if the Contractor or subcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.

(v) Procedures to prevent agents and subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subcontractor employees that have engaged in such activities.

(4) Posting. (i) The Contractor shall post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the

work is to be performed in the field or not in a fixed location) and on the Contractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Contractor shall provide the relevant contents of the compliance plan to each worker in writing.

(ii) The Contractor shall provide the compliance plan to the Contracting Officer upon request.

(5) Certification. Annually after receiving an award, the Contractor shall submit a certification to the Contracting Officer that—

(i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, subcontract or subcontractor employee engaging in prohibited activities; and

(ii) After having conducted due diligence, either—

(A) To the best of the Contractor's knowledge and belief, neither it nor any of its agents, subcontractors, or their agents is engaged in any such activities; or

(B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Contractor or subcontractor has taken the appropriate remedial and referral actions.

(i) Subcontracts. (1) The Contractor shall include the substance of this clause, including this paragraph (i), in all subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the subcontract that—

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds \$550,000.

(2) If any subcontractor is required by this clause to submit a certification, the Contractor shall require submission prior to the award of the subcontract and annually thereafter. The certification shall cover the items in paragraph (h)(5) of this clause.

CLAUSE I.53 - FAR 52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION (MAY 2022)

(a) Definitions. As used in this clause—

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply that is—

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products. Per 46 CFR 525.1(c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

"Employee assigned to the contract" means an employee who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee—

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

"Subcontract" means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

"United States," as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

(b) Enrollment and verification requirements. (1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall—

(i) Enroll. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) Verify employees assigned to the contract. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of—

(i) All new employees. (A) Enrolled 90 calendar days or more. The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) Employees assigned to the contract. For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new

hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2), respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) Option to verify employment eligibility of all employees. The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of—

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: <https://www.e-Verify.gov>.

(d) Individuals previously verified. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee—

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD) -12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) Subcontracts. The Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that—

(1) Is for – (i) Services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than \$3,500; and

(3) Includes work performed in the United States.

CLAUSE I.54 - FAR 52.223-2 AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (SEP 2013)

(a) In the performance of this contract, the contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items unless—

(1) The product cannot be acquired—

(i) Competitively within a time frame providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) The product is to be used in an application covered by a USDA categorical exemption (see 7 CFR 3201.3(e)). For example, all USDA-designated items are exempt from the preferred procurement requirement for the following:

(i) Spacecraft system and launch support equipment.

(ii) Military equipment, *i.e.*, a product or system designed or procured for combat or combat-related missions.

(b) Information about this requirement and these products is available at <http://www.biopreferred.gov>.

(c) In the performance of this contract, the Contractor shall—

(1) Report to <http://www.sam.gov>, with a copy to the Contracting Officer, on the product types and dollar value of any USDA-designated biobased products purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report no later than—

(i) October 31 of each year during contract performance; and

(ii) At the end of contract performance.

CLAUSE I.55 - FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (FEB 2021) (ALTERNATE I) (JULY 1995)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert <i>None</i>)	Identification No.
<u>None</u>	_____
_____	_____
_____	_____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the

actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which

accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

CLAUSE I.56 - FAR 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011) (ALTERNATE I) (MAY 2011)

(a) Definitions. As used in this clause—

“Toxic chemical” means a chemical or chemical category in listed in 40 CFR 372.65.

(b) Federal facilities are required to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050), and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of Section 302 of EPCRA.

(2) The emergency notice requirements of Section 304 of EPCRA.

(3) The list of Material Safety Data Sheets required by Section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA.

(6) The toxic chemical and hazardous substance release and use reduction goals of section 2(e) of Executive Order 13423 and of Executive Order 13514.

(7) The environmental management system as described in section 3(b) of E.O. 13423 and 2(j) of E.O. 13514.

CLAUSE I.57 - FAR 52.223-7 NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, 30 days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either

(1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the

Code of Federal Regulations, in effect on the date of this contract, or

(2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries.

Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall -

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

CLAUSE I.58 - FAR 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS (MAY 2008)

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

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

Recovered material means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-

products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to Rick Hersemann, 630-840-4122, Rick.Hersemann@science.doe.gov.

CLAUSE I.59 - FAR 52.223-10 WASTE REDUCTION PROGRAM (MAY 2011)

(a) Definitions. As used in this clause—

“Recycling” means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

“Waste prevention” means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

“Waste reduction” means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of section 3(e) of Executive Order 13423, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract.

CLAUSE I.60 - FAR 52.223-11 OZONE-DEPLETING SUBSTANCES AND HIGH GLOBAL WARMING POTENTIAL HYDROFLUOROCARBONS (JUN 2016)

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

“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon Dioxide’s global warming potential is defined as 1.0.

“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).

“Hydrofluorocarbons” means compounds that only contain hydrogen, fluorine, and carbon.

“Ozone-depleting substance” means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), (d), and (e) and 40 CFR Part 82, Subpart E, as follows:

Warning

Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(c) *Reporting.* For equipment and appliances that normally each contain 50 or more pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons, the Contractor shall—

(1) Track on an annual basis, between October 1 and September 30, the amount in pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons contained in the equipment and appliances delivered to the Government under this contract by—

(i) Type of hydrofluorocarbon (e.g., HFC-134a, HFC-125, R-410A, R-404A, etc.);

(ii) Contract number; and

(iii) Equipment/appliance;

(2) Report that information to the Contracting Officer for FY16 and to www.sam.gov, for FY17 and after -

(i) Annually by November 30 of each year during contract performance; and

(ii) At the end of contract performance.

(d) The Contractor shall refer to EPA’s SNAP program (available at

<http://www.epa.gov/snap>) to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables available at <http://www.epa.gov/snap>.

CLAUSE I.61 - FAR 52.223-12 MAINTENANCE, SERVICE, REPAIR, OR DISPOSAL OF REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (JUN 2016)

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

“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide’s global warming potential is defined as 1.0.

“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).

“Hydrofluorocarbons” means compounds that contain only hydrogen, fluorine, and carbon.

(b) The Contractor shall comply with the applicable requirements of sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

(c) Unless otherwise specified in the contract, the Contractor shall reduce the use, release, or emissions of high global warming potential hydrofluorocarbons under this contract by—

(1) Transitioning over time to the use of another acceptable alternative in lieu of high global warming potential hydrofluorocarbons in a particular end use for which EPA’s SNAP program has identified other acceptable alternatives that have lower global warming potential.

(2) Preventing and repairing refrigerant leaks through service and maintenance during contract performance;

(3) Implementing recovery, recycling, and responsible disposal programs that avoid release or emissions during equipment service as the equipment reaches the end of its useful life; and

(4) Using reclaimed hydrofluorocarbons, where feasible.

(d) For equipment and appliances that normally each contain 50 or more pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons, that will be

maintained, serviced, repaired, or disposed under this contract, the Contractor shall—

(1) Track on an annual basis, between October 1 and September 30, the amount in pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons added or taken out of equipment or appliances under this contract by—

(i) Type of hydrofluorocarbon (e.g., HFC-134a, HFC-125, R-410A, R-404A, etc.);

(ii) Contract number;

(iii) Equipment/appliance; and

(2) Report that information to the Contracting Officer for FY16 and to www.sam.gov, for FY17 and after--

(i) No later than November 30 of each year during contract performance; and

(ii) At the end of contract performance.

(e) The Contractor shall refer to EPA's SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82, subpart G, with supplemental tables available at <http://www.epa.gov/snap/>.

CLAUSE I.62 - FAR 52.223-13 ACQUISITION OF EPEAT-REGISTERED IMAGING EQUIPMENT (JUN 2014)

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

Imaging equipment means the following products:

(1) *Copier*—A commercially available imaging product with a sole function of the production of hard copy duplicates from graphic hard-copy originals. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as copiers or upgradeable digital copiers (UDCs).

(2) *Digital duplicator*—A commercially available imaging product that is sold in the market as a fully automated duplicator system through the method of stencil duplicating with digital reproduction functionality. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as digital duplicators.

(3) *Facsimile machine (fax machine)*—A commercially available imaging product whose primary functions are scanning hard-copy originals for electronic transmission to remote units and receiving similar electronic transmissions to produce hard-copy output. Electronic transmission is primarily over a public telephone system but also

may be via computer network or the Internet. The product also may be capable of producing hard copy duplicates. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as fax machines.

(4) *Mailing machine*—A commercially available imaging product that serves to print postage onto mail pieces. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as mailing machines.

(5) *Multifunction device (MFD)*—A commercially available imaging product, which is a physically integrated device or a combination of functionally integrated components, that performs two or more of the core functions of copying, printing, scanning, or faxing. The copy functionality as addressed in this definition is considered to be distinct from single-sheet convenience copying offered by fax machines. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as MFDs or multifunction products.

(6) *Printer*—A commercially available imaging product that serves as a hard-copy output device and is capable of receiving information from single-user or networked computers, or other input devices (e.g., digital cameras). The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as printers, including printers that can be upgraded into MFDs in the field.

(7) *Scanner*—A commercially available imaging product that functions as an electro-optical device for converting information into electronic images that can be stored, edited, converted, or transmitted, primarily in a personal computing environment. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as scanners.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only imaging equipment that, at the time of submission of proposals and at the time of award, was EPEAT[®] bronze-registered or higher.

(c) For information about EPEAT[®], see www.epa.gov/epeat.

CLAUSE I.63 - FAR 52.223-14 ACQUISITION OF EPEAT-REGISTERED TELEVISIONS (JUN 2014)

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

Television or *TV* means a commercially available electronic product designed primarily for the reception and display of audiovisual signals received from terrestrial,

cable, satellite, Internet Protocol TV (IPTV), or other digital or analog sources. A TV consists of a tuner/receiver and a display encased in a single enclosure. The product usually relies upon a cathode-ray tube (CRT), liquid crystal display (LCD), plasma display, or other display technology. Televisions with computer capability (e.g., computer input port) may be considered to be a TV as long as they are marketed and sold to consumers primarily as televisions.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only televisions that, at the time of submission of proposals and at the time of award, were EPEAT[®] bronze-registered or higher.

(c) For information about EPEAT[®], see www.epa.gov/epeat.

CLAUSE I.64 - FAR 52.223-15 ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (MAY 2020)

(a) *Definition.* As used in this clause—

Energy-efficient product

(1) Means a product that—

(i) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star trademark label; or

(ii) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy's Federal Energy Management Program.

(2) The term "product" does not include any energy-consuming product or system designed or procured for combat or combat-related missions (42 U.S.C. 8259b).

(b) The Contractor shall ensure that energy-consuming products are energy efficient products (i.e., ENERGY STAR[®] products or FEMP-designated products) at the time of contract award, for products that are—

(1) Delivered;

(2) Acquired by the Contractor for use in performing services at a Federally controlled facility;

(3) Furnished by the Contractor for use by the Government; or

(4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.

(c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless—

(1) The energy-consuming product is not listed in the ENERGY STAR® Program or FEMP; or

(2) Otherwise approved in writing by the Contracting Officer.

(d) Information about these products is available for—

(1) ENERGY STAR® at <http://www.energystar.gov/products>; and

(2) FEMP at <https://www.energy.gov/eere/femp/energy-efficient-products-and-energy-saving-technologies>.

CLAUSE I.65 - FAR 52.223-16 ACQUISITION OF EPEAT®-REGISTERED PERSONAL COMPUTER PRODUCTS (OCT 2015)

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

Computer means a device that performs logical operations and processes data. Computers are composed of, at a minimum:

(1) A central processing unit (CPU) to perform operations;

(2) User input devices such as a keyboard, mouse, digitizer, or game controller; and

(3) A computer display screen to output information. Computers include both stationary and portable units, including desktop computers, integrated desktop computers, notebook computers, thin clients, and workstations. Although computers must be capable of using input devices and computer displays, as noted in (2) and (3) above, computer systems do not need to include these devices on shipment to meet this definition. This definition does not include server computers, gaming consoles, mobile telephones, portable hand-held calculators, portable digital assistants (PDAs), MP3 players, or any other mobile computing device with displays less than 4 inches, measured diagonally.

Computer display means a display screen and its associated electronics encased in a single housing or within the computer housing (e.g., notebook or integrated desktop computer) that is capable of displaying output information from a computer via one or more inputs such as a VGA, DVI, USB, DisplayPort, and/or IEEE 1394-2008TM, Standard for High Performance Serial Bus. Examples of computer display technologies are the cathode-ray tube (CRT) and liquid crystal display (LCD).

Desktop computer means a computer where the main unit is intended to be located

in a permanent location, often on a desk or on the floor. Desktops are not designed for portability and utilize an external computer display, keyboard, and mouse. Desktops are designed for a broad range of home and office applications.

Integrated desktop computer means a desktop system in which the computer and computer display function as a single unit that receives its AC power through a single cable. Integrated desktop computers come in one of two possible forms:

(1) A system where the computer display and computer are physically combined into a single unit; or

(2) A system packaged as a single system where the computer display is separate but is connected to the main chassis by a DC power cord and both the computer and computer display are powered from a single power supply. As a subset of desktop computers, integrated desktop computers are typically designed to provide similar functionality as desktop systems.

Notebook computer means a computer designed specifically for portability and to be operated for extended periods of time either with or without a direct connection to an AC power source. Notebooks must utilize an integrated computer display and be capable of operation off of an integrated battery or other portable power source. In addition, most notebooks use an external power supply and have an integrated keyboard and pointing device. Notebook computers are typically designed to provide similar functionality to desktops, including operation of software similar in functionality to that used in desktops. Docking stations are considered accessories for notebook computers, not notebook computers. Tablet PCs, which may use touch-sensitive screens along with, or instead of, other input devices, are considered notebook computers.

Personal computer product means a computer, computer display, desktop computer, integrated desktop computer, or notebook computer.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only personal computer products that, at the time of submission of proposals and at the time of award, were EPEAT[®] bronze-registered or higher.

(c) For information about EPEAT[®], see www.epa.gov/epeat.

CLAUSE I.66 - FAR 52.223-17 AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (AUG 2018)

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

(1) Competitively within a timeframe providing for compliance with the contract performance schedule;

- (2) Meeting contract performance requirements; or
- (3) At a reasonable price.

(b) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site. The list of EPA-designate items is available at <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

CLAUSE I.67 – FAR 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (JUN 2020)

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

“Driving”–

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, dated October 1, 2009.

(c) The Contractor is encouraged to-

(1) Adopt and enforce policies that ban text messaging while driving-

(i) Company-owned or rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as-

(i) Establishment of new rules and programs or reevaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

CLAUSE I.68 - FAR 52.223-19 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEMS (MAY 2011)

The Contractor's work under this contract shall conform with all operational controls identified in the applicable agency or facility Environmental Management Systems and provide monitoring and measurement information necessary for the Government to address environmental performance relative to the goals of the Environmental Management Systems.

CLAUSE I.69 - FAR 52.223-20 AEROSOLS (JUNE 2016)

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

Global warming potential means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide's global warming potential is defined as 1.0.

High global warming potential hydrofluorocarbons means any hydrofluorocarbons in a particular end use for which EPA's Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).

Hydrofluorocarbons means compounds that only contain hydrogen, fluorine, and carbon.

(b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, or emissions of high global warming potential hydrofluorocarbons, when feasible, from aerosol propellants or solvents under this contract. When determining feasibility of using a particular alternative, the Contractor shall consider environmental, technical, and economic factors such as—

- (1) In-use emission rates, energy efficiency;
- (2) Safety, such as flammability or toxicity;
- (3) Ability to meet technical performance requirements; and

(4) Commercial availability at a reasonable cost.

(c) The Contractor shall refer to EPA's SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables available at <http://www.epa.gov/snap/>.

CLAUSE I.70 - FAR 52.223-21 FOAMS (JUNE 2016)

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

Global warming potential means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide's global warming potential is defined as 1.0.

High global warming potential hydrofluorocarbons means any hydrofluorocarbons in a particular end use for which EPA's Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).

Hydrofluorocarbons means compounds that only contain hydrogen, fluorine, and carbon.

(b) Unless otherwise specified in the contract, the Contractor shall reduce its use, release, and emissions of high global warming potential hydrofluorocarbons and refrigerant blends containing hydrofluorocarbons, when feasible, from foam blowing agents, under this contract. When determining feasibility of using a particular alternative, the Contractor shall consider environmental, technical, and economic factors such as—

- (1) In-use emission rates, energy efficiency, and safety;
- (2) Ability to meet performance requirements; and
- (3) Commercial availability at a reasonable cost.

(c) The Contractor shall refer to EPA's SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables available at <http://www.epa.gov/snap/>.

CLAUSE I.71 - FAR 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)

The Contractor will be required to design, develop, or operate a system of records on individuals to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C. 552a) and applicable agency regulations. Violation of the Act may involve the imposition of criminal penalties.

CLAUSE I.72 - FAR 52.224-2 PRIVACY ACT (APR 1984)

(a) The Contractor agrees to:

(1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies:

(i) The system of records; and

(ii) The design, development, or operation work that the Contractor is to perform;

(2) Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and

(3) Include this clause, including this subparagraph (3), in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

(b) In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Contractor is considered to be an employee of the agency.

(c)(1) "Operation of a system of records", as used in this Clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

(2) "Record", as used in this Clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

(3) "System of records on individuals," as used in this Clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

CLAUSE I.73 - FAR 52.224-3 PRIVACY TRAINING (JAN 2017)

(a) *Definition.* As used in this clause, "personally identifiable information" means information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information that is linked or linkable to a specific individual. (See Office of Management and Budget (OMB) Circular A-130, Managing Federal Information as a Strategic Resource).

(b) The Contractor shall ensure that initial privacy training, and annual privacy training thereafter, is completed by contractor employees who-

(1) Have access to a system of records;

(2) Create, collect, use, process, store, maintain, disseminate, disclose, dispose, or otherwise handle personally identifiable information on behalf of an agency; or

(3) Design, develop, maintain, or operate a system of records (see also FAR subpart 24.3 and 39.105).

(c) (1) Privacy training shall address the key elements necessary for ensuring the safeguarding of personally identifiable information or a system of records. The training shall be role-based, provide foundational as well as more advanced levels of training, and have measures in place to test the knowledge level of users. At a minimum, the privacy training shall cover-

(i) The provisions of the Privacy Act of 1974 (5 U.S.C. 552a), including penalties for violations of the Act;

(ii) The appropriate handling and safeguarding of personally identifiable information;

(iii) The authorized and official use of a system of records or any other personally identifiable information;

(iv) The restriction on the use of unauthorized equipment to create, collect, use, process, store, maintain, disseminate, disclose, dispose or otherwise access personally identifiable information;

(v) The prohibition against the unauthorized use of a system of records or unauthorized disclosure, access, handling, or use of personally identifiable information; and

(vi) The procedures to be followed in the event of a suspected or confirmed breach of a system of records or the unauthorized disclosure, access, handling, or use of personally identifiable information (see OMB guidance for Preparing for and Responding to a Breach of Personally Identifiable Information).

(2) Completion of an agency-developed or agency-conducted training course shall be deemed to satisfy these elements.

(d) The Contractor shall maintain and, upon request, provide documentation of completion of privacy training to the Contracting Officer.

(e) The Contractor shall not allow any employee access to a system of records, or permit any employee to create, collect, use, process, store, maintain, disseminate, disclose, dispose or otherwise handle personally identifiable information, or to design, develop, maintain, or operate a system of records unless the employee has completed privacy training, as required by this clause.

(f) The substance of this clause, including this paragraph (f), shall be included in all subcontracts under this contract, when subcontractor employees will-

(1) Have access to a system of records;

(2) Create, collect, use, process, store, maintain, disseminate, disclose, dispose, or otherwise handle personally identifiable information; or

(3) Design, develop, maintain, or operate a system of records.

**CLAUSE I.74 - FAR 52.225-1 BUY AMERICAN ACT-SUPPLIES (OCT 2022);
MODIFIED BY DEAR 970.2570**

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

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is—

(i) A commercial product (as defined in paragraph (1) of the definition of “commercial product” at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C.40102(4), such as agricultural products and petroleum products.

Component means an article, material, or supply incorporated directly into an end product.

Cost of components means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Critical component means a component that is mined, produced, or manufactured in the United States and deemed critical to the U.S. supply chain. The list of critical components is at FAR 25.105 .

Domestic end product means—

(1) For an end product that does not consist wholly or predominantly of iron or steel or a combination of both-

(i) An unmanufactured end product mined or produced in the United States;

(ii) An end product manufactured in the United States, if-

(A)The cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered starting in calendar year 2029. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Components of unknown origin are treated as

foreign. Scrap generated, collected, and prepared for processing in the United States is considered domestic; or

(B) The end product is a COTS item; or

(2) For an end product that consists wholly or predominantly of iron or steel or a combination of both, an end product manufactured in the United States, if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all the components used in the end product. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the end product and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the end product contains multiple components, the cost of all the materials used in such end product is calculated in accordance with the definition of "cost of components".

End product means those articles, materials, and supplies to be acquired under the contract for public use.

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign end product means an end product other than a domestic end product.

Foreign iron and steel means iron or steel products not produced in the United States. Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for an end product that is a COTS item (see 12.505(a)(1)), except that for an end product that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the end product, excluding COTS fasteners.

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall use only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled "Buy American Certificate."

CLAUSE I.75 - FAR 52.225-8 DUTY-FREE ENTRY (OCT 2010)

(a) *Definition.* "Customs territory of the United States" means the States, the District of Columbia, and Puerto Rico.

(b) Except as otherwise approved by the Contracting Officer, the Contractor shall not include in the contract price any amount for duties on supplies specifically identified in the Schedule to be accorded duty-free entry.

(c) Except as provided in paragraph (d) of this clause or elsewhere in this contract, the following procedures apply to supplies not identified in the Schedule to be accorded duty-free entry:

(1) The Contractor shall notify the Contracting Officer in writing of any purchase of foreign supplies (including, without limitation, raw materials, components, and intermediate assemblies) in excess of \$15,000 that are to be imported into the customs territory of the United States for delivery to the Government under this contract, either as end products or for incorporation into end products. The Contractor shall furnish the notice to the Contracting Officer at least 20 calendar days before the importation. The notice shall identify the--

- (i) Foreign supplies;
- (ii) Estimated amount of duty; and
- (iii) Country of origin.

(2) The Contracting Officer will determine whether any of these supplies should be accorded duty-free entry and will notify the Contractor within 10 calendar days after receipt of the Contractor's notification.

(3) Except as otherwise approved by the Contracting Officer, the contract price shall be reduced by (or the allowable cost shall not include) the amount of duty that

would be payable if the supplies were not entered duty-free.

(d) The Contractor is not required to provide the notification under paragraph (c) of this clause for purchases of foreign supplies if--

(1) The supplies are identical in nature to items purchased by the Contractor or any subcontractor in connection with its commercial business; and

(2) Segregation of these supplies to ensure use only on Government contracts containing duty-free entry provisions is not economical or feasible.

(e) The Contractor shall claim duty-free entry only for supplies to be delivered to the Government under this contract, either as end products or incorporated into end products, and shall pay duty on supplies, or any portion of them, other than scrap, salvage, or competitive sale authorized by the Contracting Officer, diverted to nongovernmental use.

(f) The Government will execute any required duty-free entry certificates for supplies to be accorded duty-free entry and will assist the Contractor in obtaining duty-free entry for these supplies.

(g) Shipping documents for supplies to be accorded duty-free entry shall consign the shipments to the contracting agency in care of the Contractor and shall include the--

(1) Delivery address of the Contractor (or contracting agency, if appropriate);

(2) Government prime contract number;

(3) Identification of carrier;

(4) Notation "UNITED STATES GOVERNMENT, _____ [agency] _____, Duty-free entry to be claimed pursuant to Item No(s) _____ [from Tariff Schedules] _____, Harmonized Tariff Schedules of the United States. Upon arrival of shipment at port of entry, District Director of Customs, please release shipment under 19 CFR Part 142 and notify [cognizant contract administration office] for execution of Customs Forms 7501 and 7501-A and any required duty-free entry certificates.";

(5) Gross weight in pounds (if freight is based on space tonnage, state cubic feet in addition to gross shipping weight); and

(6) Estimated value in United States dollars.

(h) The Contractor shall instruct the foreign supplier to--

(1) Consign the shipment as specified in paragraph (g) of this clause;

(2) Mark all packages with the words "UNITED STATES GOVERNMENT" and the title of the contracting agency; and

(3) Include with the shipment at least two copies of the bill of lading (or other shipping document) for use by the District Director of Customs at the port of entry.

(i) The Contractor shall provide written notice to the cognizant contract administration office immediately after notification by the Contracting Officer that duty-free entry will be accorded foreign supplies or, for duty-free supplies identified in the Schedule, upon award by the Contractor to the overseas supplier. The notice shall identify the--

- (1) Foreign supplies; (2) Country of origin;
- (3) Contract number; and
- (4) Scheduled delivery date(s).

(j) The Contractor shall include the substance of this clause in any subcontract if--

- (1) Supplies identified in the Schedule to be accorded duty-free entry will be imported into the customs territory of the United States; or
- (2) Other foreign supplies in excess of \$15,000 may be imported into the customs territory of the United States.

CLAUSE I.76 - FAR 52.225-9 BUY AMERICAN-CONSTRUCTION MATERIALS (OCT 2022)

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

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is—

(i) A commercial product (as defined in paragraph (1) of the definition of “commercial product” at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when

or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Critical component means a component that is mined, produced, or manufactured in the United States and deemed critical to the U.S. supply chain. The list of critical components is at FAR 25.105.

Critical item means a domestic construction material or domestic end product that is deemed critical to U.S. supply chain resiliency. The list of critical items is at FAR 25.105.

Domestic construction material means—

(1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both-

(i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States, if-

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered starting in calendar year 2029. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

(B) The construction material is a COTS item; or

(2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components".

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign construction material means a construction material other than a domestic construction material.

Foreign iron and steel means iron or steel products not produced in the United States. Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference. (1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for construction material that is a COTS item, except that for construction material that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the construction materials, excluding COTS fasteners. (See FAR 12.505(a)(2)). The Contractor shall use

only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial product or to the construction materials or components listed by the Government as follows:

_____ [Contracting
Officer to list applicable excepted materials or indicate "none"]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable.

(A) *For domestic construction material that is not a critical item or does not contain critical components.*

(1) The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent;

(2) For construction material that is not a COTS item and does not consist wholly or predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that is manufactured in the United States and does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest offer of foreign construction material that exceeds 55 percent domestic content as a domestic offer and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(A)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(A)(2) of this clause will no longer apply as of January 1, 2030.

(B) *For domestic construction material that is a critical item or contains critical components. (1) The cost of a particular domestic construction material that is a critical item or contains critical components, subject to the requirements of the Buy American statute, is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent plus the additional preference factor identified for the critical item or construction material containing critical components listed at FAR 25.105.*

(2) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest foreign offer of construction material that is manufactured in the United States and exceeds 55 percent domestic content as a domestic offer, and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(B)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(B)(2) of this clause will no longer apply as of January 1, 2030.

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute. (1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison			
Construction material description	Unit of measure	Quantity	Price (dollars) *
Item 1:			
Foreign construction material			
Domestic construction material			
Items 2:			
Foreign construction material			
Domestic construction material			

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued)].

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

CLAUSE I.77 - FAR 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2021)

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR Chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at <https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists>. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR Chapter V and/or on OFAC's website at <https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information>.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

CLAUSE I.78 - FAR 52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUNE 2000)

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

Indian means any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C.1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C.1601).

Indian organization means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., Chapter 17.

Indian-owned economic enterprise means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

Indian tribe means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C.1452(c).

Interested party means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C.1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior Bureau of Indian Affairs (BIA) Attn: Chief, Division of Contracting and Grants Administration 1849 C Street, NW, MS-2626-MIB Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

- (i) The estimated cost of a cost-type contract.
- (ii) The target cost of a cost-plus-incentive-fee prime contract.
- (iii) The target cost and ceiling price of a fixed-price incentive prime contract.
- (iv) The price of a firm-fixed-price prime contract.

(3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

CLAUSE I.79 - FAR 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL) (JUN 1987)

Except for data contained on pages of all Volume I, Volume II, and Volume III (except those pages incorporated into the contract), it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data-General" clause contained in this contract) in and to the technical data contained in the proposal dated March 4, 2024, upon which this contract is based.

CLAUSE I.80 - FAR 52.229-8 TAXES-FOREIGN COST-REIMBURSEMENT CONTRACTS (MAR 1990)

(a) Any tax or duty from which the United States Government is exempt by agreement with the Government of Switzerland or the successor states of the former Soviet Union, (the Ukraine, Belarus, Kazakstan, Russia, the Baltic States of Latvia and Lithuania, and Uzbekistan) or from which the Contractor or any subcontractor under this contract is exempt under the laws of Switzerland or the successor states of the former Soviet Union, (the Ukraine, Belarus, Kazakstan, Russia, the Baltic States of Latvia and Lithuania, and Uzbekistan) shall not constitute an allowable cost under this contract.

(b) If the Contractor or subcontractor under this contract obtains a foreign tax credit that reduces its Federal income tax liability under the United States Internal Revenue Code (Title 26, U.S. Code) because of the payment of any tax or duty that was reimbursed under this contract, the amount of the reduction shall be paid or credited at the time of such offset to the Government of the United States as the Contracting Officer directs.

CLAUSE I.81 - FAR 52.230-2 COST ACCOUNTING STANDARDS (JUN 2020)

(a) Unless the contract is exempt under 48 CFR 9903.201-1 and 9903.201-2, the provisions of 48 CFR Part 9903 are incorporated herein by reference and the Contractor, in connection with this contract, shall-

(1) *(CAS-covered Contracts Only)* By submission of a Disclosure Statement, disclose in writing the Contractor's cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5, including methods of distinguishing direct costs from indirect costs and the basis used for allocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.

(2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with paragraph (a)(4) or (a)(5) of this clause, as appropriate.

(3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in 48 CFR Part 9904, in effect on the date of award of this contract or, if the Contractor has submitted certified cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4) (i) (Agree to an equitable adjustment as provided in the Changes clause of this contract if the contract cost is affected by a change which, pursuant to paragraph (a)(3) of this clause, the Contractor is required to make to the Contractor's established cost accounting practices.

(ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of paragraph (a)(4) of this clause; provided that no agreement may be made under this provision that will increase costs paid by the United States.

(iii) When the parties agree to a change to a cost accounting practice, other than a change under subdivision (a)(4)(i) of this clause, negotiate an equitable adjustment as provided in the Changes clause of this contract.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable

Cost Accounting Standard, or to follow any cost accounting practice consistently and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States, together with interest thereon computed at the annual rate established under section 6621(a)(2) of the Internal Revenue Code of 1986 (26 U.S.C. 6621(a)(2)) for such period, from the time the payment by the United States was made to the time the adjustment is effected. In no case shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.

(b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in 48 CFR 9904 or a CAS rule or regulation in 48 CFR 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under 41 U.S.C. chapter 71, Contract Disputes.

(c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts, of any tier, including the obligation to comply with all CAS in effect on the subcontractor's award date or if the subcontractor has submitted certified cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. If the subcontract is awarded to a business unit which pursuant to 48 CFR 9903.201-2 is subject to other types of CAS coverage, the substance of the applicable clause set forth in subsection 30.201-4 of the Federal Acquisition Regulation (FAR) shall be inserted. This requirement shall apply only to negotiated subcontracts in excess of the lower CAS threshold specified in FAR 30.201-4(b) on the date of subcontract award, except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

CLAUSE I.82 - FAR 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS (JUNE 2010)

For the purpose of administering the Cost Accounting Standards (CAS) requirements under this contract, the Contractor shall take the steps outlined in paragraphs (b) through (i) and (k) through (n) of this clause:

(a) Definitions. As used in this clause-

Affected CAS-covered contract or subcontract means a contract or subcontract subject to CAS rules and regulations for which a Contractor or subcontractor-

(1) Used one cost accounting practice to estimate costs and a changed cost accounting practice to accumulate and report costs under the contract or subcontract; or

(2) Used a noncompliant practice for purposes of estimating or accumulating and reporting costs under the contract or subcontract.

Cognizant Federal agency official (CFAO) means the Contracting Officer assigned by the cognizant Federal agency to administer the CAS.

Desirable change means a compliant change to a Contractor's established or disclosed cost accounting practices that the CFAO finds is desirable and not detrimental to the Government and is, therefore, not subject to the no increased cost prohibition provisions of CAS-covered contracts and subcontracts affected by the change.

Fixed-price contracts and subcontracts means-

(1) Fixed-price contracts and subcontracts described at FAR 16.202, 16.203, (except when price adjustments are based on actual costs of labor or material, described at 16.203-1(a)(2)), and 16.207;

(2) Fixed-price incentive contracts and subcontracts where the price is not adjusted based on actual costs incurred (FAR subpart 16.4);

(3) Orders issued under indefinite-delivery contracts and subcontracts where final payment is not based on actual costs incurred (FAR subpart 16.5); and

(4) The fixed-hourly rate portion of time-and-materials and labor-hours contracts and subcontracts (FAR subpart 16.6).

Flexibly-priced contracts and subcontracts means-

(1) Fixed-price contracts and subcontracts described at FAR 16.203-1(a)(2), 16.204, 16.205, and 16.206;

(2) Cost-reimbursement contracts and subcontracts (FAR subpart 16.3);

(3) Incentive contracts and subcontracts where the price may be adjusted based on actual costs incurred (FAR subpart 16.4);

(4) Orders issued under indefinite-delivery contracts and subcontracts where final payment is based on actual costs incurred (FAR subpart 16.5); and

(5) The materials portion of time-and-materials contracts and subcontracts (FAR subpart 16.6).

Noncompliance means a failure in estimating, accumulating, or reporting costs to-

- (1) Comply with applicable CAS; or
- (2) Consistently follow disclosed or established cost accounting practices.

Required change means-

(1) A change in cost accounting practice that a Contractor is required to make in order to comply with applicable Standards, modifications or interpretations thereto, that subsequently become applicable to existing CAS-covered contracts or subcontracts due to the receipt of another CAS-covered contract or subcontract; or

(2) A prospective change to a disclosed or established cost accounting practice when the CFAO determines that the former practice was in compliance with applicable CAS and the change is necessary for the Contractor to remain in compliance.

Unilateral change means a change in cost accounting practice from one compliant practice to another compliant practice that a Contractor with a CAS-covered contract(s) or subcontract(s) elects to make that has not been deemed a desirable change by the CFAO and for which the Government will pay no aggregate increased costs.

(b) Submit to the CFAO a description of any cost accounting practice change as outlined in paragraphs (b)(1) through (3) of this clause (including revisions to the Disclosure Statement, if applicable), and any written statement that the cost impact of the change is immaterial. If a change in cost accounting practice is implemented without submitting the notice required by this paragraph, the CFAO may determine the change to be a failure to follow paragraph (a)(2) of the clause at FAR 52.230-2, Cost Accounting Standards; paragraph (a)(4) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices; paragraph (a)(4) of the clause at FAR 52.230-4, Disclosure and Consistency of Cost Accounting Practices–Foreign Concerns; or paragraph (a)(2) of the clause at FAR 52.230-5, Cost Accounting Standards–Educational Institution.

(1) When a description has been submitted for a change in cost accounting practice that is dependent on a contract award and that contract is subsequently awarded, notify the CFAO within 15 days after such award.

(2) For any change in cost accounting practice not covered by (b)(1) of this clause that is required in accordance with paragraphs (a)(3) and (a)(4)(i) of the clause at FAR 52.230-2; or paragraphs (a)(3), (a)(4)(i), or (a)(4)(iv) of the clause at FAR 52.230-5; submit a description of the change to the CFAO not less than 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) before implementation of the change.

(3) For any change in cost accounting practices proposed in accordance with paragraph (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2 and FAR 52.230-5; or with paragraph (a)(3) of the clauses at FAR 52.230-3 and FAR 52.230-4, submit a description of the change not less than 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) before implementation of the change. If the change includes a proposed retroactive date submit supporting rationale.

(4) Submit a description of the change necessary to correct a failure to comply with an applicable CAS or to follow a disclosed practice (as contemplated by paragraph (a)(5) of the clause at FAR 52.230-2 and FAR 52.230-5; or by paragraph (a)(4) of the clauses at FAR 52.230-3 and FAR 52.230-4)-

(i) Within 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) after the date of agreement with the CFAO that there is a noncompliance; or

(ii) In the event of Contractor disagreement, within 60 days after the CFAO notifies the Contractor of the determination of noncompliance.

(c) When requested by the CFAO, submit on or before a date specified by the CFAO-

(1) A general dollar magnitude (GDM) proposal in accordance with paragraph (d) or (g) of this clause. The Contractor may submit a detailed cost-impact (DCI) proposal in lieu of the requested GDM proposal provided the DCI proposal is in accordance with paragraph (e) or (h) of this clause;

(2) A detailed cost-impact (DCI) proposal in accordance with paragraph (e) or (h) of this clause;

(3) For any request for a desirable change that is based on the criteria in FAR 30.603-2(b)(3)(ii), the data necessary to demonstrate the required cost savings; and

(4) For any request for a desirable change that is based on criteria other than that in FAR 30.603-2(b)(3)(ii), a GDM proposal and any other data necessary for the CFAO to determine if the change is a desirable change.

(d) For any change in cost accounting practice subject to paragraph (b)(1), (b)(2), or (b)(3) of this clause, the GDM proposal shall-

(1) Calculate the cost impact in accordance with paragraph (f) of this clause;

(2) Use one or more of the following methods to determine the increase or decrease in cost accumulations:

(i) A representative sample of affected CAS-covered contracts and subcontracts.

(ii) The change in indirect rates multiplied by the total estimated base computed for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(iii) Any other method that provides a reasonable approximation of the total increase or decrease in cost accumulations for all affected fixed-price and flexibly-priced contracts and subcontracts;

(3) Use a format acceptable to the CFAO but, as a minimum, include the following data:

(i) The estimated increase or decrease in cost accumulations by Executive agency, including any impact the change may have on contract and subcontract incentives, fees, and profits, for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(ii) For unilateral changes, the increased or decreased costs to the Government for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts; and

(4) When requested by the CFAO, identify all affected CAS-covered contracts and subcontracts.

(e) For any change in cost accounting practice subject to paragraph (b)(1), (b)(2), or (b)(3) of this clause, the DCI proposal shall-

(1) Show the calculation of the cost impact in accordance with paragraph (f) of this clause;

(2) Show the estimated increase or decrease in cost accumulations for each affected CAS-covered contract and subcontract unless the CFAO and Contractor agree to include-

(i) Only those affected CAS-covered contracts and subcontracts having an estimate to complete exceeding a specified amount; and

(ii) An estimate of the total increase or decrease in cost accumulations for all affected CAS-covered contracts and subcontracts, using the results in paragraph (e)(2)(i) of this clause;

(3) Use a format acceptable to the CFAO but, as a minimum, include the information in paragraph (d)(3) of this clause; and

(4) When requested by the CFAO, identify all affected CAS-covered contracts and subcontracts.

(f) For GDM and DCI proposals that are subject to the requirements of paragraph (d) or (e) of this clause, calculate the cost impact as follows:

(1) The cost impact calculation shall include all affected CAS-covered contracts and subcontracts regardless of their status (i.e., open or closed) or the fiscal year in which the costs were incurred (i.e., whether or not the final indirect rates have been established).

(2) For unilateral changes-

(i) Determine the increased or decreased cost to the Government for flexibly-priced contracts and subcontracts as follows:

(A) When the estimated cost to complete using the changed practice exceeds the estimated cost to complete using the current practice, the difference is increased cost to the Government.

(B) When the estimated cost to complete using the changed practice is less than the estimated cost to complete using the current practice, the difference is decreased cost to the Government;

(ii) Determine the increased or decreased cost to the Government for fixed-priced contracts and subcontracts as follows:

(A) When the estimated cost to complete using the changed practice is less than the estimated cost to complete using the current practice, the difference is increased cost to the Government.

(B) When the estimated cost to complete using the changed practice exceeds the estimated cost to complete using the current practice, the difference is decreased cost to the Government;

(iii) Calculate the total increase or decrease in contract and subcontract incentives, fees, and profits associated with the increased or decreased costs to the Government in accordance with 48 CFR 9903.306(c). The associated increase or decrease is based on the difference between the negotiated incentives, fees, and profits and the amounts that would have been negotiated had the cost impact been known at the time the contracts and subcontracts were negotiated; and

(iv) Calculate the increased cost to the Government in the aggregate.

(3) For equitable adjustments for required or desirable changes-

(i) Estimated increased cost accumulations are the basis for increasing contract prices, target prices and cost ceilings; and

(ii) Estimated decreased cost accumulations are the basis for decreasing contract prices, target prices and cost ceilings.

(g) For any noncompliant cost accounting practice subject to paragraph (b)(4) of this clause, prepare the GDM proposal as follows:

(1) Calculate the cost impact in accordance with paragraph (i) of this clause.

(2) Use one or more of the following methods to determine the increase or decrease in contract and subcontract prices or cost accumulations, as applicable:

(i) A representative sample of affected CAS-covered contracts and subcontracts.

(ii) When the noncompliance involves cost accumulation the change in indirect rates multiplied by the applicable base for only flexibly-priced contracts and subcontracts.

(iii) Any other method that provides a reasonable approximation of the total increase or decrease.

(3) Use a format acceptable to the CFAO but, as a minimum, include the following data:

(i) The total increase or decrease in contract and subcontract price and cost accumulations, as applicable, by Executive agency, including any impact the noncompliance may have on contract and subcontract incentives, fees, and profits, for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(ii) The increased or decreased cost to the Government for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(iii) The total overpayments and underpayments made by the Government during the period of noncompliance.

(4) When requested by the CFAO, identify all CAS-covered contracts and subcontracts.

(h) For any noncompliant practice subject to paragraph (b)(4) of this clause, prepare the DCI proposal as follows:

(1) Calculate the cost impact in accordance with paragraph (i) of this clause.

(2) Show the increase or decrease in price and cost accumulations for each affected CAS-covered contract and subcontract unless the CFAO and Contractor agree to-

(i) Include only those affected CAS-covered contracts and subcontracts having-

(A) Contract and subcontract values exceeding a specified amount when the noncompliance involves estimating costs; and

(B) Incurred costs exceeding a specified amount when the noncompliance involves accumulating costs; and

(ii) Estimate the total increase or decrease in price and cost accumulations for all affected CAS-covered contracts and subcontracts using the results in paragraph (h)(2)(i) of this clause.

(3) Use a format acceptable to the CFAO that, as a minimum, include the information in paragraph (g)(3) of this clause.

(4) When requested by the CFAO, identify all CAS-covered contracts and subcontracts.

(i) For GDM and DCI proposals that are subject to the requirements of paragraph (g) or (h) of this clause, calculate the cost impact as follows:

(1) The cost impact calculation shall include all affected CAS-covered contracts and subcontracts regardless of their status (*i.e.*, open or closed) or the fiscal year in which the costs are incurred (*i.e.*, whether or not the final indirect rates have been established).

(2) For noncompliances that involve estimating costs, determine the increased or decreased cost to the Government for fixed-price contracts and subcontracts as follows:

(i) When the negotiated contract or subcontract price exceeds what the negotiated price would have been had the Contractor used a compliant practice, the difference is increased cost to the Government.

(ii) When the negotiated contract or subcontract price is less than what the negotiated price would have been had the Contractor used a compliant practice, the difference is decreased cost to the Government.

(3) For noncompliances that involve accumulating costs, determine the increased or decreased cost to the Government for flexibly-priced contracts and subcontracts as follows:

(i) When the costs that were accumulated under the noncompliant practice exceed the costs that would have been accumulated using a compliant practice (from the time the noncompliant practice was first implemented until the date the noncompliant practice was replaced with a compliant practice), the difference is increased cost to the Government.

(ii) When the costs that were accumulated under the noncompliant practice are less than the costs that would have been accumulated using a compliant practice (from the time the noncompliant practice was first implemented until the date the noncompliant practice was replaced with a compliant practice), the difference is decreased cost to the Government.

(4) Calculate the total increase or decrease in contract and subcontracts incentives, fees, and profits associated with the increased or decreased cost to the Government in accordance with 48 CFR 9903.306(c). The associated increase or decrease is based on the difference between the negotiated incentives, fees, and profits and the amounts that would have been negotiated had the Contractor used a compliant practice.

(5) Calculate the increased cost to the Government in the aggregate.

(j) If the Contractor does not submit the information required by paragraph (b) or (c) of this clause within the specified time, or any extension granted by the CFAO, the CFAO may take one or both of the following actions:

(1) Withhold an amount not to exceed 10 percent of each subsequent amount payment to the Contractor's affected CAS-covered contracts, (up to the estimated general dollar magnitude of the cost impact), until such time as the Contractor provides the required information to the CFAO.

(2) Issue a final decision in accordance with FAR 33.211 and unilaterally adjust the contract(s) by the estimated amount of the cost impact.

(k) Agree to-

(1) Contract modifications to reflect adjustments required in accordance with paragraph (a)(4)(ii) or (a)(5) of the clauses at FAR 52.230-2 and 52.230-5; or with paragraph (a)(3)(i) or (a)(4) of the clauses at FAR 52.230-3 and FAR 52.230-4; and

(2) Repay the Government for any aggregate increased cost paid to the Contractor.

(l) For all subcontracts subject to the clauses at FAR 52.230-2, 52.230-3, 52.230-4, or 52.230-5-

(1) So state in the body of the subcontract, in the letter of award, or in both (do not use self-deleting clauses);

(2) Include the substance of this clause in all negotiated subcontracts; and

(3) Within 30 days after award of the subcontract, submit the following information to the Contractor's CFAO:

(i) Subcontractor's name and subcontract number.

(ii) Dollar amount and date of award.

(iii) Name of Contractor making the award.

(m) Notify the CFAO in writing of any adjustments required to subcontracts under this contract and agree to an adjustment to this contract price or estimated cost and fee. The Contractor shall-

(1) Provide this notice within 30 days after the Contractor receives the proposed subcontract adjustments; and

(2) Include a proposal for adjusting the higher-tier subcontract or the contract appropriately.

(n) For subcontracts containing the clause or substance of the clause at FAR 52.230-2, FAR 52.230-3, FAR 52.230-4, or FAR 52.230-5, require the

subcontractor to comply with all Standards in effect on the date of award or of final agreement on price, as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data, whichever is earlier.

CLAUSE I.83 - FAR 52.232-17 INTEREST (MAY 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

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

(c) *Final Decisions*. The Contracting Officer will issue a final decision as required by 33.211 if—

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

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

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

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

(e) Amounts shall be due at the earliest of the following dates: (1) The date fixed under this contract.

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

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

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

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

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

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

CLAUSE I.84 - FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984)

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

CLAUSE I.85 - FAR 52.232-24 PROHIBITION OF ASSIGNMENT OF CLAIMS (MAY 2014)

The assignment of claims under the Assignment of Claims Act of 1940 "(31 U.S.C. 3727, 41 U.S.C. 6305)" is prohibited for this contract.

CLAUSE I.86 - FAR 52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

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

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

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

bind the Government or any Government authorized end user to such clause.

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

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

CLAUSE I.87 - FAR 52.232-40 PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (MAR 2023)

(a) (1) In accordance with 31 U.S.C. 3903 and 10 U.S.C. 3801, within 15 days after receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(2) The Contractor agrees to make such payments to its small business subcontractors without any further consideration from or fees charged to the subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial products or commercial services.

CLAUSE I.88 - FAR 52.233-1 DISPUTES (MAY 2014) (ALTERNATE I)(DEC 1991)

(a) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

(b) Except as provided in 41 U.S.C. chapter 71, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under 41 U.S.C. chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C. chapter 71. The submission may be converted to a claim under 41 U.S.C. chapter 71, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d) (1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2) (i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding \$100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in 41 U.S.C. chapter 71.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

CLAUSE I.89 - FAR 52.233-3 PROTEST AFTER AWARD (AUG 1996) (ALTERNATE I) (JUNE 1985)

(a) Upon receipt of a notice of protest (as defined in 33.101 of the FAR) the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause.

Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either --

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is cancelled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if -

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within thirty (30) days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not cancelled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not cancelled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this Clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs.

CLAUSE I.90 - FAR 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

CLAUSE I.91 - FAR 52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

CLAUSE I.92 - FAR 52.237-3 CONTINUITY OF SERVICES (JAN 1991)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another contractor, may continue them. The Contractor agrees to-

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to 90 days after this contract expires and (2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (*i.e.*, costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

CLAUSE I.93 - FAR 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)

(a) Notwithstanding any other clause of this contract-

(1) The Contracting Officer may at any time issue to the Contractor a written notice of intent to disallow specified costs incurred or planned for incurrence under this contract that have been determined not to be allowable under the contract terms; and

(2) The Contractor may, after receiving a notice under paragraph (a)(1) of this clause, submit a written response to the Contracting Officer, with justification for allowance of the costs. If the Contractor does respond within 60 days, the Contracting Officer shall, within 60 days of receiving the response, either make a written withdrawal of the notice or issue a written decision.

(b) Failure to issue a notice under this Notice of Intent to Disallow Costs clause shall not affect the Government's rights to take exception to incurred costs.

CLAUSE I.94 - FAR 52.242-3 PENALTIES FOR UNALLOWABLE COSTS (DEC 2022)(DEVIATION)(PF 2022-23)(OCT 2021)

(a) *Definition. Proposal*, as used in this clause, means either—

(1) A final indirect cost rate proposal submitted by the Contractor after the expiration of its fiscal year which-

- (i) Relates to any payment made on the basis of billing rates; or
- (ii) Will be used in negotiating the final contract price; or

(2) The final statement of costs incurred and estimated to be incurred under the Incentive Price Revision clause (if applicable), which is used to establish the final contract price.

(b) Contractors which include unallowable indirect costs in a proposal may be subject to penalties. The penalties are prescribed in 10 U.S.C. 3748 or 41 U.S.C. chapter 43, as applicable, which is implemented in Section 42.709 of the Federal Acquisition Regulation (FAR).

(c) The Contractor shall not include in any proposal any cost that is unallowable, as defined in subpart 2.1 of the FAR, or an executive agency supplement to the FAR.

(d) If the Contracting Officer determines that a cost submitted by the Contractor in its proposal is expressly unallowable under a cost principle in the FAR, or an executive agency supplement to the FAR, that defines the allowability of specific selected costs, the Contractor shall be assessed a penalty equal to—

(1) The amount of the disallowed cost allocated to this contract; plus

(2) Simple interest, to be computed-

(i) On the amount the Contractor was paid (whether as a progress or billing payment) in excess of the amount to which the Contractor was entitled; and

(ii) Using the applicable rate effective for each six-month interval prescribed by the Secretary of the Treasury pursuant to Pub.L.92-41 (85 Stat.97).

(e) If the Contracting Officer determines that a cost submitted by the Contractor in its proposal includes a cost previously determined to be unallowable for that Contractor, then the Contractor will be assessed a penalty in an amount equal to two times the amount of the disallowed cost allocated to this contract.

(f) Determinations under paragraphs (d) and (e) of this clause are final decisions within the meaning of 41 U.S.C. chapter 71, Contract Disputes.

(g) Pursuant to the criteria in FAR 42.709-6, the Contracting Officer may waive the penalties in paragraph (d) or (e) of this clause.

(h) Payment by the Contractor of any penalty assessed under this clause does not constitute repayment to the Government of any unallowable cost which has been paid by the Government to the Contractor.

CLAUSE I.95 - FAR 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)(DEVIATION)(PF 2022-23)(OCT 2021)

(a) The Contractor shall-

(1) Certify any proposal to establish or modify final indirect cost rates;

(2) Use the format in paragraph (c) of this clause to certify; and

(3) Have the certificate signed by an individual of the Contractor's organization at a level no lower than a vice president or chief financial officer of the business segment of the Contractor that submits the proposal.

(b) Failure by the Contractor to submit a signed certificate, as described in this clause, may result in final indirect costs at rates unilaterally established by the Contracting Officer.

(c) The certificate of final indirect costs shall read as follows:

Certificate of Final Indirect Costs

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

1. All costs included in this proposal (identify proposal and date) to establish final indirect cost rates for (identify period covered by rate) are allowable in accordance with the cost principles of the Federal Acquisition Regulation (FAR) and its supplements applicable to the contracts to which the final indirect cost rates will apply; and

2. This proposal does not include any costs which are expressly unallowable under applicable cost principles of the FAR or its supplements.

Firm: _____

Signature: _____

Name of Certifying Official: _____

Title: _____

Date of Execution: _____

**CLAUSE I.96 - FAR 52.242-5 PAYMENTS TO SMALL BUSINESS
SUBCONTRACTORS (JAN 2017)**

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

Reduced payment means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

Untimely payment means a payment that is more than 90 days past due under the terms and conditions of a subcontract, for supplies and services for which the Government has paid the prime contractor.

(b) *Notice*. The Contractor shall notify the Contracting Officer, in writing, not later than 14 days after-

(1) A small business subcontractor was entitled to payment under the terms and conditions of the subcontract; and

(2) The Contractor-

(i) Made a reduced or untimely payment to the small business subcontractor;
or

(ii) Failed to make a payment, which is now untimely.

(c) *Content of notice*. The Contractor shall include the reason(s) for making the reduced or untimely payment in any notice required under paragraph (b) of this clause.

CLAUSE I.97 - FAR 52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

CLAUSE I.98 - FAR 52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protégé Program (Pub. L. 101-510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its protégés.

CLAUSE I.99 - FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES (DEC 2023)

(a) Definitions. As used in this clause—

Commercial product, commercial service and commercially available off-the-shelf item have the meanings contained in Federal Acquisition Regulation (FAR) 2.101.

Subcontract includes a transfer of commercial products or commercial services between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial products, commercial services, or non-developmental items as components of items to be supplied under this contract.

(c) (1) The Contractor shall insert the following clauses in subcontracts for commercial products or commercial services:

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (Nov 2021) (41 U.S.C. 3509), if the subcontract exceeds the threshold specified in FAR 3.1004(a) on the date of subcontract award, and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(ii) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (Jun 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.

(iii) 52.203-17, Contractor Employee Whistleblower Rights (Nov 2023) (41 U.S.C. 4712); this clause does not apply to contracts of DoD, NASA, the Coast Guard, or applicable elements of the intelligence community—see FAR 3.900(a).

(iv) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017).

(v) 52.204-21, Basic Safeguarding of Covered Contractor Information Systems (Nov 2021) , other than subcontracts for commercially available off-the-shelf items, if flow down is required in accordance with paragraph (c) of FAR clause 52.204-21.

(vi) 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab Covered Entities (Dec 2023) (Section 1634 of Pub. L. 115-91).

(vii) 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (Nov 2021) (Section 889(a)(1)(A) of Pub. L. 115-232).

(viii) 52.204-27, Prohibition on a ByteDance Covered Application (Jun 2023) (Section 102 of Division R of Pub. L. 117-328).

(ix) (A) 52.204–30, Federal Acquisition Supply Chain Security Act Orders—Prohibition. (Dec 2023) (Pub. L. 115–390, title II).

(B) Alternate I (Dec 2023) of 52.204–30.

(x) 52.219-8, Utilization of Small Business Concerns (Sep 2023) (15 U.S.C.637(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR 19.702(a) on the date of subcontract award, the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(xi) 52.222-21, Prohibition of Segregated Facilities (Apr 2015).

(xii) 52.222-26, Equal Opportunity (Sept 2016) (E.O.11246).

(xiii) 52.222-35, Equal Opportunity for Veterans (Jun 2020) (38 U.S.C.4212(a));

(xiv) 52.222-36, Equal Opportunity for Workers with Disabilities (Jun 2020)(29 U.S.C.793).

(xv) 52.222-37, Employment Reports on Veterans (Jun 2020) (38 U.S.C.4212).

(xvi) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause 52.222-40.

(xvii) (A) 52.222-50, Combating Trafficking in Persons (Nov 2021) (22 U.S.C. chapter 78 and E.O. 13627).

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

(xviii) 52.222-55, Minimum Wages for Contractor Workers under Executive Order 14026 (Jan 2022), if flow down is required in accordance with paragraph (k) of FAR clause 52.222-55.

(xix) 52.222-62, Paid Sick Leave Under Executive Order 13706 (Jan 2022) (E.O. 13706), if flow down is required in accordance with paragraph (m) of FAR clause 52.222-62.

(xx) (A) 52.224-3, Privacy Training (Jan 2017) (5 U.S.C. 552a) if flow down is required in accordance with 52.224-3(f).

(B) Alternate I (Jan 2017) of 52.224-3, if flow down is required in accordance with 52.224-3(f) and the agency specifies that only its agency-provided training is acceptable).

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

(xxii) 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (Mar 2023) , if flow down is required in accordance with paragraph (c) of FAR clause 52.232-40.

(xxiii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Nov 2021) (46 U.S.C. 55305 and 10 U.S.C.2631), if flow down is required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the Contractor may flow down to subcontracts for commercial products or commercial services a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

CLAUSE I.100 - FAR 52.246-26 REPORTING NONCONFORMING ITEMS (NOV 2021)

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

Common item means an item that has multiple applications versus a single or peculiar application.

Counterfeit item means an unlawful or unauthorized reproduction, substitution, or alteration that has been knowingly mismarked, misidentified, or otherwise misrepresented to be an authentic, unmodified item from the original manufacturer, or a source with the express written authority of the original manufacturer or current design activity, including an authorized aftermarket manufacturer. Unlawful or unauthorized substitution includes used items represented as new, or the false identification of grade, serial number, lot number, date code, or performance characteristics.

Critical item means an item, the failure of which is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the item; or is likely to prevent performance of a vital agency mission.

Critical nonconformance means a nonconformance that is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the supplies or services; or is likely to prevent performance of a vital agency mission.

Design activity means an organization, Government or contractor, that has responsibility for the design and configuration of an item, including the preparation or

maintenance of design documents. Design activity could be the original organization, or an organization to which design responsibility has been transferred.

Major nonconformance means a nonconformance, other than critical, that is likely to result in failure of the supplies or services, or to materially reduce the usability of the supplies or services for their intended purpose.

Suspect counterfeit item means an item for which credible evidence (including but not limited to, visual inspection or testing) provides reasonable doubt that the item is authentic.

(b) The Contractor shall—

(1) Screen Government-Industry Data Exchange Program (GIDEP) reports, available at www.gidep.org, as a part of the Contractor's inspection system or program for the control of quality, to avoid the use and delivery of counterfeit or suspect counterfeit items or delivery of items that contain a major or critical nonconformance. This requirement does not apply if the Contractor is a foreign corporation or partnership that does not have an office, place of business, or fiscal paying agent in the United States;

(2) Provide written notification to the Contracting Officer within 60 days of becoming aware or having reason to suspect, such as through inspection, testing, record review, or notification from another source (e.g., seller, customer, third party) that any end item, component, subassembly, part, or material contained in supplies purchased by the Contractor for delivery to, or for, the Government is counterfeit or suspect counterfeit;

(3) Retain counterfeit or suspect counterfeit items in its possession at the time of discovery until disposition instructions have been provided by the Contracting Officer; and

(4) Except as provided in paragraph (c) of this clause, submit a report to GIDEP at www.gidep.org within 60 days of becoming aware or having reason to suspect, such as through inspection, testing, record review, or notification from another source (e.g., seller, customer, third party) that an item purchased by the Contractor for delivery to, or for, the Government is—

(i) A counterfeit or suspect counterfeit item; or

(ii) A common item that has a major or critical nonconformance.

(c) The Contractor shall not submit a report as required by paragraph (b)(4) of this clause, if—

(1) The Contractor is a foreign corporation or partnership that does not have an office, place of business, or fiscal paying agent in the United States;

(2) The Contractor is aware that the counterfeit, suspect counterfeit, or nonconforming item is the subject of an on-going criminal investigation, unless the report is approved by the cognizant law-enforcement agency; or

(3) For nonconforming items other than counterfeit or suspect counterfeit items, it can be confirmed that the organization where the defect was generated (*e.g.*, original component manufacturer, original equipment manufacturer, aftermarket manufacturer, or distributor that alters item properties or configuration) has not released the item to more than one customer.

(d) Reports submitted in accordance with paragraph (b)(4) of this clause shall not include—

(1) Trade secrets or confidential commercial or financial information protected under the Trade Secrets Act (18 U.S.C. 1905); or

(2) Any other information prohibited from disclosure by statute or regulation.

(e) Additional guidance on the use of GIDEP is provided at <http://www.giddep.org/about/opmanual/opmanual.htm>.

(f) If this is a contract with the Department of Defense, as provided in paragraph (c)(5) of section 818 of the National Defense Authorization Act for Fiscal Year 2012 (Pub. L. 112-81), the Contractor or subcontractor that provides a written report or notification under this clause that the end item, component, part, or material contained electronic parts (*i.e.*, an integrated circuit, a discrete electronic component (including, but not limited to, a transistor, capacitor, resistor, or diode), or a circuit assembly)) that are counterfeit electronic parts or suspect counterfeit electronic parts shall not be subject to civil liability on the basis of such reporting, provided that the Contractor or any subcontractor made a reasonable effort to determine that the report was factual.

(g) Subcontracts.

(1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert this clause, including this paragraph (g), in subcontracts that are for—

(i) Items subject to higher-level quality standards in accordance with the clause at Federal Acquisition Regulation (FAR) 52.246-11, Higher-Level Contract Quality Requirement;

(ii) Items that the Contractor determines to be critical items for which use of the clause is appropriate;

(iii) Electronic parts or end items, components, parts, or materials containing electronic parts, whether or not covered in paragraph (g)(1)(i) or (ii) of this clause, if the subcontract exceeds the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, and this contract is by, or for, the Department of Defense (as required by paragraph (c)(4) of section 818 of the National Defense Authorization Act for Fiscal Year 2012 (Pub. L. 112-81)); or

(iv) For the acquisition of services, if the subcontractor will furnish, as part of the service, any items that meet the criteria specified in paragraphs (g)(1)(i) through (g)(1)(iii) of this clause.

(2) The Contractor shall not insert the clause in subcontracts for—

(i) Commercial products and commercial services; or

(ii) Medical devices that are subject to the Food and Drug Administration reporting requirements at 21 CFR 803.

(3) The Contractor shall not alter the clause other than to identify the appropriate parties.

CLAUSE I.101 - FAR 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)

When the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:

Transportation is for the U.S. Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government.

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be:

Transportation is for the U.S. Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement Contract No. 89243024CSC000002. This may be confirmed by contacting the U.S. Department of Energy, Fermi Site Office, Kirk Road and Pine Street, PO Box 2000, Batavia, Illinois 60510.

CLAUSE I.102 - FAR 52.247-63 PREFERENCE FOR U.S. FLAG AIR CARRIERS (JUN 2003)

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

International air transportation means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

United States means the 50 States, the District of Columbia, and outlying areas.

U.S.-flag air carrier means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

(b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118)(Fly America-Act) requires that all Federal agencies and Government Contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

(c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag air carriers for international air transportation of personnel (and their personal effects) or property.

(d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

STATEMENT OF UNAVAILABILITY OF U.S.-FLAG AIR CARRIERS

International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see Section 47.403 of the Federal Acquisition Regulation): [State reasons]:

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase order under this contract that may involve international air transportation.

CLAUSE I.103 - FAR 52.247-64 PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (NOV 2021)

(a) Except as provided in paragraph (e) of this clause, the Cargo Preference Act of 1954 (46 U.S.C. App. 1241(b)) requires that Federal departments and agencies shall transport in privately owned U.S.-flag commercial vessels at least 50 percent of the gross tonnage of equipment, materials, or commodities that may be transported in ocean vessels (computed separately for dry bulk carriers, dry cargo liners, and tankers). Such transportation shall be accomplished when any equipment, materials, or commodities, located within or outside the United States, that may be transported by ocean vessel are -

(1) Acquired for a U.S. Government agency account;

(2) Furnished to, or for the account of, any foreign nation without provision for reimbursement;

(3) Furnished for the account of a foreign nation in connection with which the United States advances funds or credits, or guarantees the convertibility of foreign currencies; or

(4) Acquired with advance of funds, loans, or guaranties made by or on behalf of the United States.

(b) The Contractor shall use privately owned U.S.-flag commercial vessels to ship at least 50 percent of the gross tonnage involved under this contract (computed separately for dry bulk carriers, dry cargo liners, and tankers) whenever shipping any equipment, materials, or commodities under the conditions set forth in paragraph (a) of this clause, to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.

(c) (1) The Contractor shall submit one legible copy of a rated on-board ocean bill of lading for each shipment to both --

(i) The Contracting Officer, and

(ii) The:Office of Cargo Preference Maritime Administration (MAR-590)
400 Seventh Street, SW
Washington DC 20590

Subcontractor bills of lading shall be submitted through the Prime Contractor.

(2) The Contractor shall furnish these bill of lading copies (i) within 20 working days of the date of loading for shipments originating in the United States, or (ii)

within 30 working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:

- (A) Sponsoring U.S. Government agency.
- (B) Name of vessel.
- (C) Vessel flag of registry.
- (D) Date of loading.
- (E) Port of loading.
- (F) Port of final discharge.
- (G) Description of commodity.
- (H) Gross weight in pounds and cubic feet if available.
- (I) Total ocean freight revenue in U.S. dollars.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts or purchase orders under this contract, except those described in paragraph (e)(4).

(e) The requirement in paragraph (a) does not apply to --

(1) Cargoes carried in vessels as required or authorized by law or treaty;

(2) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. 2353);

(3) Shipments of classified supplies when the classification prohibits the use of non-Government vessels; and

(4) Subcontracts or purchase orders for the acquisition of commercial products or commercial services unless —

(i) This contract is —

(A) A contract or agreement for ocean transportation services; or

(B) A construction contract; or

(ii) The supplies being transported are —

(A) Items the Contractor is reselling or distributing to the Government without adding value. (Generally, the Contractor does not add value to the items when it subcontracts items for f.o.b. destination shipment); or

(B) Shipped in direct support of U.S. military —

(1) Contingency operations;

(2) Exercises; or

(3) Forces deployed in connection with United Nations or North Atlantic Treaty Organization humanitarian or peacekeeping operations.

(f) Guidance regarding fair and reasonable rates for privately owned U.S.-flag commercial vessels may be obtained from the:

Office of Costs and Rates
Maritime Administration
400 Seventh Street, SW
Washington DC 20590
Phone: 202-366-4610

CLAUSE I.104 - FAR 52.249-6 TERMINATION (COST-REIMBURSEMENT) (MAY 2004); MODIFIED BY DEAR 970.4905-1 (DEC 2000)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part, if --

(1) The Contracting Officer determines that a termination is in the Government's interest; or

(2) The Contractor defaults in performing this contract and fails to cure the default within 10 days (unless extended by the Contracting Officer) after receiving a notice specifying the default. "Default" includes failure to make progress in the work so as to endanger performance.

(b) The Contracting Officer shall terminate by delivering to the Contractor a Notice of

Termination specifying whether termination is for default of the Contractor or for convenience of the Government, the extent of termination, and the effective date. If, after termination for default, it is determined that the Contractor was not in default or that the Contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the Contractor as set forth in the Excusable Delays clause, the rights and obligations of the parties will be the same as if the termination was for the convenience of the Government.

(c) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause), except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts, the cost of which would be reimbursable in whole or in part, under this contract; approval or ratification will be final for purposes of this clause.

(6) Transfer title (if not already transferred) and, as directed by the Contracting Officer, deliver to the Government --

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government; and

(iii) The jigs, dies, fixtures, and other special tools and tooling acquired or manufactured for this contract, the cost of which the Contractor has been or will be reimbursed under this contract.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (c) (6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(d) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(e) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept the items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(f) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension.

If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(g) Subject to paragraph (f) of this clause, the Contractor and the Contracting Officer may agree on the whole or any part of the amount to be paid (including an allowance for fee) because of the termination. The contract shall be amended, and the Contractor paid the agreed amount.

(h) If the Contractor and the Contracting Officer fail to agree in whole or in part on the

amount of costs and/or fee to be paid because of the termination of work, the Contracting Officer shall determine, on the basis of information available, the amount, if any, due the Contractor, and shall pay that amount, which shall include the following:

(1) All costs reimbursable under this contract, not previously paid, for the performance of this contract before the effective date of the termination, and those costs that may continue for a reasonable time with the approval of or as directed by the Contracting Officer; however, the Contractor shall discontinue those costs as rapidly as practicable.

(2) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subparagraph (h)(1) of this clause.

(3) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory. If the termination is for default, no amounts for the preparation of the Contractor's termination settlement proposal may be included.

(4) A portion of the fee payable under the contract, determined as follows:

(i) If the contract is terminated for the convenience of the Government, the settlement shall include a percentage of the fee equal to the percentage of completion of work contemplated under the contract, but excluding subcontract effort included in subcontractors' termination proposals, less previous payments for fee.

(ii) If the contract is terminated for default, the total fee payable shall be such proportionate part of the fee as the total number of articles (or amount of services) delivered to and accepted by the Government is to the total number of articles (or amount of services) of a like kind required by the contract.

(5) If the settlement includes only fee, it will be determined under subparagraph (h) (4) of this clause.

(i) The cost principles and procedures in Part 31 of the Federal Acquisition Regulation, as supplemented in Subpart 970.31 of the Department of Energy Acquisition Regulation,

in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (f), (h), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (f) and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (f), (h) or (l) of this clause, the Government shall pay the Contractor --

(1) The amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken; or

(2) The amount finally determined on an appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted --

(1) All unliquidated advance or other payments to the Contractor, under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of materials, supplies, or other things acquired by the Contractor or sold under this clause and not recovered by or credited to the Government.

(l) The Contractor and Contracting Officer must agree to any equitable adjustment in fee for the continued portion of the contract when there is a partial termination. The Contracting Officer shall amend the contract to reflect the agreement.

(m) (1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or

disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) The provisions of this clause relating to fee are inapplicable if this contract does not include a fee.

CLAUSE I.105 - FAR 52.249-14 EXCUSABLE DELAYS (APR 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless --

- (1) The subcontracted supplies or services were obtainable from other sources;
- (2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and
- (3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

CLAUSE I.106 - FAR 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 2012) (SC ALTERNATE) (APR 2018)

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government unless otherwise specified in the contract. The provisions of the Section I Clause DEAR 970.5245-1 entitled "Property," apply to all property acquired under such authorization.

CLAUSE I.107 - FAR 52.251-2 INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES (JAN 1991)

The Contracting Officer may issue the Contractor an authorization to obtain interagency fleet management system (IFMS) vehicles and related services for use in the performance of this contract. The use, service, and maintenance of interagency fleet management system vehicles and the use of related services by the Contractor shall be in accordance with 41 CFR 101-39 and 41 CFR 101-38.301-1.

CLAUSE I.108 - FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (NOV 2020)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Department of Energy Acquisition Regulation (48 CFR Chapter 9) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

CLAUSE I.109 - FAR 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the Parties will be determined based on the content of the required form.

CLAUSE I.110 - DEAR 952.203-70 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (DEC 2000)

(a) The contractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or -leased sites.

(b) The contractor shall insert or have inserted the substance of this clause, including

this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or - leased sites.

CLAUSE I.111 - DEAR 952.204-2 SECURITY REQUIREMENTS (AUG 2016)

(a) *Responsibility.* It is the Contractor's duty to protect all classified information, special nuclear material, and other DOE property. The Contractor shall, in accordance with DOE security regulations and requirements, be responsible for protecting all classified information and all classified matter (including documents, material and special nuclear material) which are in the Contractor's possession in connection with the performance of work under this contract against sabotage, espionage, loss or theft. Except as otherwise expressly provided in this contract, the Contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter or special nuclear material in the possession of the Contractor or any person under the Contractor's control in connection with performance of this contract. If retention by the Contractor of any classified matter is required after the completion or termination of the contract, the Contractor shall identify the items and classification levels and categories of matter proposed for retention, the reasons for the retention, and the proposed period of retention. If the retention is approved by the Contracting Officer, the security provisions of the contract shall continue to be applicable to the classified matter retained. Special nuclear material shall not be retained after the completion or termination of the contract.

(b) *Regulations.* The Contractor agrees to comply with all security regulations and contract requirements of DOE as incorporated into the contract.

(c) *Definition of classified information.* The term *Classified Information* means information that is classified as Restricted Data or Formerly Restricted Data under the Atomic Energy Act of 1954, or information determined to require protection against unauthorized disclosure under Executive Order 12958, *Classified National Security Information*, as amended, or prior executive orders, which is identified as *National Security Information*.

(d) *Definition of restricted data.* The term *Restricted Data* means all data concerning design, manufacture, or utilization of atomic weapons; production of special nuclear material; or use of special nuclear material in the production of energy, but excluding data declassified or removed from the Restricted Data category pursuant to 42 U.S.C. 2162 [Section 142, as amended, of the Atomic Energy Act of 1954].

(e) *Definition of formerly restricted data.* The term "*Formerly Restricted Data*" means information removed from the Restricted Data category based on a joint determination by DOE or its predecessor agencies and the Department of Defense that the information - (1) Relates primarily to the military utilization of atomic weapons; and (2) can be adequately protected as National Security Information. However, such information is subject to the same restrictions on transmission to other countries or regional defense organizations that apply to Restricted Data.

(f) *Definition of national security information.* The term “*National Security Information*” means information that has been determined, pursuant to Executive Order 12958, Classified National Security Information, as amended, or any predecessor order, to require protection against unauthorized disclosure, and that is marked to indicate its classified status when in documentary form.

(g) *Definition of special nuclear material.* The term “special nuclear material” means - (1) Plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which, pursuant to 42 U.S.C. 2071 [section 51 as amended, of the Atomic Energy Act of 1954] has been determined to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

(h) *Access authorizations of personnel.*

(1) The Contractor shall not permit any individual to have access to any classified information or special nuclear material, except in accordance with the Atomic Energy Act of 1954, and the DOE's regulations and contract requirements applicable to the particular level and category of classified information or particular category of special nuclear material to which access is required.

(2) The Contractor must conduct a thorough review, as defined at 48 CFR 904.401, of an uncleared applicant or uncleared employee, and must test the individual for illegal drugs, prior to selecting the individual for a position requiring a DOE access authorization.

(i) A review must - Verify an uncleared applicant's or uncleared employee's educational background, including any high school diploma obtained within the past five years, and degrees or diplomas granted by an institution of higher learning; contact listed employers for the last three years and listed personal references; conduct local law enforcement checks when such checks are not prohibited by state or local law or regulation and when the uncleared applicant or uncleared employee resides in the jurisdiction where the Contractor is located; and conduct a credit check and other checks as appropriate.

(ii) Contractor reviews are not required for an applicant for DOE access authorization who possesses a current access authorization from DOE or another Federal agency, or whose access authorization may be reapproved without a federal background investigation pursuant to Executive Order 12968, Access to Classified Information (August 4, 1995), Sections 3.3(c) and (d).

(iii) In collecting and using this information to make a determination as to whether it is appropriate to select an uncleared applicant or uncleared employee to a position requiring an access authorization, the Contractor must comply with all applicable laws, regulations, and Executive Orders, including those - (A) Governing the processing and privacy of an individual's information, such as the

Fair Credit Reporting Act, Americans with Disabilities Act (ADA), and Health Insurance Portability and Accountability Act; and (B) prohibiting discrimination in employment, such as under the ADA, Title VII and the Age Discrimination in Employment Act, including with respect to pre- and post-offer of employment disability related questioning.

(iv) In addition to a review, each candidate for a DOE access authorization must be tested to demonstrate the absence of any illegal drug, as defined in 10 CFR 707.4. All positions requiring access authorizations are deemed *testing designated positions* in accordance with 10 CFR part 707. All employees possessing access authorizations are subject to applicant, random or for cause testing for use of illegal drugs. DOE will not process candidates for a DOE access authorization unless their tests confirm the absence from their system of any illegal drug.

(v) When an uncleared applicant or uncleared employee receives an offer of employment for a position that requires a DOE access authorization, the Contractor shall not place that individual in such a position prior to the individual's receipt of a DOE access authorization, unless an approval has been obtained from the head of the cognizant local security office. If the individual is hired and placed in the position prior to receiving an access authorization, the uncleared employee may not be afforded access to classified information or matter or special nuclear material (in categories requiring access authorization) until an access authorization has been granted.

(vi) The Contractor must maintain a record of information concerning each uncleared applicant or uncleared employee who is selected for a position requiring an access authorization. Upon request only, the following information will be furnished to the head of the cognizant local DOE Security Office:

(A) The date(s) each Review was conducted;

(B) Each entity that provided information concerning the individual;

(C) A certification that the review was conducted in accordance with all applicable laws, regulations, and Executive Orders, including those governing the processing and privacy of an individual's information collected during the review;

(D) A certification that all information collected during the review was reviewed and evaluated in accordance with the Contractor's personnel policies; and

(E) The results of the test for illegal drugs.

(i) *Criminal liability.* It is understood that disclosure of any classified information

relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to protect any classified information, special nuclear material, or other Government property that may come to the Contractor or any person under the Contractor's control in connection with work under this contract, may subject the Contractor, its agents, employees, or Subcontractors to criminal liability under the laws of the United States (see the Atomic Energy Act of 1954, 42 U.S.C. 2011 *et seq.*; 18 U.S.C. 793 and 794).

(j) *Foreign ownership, control, or influence.*

(1) The Contractor shall immediately provide the cognizant security office written notice of any change in the extent and nature of foreign ownership, control or influence over the Contractor which would affect any answer to the questions presented in the Standard Form (SF) 328, *Certificate Pertaining to Foreign Interests*, executed prior to award of this contract. The Contractor will submit the Foreign Ownership, Control or Influence (FOCI) information in the format directed by DOE. When completed the Contractor must print and sign one copy of the SF 328 and submit it to the Contracting Officer. In addition, any 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.

(2) If a Contractor has changes involving foreign ownership, control, or influence, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, DOE will consider proposals made by the Contractor to avoid or mitigate foreign influences.

(3) If the cognizant security office at any time determines that the Contractor is, or is potentially, subject to foreign ownership, control, or influence, the Contractor shall comply with such instructions as the Contracting Officer shall provide in writing to protect any classified information or special nuclear material.

(4) The Contracting Officer may terminate this contract for default either if the Contractor fails to meet obligations imposed by this clause or if the Contractor creates a foreign ownership, control, or influence 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 foreign ownership, control, or influence and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the foreign ownership, control, or influence problem.

(k) *Employment announcements.* When placing announcements seeking applicants for positions requiring access authorizations, the Contractor shall include in the written vacancy announcement, a notification to prospective applicants that reviews, and tests for the absence of any illegal drug as defined in 10 CFR 707.4, will be conducted by the employer and a background investigation by the Federal government may be required

to obtain an access authorization prior to employment, and that subsequent reinvestigations may be required. If the position is covered by the Counterintelligence Evaluation Program regulations at 10 CFR part 709, the announcement should also alert applicants that successful completion of a counterintelligence evaluation may include a counterintelligence-scope polygraph examination.

(l) *Flow down to subcontracts.* The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under its contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require such subcontractors to have an existing DOD or DOE facility clearance or submit a completed SF 328, *Certificate Pertaining to Foreign Interests*, as required in 48 CFR 952.204-73, Facility Clearance, and obtain a foreign ownership, control and influence determination and facility clearance 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. For purposes of this clause, subcontractor means any subcontractor at any tier and the term "Contracting Officer" means the DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

CLAUSE I.112 - DEAR 952.204-70 CLASSIFICATION/DECLASSIFICATION (SEP 1997)

In the performance of work under this contract, the Contractor or subcontractor shall comply with all provisions of the Department of Energy's regulations and mandatory DOE directives which apply to work involving the classification and declassification of information, documents, or material. In this section, "information" means facts, data, or knowledge itself; "document" means the physical medium on or in which information is recorded; and "material" means a product or substance which contains or reveals information, regardless of its physical form or characteristics. Classified information is "Restricted Data" and "Formerly Restricted Data" (classified under the Atomic Energy Act of 1954, as amended) and "National Security Information" (classified under Executive Order 12958 or prior Executive Orders).

The original decision to classify or declassify information is considered an inherently Governmental function. For this reason, only Government personnel may serve as original classifiers, i.e., Federal Government Original Classifiers. Other personnel (Government or Contractor) may serve as derivative classifiers which involves making classification decisions based upon classification guidance which reflect decisions made by Federal Government Original Classifiers.

The Contractor or subcontractor shall ensure that any document or material that may contain classified information is reviewed by either a Federal Government or a Contractor Derivative Classifier in accordance with classification regulations including mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine whether it contains classified

information prior to dissemination. For information which is not addressed in classification/declassification guidance, but whose sensitivity appears to warrant classification, the Contractor or subcontractor shall ensure that such information is reviewed by a Federal Government Original Classifier.

In addition, the Contractor or subcontractor shall ensure that existing classified documents (containing either Restricted Data or Formerly Restricted Data or National Security Information) which are in its possession or under its control are periodically reviewed by a Federal Government or Contractor Derivative Declassifier in accordance with classification regulations, mandatory DOE directives and classification / declassification guidance furnished to the Contractor by the Department of Energy to determine if the documents are no longer appropriately classified. Priorities for declassification review of classified documents shall be based on the degree of public and researcher interest and the likelihood of declassification upon review. Documents which no longer contain classified information are to be declassified. Declassified documents then shall be reviewed to determine if they are publicly releasable. Documents which are declassified and determined to be publicly releasable are to be made available to the public in order to maximize the public's access to as much Government information as possible while minimizing security costs.

The Contractor or subcontractor shall insert this clause in any subcontract which involves or may involve access to classified information.

CLAUSE I.113 - DEAR 952.204-71 SENSITIVE FOREIGN NATIONS CONTROLS (MAR 2011)

(a) In connection with any activities in the performance of this contract, the Contractor agrees to comply with the "Sensitive Foreign Nations Controls" requirements attached to this contract, relating to those countries, which may from time to time, be identified to the Contractor by written notice as sensitive foreign nations. The Contractor shall have the right to terminate its performance under this contract upon at least 60 days' prior written notice to the Contracting Officer if the Contractor determines that it is unable, without substantially interfering with its policies or without adversely impacting its performance to continue performance of the work under this contract as a result of such notification. If the Contractor elects to terminate performance, the provisions of this contract regarding termination for the convenience of the Government shall apply.

(b) The provisions of this clause shall be included in any subcontracts which may involve making unclassified information about nuclear technology available to sensitive foreign nations.

CLAUSE I.114 - DEAR 952.204-72 DISCLOSURE OF INFORMATION (APR 1994)

(a) It is mutually expected that the activities under this contract will not involve classified information. It is understood, however, that if in the opinion of either party, this expectation changes prior to the expiration or terminating of all activities under this contract, said party shall notify the other party accordingly in writing without delay. In any

event, the contractor shall classify, safeguard, and otherwise act with respect to all classified information in accordance with applicable law and the requirements of DOE, and shall promptly inform DOE in writing if and when classified information becomes involved, or in the mutual judgment of the parties it appears likely that classified information or material may become involved. The contractor shall have the right to terminate performance of the work under this contract and in such event the provisions of this contract respecting termination for the convenience of the Government shall apply.

(b) The contractor shall not permit any individual to have access to classified information except in accordance with the Atomic Energy Act 1954, as amended, Executive Order 12356, and DOE's regulations or requirements.

(c) The term "Restricted Data" as used in this article means all data concerning the design, manufacture, or utilization of atomic weapons, the production of special nuclear material or the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Atomic Energy Act of 1954, as amended.

CLAUSE I.115 - DEAR 952.204-75 PUBLIC AFFAIRS (DEC 2000)

(a) The Contractor must cooperate with the Department in releasing unclassified information to the public and news media regarding DOE policies, programs, and activities relating to its effort under the contract. The responsibilities under this clause must be accomplished through coordination with the Contracting Officer and appropriate DOE public affairs personnel in accordance with procedures defined by the Contracting Officer.

(b) The Contractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of unclassified information regarding DOE activities onsite and offsite, including, but not limited to, operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.

(c) The Contractor's internal procedures must ensure that all releases of information to the public and news media are coordinated through, and approved by, a management official at an appropriate level within the Contractor's organization.

(d) The Contractor must comply with established DOE procedures for obtaining advance clearances on oral, written, and audio/visual informational material prepared for public dissemination or use.

(e) Unless prohibited by law, and in accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of communications or contacts with Members of Congress

relating to the effort performed under the contract.

(f) In accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of activities or situations that may attract regional or national news media attention and of non-routine inquiries from national news media relating to the effort performed under the contract.

(g) In releases of information to the public and news media, the Contractor must fully and accurately identify the Contractor's relationship to the Department and fully and accurately credit the Department for its role in funding programs and projects resulting in scientific, technical, and other achievements.

CLAUSE I.116 - DEAR 952.204-77 COMPUTER SECURITY (AUG 2006)

(a) Definitions.

(1) Computer means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.

(2) Individual means a DOE Contractor or subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer, and does not include a member of the public who sends an e-mail message to a DOE computer or who obtains information available to the public on DOE Web sites.

(b) Access to DOE computers. A Contractor shall not allow an individual to have access to information on a DOE computer unless—

(1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and

(2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.

(c) No expectation of privacy. Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.

(d) Written records. The Contractor is responsible for maintaining written records for itself and subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The Contractor agrees to provide access to these records to the DOE, or its authorized agents, upon request.

(e) Subcontracts. The Contractor shall insert this clause, including this paragraph (e), in subcontracts under this contract that may provide access to computers owned, leased or operated on behalf of the DOE.

CLAUSE I.117 - DEAR 952.208-7 TAGGING OF LEASED VEHICLES (APR 1984)

(a) DOE intends to use U.S. Government license tags.

(b) While it is the intention that vehicles leased hereunder shall operate on Federal tags, the DOE reserves the right to utilize State tags, if necessary, to accomplish its mission. Should State tags be required, the Contractor shall furnish the DOE the documentation required by the State to acquire such tags.

CLAUSE I.118 - DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) ALTERNATE I (AUG 2009)

(a) Purpose. The purpose of this clause is to ensure that the Contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the Contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as a prime Contractor, subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity.

For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(1) Use of Contractor's Work Product.

(i) The Contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefore (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of 3 years after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services.

(ii) If, under this contract, the Contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive

acquisitions, the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The Contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the Contracting Officer, in which case the restriction in this subparagraph shall not apply.

(iii) Nothing in this paragraph shall preclude the Contractor from offering or selling its standard and commercial items to the Government.

(2) Access to and use of information.

(i) If the Contractor, in the performance of this contract, obtains access to information, such as Department plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer it shall not—

(A) use such information for any private purpose unless the information has been released or otherwise made available to the public;

(B) compete for work for the Department based on such information for a period of six (6) months after either the completion of this contract or until such information is released or otherwise made available to the public, whichever is first;

(C) submit an unsolicited proposal to the Government which is based on such information until one year after such information is released or otherwise made available to the public; and

(D) release such information unless such information has previously been released or otherwise made available to the public by the Department.

(ii) 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. 552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.

(iii) The Contractor may use technical data it first produces under this contract for its private purposes consistent with paragraphs (b)(2)(i) (A) and (D) of this clause and the patent, rights in data, and security provisions of this contract.

(c) Disclosure after award.

(1) The Contractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this contract, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to

the Contracting Officer. Such disclosure may include a description of any action which the Contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Department may, however, terminate the contract for convenience if it deems such termination to be in the best interest of the Government.

(2) In the event that the Contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the Contracting Officer, DOE may terminate this contract for default.

(d) Remedies. For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Government may terminate the contract for default, disqualify the Contractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract.

(e) Waiver. Requests for waiver under this clause shall be directed in writing to the Contracting Officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the Contracting Officer may grant such a waiver in writing.

(f) Subcontracts.

(1) The Contractor shall include a clause, substantially similar to this clause, including this paragraph (f), in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with 48 CFR part 13 and involving the performance of advisory and assistance services as that term is defined at 48 CFR 2.101. The terms "contract," "Contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the Contractor shall obtain from the proposed subcontractor or consultant the disclosure required by 48 CFR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the Contractor shall take actions to avoid, neutralize, or mitigate the organizational conflict to the satisfaction of the Contractor. If the conflict cannot be avoided or neutralized, the Contractor must obtain the approval of the DOE Contracting Officer prior to entering into the subcontract.

CLAUSE I.119 - DEAR 952.211-71 PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008)

The Contractor shall follow the provisions of Defense Priorities and Allocations System

(DPAS) regulation (15 CFR Part 700) in obtaining controlled materials and other products and materials needed to fill this contract.

CLAUSE I.120 - DEAR 952.215-70 KEY PERSONNEL (DEC 2000)

(a) The personnel listed in Section J, Appendix E entitled "Key Personnel" are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must:

(1) Notify the Contracting Officer reasonably in advance;

(2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and

(3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

CLAUSE I.121 - DEAR 952.235-71 RESEARCH MISCONDUCT (JUL 2005)

(a) The contractor is responsible for maintaining the integrity of research performed pursuant to this contract award including the prevention, detection, and remediation of research misconduct as defined by this clause, and the conduct of inquiries, investigations, and adjudication of allegations of research misconduct in accordance with the requirements of this clause.

(b) Unless otherwise instructed by the contracting officer, the contractor must conduct an initial inquiry into any allegation of research misconduct.

If the contractor determines that there is sufficient evidence to proceed to an investigation, it must notify the contracting officer and, unless otherwise instructed, the contractor must:

(1) Conduct an investigation to develop a complete factual record and an examination of such record leading to either a finding of research misconduct and an identification of appropriate remedies or a determination that no further action is warranted;

(2) If the investigation leads to a finding of research misconduct, conduct an adjudication by a responsible official who was not involved in the inquiry or investigation and is separated organizationally from the element which conducted the investigation. The adjudication must include a review of the investigative record and,

as warranted, a determination of appropriate corrective actions and sanctions.

(3) Inform the contracting officer if an initial inquiry supports a formal investigation and, if requested by the contracting officer thereafter, keep the contracting officer informed of the results of the investigation and any subsequent adjudication. When an investigation is complete, the contractor will forward to the contracting officer a copy of the evidentiary record, the investigative report, any recommendations made to the contractor's adjudicating official, the adjudicating official's decision and notification of any corrective action taken or planned, and the subject's written response (if any).

(c) The Department may elect to act in lieu of the contractor in conducting an inquiry or investigation into an allegation of research misconduct if the contracting officer finds that:

(1) The research organization is not prepared to handle the allegation in a manner consistent with this clause;

(2) The allegation involves an entity of sufficiently small size that it cannot reasonably conduct the inquiry;

(3) DOE involvement is necessary to ensure the public health, safety, and security, or to prevent harm to the public interest; or,

(4) The allegation involves possible criminal misconduct.

(d) In conducting the activities under paragraphs (b) and (c) of this clause, the contractor and the Department, if it elects to conduct the inquiry or investigation, shall adhere to the following guidelines:

(1) Safeguards for information and subjects of allegations. The contractor shall provide safeguards to ensure that individuals may bring allegations of research misconduct made in good faith to the attention of the contractor without suffering retribution. Safeguards include: protection against retaliation; fair and objective procedures for examining and resolving allegations; and diligence in protecting positions and reputations. The contractor shall also provide the subjects of allegations confidence that their rights are protected and that the mere filing of an allegation of research misconduct will not result in an adverse action. Safeguards include timely written notice regarding substantive allegations against them, a description of the allegation and reasonable access to any evidence submitted to support the allegation or developed in response to an allegation and notice of any findings of research misconduct.

(2) Objectivity and Expertise. The contractor shall select individual(s) to inquire, investigate, and adjudicate allegations of research misconduct who have appropriate expertise and have no unresolved conflict of interest. The individual(s) who conducts

an adjudication must not be the same individual(s) who conducted the inquiry or investigation, and must be separate organizationally from the element that conducted the inquiry or investigation.

(3) Timeliness. The contractor shall coordinate, inquire, investigate and adjudicate allegations of research misconduct promptly, but thoroughly. Generally, an investigation should be completed within 120 days of initiation, and adjudication should be complete within 60 days of receipt of the record of investigation.

(4) Confidentiality. To the extent possible, consistent with fair and thorough processing of allegations of research misconduct and applicable law and regulation, knowledge about the identity of the subjects of allegations and informants should be limited to those with a need to know.

(5) Remediation and Sanction. If the contractor finds that research misconduct has occurred, it shall assess the seriousness of the misconduct and its impact on the research completed or in process. The contractor must take all necessary corrective actions. Such action may include but are not limited to, correcting the research record and as appropriate imposing restrictions, controls, or other parameters on research in process or to be conducted in the future. The contractor must coordinate remedial actions with the contracting officer. The contractor must also consider whether personnel sanctions are appropriate. Any such sanction must be considered and effected consistent with any applicable personnel laws, policies, and procedures, and shall take into account the seriousness of the misconduct and its impact, whether it was done knowingly or intentionally, and whether it was an isolated event or pattern of conduct.

(e) DOE reserves the right to pursue such remedies and other actions as it deems appropriate, consistent with the terms and conditions of the award instrument and applicable laws and regulations. However, the contractor's good faith administration of this clause and the effectiveness of its remedial actions and sanctions shall be positive considerations and shall be taken into account as mitigating factors in assessing the need for such actions. If DOE pursues any such action, it will inform the subject of the action of the outcome and any applicable appeal procedures.

(f) Definitions.

Adjudication means a formal review of a record of investigation of alleged research misconduct to determine whether and what corrective actions and sanctions should be taken.

Fabrication means making up data or results and recording or reporting them.

Falsification means manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in

the research record.

Finding of Research Misconduct means a determination, based on a preponderance of the evidence, that research misconduct has occurred.

Such a finding requires a conclusion that there has been a significant departure from accepted practices of the relevant research community and that it be knowingly, intentionally, or recklessly committed.

Inquiry means information gathering and initial fact-finding to determine whether an allegation or apparent instance of misconduct warrants an investigation.

Investigation means the formal examination and evaluation of the relevant facts. Plagiarism means the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Research means all basic, applied, and demonstration research in all fields of science, medicine, engineering, and mathematics, including, but not limited to, research in economics, education, linguistics, medicine, psychology, social sciences statistics, and research involving human subjects or animals.

Research Misconduct means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results, but does not include honest error or differences of opinion.

Research record means the record of all data or results that embody the facts resulting from scientists' inquiries, including, but not limited to, research proposals, laboratory records, both physical and electronic, progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.

(g) By executing this contract, the contractor provides its assurance that it has established an administrative process for performing an inquiry, mediating if possible, or investigating, and reporting allegations of research misconduct; and that it will comply with its own administrative process and the requirements of 10 CFR part 733 for performing an inquiry, possible mediation, investigation and reporting of research misconduct.

(h) The contractor must insert or have inserted the substance of this clause, including paragraph (g), in subcontracts at all tiers that involve research.

CLAUSE I.122 - DEAR 952.242-70 TECHNICAL DIRECTION (DEC 2000)

(a) Performance of the work under this contract shall be subject to the technical direction of the DOE Contracting Officer's Representative (COR). The term "technical direction" is defined to include, without limitation:

(1) Providing direction to the contractor that redirects contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details, or otherwise serve to accomplish the contractual Statement of Work.

(2) Providing written information to the contractor that assists in interpreting drawings, specifications, or technical portions of the work description.

(3) Reviewing and, where required by the contract, approving, technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government.

(b) The contractor will receive a copy of the written COR designation from the contracting officer. It will specify the extent of the COR's authority to act on behalf of the contracting officer.

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

(1) Constitutes an assignment of additional work outside the Statement of Work;

(2) Constitutes a change as defined in the contract clause entitled "Changes;"

(3) In any manner causes an increase or decrease in the total estimated contract cost, the fee (if any), or the time required for contract performance;

(4) Changes any of the expressed terms, conditions or specifications of the contract; or

(5) Interferes with the contractor's right to perform the terms and conditions of the contract.

(d) All technical direction shall be issued in writing by the COR.

(e) The contractor must proceed promptly with the performance of technical direction duly issued by the COR in the manner prescribed by this clause and within its authority under the provisions of this clause. If, in the opinion of the contractor, any instruction or direction by the COR falls within one of the categories defined in (c) (1) through (c)(5) of this clause, the contractor must not proceed and must notify the Contracting Officer in writing within five (5) working days after receipt of any such instruction or direction and must request the Contracting Officer to modify the contract accordingly. Upon receiving the notification from the contractor, the Contracting Officer must:

(1) Advise the contractor in writing within thirty (30) days after receipt of the contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the Changes clause of the contract;

(2) Advise the contractor in writing within a reasonable time that the Government will issue a written change order; or

(3) Advise the contractor in writing within a reasonable time not to proceed with the instruction or direction of the COR.

(f) A failure of the contractor and Contracting Officer either to agree that the technical direction is within the scope of the contract or to agree upon the contract action to be taken with respect to the technical direction will be subject to the provisions of the clause entitled "Disputes."

CLAUSE I.123 - DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (AUG 2016)

(a) Authority. This clause is incorporated into this contract pursuant to the authority contained in subsection 170d. of the Atomic Energy Act of 1954, as amended (hereinafter called the Act.)

(b) Definitions. The definitions set out in the Act shall apply to this clause.

(c) Financial protection. Except as hereafter permitted or required in writing by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in paragraph (d)(2) below. DOE may, however, at any time require in writing that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.

(d)(1) Indemnification. To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) of this clause; and (ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$500 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (d)(1) of this clause is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e)(1) Waiver of defenses. In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which—

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive—

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including, but not limited to—

(1) Negligence;

(2) Contributory negligence;

(3) Assumption of risk; or

(4) Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within 3 years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(v) The term extraordinary nuclear occurrence means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR part 840.

(vi) For the purposes of that determination, offsite as that term is used in 10 CFR part 840 means away from “the contract location” which phrase means any DOE

facility, installation, or site at which contractual activity under this contract is being carried on, and any contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of contractual activity under this contract.

(3) The waivers set forth above—

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) Notification and litigation of claims. The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in paragraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person

indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) Continuity of DOE obligations. The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.

(h) Effect of other clauses. The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including the clause entitled Contract Disputes, provided, however, that this clause shall be subject to the clauses entitled Covenant Against Contingent Fees, and Accounts, records, and inspection, and any provisions that are later added to this contract as required by applicable Federal law, including statutes, executive orders and regulations, to be included in Nuclear Hazards Indemnity Agreements.

(i) Civil penalties. The Contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders.

(j) Criminal penalties. Any individual director, officer, or employee of the Contractor or of its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to 223(c) of the Act, for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

(k) Inclusion in subcontracts. The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in paragraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under section 170b. of the Act or NRC agreements of indemnification under section 170c. or k. of the Act for the activities under the subcontract.

(l) EFFECTIVE DATE: This indemnity agreement shall be applicable with respect to nuclear incidents occurring on or after January 1, 2025.

CLAUSE I.124 - DEAR 952.251-70 CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009)

(a) The Contractor shall take advantage of travel discounts offered to Federal Contractor employee travelers by AMTRAK, hotels, motels, or car rental companies,

when use of such discounts would result in lower overall trip costs and the discounted services are reasonably available. Vendors providing these services may require the Contractor employee to furnish them a letter of identification signed by the authorized Contracting Officer.

(b) Contracted airlines. Contractors are not eligible for GSA contract city pair fares.

(c) Discount rail service. AMTRAK voluntarily offers discounts to Federal travelers on official business and sometimes extends those discounts to Federal contractor employees.

(d) Hotels/motels. Many lodging providers extend their discount rates for Federal employees to Federal contractor employees.

(e) Car rentals. Surface Deployment and Distribution Command (SDDC) of the Department of Defense negotiates rate agreements with car rental companies that are available to Federal travelers on official business. Some car rental companies extend those discounts to Federal contractor employees.

(f) Obtaining travel discounts.

(1) To determine which vendors offer discounts to Government contractors, the Contractor may review commercial publications such as the Official Airline guides Official Traveler, Innovata, or National Telecommunications. The Contractor may also obtain this information from GSA contract Travel Management Centers or the Department of Defense's Commercial Travel Offices.

(2) The vendor providing the service may require the Government contractor to furnish a letter signed by the Contracting Officer. The following illustrates a standard letter of identification.

OFFICIAL AGENCY LETTERHEAD TO: Participating Vendor

SUBJECT: OFFICIAL TRAVEL OF GOVERNMENT CONTRACTOR

(FULL NAME OF TRAVELER), the bearer of this letter is an employee of (COMPANY NAME) which has a contract with this agency under Government contract (CONTRACT NUMBER). During the period of the contract (GIVE DATES), AND WITH THE APPROVAL OF THE CONTRACT VENDOR, the employee is eligible and authorized to use available travel discount rates in accordance with Government contracts and/or agreements. Government Contract City Pair fares are not available to Contractors.

SIGNATURE, Title and telephone number of Contracting Officer

CLAUSE I.125 - DEAR 970.5203-1 MANAGEMENT CONTROLS (JUN 2007) (SC ALTERNATE) (APR 2018) (DEVIATION) (PF 2022-23) (OCT 2021)

(a) The Contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted by contractor management to reasonably ensure that:

- (1) Mission and functions assigned to the contractor are properly executed;
- (2) Systems and controls employed by the contractor are documented and satisfactory to DOE;
- (3) All levels of management are accountable for effective management systems and internal controls within their areas of assigned responsibility;
- (4) Provide reasonable assurance that Government resources are safeguarded against theft, fraud, waste, and unauthorized use;
- (5) Promote work and worker safety;
- (6) Promote efficient and effective operations including consideration of outsourcing of functions;
- (7) Reduce or eliminate operational risks to Government facilities;
- (8) All obligations and costs incurred are allowable in accordance with the intended purposes and the terms and conditions of the contract;
- (9) All revenues, expenditures, transactions and assets are properly record, manage, and report;
- (10) Financial, statistical and other necessary reports are maintained in an accurate, reliable, and timely manner, with proper accountability and management controls;
- (11) Systems are periodically reviewed to provide reasonable assurance that the objectives of the systems are being accomplished and that its controls are working effectively
- (12) Such systems shall be an integral part of the Contractor's management functions, including defining specific roles and responsibilities for each level of management,, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility;

(13) The Contractor shall, As part of the internal audit program required elsewhere in this contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively. Annually, or at other intervals directed by the Contracting Officer, the Contractor shall supply to the Contracting Officer copies of the reports reflecting the status of recommendations resulting from management audits performed by its internal audit activity and any other audit organization. This requirement may be satisfied in part by the reports required under paragraph (i) of 48 CFR 970.5232-3, Accounts, records, and inspection; and

(b) The Contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.

(c) On an annual basis, the Contractor through an officer at a level above the Laboratory Director, shall submit an assurance to the Contracting Officer that the system of management controls, including all systems revised in accordance with the Special Contract Requirements H clause of this Contract, entitled, "Application of DOE Contractor Requirements Documents", is adequate to assure that the objectives of the management system are being accomplished and that the system and controls are effective and efficient."

CLAUSE I.126 - DEAR 970.5203-2 PERFORMANCE IMPROVEMENT AND COLLABORATION (MAY 2006)

(a) The contractor agrees that it shall affirmatively identify, evaluate, and institute practices, where appropriate, that will improve performance in the areas of environmental and health, safety, scientific and technical, security, business and administrative, and any other areas of performance in the management and operation of the contract. This may entail the alteration of existing practices or the institution of new procedures to more effectively or efficiently perform any aspect of contract performance or reduce overall cost of operation under the contract. Such improvements may result from changes in organization, outsourcing decisions, simplification of systems while retaining necessary controls, or any other approaches consistent with the statement of work and performance measures of this contract.

(b) The contractor agrees to work collaboratively with the Department, all other management and operating, DOE major facilities management contractors and affiliated contractors which manage or operate DOE sites or facilities for the following purposes: (i) to exchange information generally, (ii) to evaluate concepts that may be of benefit in resolving common issues, in confronting common problems, or in reducing costs of operations, and (iii) to otherwise identify and implement DOE-complex-wide management improvements discussed in paragraph (a). In doing so, it shall also affirmatively provide information relating to its management improvements to such contractors, including

lessons learned, subject to security considerations and the protection of data proprietary to third parties.

(c) The contractor may consult with the contracting officer in those instances in which improvements being considered pursuant to paragraph (a) involve the cooperation of the DOE. The contractor may request the assistance of the contracting officer in the communication of the success of improvements to other management and operating contractors in accordance with paragraph (b) of this clause.

(d) The contractor shall notify the contracting officer and seek approval where necessary to fulfill its obligations under the contract. Compliance with this clause in no way alters the obligations of the Contractor under any other provision of this contract.

CLAUSE I.127 - DEAR 970.5203-3 CONTRACTOR'S ORGANIZATION (DEC 2000)

(a) *Organization chart.* As promptly as possible after the execution of this contract, the Contractor shall furnish to the Contracting Officer a chart showing the names, duties, and organization of key personnel (see 48 CFR 952.215-70) to be employed in connection with the work, and shall furnish supplemental information to reflect any changes as they occur.

(b) *Supervisory representative of Contractor.* Unless otherwise directed by the Contracting Officer, a competent full-time resident supervisory representative of the Contractor satisfactory to the Contracting Officer shall be in charge of the work at the site, and any work off-site, at all times.

(c) *Control of employees.* The contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event the contractor fails to remove any employee from the contract work whom DOE deems incompetent, careless, or insubordinate, or whose continued employment on the work is deemed by DOE to be inimical to the Department's mission, the contracting officer may require, with the approval of the Secretary of Energy, the contractor to remove the employee from work under the contract. This includes the right to direct the contractor to remove its most senior key person from work under the contract for serious contract performance deficiencies.

(d) *Standards and procedures.* The contractor shall establish such standards and procedures as are necessary to implement the requirements set forth in 48 CFR 970.0371. Such standards and procedures shall be subject to the approval of the contracting officer.

CLAUSE I.128 - DEAR 970.5204-2 LAWS, REGULATIONS AND DOE DIRECTIVES (DEC 2000) (DEVIATION) (MAY 2018) (SC ALTERNATE) (SEPT 2018)

(a) In performing work under this contract, the Contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory agency. A List of Applicable Laws and regulations (List A) may be appended to this contract for information purposes. Omission of any applicable law or regulation from List A does not affect the obligation of the Contractor to comply with such law or regulation pursuant to this paragraph.

(b) In performing work under this contract, the Contractor shall comply with the requirements of those Department of Energy directives, or parts thereof, identified in the List of Applicable Directives (List B) appended to this contract [unless and until such time as an alternative procedure, standard, system of oversight, or assessment mechanism resulting from the process described in the Section H clause of this Contract, entitled, "Application of DOE Contractor Requirements Documents" is approved]. Except as otherwise provided for in paragraph (c) of this clause, the Contracting Officer may, from time to time and at any time, revise List B by unilateral modification to the contract to add, modify, or delete specific requirements. Prior to revising List B, the Contracting Officer shall notify the contractor in writing of the Department's intent to revise List B and provide the contractor with the opportunity to assess the effect of the contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule; and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30 days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer in writing of the potential impact of the Contractor's compliance with the revised list. Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise List B and so advise the Contractor.

(c) The Contractor shall procure all necessary permits or licenses required for the performance of work under this contract separately, or jointly with DOE as co-permittees, as appropriate.

(d) Regardless of the performer of the work, the Contractor is responsible for compliance with the requirements of this clause. The Contractor is responsible for flowing down the requirements of this clause to subcontracts at any tier to the extent necessary to ensure the Contractor's compliance with the requirements.

CLAUSE I.129 - DEAR 970.5204-3 ACCESS TO AND OWNERSHIP OF RECORDS (OCT 2014) (DEVIATION: PF 2015-23)

(a) Government-owned records. Except as provided in paragraph (b) of this clause, all records acquired or generated by the contractor in its performance of this contract, including records series described within the contract as Privacy Act systems of records, shall be the property of the Government and shall be maintained in accordance with 36 Code of Federal Regulations (CFR), Chapter XII, -- Subchapter B, "Records Management." The contractor shall ensure records classified as Privacy Act system of

records are maintained in accordance with FAR 52.224.2 "Privacy Act."

(b) Contractor-owned records. The following records are considered the property of the contractor and are not within the scope of paragraph (a) of this clause.

(1) Employment-related records (such as worker's compensation files; employee relations records, records on salary and employee benefits; drug testing records, labor negotiation records; records on ethics, employee concerns; records generated during the course of responding to allegations of research misconduct; records generated during other employee related investigations conducted under an expectation of confidentiality; employee assistance program records; and personnel and medical/health-related records and similar files), and non-employee patient medical/health-related records, except those records described by the contract as being operated and maintained by the Contractor in Privacy Act system of records.

(2) Confidential contractor financial information, internal corporate governance records and correspondence between the contractor and other segments of the contractor located away from the DOE facility (i.e., the contractor's corporate headquarters);

(3) Records relating to any procurement action by the contractor, except for records that under 48 CFR 970.5232-3 are described as the property of the Government; and

(4) Legal records, including legal opinions, litigation files, and documents covered by the attorney-client and attorney work product privileges; and

(5) The following categories of records maintained pursuant to the technology transfer clause of this contract:

(i) Executed license agreements, including exhibits or appendices containing information on royalties, royalty rates, other financial information, or commercialization plans, and all related documents, notes and correspondence.

(ii) The contractor's protected Cooperative Research and Development Agreement (CRADA) information and appendices to a CRADA that contain licensing terms and conditions, or royalty or royalty rate information.

(iii) Patent, copyright, mask work, and trademark application files and related contractor invention disclosures, documents and correspondence, where the contractor has elected rights or has permission to assert rights and has not relinquished such rights or turned such rights over to the Government.

(c) Contract completion or termination. Upon contract completion or termination, the contractor shall ensure final disposition of all Government-owned records to a Federal

Record Center, the National Archives and Records Administration, to a successor contractor, its designee, or other destinations, as directed by the Contracting Officer. Upon the request of the Government, the contractor shall provide either the original contractor-owned records or copies of the records identified in paragraph (b) of this clause, to DOE or its designees, including successor contractors. Upon delivery, title to such records shall vest in DOE or its designees, and such records shall be protected in accordance with applicable federal laws (including the Privacy Act) as appropriate. If the contractor chooses to provide its original contractor-owned records to the Government or its designee, the contractor shall retain future rights to access and copy such records as needed.

(d) Inspection, copying, and audit of records. All records acquired or generated by the Contractor under this contract in the possession of the Contractor, including those described at paragraph (b) of this clause, shall be subject to inspection, copying, and audit by the Government or its designees at all reasonable times, and the Contractor shall afford the Government or its designees reasonable facilities for such inspection, copying, and audit; provided, however, that upon request by the Contracting Officer, the Contractor shall deliver such records to a location specified by the Contracting Officer for inspection, copying, and audit. The Government or its designees shall use such records in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(e) Applicability. This clause applies to all records created, received and maintained by the contractor without regard to the date or origination of such records including all records acquired from a predecessor contractor.

(f) Records maintenance and retention. Contractor shall create, maintain, safeguard, and disposition records in accordance with 36 Code of Federal Regulations (CFR), Chapter XII, -- Subchapter B, "Records Management" and the National Archives and Records Administration (NARA)-approved Records Disposition Schedules. Records retention standards are applicable for all classes of records, whether or not the records are owned by the Government or the contractor. The Government may waive application of the NARA-approved Records Disposition Schedules, if, upon termination or completion of the contract, the Government exercises its right under paragraph (c) of this clause to obtain copies of records described in paragraph (b) and delivery of records described in paragraph (a) of this clause.

(g) Subcontracts.

(1) The contractor shall include the requirements of this clause in all subcontracts that contain the *Radiation Protection and Nuclear Criticality* clause at 952.223-72, or whenever an on-site subcontract scope of work (i) could result in potential exposure to: A) radioactive materials; B) beryllium; or C) asbestos or (ii) involves a risk associated with chronic or acute exposure to toxic chemicals or substances or other hazardous materials that can cause adverse health impacts, in accordance with 10

CFR part 851. In determining its flow- down responsibilities, the Contractor shall include the requirements of this clause in all on-site subcontracts where the scope of work is performed in: (A) Radiological Areas and/or Radioactive Materials Areas (as defined at 10 CFR 835.2); (B) areas where beryllium concentrations exceed or can reasonably be expected to exceed action levels specified in 10 CFR 850; (C) an Asbestos Regulated area (as defined at 29 CFR 1926.1101 or 29 CFR 1910.1001); or (D) a workplace where hazard prevention and abatement processes are implemented in compliance with 10 CFR 851.21 to specifically control potential exposure to toxic chemicals or substances or other hazardous materials that can cause long term health impacts.

(2) The Contractor may elect to take on the obligations of the provisions of this clause in lieu of the subcontractor, and maintain records that would otherwise be maintained by the subcontractor.

CLAUSE I.130 - DEAR 970.5211-1 WORK AUTHORIZATION (MAY 2007)

(a) *Work authorization proposal.* Prior to the start of each fiscal year, the Contracting Officer or designee shall provide the contractor with program execution guidance in sufficient detail to enable the contractor to develop an estimated cost, scope, and schedule. In addition, the Contracting Officer may unilaterally assign work. The contractor shall submit to the Contracting Officer or other designated official, a detailed description of work, a budget of estimated costs, and a schedule of performance for the work it recommends be undertaken during that upcoming fiscal year.

(b) *Cost estimates.* The contractor and the Contracting Officer shall establish a budget of estimated costs, description of work, and schedule of performance for each work assignment. If agreement cannot be reached as to scope, schedule, and estimated cost, the Contracting Officer may issue a unilateral work authorization, pursuant to this clause. The work authorization, whether issued bilaterally or unilaterally shall become part of the contract. No activities shall be authorized or costs incurred prior to Contracting Officer issuance of a work authorization or direction concerning continuation of activities of the contract.

(c) *Performance.* The contractor shall perform work as specified in the work authorization, consistent with the terms and conditions of this contract.

(d) *Modification.* The Contracting Officer may at any time, without notice, issue changes to work authorizations within the overall scope of the contract. A proposal for adjustment in estimated costs and schedule for performance of work, recognizing work made unnecessary as a result, along with new work, shall be submitted by the contractor in accordance with paragraph (a) of this clause. Resolution shall be in accordance with paragraph (b) of this clause.

(e) *Increase in estimated cost.* The contractor shall notify the Contracting Officer immediately whenever the cost incurred, plus the projected cost to complete work is

projected to differ (plus or minus) from the estimate by 10 percent. The contractor shall submit a proposal for modification in accordance with paragraph (a) of this clause. Resolution shall be in accordance with paragraph (b) of this clause.

(f) *Expenditure of funds and incurrence of costs.* The expenditure of monies by the contractor in the performance of all authorized work shall be governed by the "Obligation of Funds" or equivalent clause of the contract.

(g) *Responsibility to achieve environment, safety, health, and security compliance.*

Notwithstanding other provisions of the contract, the contractor may, in the event of an emergency, take that corrective action necessary to sustain operations consistent with applicable environmental, safety, health, and security statutes, regulations, and procedures. If such action is taken, the contractor shall notify the Contracting Officer within 24 hours of initiation and, within 30 days, submit a proposal for adjustment in estimated costs and schedule established in accordance with paragraphs (a) and (b) of this clause.

CLAUSE I.131 - DEAR 970.5215-1 TOTAL AVAILABLE FEE: BASE FEE AMOUNT AND PERFORMANCE FEE AMOUNT (DEC 2000) (ALTERNATES II AND III) (DEC 2000) (DEVIATION)

(a) *Total available fee.* Total available fee, consisting of a base fee amount (which may be zero) and a performance fee amount (consisting of an incentive fee component for objective performance requirements, an award fee component for subjective performance requirements, or both) determined in accordance with the provisions of this clause, is available for payment in accordance with the clause of this contract entitled, "Payments and advances."

(b) *Fee Negotiations.* Prior to the beginning of each fiscal year under this contract, or other appropriate period as mutually agreed upon and, if exceeding one year, approved by the Senior Procurement Executive, or designee, the contracting officer and Contractor shall enter into negotiation of the requirements for the year or appropriate period, including the evaluation areas and individual requirements subject to incentives, the total available fee, and the allocation of fee. The contracting officer shall modify this contract at the conclusion of each negotiation to reflect the negotiated requirements, evaluation areas and individual requirements subject to incentives, the total available fee, and the allocation of fee. In the event the parties fail to agree on the requirements, the evaluation areas and individual requirements subject to incentives, the total available fee, or the allocation of fee, a unilateral determination will be made by the contracting officer. The total available fee amount shall be allocated to a twelve month cycle composed of one or more evaluation periods, or such longer period as may be mutually agreed to between the parties and approved by the Senior Procurement Executive, or designee.

(c) *Determination of Total Available Fee Amount Earned.*

(1) The Government shall, at the conclusion of each specified evaluation period, evaluate the contractor's performance of all requirements, including performance

based incentives completed during the period, and determine the total available fee amount earned. At the contracting officer's discretion, evaluation of incentivized performance may occur at the scheduled completion of specific incentivized requirements.

(2) The DOE Operations/Field Office Manager, or designee, will be the Manager, Fermi Site Office. The contractor agrees that the determination as to the total available fee earned is a unilateral determination made by the Head of Contracting Activity, or designee.

(3) The evaluation of contractor performance shall be in accordance with the Performance Evaluation and Measurement Plan(s) described in subparagraph (d) of this clause unless otherwise set forth in the contract. The Contractor shall be promptly advised in writing of the fee determination, and the basis of the fee determination. In the event that the contractor's performance is considered to be less than the level of performance set forth in the Statement of Work, as amended to include the current Work Authorization Directive or similar document, for any contract requirement, it will be considered by the DOE Operations/Field Office Manager, or designee, who may at his/her discretion adjust the fee determination to reflect such performance. Any such adjustment shall be in accordance with the clause entitled, "Conditional Payment of Fee, Profit, or Incentives" if contained in the contract.

(4) Award fee not earned during the evaluation period shall not be allocated to future evaluation periods.

(d) *Performance Evaluation and Measurement Plan(s)*. To the extent not set forth elsewhere in the contract:

(1) The Government shall establish a Performance Evaluation and Measurement Plan(s) upon which the determination of the total available fee amount earned shall be based. The Performance Evaluation and Measurement Plan(s) will address all of the requirements of contract performance specified in the contract directly or by reference. A copy of the Performance Evaluation and Measurement Plan(s) shall be provided to the Contractor:

(i) prior to the start of an evaluation period if the requirements, evaluation areas, specific incentives, amount of fee, and allocation of fee to such evaluation areas and specific incentives have been mutually agreed to by the parties; or

(ii) not later than thirty days prior to the scheduled start date of the evaluation period, if the requirements, evaluation areas, specific incentives, amount of fee, and allocation of fee to such evaluation areas and specific incentives have been unilaterally established by the contracting officer.

(2) The Performance Evaluation and Measurement Plan(s) will set forth the criteria

upon which the Contractor will be evaluated relating to any technical, schedule, management, and/or cost objectives selected for evaluation. Such criteria should be objective, but may also include subjective criteria. The Plan(s) shall also set forth the method by which the total available fee amount will be allocated and the amount earned determined.

(3) The Performance Evaluation and Measurement Plan(s) may, consistent with the contract statement of work, be revised during the period of performance. The contracting officer shall notify the contractor:

(i) of such unilateral changes at least ninety calendar days prior to the end of the affected evaluation period and at least thirty calendar days prior to the effective date of the change;

(ii) of such bilateral changes at least sixty calendar days prior to the end of the affected evaluation period; or

(iii) if such change, whether unilateral or bilateral, is urgent and high priority, at least thirty calendar days prior to the end of the evaluation period.

(e) *Schedule for total available fee amount earned determinations.* The DOE Operations/Field Office Manager, or designee, shall issue the final total available fee amount earned determination in accordance with: the schedule set forth in the Performance Evaluation and Measurement Plan(s); or as otherwise set forth in this contract. However, a determination must be made within sixty calendar days after the receipt by the contracting officer of the Contractor's self-assessment, if one is required or permitted by paragraph (f) of this clause, or seventy calendar days after the end of the evaluation period, whichever is later, or a longer period if the Contractor and contracting officer agree. If the contracting officer evaluates the Contractor's performance of specific requirements on their completion, the payment of any earned fee amount must be made within seventy calendar days (or such other time period as mutually agreed to between the contracting officer and the Contractor) after such completion. If the determination is delayed beyond that date, the Contractor shall be entitled to interest on the determined total available fee amount earned at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the payment date. This rate is referred to as the "Renegotiation Board Interest Rate," and is published in the Federal Register semiannually on or about January 1 and July 1. The interest on any late total available fee amount earned determination will accrue daily and be compounded in 30-day increments inclusive from the first day after the schedule determination date through the actual date the determination is issued. That is, interest accrued at the end of any 30-day period will be added to the determined amount of fee earned and be subject to interest if not paid in the succeeding 30-day period.

(f) *Contractor self-assessment.* Following each evaluation period, the Contractor shall submit a self-assessment within 45 calendar days after the end of the period. This self-

assessment shall address both the strengths and weaknesses of the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor shall describe the actions planned or taken to correct such deficiencies and avoid their recurrence. The DOE Operations/Field Office Manager, or designee, will review the Contractor's self-assessment, if submitted, as part of its independent evaluation of the Contractor's management during the period. A self-assessment, in and of itself may not be the only basis for the award fee determination.

CLAUSE I.132 - DEAR 970.5215-3 CONDITIONAL PAYMENT OF FEE, PROFIT, OR INCENTIVES-FACILITY MANAGEMENT CONTRACTS (AUG 2009)

(a) *General.*

(1) The payment of earned fee, fixed fee, profit, or share of cost savings under this contract is dependent upon -

(i) The Contractor's or Contractor employees' compliance with the terms and conditions of this contract relating to environment, safety and health (ES&H), which includes worker safety and health (WS&H), including performance under an approved Integrated Safety Management System (ISMS); and

(ii) The Contractor's or Contractor employees' compliance with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information.

(2) The ES&H performance requirements of this contract are set forth in its ES&H terms and conditions, including the DOE approved contractor ISMS or similar document. Financial incentives for timely mission accomplishment or cost effectiveness shall never compromise or impede full and effective implementation of the ISMS and full ES&H compliance.

(3) The performance requirements of this contract relating to the safeguarding of Restricted Data and other classified information are set forth in the clauses of this contract entitled, "Security" and "Laws, Regulations, and DOE Directives," as well as in other terms and conditions.

(4) If the Contractor does not meet the performance requirements of this contract relating to ES&H or to the safeguarding of Restricted Data and other classified information during any performance evaluation period established under the contract pursuant to the clause of this contract entitled, "Total Available Fee: Base Fee Amount and Performance Fee Amount," otherwise earned fee, fixed fee, profit or share of cost savings may be unilaterally reduced by the contracting officer.

(b) *Reduction amount.*

(1) The amount of earned fee, fixed fee, profit, or share of cost savings that may be unilaterally reduced will be determined by the severity of the performance failure pursuant to the degrees specified in paragraphs (c) and (d) of this clause.

(2) If a reduction of earned fee, fixed fee, profit, or share of cost savings is warranted, unless mitigating factors apply, such reduction shall not be less than 26 percent nor greater than 100 percent of the amount of earned fee, fixed fee, profit, or the Contractor's share of cost savings for a first degree performance failure, not less than 11 percent nor greater than 25 percent for a second degree performance failure, and up to 10 percent for a third degree performance failure.

(3) In determining the amount of the reduction and the applicability of mitigating factors, the contracting officer must consider the Contractor's overall performance in meeting the ES&H or security requirements of the contract. Such consideration must include performance against any site specific performance criteria/requirements that provide additional definition, guidance for the amount of reduction, or guidance for the applicability of mitigating factors. In all cases, the contracting officer must consider mitigating factors that may warrant a reduction below the applicable range (see 48 CFR 970.1504-1-2). The mitigating factors include, but are not limited to, the following ((v), (vi), (vii) and (viii) apply to ES&H only).

(i) Degree of control the Contractor had over the event or incident.

(ii) Efforts the Contractor had made to anticipate and mitigate the possibility of the event in advance.

(iii) Contractor self-identification and response to the event to mitigate impacts and recurrence.

(iv) General status (trend and absolute performance) of: ES&H and compliance in related areas; or of safeguarding Restricted Data and other classified information and compliance in related areas.

(v) Contractor demonstration to the Contracting Officer's satisfaction that the principles of industrial ES&H standards are routinely practiced (e.g., Voluntary Protection Program, ISO 14000).

(vi) Event caused by "Good Samaritan" act by the Contractor (e.g., offsite emergency response).

(vii) Contractor demonstration that a performance measurement system is routinely used to improve and maintain ES&H performance (including effective resource allocation) and to support DOE corporate decision-making (e.g., policy, ES&H programs). * * *

(viii) Contractor demonstration that an Operating Experience and Feedback Program is functioning that demonstrably affects continuous improvement in ES&H by use of lessons-learned and best practices inter- and intra-DOE sites.

(4)

(i) The amount of fee, fixed fee, profit, or share of cost savings that is otherwise earned by a contractor during an evaluation period may be reduced in accordance with this clause if it is determined that a performance failure warranting a reduction under this clause occurs within the evaluation period.

(ii) The amount of reduction under this clause, in combination with any reduction made under any other clause in the contract, shall not exceed the amount of fee, fixed fee, profit, or the Contractor's share of cost savings that is otherwise earned during the evaluation period.

(iii) For the purposes of this clause, earned fee, fixed fee, profit, or share of cost savings for the evaluation period shall mean the amount determined by the Contracting Officer or fee determination official as otherwise payable based on the Contractor's performance during the evaluation period. Where the contract provides for financial incentives that extend beyond a single evaluation period, this amount shall also include: any provisional amounts determined otherwise payable in the evaluation period; and, if provisional payments are not provided for, the allocable amount of any incentive determined otherwise payable at the conclusion of a subsequent evaluation period. The allocable amount shall be the total amount of the earned incentive divided by the number of evaluation periods over which it was earned.

(iv) The Government will effect the reduction as soon as practicable after the end of the evaluation period in which the performance failure occurs. If the Government is not aware of the failure, it will effect the reduction as soon as practical after becoming aware. For any portion of the reduction requiring an allocation the Government will effect the reduction at the end of the evaluation period in which it determines the total amount earned under the incentive. If at any time a reduction causes the sum of the payments the Contractor has received for fee, fixed fee, profit, or share of cost savings to exceed the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned (provisionally or otherwise), the Contractor shall immediately return the excess to the Government. (What the Contractor "has earned" reflects any reduction made under this or any other clause of the contract.)

(v) At the end of the contract -

(A) The Government will pay the Contractor the amount by which the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned exceeds the sum of the payments the Contractor has received; or

(B) The Contractor shall return to the Government the amount by which the sum of the payments the Contractor has received exceeds the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned. (What the Contractor "has earned" reflects any reduction made under this or any other clause of the contract.)

(c) *Environment, Safety and Health (ES&H)*. Performance failures occur if the Contractor does not comply with the contract's ES&H terms and conditions, including the DOE approved Contractor ISMS. The degrees of performance failure under which reductions of earned or fixed fee, profit, or share of cost savings will be determined are:

(1) *First Degree*: Performance failures that are most adverse to ES&H. Failure to develop and obtain required DOE approval of an ISMS is considered first degree. The Government will perform necessary review of the ISMS in a timely manner and will not unreasonably withhold approval of the Contractor's ISMS. The following performance failures or performance failures of similar import will be considered first degree.

(i) Type A accident (defined in DOE Order 225.1B, or successor version).

(ii) Two Second Degree performance failures during an evaluation period.

(2) *Second Degree*: Performance failures that are significantly adverse to ES&H. They include failures to comply with an approved ISMS that result in an actual injury, exposure, or exceedence that occurred or nearly occurred but had minor practical long-term health consequences. They also include breakdowns of the Safety Management System. The following performance failures or performance failures of similar import will be considered second degree:

(i) Type B accident (defined in DOE Order 225.1B, or successor version).

(ii) Non-compliance with an approved ISMS that results in a near miss of a Type A or B accident. A near miss is a situation in which an inappropriate action occurs, or a necessary action is omitted, but does not result in an adverse effect.

(iii) Failure to mitigate or notify DOE of an imminent danger situation after discovery, where such notification is a requirement of the contract.

(3) *Third Degree*: Performance failures that reflect a lack of focus on improving ES&H. They include failures to comply with an approved ISMS that result in potential breakdown of the System. The following performance failures or performance failures of similar import will be considered third degree:

(i) Failure to implement effective corrective actions to address deficiencies/non-compliances documented through: external (e.g., Federal)

oversight and/or reported per DOE Order 232.1-2 requirements; or internal oversight of DOE Order 440.1A requirements.

(ii) Multiple similar non-compliances identified by external (e.g., Federal) oversight that in aggregate indicate a significant programmatic breakdown.

(iii) Non-compliances that either have, or may have, significant negative impacts to the worker, the public, or the environment or that indicate a significant programmatic breakdown.

(iv) Failure to notify DOE upon discovery of events or conditions where notification is required by the terms and conditions of the contract.

(d) *Safeguarding restricted data and other classified information.* Performance failures occur if the Contractor does not comply with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information. The degrees of performance failure under which reductions of fee, profit, or share of cost savings will be determined are as follows:

(1) *First Degree:* Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have resulted in, or that can reasonably be expected to result in, exceptionally grave damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered first degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating a risk of, loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a Special Access Program (SAP), information identified as sensitive compartmented information (SCI), or high risk nuclear weapons-related data.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other

information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(2) *Second Degree*: Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have actually resulted in, or that can reasonably be expected to result in, serious damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered second degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Secret Restricted Data or other information classified as Secret.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Secret Restricted Data, or other information classified as Secret.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Restricted Data or other classified information regardless of classification (except for information covered by paragraph (d)(1)(iii) of this clause).

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Secret Restricted Data or other classified information classified as Secret.

(3) *Third Degree*: Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have actually resulted in, or that can reasonably be expected to result in, undue risk to the common defense and security. In addition, this category includes performance failures that result from a lack of Contractor management and/or employee attention to the proper safeguarding of Restricted Data and other classified information. These performance failures may be indicators of future, more severe performance failures and/or conditions, and if identified and corrected early would prevent serious incidents. The following are examples of performance failures or performance failures of similar import that will be considered third degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Restricted Data or other information classified as Confidential.

(ii) Failure to promptly report alleged or suspected violations of laws, regulations, or directives pertaining to the safeguarding of Restricted Data or other classified information.

(iii) Failure to identify or timely execute corrective actions to mitigate or eliminate identified vulnerabilities and reduce residual risk relating to the protection of Restricted Data or other classified information in accordance with the Contractor's Safeguards and Security Plan or other security plan, as applicable.

(iv) Contractor actions that result in performance failures which unto themselves pose minor risk, but when viewed in the aggregate indicate degradation in the integrity of the Contractor's safeguards and security management system relating to the protection of Restricted Data and other classified information.

CLAUSE I.133 - DEAR 970.5216-7 ALLOWABLE COST AND PAYMENT (OCT 2021) (DEVIATION) (PF 2022-23) (OCT 2021)

(a) Invoicing.

(1) The Government will make payments to the Contractor per DEAR 970.5232-2, "Payments and advances." The payments will only be for amounts determined to be allowable by the Contracting Officer in accordance with the: Federal Acquisition Regulation (FAR) subpart 31.2 in effect on the date of this contract; the Department of Energy Acquisition Regulation subpart 970.31 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.

(b) Reimbursing costs.

(1) The Government will make payments to the Contractor per DEAR 970.5232-2, "Payments and advances." The payments will only be for allowable costs. For the purpose of reimbursing allowable costs (except as provided in paragraph (b)(2) of this 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 (the Government will make payments to the Contractor per DEAR 970.5232-2, "Payments and advances");

(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) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(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.* The Government will make payments to the Contractor per DEAR 970.5232-2, "Payments and advances."

(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. The Government will make final payment to the Contractor per DEAR 970.5232-2, "Payments and advances."

CLAUSE I.134 - DEAR 970.5217-1 STRATEGIC PARTNERSHIP PROJECTS PROGRAM (NON-DOE FUNDED WORK) (April 23, 2015)

(a) *Authority to perform Strategic Partnership Projects.* Pursuant to the Economy Act of 1932, as amended (31 U.S.C. 1535), and the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*) or other applicable authority, the Contractor may perform work for non-DOE entities (sponsors) on a fully reimbursable basis in accordance with this clause.

(b) *Contractor's implementation.* The Contractor must draft, implement, and maintain formal policies, practices, and procedures in accordance with this clause, which must be submitted to the Contracting Officer for review and approval.

(c) *Conditions of participation in Strategic Partnership Projects program.* The Contractor—

(1) Must not perform Strategic Partnership Projects activities that would place it in direct competition with the domestic private sector;

(2) Must not respond to a request for proposals or any other solicitation from another Federal agency or non-Federal organization that involves direct comparative competition, either as an offeror, team member, or subcontractor to an offeror; however, the Contractor may, following notification to the Contracting Officer, respond to Broad Agency Announcements, Financial Assistance solicitations, and similar solicitations from another Federal Agency or non-Federal organizations when the selection is based on merit or peer review, the work involves basic or applied research to further advance scientific knowledge or understanding, and a response does not result in direct, comparative competition;

(3) Must not commence work on any Strategic Partnership Projects activity until a Strategic Partnership Projects proposal package has been approved by the DOE Contracting Officer or designated representative;

(4) Must not incur project costs until receipt of DOE notification that a budgetary resource is available for the project, except as provided in 48 CFR 970.5232-6;

(5) Must ensure that all costs associated with the performance of the work, including specifically all DOE direct costs and applicable surcharges, are included in any Strategic Partnership Projects proposal;

(6) Must maintain records for the accumulation of costs and the billing of such work to ensure that DOE's appropriated funds are not used in support of Strategic Partnership Projects activities and to provide an accounting of the expenditures to DOE and the sponsor upon request;

(7) Must perform all Strategic Partnership Projects in accordance with the standards, policies, and procedures that apply to performance under this contract, including but not limited to environmental, safety and health, security, safeguards and classification procedures, and human and animal research regulations;

(8) May subcontract portion(s) of a Work for Others project; however, the Contractor must select the subcontractor and the work to be subcontracted. Any subcontracted work must be in direct support of the DOE Contractor's performance as defined in the DOE approved Strategic Partnership Projects proposal package; and,

(9) Must maintain a summary listing of project information for each active Strategic

Partnership Projects project, consisting of –

- (i) Sponsoring agency;
- (ii) Total estimated costs;
- (iii) Project title and description; (iv) Project point of contact; and,
- (v) Estimated start and completion dates.

(d) *Negotiation and execution of Strategic Partnership Projects agreement.*

(1) When delegated authority by the Contracting Officer, the Contractor may negotiate the terms and conditions that will govern the performance of a specific Strategic Partnership Projects project. Such terms and conditions must be consistent with the terms, conditions, and requirements of the Contractor's contract with DOE. The Contractor may use DOE- approved contract terms and conditions as delineated in DOE Manual 481.1-1A or terms and conditions previously approved by the responsible Contracting Officer or authorized designee for agreements with non-Federal entities. The Contractor must not hold itself out as representing DOE when negotiating the proposed Strategic Partnership Projects agreement.

(2) The Contractor must submit all Strategic Partnership Projects agreements to the DOE Contracting Officer for DOE review and approval. The Contractor may not execute any proposed agreement until it has received notice of DOE approval.

(e) *Preparation of project proposals.* When the Contractor proposes to perform Strategic Partnership Projects activities pursuant to this clause, it may assist the project sponsor in the preparation of project proposal packages including the preparation of cost estimates.

(f) *Strategic Partnership Projects appraisals.* DOE may conduct periodic appraisals of the Contractor's compliance with its Strategic Partnership Projects Program policies, practices and procedures. The Contractor must provide facilities and other support in conjunction with such appraisals as directed by the Contracting Officer or authorized designee.

(g) *Annual Strategic Partnership Projects report.* The Contractor must provide assistance as required by the Contracting Officer or authorized designee in the preparation of a DOE Annual Summary Report of Strategic Partnership Projects Activities under the contract.

CLAUSE I.135 - DEAR 970.5222-1 COLLECTIVE BARGAINING AGREEMENTS-MANAGEMENT AND OPERATING CONTRACTS (DEC 2000)

When negotiating collective bargaining agreements applicable to the work force under this contract, the Contractor shall use its best efforts to ensure such agreements contain provisions designed to assure continuity of services. All such agreements entered into during the contract period of performance should provide that grievances and disputes involving the interpretation or application of the agreement will be settled without resorting to strike, lockout, or other interruption of normal operations. For this purpose, each collective bargaining agreement should provide an effective grievance procedure with arbitration as its final step, unless the parties mutually agree upon some other method of assuring continuity of operations. As part of such agreements, management and labor should agree to cooperate fully with the Federal Mediation and Conciliation Service. The contractor shall include the substance of this clause in any subcontracts for protective services or other services performed on the DOE-owned site which will affect the continuity of operation of the facility.

CLAUSE I.136 - DEAR 970.5222-2 OVERTIME MANAGEMENT (DEC 2000) (SC ALTERNATE) (APR 2018)

(a) The Contractor shall maintain adequate internal controls to ensure that employee overtime is authorized only if cost effective and necessary to ensure performance of work under this contract.

(b) The Contractor shall notify the Contracting Officer when in any given year it is likely that overtime usage as a percentage of payroll may exceed 4%.

(c) The Contracting Officer may require the submission, for approval, of a formal annual overtime control plan whenever Contractor overtime usage as a percentage of

payroll has exceeded, or is likely to exceed, 4%.

CLAUSE I.137 - DEAR 970.5223-1 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)

(a) For the purposes of this clause,

(1) Safety encompasses environment, safety and health, including pollution prevention and waste minimization; and

(2) Employees include subcontractor employees.

(b) In performing work under this contract, the Contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Contractor shall exercise a degree of care commensurate with the work and the associated hazards. The Contractor shall ensure that management of environment, safety and health (ES&H) functions and activities becomes an integral but visible part of the contractor's work planning and execution processes. The Contractor shall, in the performance of work, ensure that:

(1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those contractor and subcontractor employees managing or supervising employees performing work.

(2) Clear and unambiguous lines of authority and responsibility for ensuring (ES&H) are established and maintained at all organizational levels.

(3) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

(4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

(5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.

(6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

(7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the contractor. These agreed-upon conditions and requirements are requirements of the contract and binding upon the contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.

(c) The Contractor shall manage and perform work in accordance with a documented Safety Management System (System) that fulfills all conditions in paragraph(b) of this clause at a minimum. Documentation of the System shall describe how the contractor will:

- (1) Define the scope of work;
- (2) Identify and analyze hazards associated with the work;
- (3) Develop and implement hazard controls;
- (4) Perform work within controls; and
- (5) Provide feedback on adequacy of controls and continue to improve safety management.

(d) The System shall describe how the contractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the contractor will measure system effectiveness.

(e) The Contractor shall submit to the contracting officer documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the contracting officer. Guidance on the preparation, content, review, and approval of the System will be provided by the contracting officer. On an annual basis, the contractor shall review and update, for DOE approval, its safety performance objectives, performance measures, and commitments consistent with and in response to DOE's program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as maintain the integrity of the entire System. Accordingly, the System shall be integrated with the Contractor's business processes for work planning, budgeting, authorization, execution, and change control.

(f) The Contractor shall comply with, and assist the Department of Energy in complying with, ES&H requirements of all applicable laws and regulations, and applicable directives identified in the clause of this contract entitled "Laws, Regulations, and DOE Directives." The Contractor shall cooperate with Federal and non-Federal

agencies having jurisdiction over ES&H matters under this contract.

(g) The Contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the Contractor fails to provide resolution or if, at any time, the contractor's acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the contracting officer may issue an order stopping work in whole or in part. Any stop work order issued by a contracting officer under this clause (or issued by the Contractor to a subcontractor in accordance with paragraph (i) of this clause) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the Contracting Officer issues a stop work order, an order authorizing the resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

(h) Regardless of the performer of the work, the Contractor is responsible for compliance with the ES&H requirements applicable to this contract. The Contractor is responsible for flowing down the ES&H requirements applicable to this contract to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements.

(i) The Contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on site at a DOE-owned or - leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) of this clause. Depending on the complexity and hazards associated with the work, the contractor may choose not to require the subcontractor to submit a Safety Management System for the contractor's review and approval.

CLAUSE I.138 - DEAR 970.5223-4 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2010)

(a) *Program Implementation.* The contractor shall, consistent with 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.

(b) *Remedies.* In addition to any other remedies available to the Government, the contractor's failure to comply with the requirements of 10 CFR part 707 or to perform in a manner consistent with its approved program may render the contractor subject to: the suspension of contract payments, or, where applicable, a reduction in award fee; termination for default; and suspension or debarment.

(c) *Subcontracts.*

(1) The contractor agrees to notify the contracting officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the contractor believes may be subject to the requirements of 10 CFR part 707, unless the contracting officer agrees to a different date.

(2) The DOE prime contractor shall require all subcontracts subject to the provisions of 10 CFR part 707 to agree to develop and implement a workplace substance abuse program that complies with the requirements of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, as a condition for award of the subcontract. The DOE prime contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR part 707.

(3) The contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR part 707.

CLAUSE I.139 - DEAR 970.5223-7 SUSTAINABLE ACQUISITION PROGRAM (OCT 2010) (SC ALTERNATE) (SEP 2018)

(a) Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall provide its services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of Federal employees, contract service providers and visitors using the facility.

(b) Green purchasing or sustainable acquisition has several interacting initiatives. The Contractor must comply with initiatives that are current as of the contract award date. DOE may require compliance with revised initiatives from time to time. The Contractor may request an equitable adjustment to the terms of its contract using the procedures at 48 CFR 970.5243-1 Changes. The initiatives important to these Orders are explained on the following Government or Industry Internet Sites:

(1) Recycled Content Products are described at <http://epa.gov/cpg>.

(2) Biobased products are described at <http://www.biopreferred.gov/>.

(3) Energy efficient products are at <http://energystar.gov/products> for Energy Star products.

(4) Energy efficient products are at <http://www.femp.energy.gov/procurement> for FEMP designated products.

(5) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at <http://www.epeat.net> the Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site.

(6) Greenhouse gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at <http://www.archives.gov/federal-register/executive-orders/disposition.html>.

(7) Non-Ozone Depleting Alternative Products are at <http://www.epa.gov/ozone/strathome.html>.

(8) Water efficient plumbing products are at <http://epa.gov/watersense>.

(c) The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming products, and 52.223-17 Affirmative procurement of EPA- Designated items in Service and Construction Contracts, require the use of products that have biobased content, are energy efficient, or have recycled content. To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor must provide the energy efficient and environmentally sustainable type of product unless that type of product—

(1) Is not available;

(2) Is not life cycle cost effective (or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable), EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level;

(3) Does not meet performance needs; or,

(4) Cannot be delivered in time to meet a critical need.

(d) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, (<http://www.epa.gov/greeningepa/practices/eo13423.htm>) and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic performance (<http://www.archives.gov/federal-register/executive-orders/disposition.html>). The Contractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, Acquisition Considerations Regarding Federal leadership in Environmental,

Energy, and Economic Performance. This guide includes information concerning recycled content products, biobased products, energy efficient products, water efficient products, alternative fuels and vehicles, non ozone depleting substances and other environmentally preferable products and services. This guide is available on the internet at: <http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf>.

(e) Contractors must establish and maintain a documented energy management program which includes requirements for energy and water efficient equipment, EnergyStar or WaterSense, as applicable and procedures for verification of purchases, following the criteria in DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation management, Attachment 1, or its successor. This requirement should not be flowed down to subcontractors.

(f) In complying with the requirements of paragraph (c) of this clause, the Contractor shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position.

(g) The Contractor shall prepare and submit performance reports using prescribed DOE formats, at the end of the Federal fiscal year, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the contract. Failure to perform this requirement may be considered a failure that endangers performance of this contract and may result in termination for default (see FAR 52.249-6, Termination (Cost Reimbursement)).

(h) These provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services in the materials selection process. The Subcontractor is not required to comply with the procedures in paragraphs (c) through (f) of this clause regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f) of this clause.

(i) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "Subcontractor."

CLAUSE I.140 - DEAR 970.5225-1 COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS (EXPORT CLAUSE) (NOV 2015)

(a) The Contractor shall comply with all applicable U.S. export control laws and regulations.

(b) The Contractor's responsibility to comply with all applicable laws and regulations exists independent of, and is not established or limited by, the information provided by this clause.

(c) Nothing in the terms of this contract adds to, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive Orders, and regulations, including but not limited to -

(1) The Atomic Energy Act of 1954, as amended;

(2) The Arms Export Control Act (22 U.S.C. 2751 *et seq.*);

(3) The Export Administration Act of 1979 (50 U.S.C. app. 2401 *et seq.*), as continued under the International Emergency Economic Powers Act (Title II of Pub. L. 95-223, 91 Stat. 1626, October 28, 1977; 50 U.S.C. 1701 *et seq.*);

(4) Trading with the Enemy Act (50 U.S.C. App. 5(b), as amended by the Foreign Assistance Act of 1961);

(5) Assistance to Foreign Atomic Energy Activities (10 CFR part 810);

(6) Export and Import of Nuclear Equipment and Material (10 CFR part 110);

(7) International Traffic in Arms Regulations (ITAR) (22 CFR parts 120 through 130);

(8) Export Administration Regulations (EAR) (15 CFR parts 730 through 774);
and

(9) Regulations administered by the Office of Foreign Assets Control (31 CFR parts 500 through 598).

(d) In addition to the Federal laws and regulations cited above, National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information establishes a national policy that, to the maximum extent possible, the products of fundamental research shall remain unrestricted. NSDD 189 provides that no restrictions may be placed upon the conduct or reporting of federally funded fundamental research that has not received national security classification, except as provided in applicable U.S. statutes. As a result, contracts confined to the performance of unclassified fundamental research generally do not involve any export-controlled activities.

NSDD 189 does not take precedence over statutes. NSDD 189 does not exempt any research from statutes that apply to export controls such as the Atomic Energy Act, as amended; the Arms Export Control Act; the Export Administration Act of 1979, as amended; or the U.S. International Emergency Economic Powers Act; or the regulations that implement those statutes (*e.g.*, the ITAR, the EAR, 10 CFR part 110 and 10 CFR part 810). Thus, if items (*e.g.*, commodities, software or technologies) that are controlled by U.S. export control laws or regulations are used to conduct research or are

generated as part of the research efforts, the export control laws and regulations apply to the controlled items.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all solicitations and subcontracts.

CLAUSE I.141 - RESERVED

CLAUSE I.142 - DEAR 970.5227-2 RIGHTS IN DATA-TECHNOLOGY TRANSFER (DEC 2000) (DEVIATION) (AL 2021-04)

(a) *Definitions.*

Assistant General Counsel for Technology Transfer and Intellectual Property is the senior intellectual property counsel for the Department of Energy, as distinguished from the NNSA Patent Counsel, and, where used in this clause, indicates that the authority for the activity(ies) being described belongs to DOE.

Computer data bases, as used in this clause, means a collection of data 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, as used in this clause, means (1) computer programs which are data comprising 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 (2) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

Data, as used in this clause, 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 "data" does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.

Department of Energy (DOE), as used in this clause, includes the National Nuclear Security Administration (NNSA), unless otherwise identified or indicated.

Limited rights data, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of paragraph (h) of this clause.

Open source software, as used in this clause, means computer software with its source code that is distributed under a license in which the user is granted the right to use, copy, modify, and prepare derivative works thereof, without having to make royalty payments.

Patent Counsel means the DOE or NNSA Patent Counsel assisting the contracting activity.

Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (i) of this clause.

Technical data, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

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

(b) Allocation of Rights.

1) Except as may be otherwise expressly provided or directed in writing by the Patent Counsel, the Government shall have—

(i) Ownership of all technical data and computer software first produced in the performance of this Contract;

(ii) Unlimited rights in technical data and computer software first produced or specifically used in the performance of this Contract, except as provided herein regarding copyright, limited rights data, or restricted computer software, and except for data subject to the withholding provisions for protected Cooperative Research and Development Agreement (CRADA) information in accordance with Technology Transfer actions under this contract, or other data specifically protected by statute for a period of time or, where, approved by Patent Counsel, in appropriate instances of the DOE Strategic Partnership Projects (SPP) Program;

(iii) The right to inspect technical data and computer software first produced or specifically used in the performance of this contract at all reasonable times. The Contractor shall make available all necessary facilities to allow DOE personnel to perform such inspection;

(iv) The right to have all technical data and computer software first produced or specifically used in the performance of this contract delivered to the Government or otherwise disposed of by the contractor, either as the Contracting Officer may from time to time direct during the progress of the work or in any

event as the Contracting Officer shall direct upon completion or termination of this contract. When delivering all contractor-produced computer software to the DOE Office of Scientific and Technical Information (OSTI), the Contractor shall submit a complete package as prescribed in paragraph (e)(3) of this section. The Contractor agrees to leave a copy of such data at the facility or plant to which such data relate, and to make available for access or to deliver to the Government such data upon request by the Contracting Officer. If such data are limited rights data or restricted computer software, the rights of the Government in such data shall be governed solely by the provisions of paragraph (h) of this clause ("Rights in Limited Rights Data") or paragraph (i) of this clause ("Rights in Restricted Computer Software"); and

(v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this Contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) The Contractor shall have:

(i) The right to withhold limited rights data and restricted computer software unless otherwise provided in provisions of this clause;

(ii) The right to use for its private purposes, subject to patent, security or other provisions of this Contract, data it first produces in the performance of this Contract, except for data in DOE's Uranium Enrichment Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation, provided the data requirements of this Contract have been met as of the date of the private use of such data; and

(iii) The right to assert copyright subsisting in scientific and technical works, and works produced by Contractor under DEAR 952.204-75 as provided in paragraph (d) of this clause and the right to request permission to assert copyright subsisting in works other than scientific and technical articles as provided in paragraph (e) of this clause.

(3) The Contractor agrees that for limited rights data or restricted computer software or other technical business or financial data in the form of recorded information which it receives from, or is given access to by DOE or a third party, including a DOE contractor or subcontractor, and for technical data or computer software it first produces under this Contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend

contained thereon.

(4) In the performance of DOE contracted obligations, each Contractor is required to manage scientific and technical information (STI) produced under the contract as a direct and integral part of the work and ensure its broad availability to all customer segments by making STI available to DOE's central STI coordinating office, OSTI. Requirements for all such reportable information to OSTI are in DOE Order 241.1B, or successor version, whether it is publicly releasable, controlled unclassified information, or classified.

(c) Copyright (General).

(1) The Contractor agrees not to mark, register, or otherwise assert copyright in any data in a published or unpublished work, other than as set forth in paragraphs (d), (e), or (f) of this clause.

(2) Except for material to which the Contractor has obtained the right to assert copyright in accordance with paragraphs (d), (e) or (f) of this clause, the contractor agrees not to include in the data delivered under this contract any material copyrighted by the contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (d) of this clause. If the contractor believes that such copyrighted material for which the license cannot be obtained must be included in the data to be delivered, rather than merely incorporated therein by reference, the contractor shall obtain the written authorization of the Contracting Officer to include such material in the data prior to its delivery.

(3) If the Contractor has not been granted permission to copyright data or computer software first produced under the contract where such permission is necessary, i.e., for works other than scientific and technical journal articles and data produced under a CRADA, and if the Government desires to obtain copyright in such data or computer software, the Patent Counsel may direct the Contractor to establish claim to copyright in such data or computer software and to assign such copyright to the Government or its designated assignee.

(d) Copyrighted works (scientific and technical works).

(1) The Contractor shall have the right to assert, without prior approval of the Contracting Officer, copyright subsisting in scientific and technical works composed under this contract or based on or containing data first produced by the Contractor in the performance of this contract, and published in academic, technical or professional journals, symposia, proceedings, contributions to chapters of book

compilations or similar means of dissemination to make broadly available to the public or scientific community for the purpose of scientific, research, knowledge and education. Such scientific and technical works may be recorded or fixed in any medium including but not limited to print, online, web, audio, video or other medium, and released or disseminated through any communication or distribution channel including but not limited to articles, reports, books, non-architectural drawings, repositories, videos, websites, workshops, or social media. When assertion of copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) on the data when such data are delivered to the Government as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a nonexclusive, paid-up, irrevocable, world-wide 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,

(2) For each scientific or technical work first produced or composed under this contract and submitted for publication or similar means of dissemination, the contractor shall provide notice to the publisher of the Government's license in the copyright that is substantially similar to or otherwise references one of the following notices below:

A suitable notice (long version) reflecting the Government's non-exclusive, paid-up, irrevocable, world-wide license in the copyright.

Notice: This work was produced by [insert the name of the Contractor] under Contract No. [insert the contract number] with the U.S. Department of Energy. The United States Government retains and the publisher, by accepting the work for publication, acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this work, or allow others to do so, for United States Government purposes. The Department of Energy will provide public access to these results of federally sponsored research in accordance with the DOE Public Access Plan (<http://energy.gov/downloads/doe-public-access-plan>).

(End of notice)

A suitable notice (short version) reflecting the Government's non-exclusive, paid-up, irrevocable, world-wide license in the copyright follows:

Notice: This work was produced by [insert the name of the Contractor] [insert the contract number] with the U.S. Department of Energy. Publisher acknowledges the U.S. Government license to provide public access under the DOE Public

Access Plan (<http://energy.gov/downloads/doe-public-access-plan>).

(End of notice)

(3) The title to the copyright of the original of unclassified graduate theses and the original of related unclassified scientific papers shall vest in the author thereof, subject to the right of DOE to retain duplicates of such documents and to use such documents for any purpose whatsoever without any claim on the part of the author or the Contractor for additional compensation.

(e) Copyrighted works (other than scientific and technical works and data produced under a CRADA). The Contractor may obtain permission to assert copyright subsisting in technical data and computer software first produced by the Contractor in performance of this contract, when the Contractor needs to control distribution to advance the goals of the technology transfer mission and where the Contractor can show that commercialization would be enhanced by such copyright protection, subject to the following:

(1) Contractor request to assert copyright.

(i) Except for scientific and technical works under (d) above and data produced under a CRADA, the Contractor shall submit in writing to Patent Counsel its request to assert copyright in data first produced in the performance of this contract pursuant to this clause. The right of the Contractor to copyright data first produced under a CRADA is as described in the individual CRADA. Each request by the Contractor must include:

(A) The identity of the data (including any computer software) for which the Contractor requests permission to assert copyright, as well as an abstract which is descriptive of the data and is suitable for dissemination purposes;

(B) The funding program under which it was funded;

(C) Whether, to the best knowledge of the Contractor, the data is subject to an international treaty or agreement;

(D) Whether the data is subject to export control;

(E) A statement that the Contractor plans to commercialize the data in compliance with the clause of this contract entitled, "Technology Transfer Mission," within five (5) years after obtaining permission to assert copyright or, on a case-by-case basis, a specified longer period where the Contractor can demonstrate that the ability to commercialize effectively is dependent upon such longer period; and

(F) For data other than computer software, a statement explaining why the assertion of copyright is necessary to enhance commercialization and is consistent with DOE's dissemination responsibilities.

(ii) For data that is developed using other funding sources in addition to DOE funding, the permission to assert copyright in accordance with this clause must also be obtained by the Contractor from all other funding sources prior to the Contractor's request to Patent Counsel. The request shall include the Contractor's certification or other documentation acceptable to Patent Counsel demonstrating such permission has been obtained;

(iii) Permission for the Contractor to assert copyright in excepted categories of data as determined exclusively by DOE will be expressly withheld. Such excepted categories include data whose release—

(A) Would be detrimental to national security, i.e., involve classified information or data or sensitive information under Section 148 of the Atomic Energy Act of 1954, as amended, or are subject to export control for nonproliferation and other nuclear-related national security purposes;

(B) Would not enhance the appropriate transfer or dissemination and commercialization of such data;

(C) Would have a negative impact on U.S. industrial competitiveness;

(D) Would prevent DOE from meeting its obligations under treaties and international agreements; or

(E) Would be detrimental to one or more of DOE's programs.

(iv) The Contractor will obtain the advanced written approval of the Patent Counsel to assert copyright where data are determined to be in the following excepted categories: (a) under export control restrictions; (b) developed with Naval Reactors' funding; (c) subject to disposition of data rights under treaties and international agreements. Additional excepted categories may be added by the Assistant General Counsel for Technology Transfer and Intellectual Property. Where data are determined to be under export control restriction, the Contractor may obtain permission to assert copyright subject to the provisions of this clause for purposes of limited commercialization in a manner that complies with export control statutes and applicable regulations. In addition, notwithstanding any other provision of this contract, all data developed with Naval Reactors' funding and those data that are classified fall within excepted categories. The rights of the Contractor in data are subject to the disposition of data rights in the treaties and

international agreements identified at DOES' Office of International Affairs (International Commitments—IEC).

(2) Patent Counsel Review and Response to Contractor's Request. The Patent Counsel shall use its best efforts to respond in writing within 60 days of receipt of a complete request by the Contractor to assert copyright in technical data and computer software pursuant to this clause. Such response shall either give or withhold DOE's permission for the Contractor to assert copyright or advise the Contractor that DOE needs additional time to respond, and the reasons therefor. If Patent Counsel grants permission for the Contractor to assert copyright in computer software, the permission automatically extends to subsequent minor versions (e.g., minor revisions, patches and bug fixes) having the same funding source, same name and substantially same functionality as the original computer software, and may be extended to subsequent major versions representing significant modifications of the program with the approval of Patent Counsel.

(3) Permission for contractor to assert copyright.

(i) For computer software, the Contractor shall furnish, or make available to the DOE Office of Scientific and Technical Information (OSTI) in accordance with OSTI guidelines at the time permission to assert copyright is given under paragraph (e)(2) of this clause—

(A) Announcement information/metadata contained in the Software Announcement Notice 241.4;

(B) The source code and/or executable file for each software program;
and

(C) Documentation, if any, which may consist of a user manual, sample test cases, or similar information, needed by a technically competent user to understand and use the software (whether included on the software media itself or provided in a separate file or in paper format).

(ii) The Contractor acknowledges that the DOE designated software distribution and control point may provide a technical description of the software in an announcement identifying its availability from the copyright holder.

(iii) Unless otherwise directed by the Patent Counsel, for data other than computer software to which the Contractor has received permission to assert copyright under paragraph (e)(2) of this clause above, the Contractor shall within sixty (60) days of obtaining such permission furnish, or make available, to OSTI in accordance with OSTI guidelines, a copy of such data as well as an abstract of

the data suitable for dissemination purposes. The Contractor acknowledges that OSTI may provide an abstract of the data in an announcement to DOE, its contractors and to the public identifying its availability from the copyright holder.

(iv) Once the Contractor is given permission to assert copyright in data, the Contractor may begin to commercialize the copyrighted data by making copyrighted data available for licensing to third parties and by offering other types of distribution to third parties. During the period in which commercialization activities pertaining to the copyrighted data are continuing, or for a specified period of time prescribed by Patent Counsel in paragraph (e)(2) above, 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 and perform publicly and display publicly, by or on behalf of the Government. For all previously approved and current copyrighted data that the Contractor is actively commercializing, the Contractor may continue to commercialize in accordance with this paragraph.

(v) When the Contractor abandons commercialization activities pertaining to the data to which the Contractor has been given permission to assert copyright or at the end of the specified period as prescribed by Patent Counsel, 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, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(vi) At any time the Contractor abandons commercialization activities for copyrighted data, the Contractor shall advise OSTI and Patent Counsel and, upon request, assign the copyright to the Government so that the Government can distribute the copyrighted data to the public. When the Contractor abandons commercialization activities, the Contractor will provide to OSTI the latest version of the copyrighted data (for example, source code, object code, minimal support documentation, drawings or updated manuals.) In addition, the Contractor will provide annually to Patent Counsel, if requested, a list of all copyrighted data that the Contractor has abandoned commercial licensing activity during that year.

(vii) Whenever the Contractor asserts copyright in data pursuant to this paragraph (e), the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 on the copyrighted data and also an acknowledgment of the Government sponsorship and license rights of paragraphs (e)(3)(iv) and (v) of this clause. Such action shall be taken when the data are delivered to the Government, licensed or deposited for registration as a published work in the U.S. Copyright Office, or when submitted for publication. The acknowledgment of

Government sponsorship and license rights shall substantially similar to the following:

Notice: These data were produced by [insert name of Contractor] under Contract No. _____ with the Department of Energy. During the period of commercialization or such other time period specified by the Department of Energy, the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. Subsequent to that period the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works, distribute copies to the public, perform publicly and display publicly, and to permit others to do so. The specific term of the license can be identified by inquiry made to the Contractor or DOE.

NEITHER THE UNITED STATES NOR THE UNITED STATES DEPARTMENT OF ENERGY, NOR ANY OF THEIR EMPLOYEES, MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY DATA, APPARATUS, PRODUCT, OR PROCESS DISCLOSED, OR REPRESENTS THAT ITS USE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS.

(End of Notice)

(viii) With respect to any data to which the Contractor has received permission to assert copyright, the DOE has the right, during the period that Contractor is commercializing the data as provided for in paragraph (e)(3)(iv) of this clause, to request the Contractor to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant(s) upon terms that are reasonable under the circumstances, and if the Contractor refuses such request, to grant such license itself, if the DOE determines that the Contractor has not made a satisfactory demonstration that either it or its licensee(s) is actively pursuing commercialization of the data as set forth in subparagraph (e)(1)(i) of this clause. Before licensing under this subparagraph, DOE shall furnish the Contractor a written request for the Contractor to grant the stated license, and the Contractor shall be allowed thirty (30) days (or such longer period as may be authorized by the Contracting Officer for good cause shown in writing by the Contractor) after such notice to show cause why the license should not be granted. The Contractor shall have the right to appeal the decision of the DOE to grant the stated license to the Invention Licensing Appeal Board as set forth in 10 CFR 781.65— "Appeals".

(ix) No costs shall be allowable for maintenance of copyrighted data, primarily for the benefit of the Contractor and/or a licensee which exceeds DOE Program needs, except as expressly provided in writing by the Contracting Officer. The Contractor may use its net royalty income to effect such maintenance costs.

(4) The following notice may be included in computer software prior to any publication or release and prior to the Contractor's obtaining permission from the Department of Energy to assert copyright in the computer software pursuant to paragraph (c)(3) of this section.

Notice: This computer software was prepared by [insert the Contractor's name] and [insert the individual author], hereinafter the Contractor, under Contract [insert the Contract Number] with the Department of Energy (DOE). All rights in the computer software are reserved by DOE on behalf of the United States Government and the Contractor as provided in the Contract. You are authorized to use this computer software for Governmental purposes but it is not to be released or distributed to the public. NEITHER THE GOVERNMENT NOR THE CONTRACTOR MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LIABILITY FOR THE USE OF THIS SOFTWARE. This notice including this sentence must appear on any copies of this computer software.

(End of notice)

(5) A similar notice can be used for data, other than computer software, prior to any publication or release and prior to Contractor's obtaining permission of DOE Patent Counsel to assert copyright.

(f) Open software source. The Contractor may release computer software first produced by the Contractor in the performance of this contract under an open source software license. Such software shall hereinafter be referred to as open source software or OSS, subject to the following:

(1) DOE Program notice for copyright assertion for OSS.

(i) The Contractor shall provide written notice (including relevant data such as, for example, the software disclosure form) to each DOE Program or Programs that have provided a substantial portion of the funding (funding source(s)) to develop the software that the Contractor intends to release as OSS unless the funding Program(s) has previously provided blanket approval for all software developed with funding from that Program or a specific DOE project stipulates the software to be released as OSS. If Program has neither consented nor objected to the assertion of copyright within two weeks of such written notification, the Contractor may assert copyright in the software. If notification of

a funding DOE Program(s) is not practicable or DOE Program(s) has objected, the Contractor shall consult with Patent Counsel, which may provide approval. For software developed under a technology transfer agreement (e.g., CRADA, SPP, or User Facility Agreement), authorization from the partner of the such agreement shall be additionally obtained for OSS release unless such agreement has a provision providing for such copyright assertion. (ii) If the software is developed with funding from a federal government agency or agencies (funding source(s)) other than DOE, then authorization from all the funding agency(ies) shall be obtained for OSS release, if practicable. Such federal government agency(ies) may provide blanket approval for all software developed with funding from that agency(ies). However, OSS release of any one of such software shall be subject to approval by all other funding sources for the software, if any. If approval from such federal government agency(ies) is not practicable, the Patent Counsel may provide approval instead.

(2) Assert copyright in the OSS. Once the Contractor has met the program approval requirements set forth in paragraph (f)(1) of this clause, copyright in the software to be distributed as OSS may be asserted by the Contractor, or, for OSS developed under a CRADA, User Facility Agreement, or SPP Agreement, either by the Contractor, CRADA Participant, User Facility User, or SPP Sponsor, as applicable, which precludes marking such OSS as protectable from public distribution.

(3) Submit Software Announcement Notice 241.4 to OSTI. The Contractor must submit Software Announcement Notice (AN) 241.4 (or the current notice as may be required by DOE) to OSTI. In the AN 241.4, the Contractor shall provide the unique URL (i.e. a persistent identifier) from which the software can be obtained so that OSTI can announce the availability of the OSS and the public has access via the URL.

(4) Maintain OSS record. The Contractor must maintain a record of all software distributed as OSS. Upon request of the Patent Counsel, the Contractor shall provide the necessary information regarding any or all OSS.

(5) Provide public access to the OSS. The Contractor shall ensure that the OSS is publicly accessible as open source via the Contractor's website, Open Source Bulletin Boards operated by third parties, DOE, or other standard industry methods.

(6) *Select an OSS license.* Each OSS will be distributed pursuant to an OSS license. The Contractor may choose among industry standard OSS licenses or create its own set of Contractor standard licenses. To assist the Contractor, the Assistant General Counsel for Technology Transfer and Intellectual Property, may

periodically issue guidance on OSS licenses. Each Contractor-created OSS license, must contain, at a minimum, the following provisions –

(i) A disclaimer or equivalent that disclaims the Government's and Contractor's liability for licensees' and third parties' use of the software; and

(ii) A grant of permission for licensee to distribute OSS containing the licensee's derivative works. This provision may allow the licensee and third parties to commercialize their derivative works or might request that the licensee's derivative works be forwarded to the Contractor for incorporation into future OSS versions.

(7) *Relationship to other required clauses in the contract.* OSS distributed in accordance with this section shall not be subject to the requirements relating to indemnification of the Contractor or Federal Government, U.S. Competitiveness and U.S. Preference, as set forth in paragraphs (f) and (g) of the clause within this contract entitled Technology Transfer Mission (48 CFR 970.5227-3). The requirement for the Contractor to request permission to assert copyright for the purpose of engaging in licensing software for royalties, as set forth elsewhere in this clause, is not modified by this section.

(8) *Government license.* For all OSS, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in data copyrighted in accordance with paragraph (f)(2) of this clause to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(9) *Contractor abandons OSS.* If the Contractor ceases to make OSS publicly available, then the Contractor shall submit to OSTI the object code and source code of the latest version of the OSS developed by the Contractor in addition to a revised Announcement Notice 241.4 (which includes an abstract) and the Contractor shall direct any inquiries from third parties seeking to obtain the original OSS to OSTI.

(g) *Subcontracting.*

(1) Unless otherwise directed by the Patent Counsel, the Contractor agrees to use, in subcontracts in which technical data or computer software is expected to be produced or in subcontracts for supplies that contain a requirement for production or delivery of data in accordance with the DOE policy and procedures by using "Rights in Data-General" at 48 CFR 52.227-14 modified in accordance with 48 CFR 927.409 including alternates as appropriate with the prior approval of DOE Patent Counsel. The Contractor shall not acquire rights in a subcontractor's limited rights data or restricted computer software, except through the use of Alternates II or III,

respectively, without the prior approval of the Patent Counsel. The clause at 48 CFR 52.227-16, Additional Data Requirements, shall be included in subcontracts in accordance with 48 CFR 927.409(d). In subcontracts, including subcontracts for related support services, involving the design or operation of any plants or facilities or specially designed equipment for such plants or facilities that are managed or operated under its contract with DOE, the Contractor shall use the "rights in Data-Facilities clause at 48 CFR 970.5227-1.

(2) It is the responsibility of the Contractor to obtain from its subcontractors technical data and computer software and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(i) Promptly submit written notice to the Contracting Officer setting forth reasons or the subcontractor's refusal and other pertinent information which may expedite disposition of the matter, and

(ii) Not proceed with the subcontract without the written authorization of the Contracting Officer.

(3) Neither the Contractor nor higher-tier subcontractors shall use their power to award subcontracts as economic leverage to acquire rights in a subcontractor's limited rights data and restricted computer software for their private use.

(h) *Rights in limited rights data.* Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable nonexclusive, paid-up license by or for the Government, in any limited rights data of the Contractor specifically used in the performance of this contract, provided, however, that to the extent that any limited rights data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth below. All such limited rights data shall be marked with the following "Limited Rights Notice:"

Limited Rights Notice

These data contain "limited rights data," furnished under Contract No. _____ with the United States Department of Energy which may be duplicated and used by the Government with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be

made solely for the following purposes:

(a) Use (except for manufacture) by support services contractors within the scope of their contracts;

(b) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(c) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(d) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and

(e) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government. This Notice shall be marked on any reproduction of this data in whole or in part.

(End of notice)

(i) *Rights in restricted computer software.* (1) Except as may be otherwise specified in this contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up, license by or for the Government, in any restricted computer software of the Contractor specifically used in the performance of this contract; provided, however, that to the extent that any restricted computer software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice" set forth below. All such restricted computer software shall be marked with the following "Restricted Rights Notice:"

Restricted Rights Notice—Long Form

(a) This computer software is submitted with restricted rights under Department of Energy Contract No. _____. It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.

(b) This computer software may be:

(1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(2) Used, copied for use, in a backup or replacement computer if any computer for which it was acquired is inoperative or is replaced;

(3) Reproduced for safekeeping (archives) or backup purposes;

(4) Modified, adapted, or combined with other computer software, provided that only the portions of the derivative software consisting of the restricted computer software are to be made subject to the same restricted rights; and

(5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in 48 CFR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.

(c) Notwithstanding the foregoing, if this computer software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the restricted rights notice above.

(d) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of notice)

(2) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

Restricted Rights Notice—Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the Long Form Notice of DOE Contract No. _____ with (name of Contractor).

(End of notice)

(3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, then the symbol R and the clause date (mo/yr) in brackets or a box, e.g. a [R-mo/yr], may be used. This will be read to mean restricted computer software, subject to the rights of the Government as described in the Long Form Notice, in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable material. In the event this contract contains any

variation to the rights in the Long Form Notice, then the contract number must also be cited.

(4) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, the software will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice "Unpublished-rights reserved under the Copyright Laws of the United States."

(j) Relationship to patents. Nothing contained in this clause creates or is intended to imply a license to the Government in any patent or is intended to be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

CLAUSE I.143 - DEAR 970.5227-3 TECHNOLOGY TRANSFER MISSION (AUG 2002) (DEVIATION) (AL 2022-01)

This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 and as amended by Pub. L. 103-160, Sections 3134 and 3160). The Contractor shall conduct technology transfer activities with a purpose of providing benefit from Federal research to U.S. industrial competitiveness.

(a) *Authority.* (1) In order to ensure the full use of the results of research and development efforts of, and the capabilities of, the Laboratory, technology transfer, including Cooperative Research and Development Agreements (CRADAs), is established as a mission of the Laboratory consistent with the policy, principles and purposes of Sections 11(a)(1) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub. L. 103-160, and of Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908); Section 102 of the Laboratory Modernization and Technology Transfer Act (Public Law 115-246) and Executive Order 12591 of April 10, 1987.

(2) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to: identifying and protecting intellectual property made, created or acquired at or by the Laboratory; negotiating licensing agreements and assignments for intellectual property made, created or acquired at or by the Laboratory that the Contractor controls or owns; bailments; negotiating all aspects of and entering into CRADAs; providing technical consulting and personnel exchanges; conducting science education activities and reimbursable Strategic Partnership Projects (SPP); providing information exchanges; and making available laboratory or weapon production user facilities. It is fully expected that the Contractor

shall use all of the mechanisms available to it to accomplish this technology transfer mission, including, but not limited to, CRADAs, user facilities, SPP, science education activities, consulting, personnel exchanges, assignments, and licensing in accordance with this clause.

(3) *Trademarks and service marks.* The Contractor, with notification to DOE Patent Counsel, is authorized to protect goods/services resulting from work at the Laboratory through Trademark and Service Mark protection. The Laboratory name and associated logos are owned by the Department of Energy unless an exception is allowed by the DOE Patent Counsel, and shall be protected by DOE Patent Counsel. In furtherance of the technology transfer mission, should the Contractor want to assert trademark or service mark protection for any word, phrase, symbol, design, or combination thereof that includes or is associated with the Laboratory name, the Contractor must first notify and obtain permission from the Department of Energy Patent Counsel. All marks, whether or not registered with the United States Patent and Trademark Office, are to be included in the "Intellectual property rights" paragraph (i) of this clause, below, regarding transfer to successor contractor, DOE reserves the right to require the Contractor to cancel registration of the mark or cease use of the mark.

(b) *Definitions.*

Assignment means any agreement by which the Contractor transfers ownership of Laboratory Intellectual Property, subject to the Government's retained rights.

Bailment means any agreement in which the Contractor permits the commercial or non-commercial transfer of custody, access or use of Laboratory Biological Materials or Laboratory Tangible Research Product for a specified purpose of technology transfer or research and development, including without limitation evaluation, and without transferring ownership to the bailee.

Contractor's Laboratory Director means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

Cooperative Research and Development Agreement (CRADA) means any agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of Title 31 of the United States Code.

Department of Energy (DOE), as used in this clause, includes the National Nuclear Security Administration (NNSA), unless otherwise identified or indicated.

Intellectual property means data, inventions, patents, patent applications, trademarks, service marks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

Joint Work Statement (JWS) means a proposal for a CRADA prepared by the Contractor, signed by the Contractor's Laboratory Director or designee which describes the project.

Laboratory biological materials means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract by Laboratory employees or through the use of Laboratory research facilities.

Laboratory tangible research product means tangible material results of research which--

- (1) Are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;
- (2) Are not materials generally commercially available; and
- (3) Were made under this contract by Laboratory employees or through the use of Laboratory research facilities.

Patent Counsel means the DOE or NNSA Patent Counsel assisting the contracting activity. The Patent Counsel is the first and primary point of contact for activities described in this clause.

Strategic Partnership Projects (SPP) means any agreement pursuant to the SPP clause, if included in this M&O contract, entered into between the Contractor as operator of the Laboratory and a non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, only when such work does not interfere with DOE-funded activities conducted as authorized by other parts of this M&O contract and on a fully reimbursable basis.

(c) *Allowable costs.* (1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation

Act of 1980, as amended (15 U.S.C. 3710). The costs associated with the conduct of technology transfer through the ORTA including activities associated with obtaining, maintaining, licensing, and assigning intellectual property rights, increasing the potential for the transfer of technology, widespread notice of technology transfer opportunities, and early stage and precommercial technology demonstration to remove barriers that limit private sector interest and demonstrate potential commercial applications of any research and technologies arising from Laboratory activities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this contract.

(2) The Contractor's participation in litigation to enforce or defend intellectual property claims incurred in its technology transfer efforts shall be as provided in the clause entitled "Insurance— Litigation and Claims" of this contract.

(d) *Conflicts of interest—technology transfer.* The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities. These procedures shall apply to all persons participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the Contracting Officer for review and approval within sixty (60) days after execution of this contract. The Contracting Officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

(1) Inform employees of and require conformance with standards of conduct and integrity in connection with research involving non-federal sponsors in accordance with the provisions of paragraph (n)(5) of this clause;

(2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to contractor-developed intellectual property;

(3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;

(4) Conduct activities relating to commercial utilization of contractor-developed intellectual property so as to avoid interference with or adverse effects on user facility or SPP activities of the Contractor;

(5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;

(6) Notify the Contracting Officer with respect to any new work to be performed or proposed to be performed under the contract for DOE or other Federal agencies

where the new work or proposal involves intellectual property in which the Contractor has obtained or intends to request or elect title;

(7) Except as provided elsewhere in this contract, obtain the approval of the Contracting Officer for any licensing of or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the Contracting Officer prior to any assignment, exclusive licensing, or option for exclusive licensing, of intellectual property to any individual who is a current or has been a Laboratory employee within the previous two years or to the company in which the individual is a principal and the Contractor's request should include notice of any technology transfer agreements (e.g., SPP and CRADA) associated with the intellectual property;

(9) Notify non-Federal sponsors of SPP activities, or non-Federal users of user facilities, of any relevant intellectual property interest of the Contractor prior to execution of SPP or user agreements; and

(10) Notify the Contracting Officer and DOE funding program prior to evaluating a proposal by a third party for DOE, when (a) the evaluator is an inventor of a Contractor invention that is the subject matter of the proposal or (b) the evaluator is a principal or has financial interest in the third party or (c) the third party is a licensee of the Contractor.

(e) *Fairness of opportunity.* In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) *U.S. industrial competitiveness for licensing and assignments of intellectual property.* (1) In the interest of enhancing U.S. Industrial Competitiveness, the Contractor shall, in its licensing and assignments of intellectual property, give preference in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. The Contractor shall consider the following factors in all of its licensing and assignment decisions involving Laboratory intellectual property where the Laboratory obtains rights during the course of the Contractor's operation of the Laboratory under this contract--

(i) Whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; and

(ii) (A) Whether the proposed licensee or assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement;

(B) In licensing or assigning any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into cooperative research and development agreements and licensing agreements, and has policies to protect United States intellectual property rights;

(C) If the proposed licensee, assignee, or parent of either type of entity is subject to the control of a foreign company or government, the Contractor, with the assistance of the Contracting Officer, in considering the factors set forth in paragraph (B) of this clause, may rely upon the following information –

(1) U.S. Trade Representative Inventory of Foreign Trade Barriers;

(2) U.S. Trade Representative Special 301 Report; and

(3) Such other relevant information available to the Contracting Officer; and

(D) The Contractor should review the U.S. Trade Representative web site at: <http://www.ustr.gov> for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision.

(2) If the Contractor determines that neither of the conditions in paragraphs (f)(1)(i) or (ii) of this clause are likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the Contracting Officer. The Contracting Officer shall act on any such requests for approval within thirty (30) days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. 204 (Preference for United States industry).

(4) The Contractor agrees to be bound by paragraph (t) U.S. Competitiveness in its Patent Rights provision (e.g. 48 CFR 970.5227-10 or 48 CFR 970.5227-12 as *may be modified*) as applicable.

(g) *Indemnity—product liability.* In entering into written technology transfer agreements, including but not limited to, research and development agreements, licenses, assignments and CRADAs, the Contractor agrees to include in such agreements a requirement that the U.S. Government and the Contractor, except for any negligent acts or omissions of the Contractor, be indemnified for all damages, costs,

and expenses, including attorneys' fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees which was derived from the work performed under the agreement. Except for CRADA and SPP where the guidance is already provided elsewhere, the Contractor shall identify and obtain the approval of the Contracting Officer for any proposed exceptions to this requirement such as where State or local law expressly prohibit the Participant from providing indemnification or where the research results will be placed in the public domain.

(h) *Disposition of income.* (1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to Section 12(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(b)(5)) and Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.) as amended through the effective date of this contract award or modification. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed 5 percent of the Laboratory's budget for that fiscal year, 15 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes as described above in this paragraph. Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for any purpose inconsistent with DOE mission direction.

(3) The Contractor shall establish subject to the approval of the Contracting Officer a policy for making awards or sharing of royalties with Contractor employees, other coinventors and coauthors, including Federal employee coinventors when deemed appropriate by the Contracting Officer. The Contractor shall notify the Contracting Officer of any changes to that policy, and such changes, shall be subject to the approval of the Contracting Officer.

(i) *Transfer to successor contractor.* In the event of termination or upon the expiration of this contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the Contracting Officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the Contracting Officer. The Contractor shall transfer title, as one or several packages if necessary, to the extent the Contractor retains title, in all patents

and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other intellectual property rights which arose at the Laboratory, to the successor contractor to the Government as directed by the Contracting Officer.

(j) *Technology transfer affecting the national security.* (1) The Contractor shall notify and obtain the approval of the Contracting Officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168), as amended. Such notification shall include sufficient information to enable DOE to determine the extent that commercialization of such technology would enhance or diminish security interests of the United States, or diminish communications within DOE's nuclear weapon production complex. DOE shall use its best efforts to complete its determination within sixty (60) days of the Contractor's notification, and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, licensing agreements and assignments, notice to such third parties that the export of goods and/or technical data from the United States may require some form of export control license or other authority from the U.S. Government and that failure to obtain such export control license may result in criminal liability under U.S. laws.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) *Records.* The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to the DOE and specifically including, but not limited to, the licensing agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) of this clause and shall provide reports to the Contracting Officer to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor's technology transfer activities while protecting any data not subject to disclosure under the Rights in Technical Data clause and paragraph (n) of this clause. Such records shall be made available in accordance with the clauses of this contract pertaining to inspection, audit and examination of records.

(l) *Reports to Congress.* To facilitate DOE's reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing intellectual property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States

industry. This plan, which may be included in the Annual Laboratory Plan, shall be provided to the Contracting Officer on or before October 1st of each year.

(m) *Oversight and appraisal.* The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities consistent with the audit and record requirements of this contract. Laboratory Contractor performance in implementing the technology transfer mission and the effectiveness of the Contractor's procedures will be evaluated by the Contracting Officer as part of the annual appraisal process, with input from the cognizant Secretarial Officer or program office.

(n) *Technology transfer through technology transfer Agreements.* Upon approval of the Contracting Officer and as provided in DOE approved guidance, the Laboratory Director, or designee, may enter into technology transfer agreements on behalf of the DOE subject to the requirements set forth in this paragraph.

(1) *Review and approval of CRADAs.* (i) Except as otherwise directed in writing by the Contracting Officer, each JWS or MSW shall be submitted to the Contracting Officer for approval. The Contractor's Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related intellectual property rights known by the Contractor to be owned by the Government to assist the Contracting Officer in the approval determination.

(ii) The Contractor shall also include (specific to the proposed CRADA), a statement of compliance with the fairness of opportunity requirements of paragraph (e) of this clause.

(iii) Within thirty (30) days after submission of a JWS, MSW or proposed CRADA, the Contracting Officer shall approve, disapprove or request modification to the JWS, MSW or CRADA. The Contracting Officer shall provide a written explanation to the Contractor's Laboratory Director or designee of any disapproval or requirement for modification of a JWS or proposed CRADA.

(iv) Except as otherwise directed in writing by the Contracting Officer, the Contractor shall not enter into, or begin work under, a CRADA until approval of the CRADA or relevant MSW has been granted by the Contracting Officer. The Contractor may submit its proposed CRADA to the Contracting Officer at the time of submitting its proposed JWS, relevant MSW or any time thereafter.

(2) *Selection of participants.* The Contractor's Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying intellectual property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements. The Contractor, in considering these factors, may rely upon the following information:

(A) U.S. Trade Representative Inventory of Foreign Trade Barriers,

(B) U.S. Trade Representative Special 301 Report, and

(C) Such other relevant information available to the Contracting Officer. The Contractor should review the U.S. Trade Representative web site at <http://www.ustr.gov> for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision;

(iii) Provide fairness of opportunity in accordance with the requirements of paragraph (e) of this clause; and

(iv) Give consideration to the conflicts of interest requirements of paragraph (d) of this clause.

(3) *Withholding of data.* (i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-Federal third party, may be protected from disclosure under the Freedom of Information Act as provided in the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(7)) for a period as agreed in the CRADA of up to five (5) years from the time the data is first produced or otherwise as delineated in Stevenson-Wydler, as amended. The DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the Contracting Officer in advance for a specific CRADA, the Contractor agrees, at the request of the Contracting Officer, to transmit such data to other DOE facilities for use by DOE or its Contractors by or on behalf of the Government. When data protected pursuant to paragraph (n)(3)(i) of this clause is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions.

(iii) A final technical report, upon completion of a CRADA, shall be provided to DOE's Office of Scientific and Technical Information; reports marked as Protected CRADA Information will not be released to the public for a period in accordance with the terms of the CRADA.

(iv) In addition to its authority to license intellectual property, the Contractor may enter into licensing agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures which include data protected pursuant to paragraph (n)(3)(i) of this clause.

(4) *SPP and user facility programs.* (i) SPP and User Facility Agreements (UFAs) may be available for use by the Contractor in addition to CRADAs. The Contractor agrees to inform prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed CRADA, of the availability of alternative forms of agreements, i.e., SPP and UFA, and of the Class Patent Waiver provisions associated therewith.

(ii) Where the Contractor believes that the transfer of technology to the U.S. domestic economy will benefit from, or other equity considerations dictate, an arrangement other than the Class Waiver of patent rights to the sponsor in SPP and UFAs, a request may be made to the Contracting Officer for an exception to the Class Waivers.

(iii) Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, and the provisions in such agreements take precedence over any disposition of rights contained in this contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including SPP and User Class Waivers) or individually negotiated waiver which applies to the agreement.

(5) *Conflicts of interest.* (i) Except as provided in paragraph (n)(5)(iii) of this clause, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the negotiation, approval or performance of a technology transfer agreement, if, to such employee's knowledge--

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee—

(1) Holds financial interest in any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement; or

(2) Receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement; or

(B) A financial interest in any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment.

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the negotiation, approval or performance of the technology transfer agreement certify through the Contractor to the Contracting Officer that the circumstances described in paragraph (n)(5)(i) of this clause do not apply to that employee.

(iii) The requirements of paragraphs (n)(5)(i) and (n)(5)(ii) of this clause shall not apply in a case where the Contracting Officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs of the nature of and extent of any financial interest described in paragraph (n)(5)(i) of this clause, and the Contracting Officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee's participation in the process of negotiation, approval or performance of the technology transfer agreement.

(o) *Technology transfer in other cost-sharing agreements.* In conducting research and development activities in cost-shared agreements not covered by paragraph (n) of this clause, the Contractor, with prior written permission of the Contracting Officer, may provide for the withholding of data produced thereunder in accordance with the applicable provisions of paragraph (n)(3) of this clause.

(p) *Technology partnership ombudsman.* (1) The Contractor agrees to establish a position to be known as "Technology Partnership Ombudsman," to help resolve complaints from outside organizations regarding the policies and actions of the Contractor with respect to technology partnerships (including CRADAs), patents owned by the Contractor for inventions made at the laboratory, and technology licensing.

(2) The Ombudsman shall be a senior official of the Contractor's laboratory staff, who is not involved in day-to-day technology partnerships, patents or technology licensing, or, if appointed from outside the laboratory or facility, shall function as such senior official.

(3) The duties of the Technology Partnership Ombudsman shall include--

(i) Serving as the focal point for assisting the public and industry in resolving complaints and disputes with the laboratory or facility regarding technology partnerships, patents, and technology licensing;

(ii) Promoting the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low cost resolution of complaints and disputes, when appropriate; and

(iii) Submitting a quarterly report, in a format provided by DOE, to Director of the DOE Office of Dispute Resolution and the Contracting Officer concerning the number and nature of complaints and disputes raised, along with the Ombudsman's assessment of their resolution, consistent with the protection of confidential and sensitive information.

CLAUSE I.144 - DEAR 970.5227-4 AUTHORIZATION AND CONSENT (AUG 2002) (DEVIATION) (AL 2021-04)

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) If the Contractor is sued for copyright infringement or anticipates the filing of such a lawsuit, the Contractor may request authorization and consent to copy a copyrighted work from the Contracting Officer. Programmatic necessity is a major consideration for DOE in determining whether to grant such request.

(c)(1) The Contractor agrees to include, and require inclusion of, the Authorization and Consent clause at 48 CFR 52.227-1, without Alternate I, but suitably modified to identify the parties, in all subcontracts expected to exceed the simplified acquisition threshold at any tier for supplies or services, including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services.

(2) The Contractor agrees to include, and require inclusion of, paragraph (a) of this Authorization and Consent clause, suitably modified to identify the parties, in all subcontracts at any tier for research and development activities expected to exceed the simplified acquisition threshold.

(3) Omission of an authorization and consent clause from any subcontract, including those valued less than the simplified acquisition threshold does not affect this authorization and consent.

CLAUSE I.145 - DEAR 970.5227-5 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2000) (DEVIATION) (AL 2021-04)

(a) The Contractor shall report to the Contracting Officer promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) If any person files a claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Except where the Contractor has agreed to indemnify the Government, the Contractor shall furnish such evidence and information at the expense of the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause suitably modified to identify the parties, in all subcontracts at any tier expected to exceed the simplified acquisition threshold.

CLAUSE I.146 - DEAR 970.5227-6 PATENT INDEMNITY-SUBCONTRACTS (DEC 2000)

Except as otherwise authorized by the Contracting Officer, the Contractor shall obtain indemnification of the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a secrecy order by the Government) from Contractor's subcontractors for any contract work subcontracted in accordance with FAR 48 CFR 52.227-3.

CLAUSE I.147 - DEAR 970.5227-8 REFUND OF ROYALTIES (AUG 2002)

(a) During performance of this Contract, if any royalties are proposed to be charged to the Government as costs under this Contract, the Contractor agrees to submit for approval of the Contracting Officer, prior to the execution of any license, the following information relating to each separate item of royalty:

(1) Name and address of licensor;

(2) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable;

(3) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable;

(4) Percentage or dollar rate of royalty per unit;

(5) Unit price of contract item;

(6) Number of units;

(7) Total dollar amount of royalties; and

(8) A copy of the proposed license agreement.

(b) If specifically requested by the Contracting Officer, the Contractor shall furnish a copy of any license agreement entered into prior to the effective date of this clause and an identification of applicable claims of specific patents or other basis upon which royalties are payable.

(c) The term “royalties” as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications that are used in the performance of this contract or any subcontract hereunder.

(d) The Contractor shall furnish to the Contracting Officer, annually upon request, a statement of royalties paid or required to be paid in connection with performing this Contract and subcontracts hereunder.

(e) For royalty payments under licenses entered into after the effective date of this Contract, costs incurred for royalties proposed under this paragraph shall be allowable only to the extent that such royalties are approved by the Contracting Officer. If the Contracting Officer determines that existing or proposed royalty payments are inappropriate, any payments subsequent to such determination shall be allowable only to the extent approved by the Contracting Officer.

(f) Regardless of prior DOE approval of any individual payments or royalties, DOE may contest at any time the enforceability, validity, scope of, or title to a patent for which Contractor makes a royalty or other payment.

(g) If at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of any royalties to which this clause applies, the Contractor shall promptly notify the Contracting Officer of that fact and shall promptly reimburse the Government for any refunds received or royalties paid after having received notice of such relief.

(h) The Contractor agrees to include, and require inclusion of, this clause, including this paragraph (h), suitably modified to identify the parties in any subcontract at any tier in which the amount of royalties reported during negotiation of the subcontract exceeds \$250.

CLAUSE I.148 - DEAR 970.5227-10 PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (DEC 2000) (DEVIATION) (AL 2022-01)

(a) *Definitions.* *DOE licensing regulations* means the Department of Energy patent licensing regulations at 10 CFR part 781.

Exceptional circumstance subject invention means any subject invention in a technical field or related to a task determined by the Department of Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii) and in accordance with 37 CFR 401.3(e).

Initial Patent Application means, as to a given Subject Invention, the first provisional or non-provisional U.S. national application for patent as defined in 37 CFR 1.9(a)(2) and (3), respectively, the first international application filed under the Patent Cooperation Treaty as defined in 37 CFR 1.9(b) which designates the United States, or the first application for a Plant Variety Protection certificate, as applicable.

Invention means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

Patent Counsel means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity. The Patent Counsel is the first and primary point of contact for activities described in this clause.

Practical application means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

Small business firm means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, are used.

Statutory Period means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 U.S.C. 102(b) as

amended by the Leahy-Smith America Invents Act, Public Law 112-29.

Subject Invention means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) shall also occur during the period of contract performance.

(b) *Allocation of Principal Rights.*

(1) *Retention of title by the Contractor.* Except for exceptional circumstance subject inventions, the contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(2) *Treaties and international agreements.* Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified at DOE's Office of International Affairs (International Commitments—IEC) (<http://energy.gov/ia/iec-documents>), or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions.

(3) *Exceptional circumstance subject inventions.* Except to the extent that rights are retained by the Contractor in a determination of exceptional circumstances or granted to a contractor through a determination of greater rights in accordance with subparagraph (b)(4) of this clause, the Contractor does not have a right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions. (i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions--

(A) Uranium enrichment technology;

(B) Storage and disposal of civilian high-level nuclear waste and spent fuel technology; and

(C) National security technologies classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168).

(ii) As determined by the DOE, inventions made under any agreement, contract or subcontract, related to the exceptional circumstance subject inventions under U.S.C. § 202, maintained by the Office of the Assistant General Counsel for Technology Transfer and Intellectual Property, include but is not limited to the following—

(A) DOE Steel Initiative and Metals Initiative;

(B) U.S. Advanced Battery Consortium;

(C) Any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI);

(D) Any funding agreement related to Energy Efficiency, Storage, Integration and Related Technologies, Renewable Energy, and Advanced Energy Technologies which is funded by the Office of Energy Efficiency and Renewable Energy (EERE) or the Advanced Research Projects Agency – Energy (ARPA-E);

(E) Solid State Energy Conversion Alliance (SECA), if the Contractor is a participant in the “Core Technology Program”;

(F) Solid State Lighting (SSL) Program, if the Contractor is a participant in the “Core Technology Program.”

(G) Cybersecurity, Energy Security, and Emergency Response;

(H) Quantum Information Science Technologies; and

(I) Domestic Manufacture of DOE Science and Energy Technologies (S&E DEC).

(iii) Inventions subject to “Department of Energy Determination of Exceptional Circumstances under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies” (S&E DEC) issued June 7, 2021, must comply with paragraph (t) U.S. Competitiveness requirements to the maximum extent authorized by the S&E DEC unless otherwise directed by DOE Patent Counsel in writing.

(iv) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, tasks, or other classifications for the purpose of determining DOE exceptional circumstance subject inventions.

(4) *Contractor request for greater rights in exceptional circumstance subject inventions.* The Contractor may request rights greater than allowed by the

exceptional circumstance determination in an exceptional circumstance subject invention by submitting such a request in writing to Patent Counsel at the time the exceptional circumstance subject invention is disclosed to DOE or within eight (8) months after conception or first actual reduction to practice of the exceptional circumstance subject invention, whichever occurs first, unless a longer period is authorized in writing by the Patent Counsel for good cause shown in writing by the Contractor. DOE may, in its discretion, grant or refuse to grant such a request by the Contractor.

(5) *Contractor employee-inventor rights.* If the Contractor does not elect to retain title to a subject invention or does not request greater rights in an exceptional circumstance subject invention, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may, in its discretion, grant or refuse to grant such a request by the Contractor employee-inventor.

(6) *Government assignment of rights in Government employees' subject inventions.* If a Government employee is a joint inventor of a subject invention or of an exceptional circumstance subject invention to which the Contractor has rights, the Government may assign or refuse to assign to the Contractor any rights in the subject invention or exceptional circumstance subject invention acquired by the Government from the Government employee, in accordance with 48 CFR 27.304-1(d). The rights assigned to the Contractor are subject to any provision of this clause that is applicable to subject inventions in which the Contractor retains title, including reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid-up license, except that the Contractor shall file its Initial Patent Application claiming the subject invention or exceptional circumstance invention within one (1) year after the assignment of such rights. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the Government employee.

(c) *Subject invention disclosure, election of title and filing of patent application by contractor.*

(1) *Subject invention disclosure.* The contractor will disclose each subject invention to the Patent Counsel within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written or electronic report and shall identify the contract under which the invention was made and the inventor(s) and all sources of funding by Budget and Resources (B&R) code and, if applicable, the technology transfer agreement number for the invention. It shall be sufficiently complete in

technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted or made available for publication at the time of disclosure. The disclosure shall identify if the invention falls within an exceptional circumstance field. DOE will make a determination and advise the Contractor within 30 days of receipt of an invention disclosure as to whether the invention is an exceptional circumstance subject invention. In addition, after disclosure to the Patent Counsel, the Contractor will notify the agency of any accepted manuscript describing the invention for publication or any on sale or public use planned by the contractor that is 60 days prior to the end of the Statutory Period. The Contractor shall notify Patent Counsel prior to any release or publication of information concerning any nonelectable subject invention such as an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(2) *Election by the Contractor.* Except as provided in paragraph (b)(2) of this clause, the Contractor will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where publication, on sale or public use has initiated the Statutory Period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the Statutory Period.

(3) *Filing of patent applications by the Contractor.* The Contractor will file its Initial Patent Application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, or prior to the end of any Statutory Period herein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the corresponding first filed patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) *Contractor's request for an extension of time.* Requests for an extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2) and (3) may, at the discretion of Patent Counsel, be granted.

(5) *Publication review.* During the course of the work under this contract, the Contractor may desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course

of or under this contract. Contractor's Invention Identification Procedures under paragraph (f)(5) should address timely disclosure of inventions, consider whether review is required, and if so, facilitate such review by Contractor personnel responsible for patent matters prior to disclosure of publications in order that public disclosure of such information will not adversely affect the patent interest of DOE or the Contractor.

(6) *Reporting to DOE and Approvals.* Whenever possible in this paragraph (c), the Government electronic reporting system (e.g., iEdison or similar system) shall be used for reporting and approvals.

(d) *Conditions when the Government may obtain title.* The Contractor will convey to the DOE, upon written request, title to any subject invention—

(1) If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title.

(2) In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in subparagraph (c) above, but prior to its receipt of the written request of the DOE, the Contractor shall continue to retain title in that country.

(3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(4) If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention to which the Contractor had initially retained title or rights, or in an exceptional circumstance subject invention to which the Contractor was granted greater rights, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(5) Upon a breach of paragraph (t) U.S. Competitiveness of this clause.

(e) *Minimum rights of the Contractor and protection of the Contractor's right to file.*

(1) *Request for a Contractor license.* The Contractor may request the right to reserve a revocable, nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. DOE may grant or refuse to grant such a request by the Contractor. When DOE approves such reservation, the Contractor's license will normally extend to its

domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE, except when transferred to the successor of that part of the contractor's business to which the invention pertains.

(2) *Revocation or modification of a Contractor license.* The Contractor's domestic license maybe revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781. This license will not be revoked in the field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the subject invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application of the subject invention in that foreign country.

(3) *Notice of revocation or modification of a Contractor license.* Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781 concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license. (f) *Contractor action to protect the Government's interest.* (1) *Execution of delivery of title or license instruments.* The Contractor agrees to execute or to have executed, and promptly deliver to the Patent Counsel all instruments necessary to accomplish the following actions:

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title; and

(ii) Convey title to DOE when requested under subparagraphs (b) or paragraph (d) of this clause and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) *Contractor employee agreements.* The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to Contractor personnel identified as responsible for the

administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) *Notification of discontinuation of patent protection.* The Contractor will notify the Patent Counsel of any decision not to file a patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 60 days before the expiration of the response period required by the relevant patent office.

(4) *Notification of Government rights.* The Contractor agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the contract) awarded by (identify the Federal agency). The government has certain rights in the invention."

(5) *Invention identification procedures.* The Contractor shall establish and maintain active and effective procedures to ensure that subject inventions are promptly identified and timely disclosed and shall submit a written description of such procedures to the Contracting Officer so that the Contracting Officer may evaluate and determine their effectiveness.

(6) *Patent filing documentation.* If the Contractor files a domestic or foreign patent application claiming a subject invention, the Contractor shall promptly submit to Patent Counsel, upon request, the following information and documents:

(i) The filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);

(ii) An executed and approved instrument fully confirmatory of all Government rights in the subject invention; and

(iii) The patent number, issue date, and a copy of any issued patent claiming the subject invention.

(7) *Duplication and disclosure of documents.* The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is subject to the confidentiality provision at 35 U.S.C. 205 and 37 CFR part 401.

(g) *Subcontracts.*

(1) *Subcontractor subject inventions.* The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.

(2) *Inclusion of patent rights clause—non-profit organization or small business firm subcontractors.* Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 37 CFR 401.14, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(2) of this clause. The subcontractor retains all rights provided for the contractor in the patent rights clause at 37 CFR 401.3(a) and 401.14. If the S&E DEC is applicable (see subparagraph (b)(6)(iii) of this clause), paragraph (t) U.S. Competitiveness must be included in the subcontractor's patent clause as paragraph (m) U.S. Competitiveness. Additionally, the following item (4) must be added to paragraph (d) of the subcontractor's patent clause "(4) Upon a breach of paragraph (m) U.S. Competitiveness of this clause."

(3) *Inclusion of patent rights clause—subcontractors other than non-profit organizations and small business firms.* Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227–13 suitably modified to identify the parties, in any contract for experimental, developmental, demonstration or research work. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause. If the S&E DEC is applicable (see subparagraph (b)(6)(iii) of this clause), paragraph (t) U.S. Competitiveness must be included in the subcontractor's patent clause as paragraph (n) U.S. Competitiveness. Additionally, the following must be appended to the first sentence paragraph of (d)(1) "or upon a breach of paragraph (n) U.S. Competitiveness of this clause."

(4) *DOE and subcontractor contract.* With respect to subcontracts at any tier, DOE, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(5) *Subcontractor refusal to accept terms of patent clause.* If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such a refusal, including any relevant information for expediting disposition of the matter, and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.

(6) *Notification of award of subcontract.* Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.

(7) *Identification of subcontractor subject inventions.* If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention.

(h) *Reporting on utilization of subject inventions.* The Contractor agrees to submit to DOE on request, periodic reports, no more frequently than annually, on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. In addition, the Contractor shall provide data to DOE for the annual data call for the Department of Commerce report that includes the number of patent applications filed, the number of patents issued, licensing activity, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) *Preference for United States Industry.* Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such

person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) *March-in Rights*. The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right under 35 U.S.C. 203 and in accordance with the procedures in 37 CFR 401.6 and any DOE supplemental regulations to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself

(k) *Special provisions for contracts with nonprofit organizations*. If the Contractor is a nonprofit organization, it agrees that:

(1) *DOE approval of assignment of rights*. Rights to a subject invention in the United States may not be assigned by the Contractor without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions of this clause as the Contractor.

(2) *Small business firm licensees*. It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(2).

(3) *Contractor licensing of subject inventions.* To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.

(l) *Communications.* The Contractor shall direct any notification, disclosure or request provided for in this clause to the Patent Counsel assisting the DOE contracting activity.

(m) *Reports.*

(1) *Interim reports.* Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period.

(2) *Final reports.* Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract, a list of all subject inventions disclosed during the performance period of the contract, or a statement that no subject inventions were made during the contract performance period; and a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period under which a subject invention was reported, or a statement that no such subject inventions under subcontracts were reported during the contract performance period.

(n) *Records relating to subject inventions—*

(1) *Contractor compliance.* Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including exceptional circumstance subject inventions, or to determine Contractor compliance with any requirement of this clause.

(2) *Unreported inventions.* If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes the unreported invention may be a subject invention, including exceptional circumstance subject inventions, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.

(3) *Confidentiality.* Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.

(4) *Power of inspection.* With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.

(o) *Facilities license.* In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or product manufactured at the facility (1) to practice or have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(p) *Atomic Energy.*

(1) *Pecuniary awards.* No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) *Patent agreements.* Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of subparagraph (p)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(q) *Classified inventions.*

(1) *Approval for filing a foreign patent application.* The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.

(2) *Transmission of classified subject matter.* If in accordance with this clause the Contractor files a patent application in the United States disclosing a subject

invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.

(3) *Inclusion of clause in subcontracts.* The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.

(r) *Patent functions.* Upon the written request of the Contracting Officer or Patent Counsel, the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract, including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.

(s) *Educational awards subject to 35 U.S.C. 212.* The Contractor shall notify the Contracting Officer prior to the placement of any person subject to 35 U.S.C. 212 in an area of technology or task (1) related to exceptional circumstance technology or (2) which is subject to treaties or international agreements as set forth in paragraph (b)(3) of this clause or agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(t) *U. S. Competitiveness. Notwithstanding 48 CFR 970.5227-3(f) U.S. Industrial Competitiveness, for all work subject to the S&E DEC, the Contractor agrees that any products embodying any subject invention or produced through the use of any subject invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., alternative binding commitments to provide an overall net benefit to the U.S. economy. The Contractor agrees that it will not license, assign, or otherwise transfer any subject invention to any entity, at any tier, unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention(s): (1) undergo a change in ownership amounting to a controlling interest, or (2) sell, assign, or otherwise transfer title or exclusive rights in the invention(s), then the assignment, license, or other transfer of rights in the subject invention(s) is/are suspended until approved in writing by DOE. The Contractor and any successor assignee will convey to DOE, upon written request from DOE, title to any subject invention, upon a breach of this paragraph. The Contractor will include this paragraph in all subawards/contracts,*

regardless of tier, for experimental, developmental or research work.

(u) *Annual appraisal by Patent Counsel.* Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

(v) *Unauthorized Access.* The contractor will protect all invention reports, unpublished patent applications and other invention related information from unauthorized access and disclosure using at least commonly available techniques and practices. In the event that the Contractor becomes aware of unauthorized access to invention reports, unpublished patent applications and other invention related information, the Contractor shall notify Patent Counsel within 7 days.

CLAUSE I.149 - DEAR 970.5228-1 INSURANCE-LITIGATION AND CLAIMS (JUL 2013)

(a) The contractor must comply with 10 CFR part 719, Contractor Legal Management Requirements, if applicable.

(b)(1) Except as provided in paragraph (b)(2) of this clause, the contractor shall procure and maintain such bonds and insurance as required by law or approved in writing by the Contracting Officer.

(2) The contractor may, with the approval of the Contracting Officer, maintain a self- insurance program in accordance with FAR 28.308; provided that, with respect to workers' compensation, the contractor is qualified pursuant to statutory authority.

(3) All bonds and insurance required by this clause shall be in a form and amount and for those periods as the Contracting Officer may require or approve and with sureties and insurers approved by the Contracting Officer.

(c) The contractor agrees to submit for the Contracting Officer's approval, to the extent and in the manner required by the Contracting Officer, any other bonds and insurance that are maintained by the contractor in connection with the performance of this contract and for which the contractor seeks reimbursement. If an insurance cost (whether a premium for commercial insurance or related to self-insurance) includes a portion covering costs made unallowable elsewhere in the contract, and the share of the cost for coverage for the unallowable cost is determinable, the portion of the cost that is otherwise an allowable cost under this contract is reimbursable to the extent determined by the Contracting Officer.

(d) Except as provided in paragraph (f) of this clause, or specifically disallowed elsewhere in this contract, the contractor shall be reimbursed—

(1) For that portion of the reasonable cost of bonds and insurance allocable to this contract required in accordance with contract terms or approved under this

clause, and

(2) For liabilities (and reasonable expenses incidental to such liabilities, including litigation costs) to third persons not compensated by insurance without regard to the clause of this contract entitled "Obligation of Funds."

(e) The Government's liability under paragraph (d) of this clause is subject to the availability of appropriated funds. Nothing in this contract shall be construed as implying that the Congress will, at a later date, appropriate funds sufficient to meet deficiencies.

(f)(1) Notwithstanding any other provision of this contract, the contractor shall not be reimbursed for liabilities to third parties, including contractor employees, and directly associated costs which may include but are not limited to litigation costs, counsel fees, judgments and settlements—

(i) Which are otherwise unallowable by law or the provisions of this contract, including the cost reimbursement limitations contained in 48 CFR part 31, as supplemented by 48 CFR 970.31;

(ii) For which the contractor has failed to insure or to maintain insurance as required by law, this contract, or by the written direction of the Contracting Officer; or

(iii) Which were caused by contractor managerial personnel's—

(A) Willful misconduct;

(B) Lack of good faith; or

(C) Failure to exercise prudent business judgment, which means failure to act in the same manner as a prudent person in the conduct of competitive business; or, in the case of a non-profit educational institution, failure to act in the manner that a prudent person would under the circumstances prevailing at the time the decision to incur the cost is made.

(2) The term "contractor's managerial personnel" is defined in the Property clause in this contract.

(g)(1) All litigation costs, including counsel fees, judgments and settlements shall be segregated and accounted for by the contractor separately. If the Contracting Officer provisionally disallows such costs, then the contractor may not use funds advanced by DOE under the contract to finance the litigation.

(2) Punitive damages are not allowable unless the act or failure to act which gave rise to the liability resulted from compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer.

(3) The portion of the cost of insurance obtained by the contractor that is

allocable to coverage of liabilities referred to in paragraph (f) of this clause is not allowable.

(h) The contractor may at its own expense and not as an allowable cost procure for its own protection insurance to compensate the contractor for any unallowable or non-reimbursable costs incurred in connection with contract performance.

CLAUSE I.150 - DEAR 970.5229-1 STATE AND LOCAL TAXES (DEC 2000)

(a) The Contractor agrees to notify the Contracting Officer of any State or local tax, fee, or charge levied or purported to be levied on or collected from the contractor with respect to the contract work, any transaction thereunder, or property in the custody or control of the Contractor and constituting an allowable item of cost if due and payable, but which the contractor has reason to believe, or the Contracting Officer has advised the Contractor, is or may be inapplicable or invalid; and the contractor further agrees to refrain from paying any such tax, fee, or charge unless authorized in writing by the contracting officer. Any State or local tax, fee, or charge paid with the approval of the contracting officer or on the basis of advice from the Contracting Officer that such tax, fee, or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling or determination that such tax, fee, or charge was in fact inapplicable or invalid.

(b) The Contractor agrees to take such action as may be required or approved by the Contracting Officer to cause any State or local tax, fee, or charge which would be an allowable cost to be paid under protest; and to take such action as may be required or approved by the Contracting Officer to seek recovery of any payments made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the Government to join with the Contractor in any proceedings for the recovery thereof or to sue for recovery in the name of the Contractor. If the Contracting Officer directs the Contractor to institute litigation to enjoin the collection of or to recover payment of any such tax, fee, or charge referred to above, or if a claim or suit is filed against the contractor for a tax, fee, or charge it has refrained from paying in accordance with this clause, the procedures and requirements of the clause entitled "Insurance-Litigation and Claims" shall apply and the costs and expenses incurred by the Contractor shall be allowable items of costs, as provided in this contract, together with the amount of any judgment rendered against the Contractor.

(c) The Government shall hold the Contractor harmless from penalties and interest incurred through compliance with this clause. All recoveries or credits in respect of the foregoing taxes, fees, and charges (including interest) shall inure to and be for the sole benefit of the Government.

CLAUSE I.151 - DEAR 970.5231-4 PREEXISTING CONDITIONS (DEC 2000)
(ALTERNATE II) (DEC 2000)

(a) The Department of Energy agrees to reimburse the Contractor, and the contractor

shall not be held responsible, for any liability (including without limitation, a claim involving strict or absolute liability and any civil fine or penalty), expense, or remediation cost, but limited to those of a civil nature, which may be incurred by, imposed on, or asserted against the contractor arising out of any condition, act, or failure to act which occurred before the Contractor assumed responsibility on January 1, 2025. To the extent the acts or omissions of the contractor cause or add to any liability, expense or remediation cost resulting from conditions in existence prior to January 1, 2025, the Contractor shall be responsible in accordance with the terms and conditions of this contract.

(b) The obligations of the Department of Energy under this clause are subject to the availability of appropriated funds.

(c) The Contractor has the duty to inspect the facilities and sites and timely identify to the Contracting Officer those conditions which it believes could give rise to a liability, obligation, loss, damage, penalty, fine, claim, action, suit, cost, expense, or disbursement or areas of actual or potential noncompliance with the terms and conditions of this contract or applicable law or regulation. The Contractor has the responsibility to take corrective action, as directed by the Contracting Officer and as required elsewhere in this contract.

CLAUSE I.152 - DEAR 970.5232-1 REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 2000)

(a) The Contracting Officer may reduce or suspend further advance, partial, or progress payments to the contractor upon a written determination by the Senior Procurement Executive that substantial evidence exists that the Contractor's request for advance, partial, or progress payment is based on fraud.

(b) The Contractor shall be afforded a reasonable opportunity to respond in writing.

CLAUSE I.153 - DEAR 970.5232-2 PAYMENTS AND ADVANCES (DEC 2000) (ALTERNATE II) (DEC 2000) (PF 2022-23 DEVIATION) (OCT 2021)

(a) *Payment of Total available fee: Base Fee and Incentive Fee.*

(1) The base fee amount, if any, is payable in equal monthly installments. Total available fee amount earned is payable following the Government's Determination of Total Available Fee Amount Earned in accordance with the clause of this contract entitled "Total Available Fee: Base Fee Amount and Incentive Fee Amount." Base fee amount and total available fee amount earned payments shall be made by direct payment or withdrawn from funds advanced or available under this contract, as determined by the Contracting Officer. The Contracting Officer may offset against any such fee payment the amounts owed to the Government by the Contractor, including any amounts owed for disallowed costs under this contract. No base fee amount or total available fee amount earned payment may be withdrawn against the

payments cleared financing arrangement without the prior written approval of the Contracting Officer.

(2) *Provisional fee.* Additionally, if the Contracting Officer authorizes provisional payment of fee and for only as long as the Contracting Officer authorizes it, the Contractor may withdraw from funds advanced on the last working day of each month a provisional fee equal to 6 percent of the annual total available fee amount. The Contracting Officer may for any reason withdraw his/her authorization allowing the Contractor's withdrawal of provisional fee if at any time in his/her judgement the Contractor will not earn the provisional fee. The Contracting Officer's decision to authorize the Contractor's withdrawal of provisional fee or to withdraw such authorization is solely within the Contracting Officer's discretion. Following the Government's determination of total available fee amount earned, the Contractor may withdraw from funds advanced the amount by which earned fee exceeds provisional fee; and must immediately return to funds advanced the amount by which provisional fee exceeds earned fee.

(b) *Payments on account of allowable costs.* The Contracting Officer and the Contractor shall agree as to the extent to which payment for allowable costs or payments for other items specifically approved in writing by the Contracting Officer (for example, negotiated fixed amounts) shall be made from advances of Government funds.

(c) *Timing of payments.* Funds for payments of allowable costs, including payments for pension plan contributions, shall be drawn from the special financial institution account when those payments are made, not when the costs are accrued.

(d) *Special financial institution account-use.* All advances of Government funds shall be withdrawn pursuant to a payments cleared financing arrangement prescribed by DOE in favor of the financial institution or, at the option of the Government, shall be made by direct payment or other payment mechanism to the Contractor, and shall be deposited only in the special financial institution account referred to in the Special Financial Institution Account Agreement, which is incorporated into this contract as Appendix C. The contractor will follow current procedures and requirements for establishing and managing the special financial institution account that are stated in the Department's Financial Management Handbook and relevant Department of Treasury rules.

(e) *Use of the special financial institution account for unallowable costs.* Government funds in the special financial institution account shall be used only for costs allowable and, if applicable, fees earned under this contract, negotiated fixed amounts, or payments for other items specifically approved in writing by the Contracting Officer.

(f) *Title to funds advanced.* Title to the unexpended balance of any funds advanced and of any special financial institution account established pursuant to this clause shall remain in the Government and be superior to any claim or lien of the financial institution

of deposit or others. It is understood that an advance to the Contractor hereunder is not a loan to the Contractor, and will not require the payment of interest by the Contractor, and that the Contractor acquires no right, title or interest in or to such advance other than the right to make expenditures therefrom, as provided in this clause.

(g) *Financial settlement.* The Government shall promptly pay to the Contractor the unpaid balance of allowable costs (or other items specifically approved in writing by the Contracting Officer) and fee upon termination of the work, expiration of the term of the contract, or completion of the work and its acceptance by the Government after—

(1) Compliance by the Contractor with DOE's patent clearance requirements; and

(2) The furnishing by the Contractor of—

(i) An assignment of the Contractor's rights to any refunds, rebates, allowances, accounts receivable, collections accruing to the Contractor in connection with the work under this contract, or other credits applicable to allowable costs under the contract;

(ii) A closing financial statement;

(iii) The accounting for Government-owned property required by the clause entitled "Property"; and

(iv) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract subject only to the following exceptions—

(A) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible to exact statement by the Contractor;

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the Contractor on the date of the execution of the release; and provided further that the Contractor gives notice of such claims in writing to the Contracting Officer promptly, but not more than one (1) year after the Contractor's right of action first accrues. In addition, the Contractor shall provide prompt notice to the Contracting Officer of all potential claims under this clause, whether in litigation or not (see also Contract Clause, 48 CFR 970.5228-1, "Insurance—Litigation and Claims");

(C) Claims for reimbursement of costs (other than expenses of the Contractor by reason of any indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the Contractor under the provisions of this contract relating to patents; and

(D) Claims recognizable under the clause entitled, Nuclear Hazards Indemnity Agreement.

(3) In arriving at the amount due the Contractor under this clause, there shall be deducted—

(i) Any claim which the Government may have against the Contractor in connection with this contract; and

(ii) Deductions due under the terms of this contract and not otherwise recovered by or credited to the Government. The unliquidated balance of the special financial institution account may be applied to the amount due and any balance shall be returned to the Government forthwith.

(h) *Claims.* Claims for credit against funds advanced for payment shall be accompanied by such supporting documents and justification as the Contracting Officer shall prescribe.

(i) *Discounts.* The Contractor shall take and afford the Government the advantage of all known and available cash and trade discounts, rebates, allowances, credits, salvage, and commissions unless the Contracting Officer finds that action is not in the best interest of the Government.

(j) *Collections.* All collections accruing to the Contractor in connection with the work under this contract, except for the Contractor's fee and royalties or other income accruing to the Contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable requirements imposed by the Contracting Officer pursuant to the Laws, regulations, and DOE directives clause of this contract and, to the extent consistent with those requirements, shall be deposited in the special financial institution account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the Contracting Officer.

(k) *Direct payment of charges.* The Government reserves the right, upon 10 days' written notice from the Contracting Officer to the Contractor, to pay directly to the persons concerned, all amounts due which otherwise would be allowable under this contract. Any payment so made shall discharge the Government of all liability to the Contractor.

(l) *Determining allowable costs.* Regardless of contractor type, the Contracting Officer shall determine allowable costs in accordance with 48 CFR 31.2 and 48 CFR 970.31 in effect on the date of this contract and other provisions of this contract.

CLAUSE I.154 - DEAR 970.5232-3 ACCOUNTS, RECORDS AND INSPECTION (DEC 2010) (DEVIATION) (PF 2022-23) (OCT 2021)

(a) *Accounts.* The Contractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs; collections accruing to the Contractor in connection with the work under this contract, other applicable credits, negotiated fixed amounts, and fee accruals under this contract; and the receipt, use, and disposition of all Government property coming into the possession of the Contractor under this contract. The system of accounts employed by the Contractor shall be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied.

(b) *Inspection and audit of accounts and records.* All books of account and records relating to this contract shall be subject to inspection and audit by DOE or its designees in accordance with the provisions of the clause, Access to and Ownership of Records, at all reasonable times, before and during the period of retention provided for in paragraph (d) of this clause, and the Contractor shall afford DOE proper facilities for such inspection and audit.

(c) *Audit of subcontractors' incurred costs.* If the subcontractor's incurred costs are a factor in determining the amount the Contractor pays the subcontractor and submits to the Government for reimbursement, the Contractor shall: perform a sufficient amount of audit work of its subcontractor's incurred costs to provide reasonable assurance the costs are allowable; or arrange for an audit by the cognizant government audit agency through the Contracting Officer of its subcontractor's incurred costs.

(d) *Disposition of records.* Except as agreed upon by the Government and the Contractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the Contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract, shall be the property of the Government, and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the progress of the work or, in any event, as the Contracting Officer shall direct upon completion or termination of this contract and final audit of accounts hereunder. Except as otherwise provided in this contract, including provisions of the clause 970.5204-3, Access to and Ownership of Records, all other records in the possession of the Contractor relating to this contract shall be preserved by the Contractor for a period of three years after final payment under this contract or otherwise disposed of in such manner as may be agreed upon by the Government and the Contractor.

(e) *Reports.* The Contractor shall furnish such progress reports and schedules, financial and cost reports, and other reports concerning the work under this contract as the Contracting Officer may from time to time require.

(f) *Inspections.* The DOE shall have the right to inspect the work and activities of the Contractor under this contract at such time and in such manner as it shall deem appropriate.

(g) *Subcontracts*. The Contractor further agrees to require the inclusion of provisions similar to those in paragraphs (a) through (g) and paragraph (h) of this clause in all subcontracts (including fixed-price or unit-price subcontracts or purchase orders) of any tier entered into hereunder where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor.

(h) *Comptroller General*. (1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's or subcontractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any employee regarding such transactions.

(1) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(2) Nothing in this contract shall be deemed to preclude an audit by the Government Accountability Office of any transaction under this contract.

(i) *Internal audit*. The Contractor agrees to design and maintain an internal audit plan and an internal audit organization.

(1) Upon contract award, the exercise of any contract option, or the extension of the contract, the Contractor must submit to the Contracting Officer for approval an Internal Audit Implementation Design to include the overall strategy for internal audits. The Audit Implementation Design must describe—

(i) The internal audit organization's placement within the Contractor's organization and its reporting requirements;

(ii) The audit organization's size and the experience and educational standards of its staff;

(iii) The audit organization's relationship to the corporate entities of the Contractor;

(iv) The standards to be used in conducting the internal audits;

(v) The overall internal audit strategy of this contract, considering particularly the method of auditing costs incurred in the performance of the contract;

(vi) The intended use of external audit resources;

(vii) The plan for audit of subcontracts, both pre-award and post-award; and

(viii) The schedule for peer review of internal audits by other contractor internal audit organizations, or other independent third party audit entities approved by the DOE Contracting Officer.

(2) By each January 31 of the contract performance period, the Contractor must submit an annual audit report to the Contracting Officer, providing a summary of the audit activities undertaken during the previous fiscal year. That report shall reflect the results of the internal audits during the previous fiscal year and the actions to be taken to resolve weaknesses identified in the contractor's system of business, financial, or management controls.

(3) By each June 30 of the contract performance period, the Contractor must submit to the Contracting Officer an annual audit plan for the activities to be undertaken by the internal audit organization during the next fiscal year that is designed to test the costs incurred and contractor management systems described in the internal audit design.

(4) The Contracting Officer may require revisions to documents submitted under paragraphs (i)(1), (i)(2), and (i)(3) of this clause, including the design plan for the internal audits, the annual report, and the annual internal audits.

(j) *Remedies.* If at any time during contract performance, the Contracting Officer determines that unallowable costs were claimed by the Contractor to the extent of making the contractor's management controls suspect, or the contractor's management systems that validate costs incurred and claimed suspect, the Contracting Officer may, in his or her sole discretion, require the Contractor to cease using the special financial institution account in whole or with regard to specified accounts, requiring reimbursable costs to be claimed by periodic vouchering. In addition, the Contracting Officer, where he or she deems it appropriate, may: Impose a penalty under 48 CFR 52.242-3, Penalties for Unallowable Costs; require a refund; reduce the contractor's otherwise earned fee; and take such other action as authorized in law, regulation, or this contract.

CLAUSE I.155 - DEAR 970.5232-4 OBLIGATION OF FUNDS (DEC 2000)

(a) Obligation of funds. The amount presently obligated by the Government with respect to this contract is five million dollars (\$5,000,000.00). Such amount may be increased unilaterally by DOE by written notice to the contractor and may be increased or decreased by written agreement of the parties (whether or not by formal modification of this contract). Estimated collections from others for work and services to be performed under this contract are not included in the amount presently obligated. Such collections, to the extent actually received by the contractor, shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract. Nothing in this paragraph is to be construed as authorizing the contractor to exceed limitations stated in financial plans established by DOE and furnished to the contractor from time to time under this contract.

(b) Limitation on payment by the Government. Except as otherwise provided in this contract and except for costs which may be incurred by the contractor pursuant to the Termination clause of this contract or costs of claims allowable under the contract occurring after completion or termination and not released by the contractor at the time of financial settlement of the contract in accordance with the clause entitled "Payments and Advances," payment by the Government under this contract on account of allowable costs shall not, in the aggregate, exceed the amount obligated with respect to this contract, less the contractor's fee and any negotiated fixed amount. Unless expressly negated in this contract, payment on account of those costs excepted in the preceding sentence which are in excess of the amount obligated with respect to this contract shall be subject to the availability of:

(1) Collections accruing to the contractor in connection with the work under this contract and processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract, and

(2) Other funds which DOE may legally use for such purpose provided DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available.

(c) Notices--Contractor excused from further performance. The contractor shall notify DOE in writing whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), plus the contractor's best estimate of collections to be received and available during the 45 day period hereinafter specified, is in the contractor's best judgment sufficient to continue contract operations at the programmed rate for only 45 days and to cover the contractor's unpaid fee and any negotiated fixed amounts, and outstanding encumbrances and liabilities on account of costs allowable under the contract at the end of such period. Whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), less the amount of the contractor's fee then earned but not paid and any negotiated fixed amounts, is in the contractor's best judgment sufficient only to liquidate outstanding encumbrances and liabilities on account of costs allowable under this contract, the contractor shall immediately notify DOE and shall make no further encumbrances or expenditures (except to liquidate existing encumbrances and liabilities), and, unless the parties otherwise agree, the contractor shall be excused from further performance (except such performance as may become necessary in connection with termination by the Government) and the performance of all work hereunder will be deemed to have been terminated for the convenience of the Government in accordance with the provisions of the Termination clause of this contract.

(d) Financial plans; cost and encumbrance limitations. In addition to the limitations provided for elsewhere in this contract, DOE may, through financial plans, such as Approved Funding Programs, or other directives issued to the contractor, establish

controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The contractor agrees

(1) to comply with the specific limitations (ceilings) on costs and encumbrances set forth in such plans and directives,

(2) to comply with other requirements of such plans and directives, and

(3) to notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun.

(e) Government's right to terminate not affected. The giving of any notice under this clause shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of the Termination clause of this contract.

CLAUSE I.156 - DEAR 970.5232-5 LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000)

(a) The contractor is not liable to the Government for increased costs or interest resulting from its failure to comply with the clauses of this contract entitled, "Cost Accounting Standards," and "Administration of Cost Accounting Standards," if its failure to comply with the clauses is caused by the contractor's compliance with published DOE financial management policies and procedures or other requirements established by the Department's Chief Financial Officer or Procurement Executive.

(b) The contractor is not liable to the Government for increased costs or interest resulting from its subcontractors' failure to comply with the clauses at FAR 52.230-2, "Cost Accounting Standards," and FAR 52.230-6, "Administration of Cost Accounting Standards," if the contractor includes in each covered subcontract a clause making the subcontractor liable to the Government for increased costs or interest resulting from the subcontractor's failure to comply with the clauses; and the contractor seeks the subcontract price adjustment and cooperates with the Government in the Government's attempts to recover from the subcontractor.

CLAUSE I.157 - DEAR 970.5232-6 STRATEGIC PARTNERSHIP PROJECT FUNDING AUTHORIZATION (April 23, 2015)

Any uncollectible receivables resulting from the Contractor utilizing contractor corporate funding for reimbursable work shall be the responsibility of the Contractor, and the United States Government shall have no liability to the Contractor for the Contractor's uncollected receivables. The Contractor is permitted to provide advance payment utilizing contractor corporate funds for reimbursable work to be performed by the Contractor for a non-Federal entity in instances where advance payment from that entity is required under the Laws, regulations, and DOE directives clause of this contract and such advance cannot be obtained. The Contractor is also permitted to provide

advance payment utilizing contractor corporate funds to continue reimbursable work to be performed by the Contractor for a Federal entity when the term or the funds on a Federal interagency agreement required under the Laws, regulations, and DOE directives clause of this contract have elapsed. The Contractor's utilization of contractor corporate funds does not relieve the Contractor of its responsibility to comply with all requirements for Strategic Partnership Projects applicable to this contract.

CLAUSE I.158 - DEAR 970.5232-7 FINANCIAL MANAGEMENT SYSTEM (DEC 2000) (DEVIATION) (PF 2022-23) (OCT 2021)

(a) The Contractor shall maintain and administer a financial management system that is suitable to provide proper accounting in accordance with DOE requirements. In addition, the Contractor shall maintain and administer a financial management system that is in accordance with Generally Accepted Accounting Principles (GAAP) for Federal entities, as defined by the Federal Accounting Standards Advisory Board and implemented by the DOE Financial Management Handbook and other implementing policies. The financial system will also permit the proper allocation of costs to separately funded activities consistent with Cost Accounting Standards (CAS), as defined by 48 CFR 9900 and any implementing DOE policies, and ensures that accountability for the assets can be maintained.

(b) The Contractor shall submit to the Contracting Officer for written approval an annual plan for new financial management systems and/or subsystems and major enhancements and/or upgrades to the currently existing financial systems and/or subsystems. The Contractor shall notify DOE 30 days in advance of any planned implementation of any substantial changes to the plan and, as requested by the Contracting Officer, shall submit any such changes to the Contracting Officer for written approval before implementation.

CLAUSE I.159 - DEAR 970.5232-8 INTEGRATED ACCOUNTING (DEC 2000) (DEVIATION) (PF 2022-23) (OCT 2021)

Integrated accounting procedures are required for use under this contract. The Contractor's financial management system shall include an integrated accounting system that is linked to DOE's accounts through the use of corresponding accounts and that has electronic capability to transmit monthly and year-end self-balancing trial balances to the Department's primary accounting system for reporting financial activity under this contract in accordance with requirements imposed by the Contracting Officer pursuant to the Laws, Regulations, and DOE Directives clause of this contract.

CLAUSE I.160 - DEAR 970.5235-1 FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2010)

(a) Pursuant to 48 CFR 35.017-1, this contract constitutes the sponsoring agreement between the Department of Energy and the contractor, which establishes the relationship for the operation of a Department of Energy sponsored Federally Funded Research and

Development Center (FFRDC).

(b) In the operation of this FFRDC, the contractor may be provided access beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to Government employees and facilities needed to discharge its responsibilities efficiently and effectively. Because of this special relationship, it is essential that the FFRDC be operated in the public interest with objectivity and independence, be free from organizational conflicts of interest, and have full disclosure of its affairs to the Department of Energy.

(c) Unless otherwise provided by the contract, the contractor may accept work from a nonsponsor (as defined in 48 CFR 35.017) in accordance with the requirements and limitations of clause 48 CFR 970.5217-1, Strategic Partnership Projects Program.

(d) As an FFRDC, the contractor shall not use its privileged information or access to government facilities to compete with the private sector. Specific guidance on restricted activities is contained in DOE Order 481.1C, Strategic Partnership Projects (Formerly Known as Work for Others (Non-Department of Energy Funded Work)) or successor version.

CLAUSE I.161 - DEAR 970.5236-1 GOVERNMENT FACILITY SUBCONTRACT APPROVAL (DEC 2000) (SC ALTERNATE) (APR 2018)

The Contractor shall procure, by subcontract, the construction of new facilities or the alteration or repair of Government-owned facilities at the site. All such subcontracts which meet the review thresholds established in *Appendix G*, shall be subject to the written approval of the Contracting Officer.

CLAUSE I.162 - DEAR 970.5243-1 CHANGES (DEC 2000)

(a) *Changes and adjustment of fee.* The contracting officer may at any time and without notice to the sureties, if any, issue written directions within the general scope of this contract requiring additional work or directing the omission of, or variation in, work covered by this contract. If any such direction results in a material change in the amount or character of the work described in the "Statement of Work," an equitable adjustment of the fee, if any, shall be made in accordance with the agreement of the parties and the contract shall be modified in writing accordingly. Any claim by the contractor for an adjustment under this clause must be asserted in writing within 30 days from the date of receipt by the contractor of the notification of change; provided, however, that the contracting officer, if it is determined that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. A failure to agree on an equitable adjustment under this clause shall be deemed to be a dispute within the meaning of the clause entitled "Disputes."

(b) *Work to continue.* Nothing contained in this clause shall excuse the contractor

from proceeding with the prosecution of the work in accordance with the requirements of any direction hereunder.

CLAUSE I.163 - DEAR 970.5244-1 CONTRACTOR PURCHASING SYSTEM (AUG 2016) (DEVIATION) (PF 2015-17) (MAR 2015) (DEVIATION) (PF 2022-23) (OCT 2021)

(a) *General.* The Contractor shall develop, implement, and maintain formal policies, practices, and procedures to be used in the award of subcontracts consistent with this clause. The Contractor's purchasing system and methods shall be fully documented, consistently applied, and acceptable to the Department of Energy (DOE) in accordance with 48 CFR 970.4401-1. The Contractor shall maintain file documentation appropriate to the value of the purchase and adequate to establish the propriety of the transaction and the price paid. The Contractor's obligations include, among other things, retaining documentation to justify the cost on any flexibly priced subcontract or any subcontract with a flexibly priced element. DOE reserves the right at any time to require that the Contractor submit for approval any or all subcontracts or purchases under this contract. The Contractor shall not purchase any item or service expressly prohibited by the written direction of DOE, and shall use any special and directed sources expressly required by the DOE Contracting Officer. DOE will conduct periodic appraisals of the Contractor's management of all facets of the Contractor's purchasing function, including the Contractor's compliance with its approved system and methods and the Contractor's management of the function. Such appraisals shall be performed against the criteria and measures set forth in 48 CFR subpart 44.3. The Contractor's approved purchasing system and methods shall include the requirements set forth in paragraphs (b) through (y) of this clause.

(b) *Acquisition of utility services.* Utility services shall be acquired in accordance with the requirements of 48 CFR subpart 970.41.

(c) *Acquisition of real property.* Real estate or real property interests shall be acquired in accordance with 48 CFR subpart 917.74.

(d) *Advance notice of proposed subcontract awards.* Advance notice shall be provided in accordance with 48 CFR 970.4401-3.

(e) *Audit of subcontractors.*

(1) The Contractor shall provide for—

(i) Periodic post-award audit--or a sufficient amount of audit work--to provide reasonable assurance that all claimed subcontract costs are allowable for: flexibly priced subcontracts at all tiers; and the flexibly priced elements in any subcontracts at all tiers ("flexibly priced" subcontracts and elements include Cost-Reimbursement subcontracts, Time-and-Materials subcontracts, cost-reimbursement elements in Fixed-Priced contracts, etc.); and

(ii) Audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.

(2) Responsibility for determining the allowability of costs under each cost-reimbursement subcontract remains with the Contractor or next higher-tier subcontractor. The Contractor shall provide, in appropriate cases, for the timely joint involvement of the Contractor and the DOE Contracting Officer in resolution of subcontract cost allowability. In no case, however, shall the Contractor's subcontract audit arrangements preclude the Contracting Officer's determination of the allowability or unallowability of the subcontract costs the Contractor claims for reimbursement.

(3) Where audits of subcontractors at any tier are required, the Contractor shall consult with the DOE Contracting Officer on the best approach for obtaining an audit; this may involve employing external auditors. The Contractor shall interact with the cognizant Federal agency in a manner appropriate to the magnitude and nature of the subcontracted work. In no case, however, shall subcontractor auditing arrangements preclude determination by the Contracting Officer of the allowability or unallowability of subcontractor costs claimed for reimbursement by the Contractor.

(4) Allowable costs for cost-reimbursement subcontracts are to be determined in accordance with the cost principles of 48 CFR part 31, appropriate for the type of organization to which the subcontract is to be awarded, as supplemented by 48 CFR part 931. Allowable costs in the purchase or transfer from contractor-affiliated sources shall be determined in accordance with 48 CFR 970.4402-3 and 48 CFR 31.205-26(e).

(f) *Bonds and insurance.* (1) The Contractor shall require performance bonds in amounts as set forth in 48 CFR 28.102-2(b) for all fixed-priced and unit-priced construction subcontracts in excess of \$150,000. The Contractor shall consider the use of performance bonds in fixed-price non-construction subcontracts, where appropriate.

(5) For fixed-price, unit-priced and cost reimbursement construction subcontracts in excess of \$150,000, a payment bond shall be obtained on Standard Form 25A modified to name the Contractor as well as the United States of America as obligees. The amounts shall be determined in accordance with 48 CFR 28.102-2(b).

(6) For fixed-price, unit-priced and cost-reimbursement construction subcontracts greater than \$35,000, but not greater than \$150,000, the Contractor shall select two or more of the payment protections at 48 CFR 28.102-1(b), giving particular consideration to the inclusion of an irrevocable letter of credit as one of the selected alternatives.

(7) A subcontractor may have more than one acceptable surety in both construction and other subcontracts, provided that in no case will the liability of any one surety exceed the maximum sum for which it is qualified for any one obligation.

For subcontracts other than construction, a co-surety (two or more sureties together) may reinsure amounts in excess of their individual capacity, with each surety having the required underwriting capacity that appears on the list of acceptable corporate sureties.

(g) *Buy American*. The Contractor shall comply with the provisions of the Buy American Act as reflected in 48 CFR 52.225-1 and 48 CFR 52.225-9. The Contractor shall forward determinations of non-availability of individual items to the DOE Contracting Officer for approval. Items in excess of \$500,000 require the prior concurrence of the Head of Contracting Activity. If, however, the Contractor has an approved purchasing system, the Head of the Contracting Activity may authorize the Contractor to make determinations of non-availability for individual items valued at \$500,000 or less.

(h) *Construction and architect-engineer subcontracts*. (1) *Independent Estimates*. A detailed, independent estimate of costs shall be prepared for all construction work to be subcontracted that is expected to exceed the simplified acquisition threshold.

(i) *Prevention of conflict of interest*.

(i) The Contractor shall not award a subcontract for construction to the architect-engineer firm or an affiliate that prepared the design. This prohibition does not preclude the award of a "turnkey" subcontract so long as the subcontractor assumes all liability for defects in design and construction and consequential damages.

(ii) The Contractor shall not award both a cost-reimbursement subcontract and a fixed-price subcontract for construction or architect-engineer services or any combination thereof to the same firm where those subcontracts will be performed at the same site.

(iii) The Contractor shall not employ the construction subcontractor or an affiliate to inspect the firm's work. The Contractor shall assure that the working relationships of the construction subcontractor and the subcontractor inspecting its work and the authority of the inspector are clearly defined.

(j) *Contractor-affiliated sources*. Equipment, materials, supplies, or services from a contractor-affiliated source shall be purchased or transferred in accordance with 48 CFR 970.4402-3.

(k) *Contractor-subcontractor relationship*. The obligations of the Contractor under paragraph (a) of this clause, including the development of the purchasing system and methods, and purchases made pursuant thereto, shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors). Subcontracts shall be in the name of the Contractor, and shall not bind or purport to bind the Government.

(l) *Government property.* The Contractor shall establish and maintain a property management system that complies with criteria in 48 CFR 970.5245-1, Property.

(m) *Indemnification.* Except for Price-Anderson Nuclear Hazards Indemnity, no subcontractor may be indemnified except with the prior approval of the Head of the Contracting Activity, in consultation with the local legal counsel.

(n) *Leasing of motor vehicles.* Contractors shall comply with 48 CFR subpart 8.11 and 48 CFR subpart 908.11.

(o) *Management, acquisition and use of information resources.* Requirements for information technology and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders, statutes, and regulations.

(p) *Priorities, allocations and allotments.* Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.

(q) *Purchase of special items.* Purchase of the following items shall be in accordance with the following provisions of 48 CFR subpart 8.5, 48 CFR subpart 908.71 Federal Management Regulation (41 CFR chapter 102), the Federal Property Management Regulation (41 CFR chapter 101), and the following:

- (1) Motor vehicles—48 CFR 908.7101
- (2) Aircraft—48 CFR 908.7102
- (3) Security Cabinets—48 CFR 908.7106
- (4) Alcohol—48 CFR 908.7107
- (5) Reserved
- (6) Fuels and packaged petroleum products—48 CFR 908.7109
- (7) Coal—48 CFR 908.7110
- (8) Arms and Ammunition—48 CFR 908.7111
- (9) Heavy Water—48 CFR 908.7121(a)
- (10) Precious Metals—48 CFR 908.7121(b)
- (11) Lithium—48 CFR 908.7121(c)
- (12) Products and services of the blind and severely handicapped—41 CFR 101-26.701
- (13) Products made in Federal penal and correctional institutions—41 CFR 101-26.702

(r) *Purchase versus lease determinations.* The Contractor shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease versus purchase determinations. Such determinations shall be made—

- (1) At time of original acquisition;

- (2) When lease renewals are being considered; and
- (3) At other times as circumstances warrant.

(s) *Quality assurance.* The Contractor shall include appropriate clauses in subcontracts related to quality assurance requirements that provide no less protection for the Government, as that required of the Contractor in the prime contract.

(t) *Setoff of assigned subcontractor proceeds.* Where a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with 48 CFR 932.803.

(u) *Strategic and critical materials.* The Contractor may use strategic and critical materials in the National Defense Stockpile.

(v) *Termination.* When subcontracts are terminated as a result of the termination of all or a portion of this contract, the Contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in 48 CFR subparts 49.1, 49.2 and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the Contractor shall settle such subcontracts in general conformity with the policies and principles in 48 CFR subparts 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract. Terminations which require approval by the Government shall be supported by accounting data and other information as may be directed by the Contracting Officer.

(w) *Unclassified controlled nuclear information.* Subcontracts involving unclassified controlled nuclear information shall be treated in accordance with 10 CFR part 1017.

(x) *Subcontract flowdown requirements.* In addition to terms and conditions that are included in the prime contract which direct application of such terms and conditions in appropriate subcontracts, the Contractor shall include the following clauses in subcontracts, as applicable:

(1) Wage rate requirements (construction), formerly known as Davis-Bacon, clauses prescribed in 48 CFR 22.407.

(2) Foreign Travel clause prescribed in 48 CFR 952.247-70.

(3) Counterintelligence clause prescribed in 48 CFR 904.404(d)(7).

(4) Service Contract Labor Standards, formerly known as Service Contract Act clauses prescribed in 48 CFR 22.1006.

(5) State and local taxes clause prescribed in 48 CFR 970.2904-1.

(6) Cost or pricing data clauses prescribed in 48 CFR 970.1504-3-1.

(7) Displaced Employee Hiring Preference clause prescribed in 48 CFR 926.7104.

(8) Service Contract Reporting clause prescribed in 48 CFR 4.1705.

(9) Contract Work Hours and Safety Standards – Overtime Compensation as prescribed in 48 CFR 22.305.

(10) Paid Sick leave under Executive Order 13706 as prescribed in 48 CFR 22.2110.

(11) Collective Bargaining Agreements Management and Operating Contracts as prescribed in 48 CFR 970.2201-1-3.

(12) Workplace Substance Abuse Programs at DOE Sites as prescribed in 48 CFR 970.2305-4.

(13) Minimum Wages clause prescribed in 48 CFR 22.1906.

(y) *Legal services.* Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719.

CLAUSE I.164 - DEAR 970.5245-1 PROPERTY (AUG 2016) (ALTERNATE I) (AUG 2016)

(a) Furnishing of Government property. The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

(b) Title to property. Except as otherwise provided by the Contracting Officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the Contractor, for the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass directly from the vendor to the Government. The Government reserves the right to inspect, and to accept or reject, any item of such property. The Contractor shall make such disposition of rejected items as the Contracting Officer shall direct. Title to other property, the cost of which is reimbursable to the Contractor under this contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government, whichever first occurs. Property furnished by the Government and property purchased or furnished by the Contractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) Identification. To the extent directed by the Contracting Officer, the Contractor shall identify Government property coming into the Contractor's possession or custody, by marking and segregating in such a way, satisfactory to the Contracting Officer, as shall indicate its ownership by the Government.

(d) Disposition. The Contractor shall make such disposition of Government property which has come into the possession or custody of the Contractor under this contract as the Contracting Officer may direct during the progress of the work or upon completion or termination of this contract. The Contractor may, upon such terms and conditions as the Contracting Officer may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the Contracting Officer and the Contractor as the fair value thereof. The amount received by the Contractor as the result of any disposition, or the agreed fair value of any such property acquired by the Contractor, shall be applied in reduction of costs allowable under this contract or shall be otherwise credited to account to the Government, as the Contracting Officer may direct. Upon completion of the work or the termination of this contract, the Contractor shall render an accounting, as prescribed by the Contracting Officer, of all government property which had come into the possession or custody of the Contractor under this contract.

(e) Protection of government property—management of high-risk property and classified materials.

(1) The Contractor shall take all reasonable precautions, and such other actions as may be directed by the Contracting Officer, or in the absence of such direction, in accordance with sound business practice, to safeguard and protect government property in the Contractor's possession or custody.

(2) In addition, the Contractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control and disposition of high-risk property and classified materials throughout the life cycle of the property and materials consistent with the policies, practices and procedures for property management contained in the Federal Property Management Regulations (41 CFR chapter 101), the Department of Energy (DOE) Property Management Regulations (41 CFR chapter 109), and other applicable Regulations.

(3) High-risk property is property, the loss, destruction, damage to, or the unintended or premature transfer of which could pose risks to the public, the environment, or the national security interests of the United States. High-risk property includes proliferation sensitive, nuclear related dual use, export controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(f) Risk of loss of Government property.

(1)(i) The Contractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following—

(A) Willful misconduct or lack of good faith on the part of the Contractor's managerial personnel;

(B) Failure of the Contractor's managerial personnel to take all reasonable steps to comply with any appropriate written direction of the Contracting Officer to safeguard such property under paragraph (e) of this clause; or

(C) Failure of contractor managerial personnel to establish, administer, or properly maintain an approved property management system in accordance with paragraph (i)(1) of this clause.

(ii) If, after an initial review of the facts, the Contracting Officer informs the Contractor that there is reason to believe that the loss, destruction of, or damage to the government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the Contractor to show that the Contractor should not be required to compensate the government for the loss, destruction, or damage.

(2) In the event that the Contractor is determined liable for the loss, destruction or damage to Government property in accordance with (f)(1) of this clause, the Contractor's compensation to the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(3) The portion of the cost of insurance obtained by the Contractor that is allocable to coverage of risks of loss referred to in paragraph (f)(1) of this clause is not allowable.

(g) Steps to be taken in event of loss. In the event of any damage, destruction, or loss to Government property in the possession or custody of the Contractor with a value

above the threshold set out in the Contractor's approved property management system, the Contractor —

(1) Shall immediately inform the Contracting Officer of the occasion and extent thereof,

(2) Shall take all reasonable steps to protect the property remaining, and

(3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the Contracting Officer. The Contractor shall take no action prejudicial to the right of the Government to recover therefore, and shall furnish to the Government, on request, all reasonable assistance in obtaining recovery.

(h) Government property for Government use only. Government property shall be used only for the performance of this contract.

(i) Property Management—(1) Property Management System.

(i) The Contractor shall establish, administer, and properly maintain an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the contract. The Contractor's property management system shall be submitted to the Contracting Officer for approval and shall be maintained and administered in accordance with sound business practice, applicable Federal Property Management Regulations and Department of Energy Property Management Regulations, and such directives or instructions which the Contracting Officer may from time to time prescribe.

(ii) In order for a property management system to be approved, it must provide for—

(A) Comprehensive coverage of property from the requirement identification, through its life cycle, to final disposition;

(B) [Reserved]

(C) Full integration with the Contractor's other administrative and financial systems; and

(D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.

(iii) Approval of the Contractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (i)(2) of this clause.

(2) Property Inventory.

(i) Unless otherwise directed by the Contracting Officer, the Contractor shall within six months after execution of the contract provide a baseline inventory covering all items of Government property.

(ii) If the Contractor is succeeding another contractor in the performance of this contract, the Contractor shall conduct a joint reconciliation of the property inventory with the predecessor contractor. The Contractor agrees to participate in a joint reconciliation of the property inventory at the completion of this contract. This information will be used to provide a baseline for the succeeding contract as well as information for closeout of the predecessor contract.

(j) The term "contractor's managerial personnel" as used in this clause means the Contractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of all or substantially all of—

(1) The Contractor's business; or

(2) The Contractor's operations at any one facility or separate location at which this contract is being performed; or

(3) The Contractor's Government property system and/or a Major System Project as defined in DOE Order 413.3B, or successor version (Version in effect on effective date of contract).

(k) The Contractor shall include this clause in all cost reimbursable Subcontracts.

APPENDIX A

ADVANCE UNDERSTANDING ON HUMAN RESOURCES

**Applicable to the Operation of
Fermi National Accelerator Laboratory**

FERMI NATIONAL ACCELERATOR LABORATORY

ADVANCE UNDERSTANDING ON HUMAN RESOURCES

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SECTION I – INTRODUCTION

- (a) This Advance Understanding is intended to document the principles and measures for evaluation of the Contractor's Human Resources Management (CHRM) programs and other items of allowable personnel costs and related expenses not specifically addressed elsewhere under this contract.
- (b) The Contractor shall select, manage, and direct its workforce and apply its human resource policies in general conformity with its private operations and/or industrial practices insofar as they are consistent with this contract. Any changes to the personnel policies or practices in place as of the effective date of this contract which would increase costs, is subject to approval in advance by the Contracting Officer. Any programs or policies initiated for corporate application, permanently or for a finite period, that will impact staffing levels or compensation costs (i.e., furloughs or salary cuts) will not be applicable to Laboratory employees or employees otherwise funded through this contract, without prior approval of the Contracting Officer.
- (c) The Laboratory's programs will comply with the Federal Acquisition Regulation (FAR) cost principles and FAR contract clauses, as supplemented by the Department of Energy Acquisition Regulation (DEAR), for all Human Resources programs. The Contractor shall use effective management review procedures and internal controls to assure compliance with the FAR and DEAR as well as to ensure that the cost limitation set forth herein are not exceeded, and that areas which require prior approval of the DOE Contracting Officer or designated representative are reviewed and approved prior to incurrence of costs.
- (d) This Appendix A may be modified from time to time by agreement of the Parties. Either Party may, at any time, request that this Appendix A be revised, and the Parties hereto agree to negotiate in good faith concerning any requested revision. Revisions to this Appendix A shall be accomplished by executing a modification to the prime contract.
- (e) The Laboratory Director may make exceptions to the provisions of Appendix A when such exceptions are in the best interest of contract operations or will facilitate or enhance contract performance and are approved in advance by the Contracting Officer.
- (f) The Contractor, or designated representative, shall promptly furnish all reports and information required or otherwise indicated in this Advance Understanding to the Contracting Officer. The Contractor recognizes that the Contracting Officer or designated representative may make other data requests from time to time and the Contractor agrees to cooperate in meeting requests.
- (g) It is understood that no provision of this Appendix can affect any right guaranteed to a bargaining unit employee by the terms of a Collective Bargaining Agreement.

SECTION II – COMPENSATION

(a) Salary Increases.

- (1) An administrative stipend may be paid to an employee who is temporarily assigned responsibilities of a higher level position or other significant duties not part of the employee's regular position. The sum of the stipend and base salary shall not exceed the maximum salary of the higher level position. The Laboratory Director may authorize an administrative stipend up to 15% of the appointee's annual base salary for a period not to exceed one year.
- (2) Notwithstanding any other term or condition set forth in this contract, the Contracting Officer's approval of compensation actions pursuant to the H Clause entitled "Employee Compensation: Pay and Benefits will consider:
 - (A) relative alignment of proposed salaries with subordinate levels;
 - (B) available market data, comparing total-cash compensation; and
 - (C) total compensation relative to the maximum compensation reimbursement level, per the Bipartisan Budget Act of 2013 (BBA), Section 702, Limitation on Allowable Government Contractor Compensation Costs.

(b) Compensation Increase Plan (CIP).

- (1) The Contractor shall submit the CIP proposal not later than 60 days prior to the start of the new salary cycle.
- (2) In order to pay "on-market-on-average," in the calculation of market position, Laboratory salary data shall be matched to survey data as of the midpoint of the salary cycle (i.e., April 1 for a 10/1-9/30 salary cycle).
- (3) The CIP shall be expressed as a percentage of the projected base payroll for the end of the salary cycle (i.e., September 30 for a 10/1-9/30 salary cycle).

(c) Payment of Joint Appointees.

Joint Appointees shall be paid at the salary and fringe benefit rates established by the home institution, for the percentage of time worked at the host institution.

SECTION III – ANCILLARY PAY COMPONENTS

(a) Premium Pay.

The Contractor is authorized to provide shift differentials and other premium pay, such as Call-In Pay, On-Call Pay, meal allowances, and hazardous duty pay, as documented in a Contracting Officer-approved policy.

(b) Extended work week.

When deemed essential to the performance of work under this contract, an extended work week may be established at the Laboratory or any portion thereof.

(c) Medical evacuation services/insurance.

Employees required to perform official travel to foreign countries where local care is substandard (according to U.S. standards) may have coverage that pays for evacuation services to an acceptable medical facility in a proximal location on an urgent or emergency basis. The policy shall cover evacuation, expatriation of remains, and ancillary costs associated with the incident. Costs for such coverage for eligible employees are allowable.

SECTION IV – PAYMENTS ON SEPARATION

(a) Reduction in Force (RIF).

When employees are terminated due to a RIF, the following costs are allowable:

(1) Pay in Lieu of Notice. Any employee who is laid off or terminated due to a RIF may be given pay in lieu of the required minimum written notice of termination. Accumulated vacation credit is also paid.

(2) Severance Pay Benefit. As documented in a Contracting Officer-approved policy.

(b) Payments upon termination other than RIF.

(1) Sick Leave. The payment of accumulated sick leave upon termination is unallowable.

(2) Vacation. The Contractor is authorized to pay for accumulated vacation upon termination at the rate in effect as of the date of termination, including any shift differential.

SECTION V – LABOR RELATIONS

(a) Collective bargaining.

Costs of fringe benefits and wages paid to employees under collective bargaining agreements are allowable. All other reasonable costs and expenses, such as expenses relating to the grievance process, arbitration and arbitration awards, and other costs and expenses incurred pursuant to applicable collective bargaining agreements and revisions thereto, are also allowable.

(b) Collective Bargaining Agreements.

The Contractor shall provide copies of collective bargaining agreements to the Contracting Officer as they are ratified or modified.

(c) Bargaining Unit Activity.

Pay for absences from work by employees acting in the capacity of union officers, union stewards and committee members for time spent in handling grievances, negotiating with the Laboratory, and serving on labor management (Laboratory) committees, are allowable.

SECTION VI – SETTLEMENT COSTS

The Contractor is authorized to resolve internal staff settlements and employee grievances up to \$25,000 without the advance approval of the Contracting Officer.

SECTION VII – PROGRAMS INVOLVING EMPLOYEE ABSENCE FROM THE WORKPLACE

(a) Paid Leave.

The Laboratory will provide a reasonable and cost effective paid leave program. Paid leave includes vacation, holiday, sick, jury, bereavement, military, voting and personal leave according to Contracting Officer-approved Laboratory schedules. Only leave categories included in the Benefit Value Study shall be allowable.

(b) Sabbaticals/Temporary Assignments of Laboratory Employees to Other Institutions for Teaching and Research.

The Contractor shall be reimbursed for expenditures consistent with Laboratory policy arising out of an approved employee assignment to another institution for teaching and/or research if the assignment does not exceed one year.

(c) Military Leave.

Military leave and the associated pay is authorized in accordance with Contracting Officer-approved policies, and/or State or Federal law.

(d) Security Leave.

Wages or salaries paid to employees when access authorization is suspended by DOE will be allowable costs under the following conditions:

If a position which does not require access authorization is not available, the Laboratory Director or designee may place the employee on leave with pay at his or her base compensation until final disposition of the case. Leave with pay requires the Contracting Officer's concurrence that no position is available to which the employee might reasonably be transferred.

(e) Temporary Domestic Assignment Allowances.

Temporary domestic assignment allowances shall be consistent with Acquisition Letter (AL) 2018-08 dated May 3, 2018 entitled "Contractor Domestic Extended Personnel Assignments," which may be revised from time to time, and Contractor policy consistent with the aforementioned AL.

SECTION VIII – EMPLOYEE TRAINING, EDUCATION AND DEVELOPMENT

(a) The Laboratory shall establish training, education and development programs that are consistent with DOE requirements and guidance, industry standards, and other Federal, State, and local regulations. These programs shall ensure that employees are well-qualified and competent to manage facilities and meet mission requirements through administrative, professional, and technical excellence.

(1) Training.

The Laboratory may permit selected employees to attend training classes while receiving full pay in order to enable them to acquire the needed skills to qualify them for more responsible jobs and maintain competence in their fields.

(2) Education.

(A) The Laboratory may approve and support educational courses taken by employees which serve to improve efficiency and productivity of Laboratory operations, increase needed skills, or prepare employees for increased responsibilities.

(B) An employee or third party on behalf of an employee may be paid for tuition, required textbooks and fees for courses approved in advance by the Laboratory.

3) Development.

The Contractor shall be reimbursed for the cost of development programs, including but not limited to, apprenticeship training, supervisory training, management development, career updating and redirection, and work-study and other programs supporting the development of staff in fields of interest to the Laboratory.

SECTION IX – EMPLOYEE PROGRAMS

(a) Service/Retirement/Non-Performance Awards.

The Contractor is authorized to provide monetary or non-monetary recognition for achievements not based on performance. Awards may include, for example, Length of Service/Retirement Recognition; Safety Awards; Patent Awards; Suggestion Program.

(b) Performance Award Programs.

The Contractor may recognize employees or groups of employees who have distinguished themselves by their significant contributions and outstanding performance in the course of their work. Awards may be provided to employees or groups of employees in the form of cash. Additionally, noteworthy achievements and special efforts may be recognized by the presentation of plaques, certificates, and memorabilia.

(c) Cost of Health Services.

The Contractor shall be reimbursed for the costs of operating a Health Unit for Laboratory employees, including but not limited to the following: Pre-employment physicals and other medical examinations required to meet Laboratory employment requirements, medical care for occupational injuries and to provide relief for minor physical complaints of employees while at the Laboratory, and health examinations provided as a health service for employees.

(d) Other.

(1) The Contractor may develop, administer and support a variety of employee programs. These programs may include athletic, cultural, and family activities. Participant fees may be collected to partially offset the cost of some or all of these activities. Appropriate facilities, utilities, and maintenance may be provided by the Laboratory. Entertainment costs,

including costs of amusement, diversions, and social activities are unallowable, as well as directly related costs such as tickets, meals, lodging, rentals, transportation and gratuities.

- (2) Wellness Program. Costs of a Wellness Program to promote employee health and fitness are allowable.
- (3) Employee Assistance Program. The Contractor shall (1) maintain a program of preventive services, education, short-term counseling, coordination with and referrals to outside agencies, and follow-up upon return to work that conforms to the requirements of 10 CFR 707.6, Employee Assistance, Education, and Training; (2) submit for approval by the Contracting Officer any changes to the employee assistance program implementation plan; and (3) prepare and submit information to DOE concerning Employee Assistance Program services as requested by the Contracting Officer. Such reports shall not include individual identifiers.

SECTION X - COSTS OF RECRUITING PERSONNEL

- (a) The Contractor may incur costs for the recruitment of personnel, as follows:
 - (1) Costs of advertising and agency and consultant fees.
 - (2) Recruiting Expenses. The Laboratory may reimburse, consistent with other provisions of this contract, employees traveling for recruiting purposes, the actual cost incurred for the following expenses: transportation, lodging, and meals for prospective employees and, when approved, for spouses or representatives of academic institutions, professional societies and other scientific organizations and incidental expenses incurred in recruiting.
 - (3) New or prospective employees who have been offered and have accepted a position, and who are required to take a pre-placement physical examination, shall be reimbursed for costs of the physical examination.
 - (4) Costs associated with pre-employment screening shall be allowable.
- (b) Recruitment/Retention Tools.
 - (1) The Contractor may pay a sign-on bonus to recruit employees with critical skills.
 - (2) An annual retention bonus is authorized to retain employees with critical skills or whose expertise is critical to the completion of a specific project.

- (3) The Contractor is authorized to provide service credit to critical skill new-hires for previous relevant experience at another DOE facility or external organization, excluding defined benefit pension plans. Credited service may be used to establish eligibility for, or determine accrual of, service-based benefits (i.e., vacation accruals, vesting, or severance – unless severance has been paid for prior service as indicated in the H Clause entitled “Employee Compensation: Pay and Benefits), in accordance with the Contractor’s policies.

SECTION XI – REDUCTIONS IN CONTRACTOR EMPLOYMENT

Reductions in employment will be conducted in accordance with the Contractor's Contracting Officer-approved policies and practices and in accordance with applicable Departmental guidance on workforce restructuring, as revised from time to time.

(a) Workforce Restructuring Actions.

- (1) The Contractor will notify or request approval of workforce restructuring actions in accordance with the following:

RESTRUCTURING ACTION	# OF EMPLOYEES POTENTIALLY IMPACTED	ACTION REQUIRED
Voluntary	100 or more	CO Notification
Involuntary	100 or more	CO Approval

- (A) The Contractor is only required to provide notification of Self-Select Voluntary Separation Programs (SSVSP) if consistent with the following parameters:

- 1. In accordance with approved laboratory/contractor policies;
- 2. No enhanced benefits (severance or pension);
- 3. No backfilling (internally or externally) or re-employment of employees for a one-year period after severance is paid. If an employee is hired or rehired prior to the one-year period, the employee may be required to pay back, to the Contractor who provided the severance payment, all or a pro-rata amount of the severance received under the SSVSP. There is no backfilling where a separating employee is replaced by an internal candidate so long as:

- 1) The separating employee is leaving voluntarily;

- 2) The internal replacement is a regular, permanent employee on the contractor's payroll, not a temporary hire, staff augmentee, or someone serving under a post-doctoral program, etc.;
 - 3) The replacement results in a net reduction in headcount and costs of regular employees; and
 - 4) The replacement is accomplished in an otherwise legally compliant manner, including no unlawful intent to discriminate based upon age.
4. A business case is submitted 5 business days in advance of notification date that includes the maximum number of voluntary reductions, maximum dollars, positions/skills impacted; reasons reductions are needed, including how conducting a SSVSP will better position the Contractor to conduct the mission work, copy of self-select waivers, and communication plan; and
 5. Voluntary reductions are offered to all eligible employees in an operational unit (i.e., organization, direct/indirect category, etc.).
- (B) Actions requiring approval will additionally require a workforce restructuring plan (Specific Plan) prepared in accordance with DOE policy.
- (C) Approval actions shall be submitted a minimum of 10 business days prior to announcement to employees.
- (D) The Contracting Officer will review and approve any Specific Plan submitted for review affecting the reduction of 100 or more employees through an involuntary separation action within 10 business days after submission of a complete package by the Contractor unless the Contractor is notified of issues necessitating an extension of time. Should DOE request additional information from the Contractor regarding any Specific Plan, the Contractor will respond to such request within 3 business days.
- (E) The Contractor must perform an adverse impact analysis as part of its determination to undertake involuntary separation action(s). A copy of the adverse impact analysis for involuntary separation action(s) affecting 100 or more contractor employees within a rolling 12-month period shall be submitted to the DOE site counsel, as applicable, prior to notification of employees selected for involuntary separation.
- (F) Waivers or self-select forms that vary from those provided in DOE policy documents are subject to approval by DOE. The templates for

the contractor Involuntary Separation Plan, as well as the General Release and Waiver Forms, are available online at:

<http://www.energy.gov/gc/services/technology-transfer-and-procurement/office-assistant-general-counsel-labor-and-pension>.

- (G) The Contractor is responsible and accountable for conducting and defending all voluntary and involuntary separation actions in compliance with applicable laws, regulations, and the contract terms and conditions.
- (2) Any employee who volunteers for layoff or retirement during a time period in which the Contractor has a DOE approved active reduction in force plan will be eligible for severance pay provided the termination is accepted by Laboratory management and results in the retention of an employee who otherwise would have been laid off.
 - (A) If DOE approval is not required, severance may be paid to an employee who volunteers for layoff or retirement if contractor management has approved the restructuring action and the termination results in the retention of an employee who otherwise would be laid off.
 - (B) Severance is not payable to an employee who volunteers for layoff or retirement if the termination is not associated with a restructuring action approved and initiated by contractor management.
- (3) The Contractor, to the extent practicable, shall provide outplacement services in the forms of skills assessment and resume preparation to those employees who are involuntarily separated due to a layoff.
- (b) Displaced Worker Medical Benefit.

Employees placed on layoff status who have completed the entry probation period may be eligible for continued participation in the health benefits program with premiums supplemented by the Contractor based on the following schedule:

- (1) First Year. The Contractor's contribution for an active employee
- (2) Second Year. One half of the Contractor's Cobra premium
- (3) Third and subsequent years. Reasonable administrative costs that exceed the two percent administrative fee paid by the displaced worker.

Eligibility is determined in accordance with Departmental policy on workforce restructuring.

SECTION XII – EMPLOYEE BENEFITS

(a) Energy Employees' Occupational Illness Compensation Program Act (EEOICPA).

The Laboratory agrees to comply with requests for information, records, and other program requirements to ensure the orderly administration and adjudication of claims under the EEOICPA.

(b) Dependent Care.

The Laboratory is authorized to provide a dependent care benefit program as a fringe benefit, documented in a Contracting Officer approved policy.

If applicable, the Contractor shall sub-contract the operation of a dependent care center. The facility must be for the exclusive or nonexclusive use of Laboratory employees. Expense items such as utilities, maintenance, food services, medical services, or supplies already used in support of site operations and readily available are allowable. The cost of meals shall not be allowable.

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

**Applicable to the Operation of Fermi
National Accelerator Laboratory**



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Performance Evaluation and Measurement Plan of Fermi

Forward Discovery Group, LLC. for

the

Management and Operation of the Fermi National
Accelerator Laboratory

Fiscal Year 2025

January 1, 2025 – September 30, 2025

Rev. 3

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INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Fermi Forward Discovery Group, LLC (hereafter referred to as "the Contractor") performance regarding the management and operations of the Fermi National Accelerator Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from January 1, 2025, through September 30, 2025. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

This document also describes the distribution of the total available performance-based fee and the methodology for determining the amount of fee earned by the Contractor as stipulated within the clauses entitled, "Determining Total Available Performance Fee and Fee Earned," "Conditional Payment of Fee, Profit, or Incentives," and "Total Available Fee: Base Fee Amount and Performance Fee Amount." In partnership with the Contractor and other key customers, the Department of Energy (DOE) Headquarters (HQ) and the Site Office have defined the measurement basis that serves as the Contractor's performance-based evaluation and fee determination.

The Performance Goals (hereafter referred to as Goals), Performance Objectives (hereafter referred to as Objectives) and set of notable outcomes discussed herein were developed in accordance with contract expectations set forth within the contract. The notable outcomes for meeting the Objectives set forth within this plan have been developed in coordination with HQ program offices as appropriate. Except as otherwise provided for within the contract, the evaluation and fee determination will rest solely on the Contractor's performance within the Performance Goals and Objectives set forth within this plan.

The overall performance against each Objective of this performance plan, to include the evaluation of notable outcomes, shall be evaluated jointly by the appropriate HQ office, major customer and/or the Site Office as appropriate. This cooperative review methodology will ensure that the overall evaluation of the Contractor results in a consolidated DOE position taking into account specific notable outcomes as well as all additional information available to the evaluating office. The Site Office shall work closely with each HQ program office or major customer throughout the year (Jan 1, 2025 – Sep 30, 2025) in evaluating the Contractor's performance and will provide observations regarding programs and projects as well as other management and operation activities conducted by the Contractor throughout the year (Jan 1, 2025 – Sep 30, 2025).

Section I provides information on how the performance rating (grade) for the Contractor, as well as the performance-based incentives fee earned (if any), will be determined. As applicable, also provides information on the award term eligibility requirements.

Section II provides the detailed information concerning each Goal, its corresponding Objectives, and notable outcomes identified, along with the weightings assigned to each Goal and Objective and a table for calculating the final grade for each Goal.

I. DETERMINING THE CONTRACTOR'S PERFORMANCE RATING, PERFORMANCE-BASED FEE AND AWARD TERM ELIGIBILITY

The FY 2025 (Jan 1, 2025 – Sep 30, 2025) Contractor performance grade for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Contractor/Laboratory Leadership and for Management and Operations (M&O). For each Science and Technology (S&T) Goal, an initial weighted sum will be calculated analogously for each evaluating office, and a cost-based weighted sum of these initial sums will determine the Contractor performance grade. Each Goal is composed of two or more weighted Objectives. Additionally, a set of notable outcomes has been identified to highlight key aspects/areas of performance deserving special attention by the Contractor for the upcoming fiscal year (Jan 1, 2025 – Sep 30, 2025) performance period. Each notable outcome is linked to one or more Objectives, and failure to meet expectations against any notable outcome will result in a grade less than B+ for that Objective(s). That is, if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 1.0, 2.0, or 3.0, the SC program office that assigned the notable outcome shall award a grade less than “B+” for the Objective(s) to which the notable outcome is linked; and if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 4.0, 5.0, 6.0, 7.0 or 8.0, SC shall award a grade less than “B+” for the Objective(s) to which the notable outcome is linked. Performance above expectations against a notable outcome will be considered in the context of the Contractor’s entire performance with respect to the relevant Objective. The following section describes SC’s methodology for determining the Contractor’s grades at the Objective level.

Performance Evaluation Methodology:

The purpose of this section is to establish a methodology to develop grades at the Objective level. Each evaluating office shall provide a proposed grade and corresponding numerical score for each Objective (see Figure 1 for SC’s scale). Each evaluation will measure the degree of effectiveness and performance of the Contractor in meeting the corresponding Objectives.

Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	0.8-1.0	0.7-0

Figure 1. FY 2025 (Jan 1, 2025 – Sep 30, 2025) Contractor Letter Grade Scale

For the three S&T Goals (1.0 – 3.0) the Contractor shall be evaluated against the defined levels of performance provided for each Objective under the S&T Goals. The Contractor performance under Goal 4.0 will also be evaluated using the defined levels of performance described for the four Objectives under Goal 4.0. The descriptions for these defined levels of performance are included in Section II.

It is the DOE’s expectation that the Contractor provides for and maintains management and operational (M&O) systems that efficiently and effectively support the current mission(s) of the Laboratory and assure the Laboratory’s ability to deliver against DOE’s future needs. In evaluating the Contractor’s performance DOE shall assess the degree of effectiveness and performance in meeting each of the Objectives provided under each of the Goals. For the four M&O Goals (5.0 – 8.0) DOE will rely on a combination of the information through the Contractor’s own assurance systems, the ability of the Contractor to demonstrate the validity of this information, and DOE’s own independent assessment of the Contractor’s performance across the spectrum of its responsibilities. The latter might include but is not limited to operational awareness (daily oversight) activities; formal assessments conducted; “For Cause” reviews (if any); and other outside agency reviews (OIG, GAO, DCAA, etc.).

The mission of the Laboratory is to deliver the science and technology needed to support Departmental missions and other sponsors’ needs. Operational performance at the Laboratory meets DOE’s expectations (defined as the grade of B+) for each Objective if the Contractor is performing at a level that fully supports the Laboratory’s current and future science and technology mission(s). Performance that

does, or has the potential to, 1) adversely impact the delivery of the current and/or future DOE/Laboratory mission(s), 2) adversely impact the DOE and or the Laboratory’s reputation, or 3) fail to provide the competent people, necessary facilities and robust systems necessary to ensure sustainable performance, shall be graded below expectations as defined in Figure I-1, below.

The Department sets our expectations high and expects performance at that level to optimize the efficient and effective operation of the Laboratory. Thus, the Department does not expect routine Contractor performance above expectations against the M&O Goals (5.0 – 8.0). Performance that might merit grades above B+ would need to reflect a Contractor’s significant contributions to the management and operations at the system of Laboratories, or recognition by external, independent entities as exemplary performance.

Definitions for the grading scale for the Goal 5.0 – 8.0 Objectives are provided in Figure I-1, below:

Letter Grade	Numerical Grade	Definition
A+	4.3-4.1	Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor’s systems function at a level that fully supports the Laboratory’s current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary.
A	4.0-3.8	Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor’s systems function at a level that fully supports the Laboratory’s current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized by external, independent entities as exemplary.
A-	3.7-3.5	Exceeds expectations of performance against all aspects of the Objective in question. The Contractor’s systems function at a level that fully supports the Laboratory’s current and future science and technology mission(s).
B+	3.4-3.1	Meets expectations of performance against all aspects of the Objective in question. The Contractor’s systems function at a level that fully supports the Laboratory’s current and future science and technology mission(s). No performance has, or has the potential to, adversely impact 1) the delivery of the current and/or future DOE/Laboratory mission(s), 2) the DOE and/or the Laboratory’s reputation, or does not 3) provide a sustainable performance platform.
B	3.0 -2.8	Just misses meeting expectations of performance against a few aspects of the Objective in question. In a few minor instances, the Contractor’s systems function at a level that does not fully support the Laboratory’s current and future science and technology mission or provide a sustainable performance platform.
B-	2.7-2.5	Misses meeting expectations of performance against several aspects of the Objective in question. In several areas, the Contractor’s systems function at a level that does not fully support the Laboratory’s current and future science and technology mission or provide a sustainable performance platform.
C+	2.4-2.1	Misses meeting expectations of performance against many aspects of the Objective in question. In several notable areas, the Contractor’s systems function at a level that does not fully support the Laboratory’s current and future science and technology mission or provide a sustainable performance platform, and/or have affected the reputation of the Laboratory or DOE.
C	2.0-1.8	Significantly misses meeting expectations of performance against many aspects of the Objective in question. In many notable areas, the Contractor’s systems do not support the Laboratory’s current and future science and technology mission, nor provide a sustainable performance platform and may affect the reputation of the Laboratory or DOE.

C-	1.7- 1.1	Significantly misses meeting expectations of performance against most aspects of the Objective in question. In many notable areas, the Contractor's systems demonstrably hinder the Laboratory's ability to deliver on current and future science and technology mission and have harmed the reputation of the Laboratory or DOE.
D	1.0-0.8	Most or all expectations of performance against the Objective in question are missed. Performance failures in this area have affected all parts of the Laboratory; DOE leadership engagement is required to deal with the situation and help the Contractor.
F	0.7-0	All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE.

Figure I-1. Letter Grade and Numerical Grade Definitions for Objectives under M&O Goals

Calculating Individual Goal Scores and Letter Grades:

Each Objective is assigned the earned numerical score by each evaluating office as stated above. For an evaluating office, the Goal score is then computed by multiplying each Objective numerical score under that Goal by the weight assigned to that Objective by that office, and then adding these values together. For Goals 4.0-8.0, this determines the overall Goal score. For Goals 1.0-3.0, the overall Goal score is calculated by multiplying each evaluating office's Goal score by the office's cost-based weight, and then adding them. For the purpose of determining the eight Goal grades, the unrounded raw overall numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below following Figure 2, and then will be compared to Figure 1. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation from Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

The eight Performance Goal grades shall be used to create a report card for the laboratory (see Figure 2, below).

Performance Goal	Grade
1.0 Mission Accomplishment	
2.0 Design, Fabrication, Construction and Operations of Research Facilities	
3.0 Science and Technology Program Management	
4.0 Sound and Competent Leadership and Stewardship of the Laboratory	
5.0 Integrated Safety, Health, and Environmental Protection	
6.0 Business Systems	
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio	
8.0 Integrated Safeguards and Security Management and Emergency Management Systems	

Figure 2. Laboratory Report Card

Although rounded to convert to letter grades, the unrounded raw numerical score from each calculation shall be carried through to the next stage of the calculation process. The unrounded raw numerical score for weighted final S&T and weighted final M&O will be rounded to the nearest tenth of a point for purposes of determining fee. A standard rounding convention of x.44 and less rounds down to the nearest tenth (here, x.4), while x.45 and greater rounds up to the nearest tenth (here, x.5).

Determining the Amount of Performance-Based Fee Earned:

SC uses the following process to determine the amount of performance-based fee earned by the contractor. The overall Goal scores for each S&T Performance Goal shall be used to determine an initial numerical score for S&T (see Table A, below), and the overall Goal scores for each M&O Performance Goal shall be used to determine an initial numerical M&O score (see Table B, below).

S&T Performance Goal	Numerical Score	Weight ¹		
1.0 Mission Accomplishment		30%		
2.0 Design, Fabrication, Construction and Operation of Research Facilities				
3.0 Science and Technology Program Management		25%		
Initial S&T Score				

Table A. Fiscal Year 2025 (Jan 1, 2025 – Sep 30, 2025) Contractor Evaluation Initial S&T Score Calculation

M&O Performance Goal	Numerical Score	Weight		
5.0 Integrated Safety, Health, and Environmental Protection		30%		
6.0 Business Systems		30%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio		25%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems		15%		
Initial M&O Score				

Table B. Fiscal Year 2025 (Jan 1, 2025 - Sep 30, 2025) Contractor Evaluation Initial M&O Score Calculation

These initial scores will then be adjusted based on the numerical score for Goal 4.0 (see Table C, below).

	Numerical Score	Weight		
Initial S&T Score	TBD	75%		
Goal 4.0	TBD	25%		
Final S&T Score				
Initial M&O Score	TBD	75%		
Goal 4.0	TBD	25%		
Final M&O Score				

Table C. Fiscal Year 2025 (Jan 1, 2025 – Sep 30, 2025) Final S&T and M&O Score Calculation

¹ For Goals 1.0 and 2.0, the weights are based on fiscal year costs (Jan 1, 2025 – Sep 30, 2025) for each program distributed between Goals 1.0 and 2.0; however, a minimum weight of 30% for Goal 1.0 is required regardless of program distributions. For Goal 3.0, the weight is set as a fixed percentage for all laboratories

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2025 (Jan 1, 2025 – Sep 30, 2025) as calculate with Table D.

Overall Final Score for either S&T or M&O from Table C.	Percent S&T Fee Earned	M&O Fee Multiplier
4.3	100%	100%
4.2		
4.1		
4.0	97%	100%
3.9		
3.8		
3.7	94%	100%
3.6		
3.5		
3.4	91%	100%
3.3		
3.2		
3.1		
3.0	88%	95%
2.9		
2.8		
2.7	85%	90%
2.6		
2.5		
2.4	75%	85%
2.3		
2.2		
2.1		
2.0	50%	75%
1.9		
1.8		
1.7	0%	60%
1.6		
1.5		
1.4		
1.3		
1.2		
1.1		
1.0 to 0.8	0%	0%
0.7 to 0.0	0%	0%

Figure 3. Performance-Based Fee Earned Scale

Overall Fee Determination	
Percent S&T Fee Earned	
M&O Fee Multiplier	x
Overall Earned Performance-Based Fee	

Table D. Final Percentage of Performance-Based Fee Earned Determination

The Federal Acquisition Regulation (FAR) requirements for using and administering cost-plus-award-fee contracts were modified to provide for a five-level adjectival grading system with associated levels of available fee². SC has addressed the FAR Part 16 language by mapping its standard numerical scores and associated fee determination to FAR Adjectival Rating System as noted in Figure 4.

Range of Overall Final Score for S&T from Figure 3.	FAR Adjectival Rating	Maximum Performance- Fee Pool Available to be Earned
3.1 to 4.3	Excellent	100%
2.5 to 3.0	Very Good	88%
2.1 to 2.4	Good	75%
1.8 to 2.0	Satisfactory	50%
0.0 to 1.7	Unsatisfactory	0%

Figure 4. Crosswalk of SC Numerical Scores and the FAR Part 16a Adjectival Rating System

Adjustment to the Letter Grade and/or Performance-Based Fee Determination:

The lack of performance objectives and notable outcomes in this plan does not diminish the need to comply with minimum contractual requirements. Although the performance-based Goals and their corresponding Objectives shall be the primary means utilized in determining the Contractor’s performance grade and/or amount of performance-based fee earned, the Contracting Officer may unilaterally adjust the rating and/or reduce the otherwise earned fee based on the Contractor’s performance against all contract requirements as set forth in the Prime Contract. While reductions may be based on performance against any contract requirement, specific note should be made to contract clauses which address reduction of fee including, Standards of Contractor Performance Evaluation, DEAR 970.5215-1 – Total Available Fee: Base Fee Amount and Performance Fee Amount, and Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts. Data to support rating and/or fee adjustments may be derived from other sources to include, but not limited to, operational awareness (daily oversight) activities; “For Cause” reviews (if any); and other outside agency reviews (OIG, GAO, DCAA, etc.), as needed.

The adjustment of a grade and/or reduction of otherwise earned fee will be determined by the severity of the performance failure and consideration of mitigating factors. DEAR 970.5215-3 Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts is the mechanism used for reduction of fee as it relates to performance failures related to safeguarding of classified information and to adequate protection of environment, health and safety. Its guidance can also serve as an example for reduction of fee in other areas.

The final Contractor performance-based grades for each Goal and fee earned determination will be contained within a report covering Jan 1, 2025 – Sep 30, 2025, documenting the results from the DOE review. The report will identify areas where performance improvement is necessary and, if required, provide the basis for any performance-based rating and/or fee adjustments made from the otherwise earned rating/fee based on Performance Goal achievements.

² See Policy Flash 2010-05, *Federal Acquisition Circular 2005-37*.

Determining Award Term Eligibility:

The Prime contract contains a non-monetary performance incentive in Section F “Deliveries or Performance” at Clause F.2. The base term of the prime contract is five years expiring December 31, 2029. Contingent upon approval of contract extension, the prime contract may be extended utilizing the “Award Term Incentive (Special)” Clause.

II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

Background

The current performance-based management approach to oversight within DOE has established a new culture within the Department with emphasis on the customer-supplier partnership between DOE and the laboratory contractors. It has also placed a greater focus on mission performance, best business practices, cost management, and improved contractor accountability. Under the performance-based management system the DOE provides clear direction to the laboratories and develops annual performance plans (This covers Jan 1, 2025 – Sep 30, 2025) to assess the contractors’ performance in meeting that direction in accordance with contract requirements. The DOE policy for implementing performance-based management includes the following guiding principles:

- Performance objectives are established in partnership with affected organizations and are directly aligned to the DOE strategic goals;
- Resource decisions and budget requests are tied to results; and
- Results are used for management information, establishing accountability, and driving long-term improvements.

The performance-based approach focuses the evaluation of the Contractor’s performance against these Performance Goals. Progress against these Goals is measured through the use of a set of Objectives. The success of each Objective will be measured based on demonstrated performance by the laboratory, and on a set of notable outcomes that focus laboratory leadership on the specific items that are the most important initiatives, and highest risk issues the laboratory must address during the fiscal year (Jan 1, 2025 – Sep 30, 2025). These notable outcomes should be objective, measurable, and results-oriented to allow for a definitive determination of whether or not the specific outcome was achieved at the end of the year (Sep 30, 2025).

Performance Goals, Objectives, and Notable Outcomes

The following section describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2025 (Jan 1, 2025 – Sep 30, 2025).

GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

The science and technology programs at the Laboratory produce high-quality, original, and creative results that advance science and technology; demonstrate sustained scientific progress and impact; receive appropriate external recognition of accomplishments; and contribute to overall research and development goals of the Department and its customers.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Mission Accomplishment Goal measures the overall effectiveness and performance of the Contractor in delivering science and technology results which contribute to and enhance the DOE's (or other relevant supporting agencies') mission of protecting our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge by supporting world-class, peer-reviewed scientific results, which are recognized by others.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Offices, other cognizant HQ Program Offices, and other customers as identified below. The Goal score from each HQ Program Office and/or customer is computed by multiplying each Objective numerical score by the associated weight assigned by that Office/customer and summing them (see Table 1.1).

The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025).

- Office of High Energy Physics (HEP)
- Workforce Development for Teachers and Scientists (WDTS)

The overall Performance Goal score and grade will be determined by multiplying the Goal score assigned by each of the offices identified above by the cost-based weightings identified for each and then summing them (see Table 1.2, below). The cost-based weights to be utilized for determining the overall score will be determined following the end of the performance period and will be based on actual cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science Program Offices, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives, the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY2025 (Jan 1, 2025 – Sep 30, 2025) as compared to the total cost for those remaining HQ Program Offices

Objectives:

1.1 Provide Science and Technology Results with Meaningful Impact on the Field

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Performance of the Laboratory with respect to proposed research plans;
- Performance of the Laboratory with respect to community impact and peer review; and
- Performance of the Laboratory with respect to impact to DOE (or other customer) mission needs.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Impact of publications on the field, as measured primarily by peer review;
- Impact of S&T results on the field, as measured primarily by peer review;
- Impact of S&T results outside the field indicating broader interest;
- Impact of S&T results on DOE or other customer mission(s);
- Successful stewardship of mission-relevant research areas;
- Delivery on proposed S&T plans;
- Significant awards (Nobel Prizes, R&D 100, FLC, etc.);
- Invited talks, citations, making high-quality data available to the scientific community; and
- Development of tools and techniques that become standards or widely-used in the scientific community.

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>significant research areas</i> for which the Laboratory has <i>exceeded the expectations</i> of the proposed research plans <i>in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected.</i> • S&T conducted at the Laboratory <i>has resolved one of the most critical questions in the field or has changed the way the research community thinks about a particular field through paradigm shifting discoveries that would be considered the most influential discovery of the decade for that field.</i> • S&T conducted at the Laboratory <i>provided major advances that significantly accelerate DOE or other customer mission(s).</i>
A	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>important examples</i> where the Laboratory <i>exceeded the expectations of the proposed research plans in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected.</i> • <i>All areas</i> of S&T conducted at the Laboratory are of <i>exceptional or outstanding merit and quality.</i> • S&T conducted at the Laboratory has <i>significant positive impact</i> to DOE or other customer missions.
A-	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>important examples</i> where the Laboratory <i>exceeded the expectations of the proposed research plans.</i> • <i>Significant areas</i> of S&T conducted at the Laboratory are of <i>exceptional or outstanding merit and quality.</i> • S&T conducted at the Laboratory <i>significantly impact</i> DOE or other customer missions.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • The Laboratory has successfully executed proposed research plans. • S&T conducted at the Laboratory are of <i>high</i> scientific merit and quality. • S&T conducted at the Laboratory <i>advance</i> DOE or other customer missions.
B	<ul style="list-style-type: none"> • The Laboratory has successfully executed proposed research plans. • S&T conducted at the Laboratory <i>advance</i> DOE or other customer missions. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least</i> one of the following reasons:</p> <ul style="list-style-type: none"> • S&T conducted at the Laboratory <i>are not uniformly of high merit and quality OR some areas of research, previously supported, have become uncompetitive OR the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>

B-	<p>The Laboratory fails to meet the conditions for B+ for at least one of the following reasons:</p> <ul style="list-style-type: none"> • The Laboratory has failed to successfully execute proposed research plans, but contingencies were in place such that no funding was or will be terminated. OR S&T conducted at the Laboratory does little to advance DOE or other customer missions. • Significant areas of S&T conducted at the Laboratory are not of high merit and quality OR some areas of research, previously supported, have become uncompetitive OR the Laboratory do not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.
C	<p>The Laboratory fails to meet the conditions for B+ for at least one of the following reasons:</p> <ul style="list-style-type: none"> • In several significant aspects, the Laboratory failed to deliver on proposed research plans using available resources such that some funding was or will be terminated OR S&T conducted at the Laboratory failed to contribute to DOE or other customer missions. • Significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.
D	<p>The Laboratory fails to meet the conditions for B+ for at least one of the following reasons:</p> <ul style="list-style-type: none"> • Multiple program elements at the Laboratory failed to deliver on proposed research plans using available resources such that significant funding was or will be terminated. • Multiple significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities. • S&T conducted at the Laboratory failed to contribute to DOE or other customer missions.
F	<p>The Laboratory fails to meet the conditions for B+ for at least one of the following reasons:</p> <ul style="list-style-type: none"> • <i>Multiple program elements at the Laboratory failed to deliver on proposed research plans using available resources resulting in total termination of funding.</i> • <i>Multiple significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities OR the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud.</i> • <i>S&T conducted at the Laboratory failed to contribute to DOE or other customer missions.</i>

1.2 Provide Quality Leadership in Science and Technology that Advance Community Goals and DOE Mission Goals.

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Innovativeness / Novelty of research ideas put forward by the Laboratory;
- Extent to which Laboratory staff members take on substantive or formal leadership roles in their community;
- Extent to which Laboratory staff members take on formal leadership roles in DOE, SC and/or other customer activities;
- Extent to which Laboratory staff members contribute thoughtful and thorough peer reviews and other research assessments as requested by DOE, SC or other supporting customers; and
- Extent to which Laboratory staff members champion Laboratory and Community goals to foster effective work environment in the S&T field.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- Willingness to pursue novel approaches and/or demonstration of innovative solutions to problems;
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that previous risky decisions by the PI/research staff have proved to be correct and are paying off;
- The uniqueness and challenge of science pursued recognition for doing the best work in the field;
- Extent and quality of collaborative efforts;
- Staff members visible in leadership positions in the scientific community;
- Involvement in professional organizations, National Academies panels and workshops;
- Effectiveness in driving the direction and setting the priorities of the community in a research field;
- Success in competition for resources; and
- Extent and quality of efforts to create new opportunities for the support and mentoring of project personnel (students, postdocs, and/or research staff).

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • Laboratory staff members have <i>leadership positions</i> in professional organizations AND <i>staff has contributing role in National Academy or equivalent panels to discuss further research directions</i>; • Laboratory staff members have <i>leadership positions</i> in DOE and/or in other supporting agencies sponsored workshops and strategic planning activities. • The Laboratory program consistently produces and submits competitive proposals that challenge convention and open <i>significant new fields</i> for research that are well aligned with DOE or other supporting agency mission needs and <i>the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas</i>. • Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.
A	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • Laboratory staff members have <i>leadership positions</i> in professional organizations OR <i>staff has contributing role in National Academy or equivalent panels to discuss further research directions</i>; • Laboratory staff members have <i>leadership positions</i> in DOE and/or other supporting agency-sponsored workshops and strategic planning activities. • The Laboratory program consistently submits competitive proposals that challenge convention and open <i>significant new avenues</i> for research that are well aligned with DOE or other supporting agencies mission needs. • Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • Laboratory staff members are <i>active participants</i> in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise. • Laboratory staff members are <i>active participants</i> in DOE and/or or other supporting agencies-sponsored workshops and strategic planning activities. • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE or other supporting agencies. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE or other supporting agencies mission needs. • Laboratory staff are <i>active participants</i> in multi-institutional research collaborations.

<p style="text-align: center;">B</p>	<ul style="list-style-type: none"> • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE and/or other supporting agencies. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE and/or other supporting agencies mission needs. <p>BUT the Laboratory fails to meet the conditions for B+ for at least one of the following reasons:</p> <ul style="list-style-type: none"> • Although <i>regular participants</i> in professional organizations, committees, and activities, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Although <i>regular participants</i> in DOE and/or other supported agencies sponsored workshops and strategic planning activities, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Although <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>
<p style="text-align: center;">B-</p>	<ul style="list-style-type: none"> • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE or other supporting agencies. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least</i> one of the following reasons:</p> <ul style="list-style-type: none"> • The Laboratory program submits competitive proposals <i>but these either lack innovation or are not well aligned with DOE or other supporting agencies mission needs.</i> • Laboratory staff are <i>infrequent participants</i> in professional organizations, committees, and activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Laboratory staff are <i>infrequent participants</i> in DOE or other supported agencies sponsored workshops and strategic planning activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Although <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>
<p style="text-align: center;">C</p>	<p>The Laboratory fails to meet the conditions for B+ for <i>at least</i> one of the following reasons:</p> <ul style="list-style-type: none"> • Laboratory staff members <i>do not reliably</i> contribute thoughtful and thorough peer review in a timely manner, when requested by DOE or other supporting agencies. • <i>Some areas of research, previously supported, are no longer competitive.</i> • Laboratory staff members are <i>infrequent participants</i> in professional organizations, committees, and activities, AND <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Laboratory staff members are <i>infrequent participants</i> in DOE or other supported agencies sponsored workshops and strategic planning activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> • Although Laboratory staff members are <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>
<p style="text-align: center;">D</p>	<p>The Laboratory fails to meet the conditions for B+ because the Laboratory staff are working on problems that are no longer at the forefront of science and are considered mundane.</p>
<p style="text-align: center;">F</p>	<p>Review has found the Laboratory staff to be <i>guilty of gross scientific incompetence and/or scientific fraud</i></p>

Program Office³	Letter Grade	Numerical Score	Weight	Overall Score
Office of High Energy Physics				
1.1 Impact			50%	
1.2 Leadership			50%	
Overall HEP Total				
Workforce Development for Teachers and Scientists (WDTS)				
1.1 Impact			65%	
1.2 Leadership			35%	
Overall WDTS Total				

Table 1.1 – Program Performance Goal 1.0 Score

Program Office⁴	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of High Energy Physics				
Workforce Development for Teachers and Scientists				
Performance Goal 1.0 Total				

Table 1.2 – Overall Performance Goal 1.0 Score Development²

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 1.3 - Goal; 1.0 Final Letter Grade

³ A complete listing of the Objectives weightings under the SA&T Goals for the SC Programs and other customers is provided within Attachment I to this plan

⁴ The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual costs for fiscal year 2025 (Jan 1, 2025 – Sep 30, 2025).

GOAL 2.0 Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities

The Laboratory provides effective and efficient strategic planning; fabrication, construction and/or operations of Laboratory research facilities; and are responsive to the user community.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities Goal shall measure the overall effectiveness and performance of the Contractor in planning for and delivering leading-edge specialty research and/or user facilities to ensure the required capabilities are present to meet today's and tomorrow's complex challenges. It also measures the Contractor's innovative operational and programmatic means for implementation of systems that ensures the availability, reliability, and efficiency of these facilities; and the appropriate balance between R&D and user support.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025).

- Office of Basic Energy Sciences (BES)
- Office of High Energy Physics (HEP)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025) as compared to the total cost for those remaining HQ Program Offices.

Objectives

2.1 Provide Effective Facility Design(s) as Required to Support Laboratory Programs (i.e., activities leading up to CD-2)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's delivery of accurate and timely information required to carry out the critical decision and budget formulation process;
- The Laboratory's ability to meet the intent of DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets;
- The extent to which the Laboratory appropriately assesses risks and contingency needs; and
- The extent to which the Laboratory is effective in its unique management role and partnership with HQ.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- The quality of the scientific justification for proposed facilities resulting from preconceptual R&D;
- The technical quality of conceptual and preliminary designs and the credibility of the associated cost estimates
- The credibility of plans for the full life cycle of proposed facilities including financing options;
- The leveraging of existing facilities and capabilities of the DOE Laboratory complex in plans for proposed facilities; and
- The novelty and potential impact of new technologies embodied in proposed facilities.

Letter Grade	Definition
A+	<p>In addition to satisfying all conditions for B+; the Laboratory <i>exceeds expectations</i> in <i>all</i> of these categories:</p> <ul style="list-style-type: none"> • The Laboratory is recognized by the research community as the leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate and thoroughly document the potential for transformational scientific advancement. • Approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. • Reviews repeatedly confirm strong potential for scientific discovery in areas that support the Department’s mission, and potential to change a discipline or research area’s direction. • The Laboratory identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing and these efforts result in significant cost estimate and/or risk reductions without loss or, or while enhancing capability.
A	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • The Laboratory is recognized by the research community as a leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ • The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing.
A-	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective • Reviews repeatedly confirm potential for scientific discovery in areas that support the Department’s mission, and potential to change a discipline or research area’s direction.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD- 0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2). • Documentation requested by the programs is provided in a timely and thorough manner. • The Laboratory keeps DOE apprised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences. • The Laboratory solves problems and addresses issues to avoid adverse impacts to the project.
B	<p>The Laboratory fails to meet expectations in one of the areas listed under B+.</p>

B-	The Laboratory fails to meet expectations in several of the areas listed under B+
C	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the required analyses and documentation developed by the Laboratory are EITHER not innovative OR reflect a lack of commitment and leadership.
D	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the Laboratory fails to provide a compelling justification for the acquisition.
F	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed.

2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components (execution phase, post CD-2 to CD-4)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory’s adherence to DOE Order 413.3 Project Management for the Acquisition of Capital Assets;
- Successful fabrication of facility components by the Laboratory;
- The Laboratory’s effectiveness in meeting construction schedule and budget;
- The quality of key Laboratory staff overseeing the project(s); and
- The extent to which the Laboratory maintains open, effective, and timely communication with HQ regarding issues and risks.

Letter Grade	Definition
A+	In addition to satisfying all conditions for A, <ul style="list-style-type: none"> • There is high confidence throughout the execution phase that the project will be completed <i>significantly</i> under budget and/or ahead of schedule while meeting or exceeding all performance baselines;
A	In addition to satisfying all conditions for B+, <ul style="list-style-type: none"> • The Laboratory has identified and implemented practices that would allow the project scope to be <i>significantly expanded</i> if such were desirable, without impact on baseline cost or schedule; • The Laboratory <i>always</i> provides <i>exemplary</i> project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to be <i>exemplary</i>. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;
A-	In addition to satisfying all conditions for B+, <ul style="list-style-type: none"> • The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule; • Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule • The Laboratory provides <i>particularly useful</i> project status reports on time to DOE and regularly takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to <i>exceed expectations</i>. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;

B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • The project meets CD-2 performance measures; • The Laboratory provides sustained leadership and commitment to environment, safety and health; • Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project; • To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule; • DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
B	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT</p> <ul style="list-style-type: none"> • The project fails to meet expectations in <i>one</i> of the remaining areas listed under B+.
B-	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT</p> <ul style="list-style-type: none"> • The project fails to meet expectations in <i>several</i> of the areas listed under B+
C	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT The project fails to meet expectations in <i>several</i> of the areas listed under B+ AND</p> <ul style="list-style-type: none"> • Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; • Reports to DOE can vary in degree of completeness
D	<p>The project fails to meet conditions for B+ in at least one of the following areas:</p> <ul style="list-style-type: none"> • Reviews indicate project is likely to breach its cost/schedule performance baseline; • Laboratory commitment to environment, safety and health issues is inadequate; • Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided.
F	<p>The project fails to meet conditions for B+ in at least one of the following areas:</p> <ul style="list-style-type: none"> • Laboratory falsifies data during project execution phase; • Shows disdain for executing the project within minimal standards for environment, safety or health, • Fails to keep DOE informed of project status; • Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The availability, reliability, performance, and efficiency of Laboratory facilities;
- The degree to which the facility is optimally arranged to support the user community;
- The extent to which Laboratory R&D is conducted to develop/expand the capabilities of the facilities;
- The Laboratory's effectiveness in balancing resources between facility R&D and user support; and,
- The quality of the process used to allocate facility time to users; and
- The extent to which the facility's process for allocating facility time provides access to new users.

Letter Grade	Definition
A+	<p>In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are also met</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>significantly less</i> than planned and are acknowledged to be ‘leadership caliber’ by reviews; • Data on environment, safety, and health continues to be exemplary and widely regarded as among the ‘best in class’ • The Laboratory took extraordinary means to deliver an extraordinary result for the users and the program in the performance/ review period.
A	<p>In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are also met</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in most of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>less</i> than planned and are acknowledged to be ‘leadership caliber’ by reviews; • Data on environment, safety, and health continues to be <i>exemplary</i> and widely regarded as among the ‘best in class.’
A-	<p>In addition to satisfying all conditions for B+, <i>one</i> of the following conditions is met:</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in any of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>less</i> than planned and are acknowledged to be among the best by reviews;
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • Performance of the facility <i>meets</i> expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, capability (for example, beam delivery, luminosity, peak performance, etc.), • The schedule and the costs associated with the ramp-up to steady state operations occur as planned; • Data on environment, safety, and health continues to be very good as compared with other projects in the DOE. • User surveys meet program expectations and reflect that the Laboratory is responsive to user needs.
B	The project fails to meet expectations in <i>one</i> of the areas listed under B+
B-	The project fails to meet expectations in <i>more than one</i> of the areas listed under B+.
C	<p>Performance of the facility fails to meet expectations in <i>many</i> of the areas listed under B+; for example,</p> <ul style="list-style-type: none"> • The cost of operations is unexpectedly high, and availability of the facility is unexpectedly low, the number of users is unexpectedly low, capability is well below expectations. • The facility operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, or the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is satisfactory.
D	<p>Performance of the facility fails to meet expectations in <i>many</i> of the areas listed under B+; for example,</p> <ul style="list-style-type: none"> • The cost of operations is unexpectedly high, and availability of the facility is unexpectedly low; capability is well below expectations. • The facility operates somewhat below steady state, on cost and on schedule, and the reliability of performance is somewhat below planned values, or the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is inadequate.
F	<ul style="list-style-type: none"> • The facility fails to operate; the facility operates well below steady state and/or the reliability of the performance is well below planned values • Laboratory commitment to environment, safety, and health issues is inadequate.

2.4 Utilization of Facility(s) to Provide Impactful S&T Results and Benefits to External User Communities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The extent to which the facility is being used to perform influential science;
- The Laboratory's efforts to take full advantage of the facility to generate impactful S&T results;
- The extent to which the facility is strengthened by a resident Laboratory research community that pushes the envelope of what the facility can do and/or are among the scientific leaders of the community;
- The Laboratory's ability to appropriately balance access by internal and external user communities; and
- The extent to which there is a healthy program of outreach to the scientific community.

Letter Grade	Definition
A+	In addition to meeting all measures under <i>A</i> , <ul style="list-style-type: none"> • The Laboratory took extraordinary means to deliver an extraordinary result for a new user community.
A	In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are met <ul style="list-style-type: none"> • An <i>aggressive</i> outreach programs is in place and has been documented as attracting new communities to the facility; • Reviews consistently find that the facility capability or scope of research potential <i>significantly</i> exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews find that multiple disciplines are using the facility in new and novel ways that the facility is being used to pursue influential science.
A-	In addition to satisfying all conditions for B+, all of the following conditions are met <ul style="list-style-type: none"> • A <i>strong</i> outreach program is in place; • Reviews find that the facility capability or scope of research potential exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews document how multiple disciplines are using the facility in new and novel ways and/or that the facility is being used to pursue important science.
B+	The Laboratory has achieved each of the following objectives: <ul style="list-style-type: none"> • Reviews find / validate that the facility is being used for influential science; • The scope of facility capabilities is challenged and broadened by resident users; • The Laboratory effectively manages user allocations; • The Laboratory effectively maintains the facility to required performance standards (for example, runtime, luminosity, etc.) • A healthy outreach program is in place.
B	The Laboratory fails to meet expectations in <i>one</i> of the areas listed under B+
B-	The Laboratory fails to meet expectations in <i>several</i> of the areas listed under B+
C	The Laboratory fails to meet expectations in <i>many</i> of the areas listed under B+
D	Reviews find that there are few facility users, few of whom are using the facility in novel ways to impactful science; research base is very thin.
F	Laboratory staff does not possess capabilities to operate and/or use the facility adequately

Notable Outcomes

- **HEP:**
Effectively manage and safely execute the assigned project scope for LBNF/DUNE Excavation subproject, LBNF/DUNE BSI subproject, PIP II project, HL-LHC AUP project, and HL-LHC CMS project in accordance with DOE Order 413.3B. Performance will be assessed based on execution of baseline scope through September 30, 2025. (Objective 2.2)
- **BES:**
Effectively manage and safely execute the assigned LCLS-II-HE project scope in accordance with DOE Order 413.3B. Performance will be assessed based on the assigned project management responsibilities and cryomodule work planned and accomplished through September 30, 2025. (Objective 2.2)

Program Office⁵	Letter Grade	Numerical Score	Weight	Overall Score
Office of Basic Energy Sciences				
2.1 Provide Effective Facility Design(s)			0%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			100%	
2.3 Provide Efficient and Effective Operation of Facilities			0%	
2.4 Utilization of Facility(s) to Provide Impactful S&T Results and Benefits to External User Communities			0%	
Overall BES Total				
Office of High Energy Physics				
2.1 Provide Effective Facility Design(s)			10%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			75%	
2.3 Provide Efficient and Effective Operation of Facilities			15%	
2.4 Utilization of Facility(s) to Provide Impactful S&T Results and Benefits to External User Communities			0%	
Overall HEP Total				

Table 2.1 – Program Performance Goal 2.0 Score Development

⁵ A complete listing of Objectives weightings under the S&T Goals for the SC programs and other customers is provided within Attachment I to this plan.

Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Basic Energy Sciences				
Office of High Energy Physics				
Performance Goal 2.0 Total				

Table 2.2 – Overall Performance Goal 2.0 Score Development⁶

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 2.3 – Goal 2.0 Final Letter Grade

⁶ The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual costs for fiscal year 2025 (Jan 1, 2025 – Sep 30, 2025).

GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

The Laboratory provides effective program vision and leadership; strategic planning and development of initiatives; recruits and retains a quality scientific workforce; and provides outstanding research processes, which improve research productivity.

The weight of this Goal is 25%.

The Provide Effective and Efficient Science and Technology Program Management Goal shall measure the Contractor's overall management in executing S&T programs. Dimensions of program management covered include: 1) providing key competencies to support research programs to include key staffing requirements; 2) providing quality research plans that take into account technical risks, identify actions to mitigate risks; and 3) maintaining effective communications with customers to include providing quality responses to customer needs.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025) provided by the Program Offices listed below.

- Office of High Energy Physics (HEP)
- Workforce Development for Teachers and Scientists (WDTS)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2025 (Jan 1, 2025 – Sep 30, 2025), as compared to the total cost for those remaining HQ Program Offices.

Objectives

3.1 Provide Effective and Efficient Strategic Planning and Stewardship of Scientific Capabilities and Program Vision

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality of the Laboratory's strategic plan;
- The extent to which the Laboratory shows strategic vision for research
- The extent to which programs of research take advantage of Laboratory capabilities—research programs are more than the sum of their individual project parts;
- The extent to which the Laboratory undertakes research for which it is uniquely qualified;
- The extent to which lab plans are aligned with DOE or other supporting agency mission goals;
- The extent to which the Laboratory programs are balanced between high-/low- risk research for a sustainable program; and
- The extent to which the Laboratory is able to retain and recruit staff for a sustainable program.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Articulation of scientific vision;
- Development and maintenance of core competencies;
- Ability to attract and retain highly qualified staff;
- Efficiency and effectiveness of joint planning (e.g., workshops) with outside community;
- Creativity and robustness of ideas for new facilities and research programs; and
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that the Laboratory “guessed right” in that previous risky decisions proved to be correct and are paying off.
- The depth and breadth of Laboratory research portfolio and its potential for growth.

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory’s strategic plan has enabled the Laboratory to achieve each of the following:</p> <ul style="list-style-type: none"> • <i>Most</i> of the Laboratory’s core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in <i>most</i> programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off; • The Laboratory has succeeded in developing new core competencies of <i>outstanding</i> quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC or other supporting department or agency missions;
A	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory’s strategic plan has enabled the Laboratory to achieve the following:</p> <ul style="list-style-type: none"> • <i>Several</i> of the Laboratory’s core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in <i>several</i> programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off • The Laboratory has succeeded in developing <i>new</i> core competencies of <i>high</i> quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC/other supporting departments or agency missions.
A-	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory’s strategic plan has enabled the Laboratory to achieve at least one of the following:</p> <ul style="list-style-type: none"> • At least one of the Laboratory’s core competencies is recognized as <i>world-leading</i>; • The Laboratory has attracted and retained <i>world-leading</i> scientists in one or more programs; • The Laboratory has a coherent plan for addressing future workforce challenges.
B+	<p>The execution of the Laboratory’s strategic plan has enabled the Laboratory to achieve each of the following objectives:</p> <ul style="list-style-type: none"> • The Laboratory has articulated a coherent and compelling strategic plan that has been developed with input from external research communities and headquarters guidance, which, where appropriate, includes a coherent plan for building smaller research programs into new core competencies; and reallocates resources away from less effective programs. • The Laboratory has demonstrated the ability to attract and retain professional scientific staff in support of its strategic vision. • The portfolio of Laboratory research balances the needs for both high-risk/ high-payoff research and stewardship of mission-critical research. • The Laboratory’s research portfolio takes advantage of unique capabilities at the Laboratory • The Laboratory’s research portfolio includes activities for which the Laboratory is uniquely capable.

B	<p>The Laboratory fails to satisfy one of the conditions for B+; for example</p> <ul style="list-style-type: none"> • The Laboratory’s strategic plan is only <i>partially</i> coherent and is not entirely well-connected with external communities; • The portfolio of Laboratory research does <i>not</i> appropriately balance high-risk/ high-payoff research and stewardship of mission-critical research; • The Laboratory has developed and maintained <i>some, but not all</i>, of its core competencies. • The plan to attract and retain professional scientific staff is <i>lacking</i> strategic vision.
B-	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, including at least one of the following:</p> <ul style="list-style-type: none"> • Weak programmatic vision insufficiently connected with external communities; • Development and maintenance of only a few core competencies • Little attention to maintaining the correct balance between high-risk and mission-critical research; • Inability to attract and retain talented scientists in some programs.
C	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, including at least one of the following reasons:</p> <ul style="list-style-type: none"> • The Laboratory’s strategic plan lacks strategic vision and lacks appropriate coordination with appropriate stakeholders including external research groups. • The Laboratory’s strategic plan does not provide for sufficient maintenance of core competencies • Plan to attract and retain professional scientific staff is unlikely to be successful or does not focus on strategic capabilities.
D	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, and specifically</p> <ul style="list-style-type: none"> • The Laboratory has demonstrated little effort in developing a strategic plan. • The Laboratory has done little to develop and maintain core competencies • The Laboratory has had minimal success in attracting and retaining professional scientific staff.
F	<p>The Laboratory has:</p> <ul style="list-style-type: none"> • Made limited or ineffective attempts to develop a strategic plan; • Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas; • Failed to attract even reasonably competent scientists and technical staff.

3.2 Provide Effective and Efficient Science and Technology Project/Program/Facilities Management

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory’s management of R&D programs and facilities according to proposed plans;
- The extent to which the Laboratory’s management of projects/programs/facilities supports the Laboratory strategic plan
- Adequacy of the Laboratory’s consideration of technical risks;
- The extent to which the Laboratory is successful in identifying/avoiding technical problems;
- Effectiveness in leveraging across multiple areas of research and between research and facility capabilities;
- The extent to which the Laboratory demonstrates a willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.); and
- The use of LDRD and other Laboratory investments and overhead funds to improve the competitiveness of the Laboratory; and
- The extent to which the laboratory management fosters a safe and professional work environment and promotes staff professional development and growth.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Laboratory plans that are reviewed by experts outside of lab management and/or include broadly-based input from within the Laboratory.

Letter Grade	Definition
A+	In addition to meeting all expectations under A, <ul style="list-style-type: none"> • The Laboratory has taken extraordinary measures to deliver an extraordinary result of critical importance to DOE or other relevant supporting agency missions, which could include the delivery of a critical technology or insight in response to a National emergency
A	In addition to satisfying the conditions for B+, <ul style="list-style-type: none"> • The Laboratory’s implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in <i>several</i> programmatic areas. Examples are listed under A-.
A-	In addition to satisfying the conditions for B+, <ul style="list-style-type: none"> • The Laboratory’s implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in <i>more than one</i> programmatic area. Examples of performance that exceeds expectations include: • The Laboratory’s implementation of project/program/facility plans has led directly to significant cost savings and/or significantly higher productivity than expected; • Project/program/facility plans prove to be robust against changing scientific and fiscal conditions through contingency planning; • The Laboratory has demonstrated creativity and forceful leadership in development and/or proactive management of its project/program/facility plans to reduce or eliminate risk; • The Laboratory’s proposals for new initiatives are funded through reallocation of resources from less effective programs. • Research plans and management actions are proactive, not reactive, as evidenced by making hard decisions and taking strong actions; and • Management is prepared for budget fluctuations and changes in DOE or other supporting agency program priorities – multiple contingencies are planned for; and • LDRD investments, overhead funds, and other Laboratory funds are used to strengthen lab plans and fill critical gaps in the Laboratory portfolio enabling it to respond to future DOE or other relevant supporting agency initiatives and/or national emergencies.
B+	The Laboratory has achieved each of the following objectives: <ul style="list-style-type: none"> • Project/program/facility plans exist for all major projects/programs/facilities. • Project/program/facility plans are consistent with known budgets, are based on reasonable assessments of technical risk, are well-aligned with DOE or other relevant supporting agency interests, provide sufficient flexibility to respond to unforeseen directives and opportunities, and effectively leverage other Laboratory resources and expertise. • The Laboratory has implemented the project/program/facility plans and has effective methods of tracking progress. • The Laboratory demonstrates willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.). • The Laboratory’s implementation of project/program/facility plans has led directly to effective R&D programs/facility operations. • LDRD investments and other overhead funds are managed appropriately.
B	<ul style="list-style-type: none"> • Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. BUT the Laboratory fails to meet <i>at least one of</i> the conditions for B+.

B-	<ul style="list-style-type: none"> Project/program/facility plans exist for all major projects/programs/facilities. The Laboratory has implemented the project/program/facility plans. <p>BUT the Laboratory fails to meet <i>several of</i> the conditions for B+.</p>
C	<ul style="list-style-type: none"> Project/program/facility plans exist for most major projects/programs/facilities. <p>BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory fails to meet <i>several of</i> the conditions for B+.</p>
D	<ul style="list-style-type: none"> Project/program/facility plans do not exist for a significant fraction of the Laboratory's major projects/programs/facilities; <p>OR</p> <ul style="list-style-type: none"> Significant work at the Laboratory is not in alignment with the project/program/facility plans
F	The Laboratory has failed to conduct project/program/facility planning activities.

3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality, accuracy and timeliness of the Laboratory's response to customer requests for information;
- The extent to which the Laboratory provides point-of-contact resources and maintains effective internal communications hierarchies to facilitate efficient determination of the appropriate point-of-contact for a given issue or program element;
- The effectiveness of the Laboratory's communications and depth of responsiveness under extraordinary or critical circumstances; and
- The effectiveness of Laboratory management in accentuating the importance of communication and responsiveness.

Letter Grade	Definition
A+	In addition to meeting all expectations under A, <ul style="list-style-type: none"> The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE or other relevant supporting agency's mission objectives
A	In addition to satisfying the conditions for B+, the Laboratory also meets all of the following: <ul style="list-style-type: none"> Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; Communication channels are well-defined, and information is effectively conveyed; Responses to HQ requests for information from all Laboratory representatives are prompt, thorough, correct and succinct; important or critical information is delivered in real-time; Laboratory representatives <i>always</i> initiate a communication with HQ on emerging Laboratory issues; headquarters is never surprised to learn of emerging Laboratory issues through outside channels.
A-	In addition to satisfying the conditions for B+, <ul style="list-style-type: none"> Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; Responses to requests for information are prompt, thorough, and economical/succinct at all levels of interaction; Laboratory representatives <i>often</i> initiate communication with HQ on emerging Laboratory issues; and under critical circumstances, essential information is delivered in real-time

B+	The Laboratory has achieved each of the following objectives: <ul style="list-style-type: none"> • Staff throughout the Laboratory organization engage in good communication practices; • Responses to requests for information are prompt and thorough; • The accuracy and integrity of the information provided is never in doubt; • Up-to-date point-of-contact information is widely available for all programmatic areas; and Headquarters is always and promptly informed of both positive and negative events at the Laboratory
B	The Laboratory failed to meet the conditions for B+ <i>in a few instances</i>
B-	The Laboratory fails to meet the conditions for B+ for <i>one</i> of the following reasons: <ul style="list-style-type: none"> • Responses to requests for information do not provide the minimum requirements to meet HQ needs; While the integrity of the information provided is never in doubt, its accuracy sometimes is; • Laboratory representatives do not take the initiative to alert HQ to emerging Laboratory issues.
C	The Laboratory fails to meet the conditions for B+ for <i>one or more</i> of the following reasons: <ul style="list-style-type: none"> • Responses to requests for information frequently fail to provide the minimum requirements to meet HQ needs • The Laboratory used outside channels or circumvented HQ in conveying critical information; • The integrity and/or accuracy of information provided is sometimes in doubt; • Laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; • Laboratory representatives failed to alert HQ to emerging Laboratory issues.
D	The Laboratory fails to meet the conditions for B+ for <i>one</i> of the following reasons: <ul style="list-style-type: none"> • Laboratory staff are generally well-intentioned in communication but consistently ineffective and/or incompetent; • The Laboratory management fails to emphasize the importance of effective communication and responsiveness
F	The Laboratory fails to meet the conditions for B+ for <i>one</i> of the following reasons <ul style="list-style-type: none"> • Laboratory staff are openly hostile and/or non-responsive to requests for information – emails and phone calls are consistently ignored; • Responses to requests for information are consistently incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.

Notable Outcomes

- **HEP:**

Determine the cause of repeated funding shortfalls in the Accelerator Test Facilities (ATF) and develop a new business model that provides cost stability and fair access for all users of the ATF. The new model should be presented to HEP by August 1, 2025, so HEP can implement any needed funding changes by FY 2026. (Objective 3.2)

Program Office ⁷	Letter Grade	Numerical Score	Weight	Overall Score
Office of High Energy Physics				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			50%	
3.3 Communications and Responsiveness			20%	
Overall HEP Total				
Office of Workforce Development for Teachers and Scientists				
3.1 Effective and Efficient Strategic Planning and Stewardship			15%	
3.2 Project/Program /Facilities Management			35%	
3.3 Communications and Responsiveness			50%	
Overall WDTS Total				

Table 3.1 – Program Performance Goal 3.0 Score Development

HQ Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of High Energy Physics				
Office of Workforce Development for Teachers and Scientists				
Performance Goal 3.0 Total				

Table 3.2 – Overall Performance Goal 3.0 Score Development⁸

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 3.3 – Goal 3.0 Final Letter Grade

⁷ A complete listing of the Objectives weights under the S&T Goals for the SC Programs and other customers is provided withing Attachment I of this plan.

⁸ The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual costs for fiscal year 2025 (Jan 1, 2025 – Sep 30, 2025).

Program Office Goal & Objective Weightings - Office of Science

	BES	HEP	WDTS
	Weight	Weight	Weight
Goal 1.0 Mission Accomplishment	N/A	TBD	TBD
1.1 Impact	0%	50%	65%
1.2 Leadership	0%	50%	35%
Goal 2.0 Design, Fabrication, Construction and Operation of Facilities	TBD	TBD	N/A
2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2)	0%	10%	N/A
2.2 Construction of Facility / Fabrication of Components (execution phase, Post CD-2 to CD-4)	100%	75%	N/A
2.3 Operation of Facility	0%	15%	N/A
2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community	0%	0%	N/A
Goal 3.0 Program Management	N/A	TBD	TBD
3.1 Effective and Efficient Strategic Planning and Stewardship	N/A	30%	15%
3.2 Project/Program/Facilities Management	N/A	50%	35%
3.3 Communications and Responsiveness	N/A	20%	50%

GOAL 4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory

This Goal evaluates the Contractor’s Leadership capabilities in leading the direction of the overall Laboratory, the responsiveness of the Contractor to issues and opportunities for continuous improvement, and corporate office involvement/commitment to the overall success of the Laboratory.

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in overall Contractor Leadership’s planning for, integration of, responsiveness to and support for the overall success of the Laboratory. This may include, but is not limited to, the quality of Laboratory Vision/Mission strategic planning documentation and progress in realizing the Laboratory vision/mission; the ability to establish and maintain long-term partnerships/relationships with the scientific and local communities as well as private industry that advance, expand, and benefit the ongoing Laboratory mission(s) and/or provide new opportunities/capabilities; implementation of a robust assurance system; Laboratory leadership facilitate and effectively manage external engagements and partnerships; Laboratory and Corporate Office Leadership’s ability to instill responsibility and accountability down and through the entire organization; overall effectiveness of communications with DOE; understanding, management and allocation of the costs of doing business at the Laboratory commensurate with associated risks and benefits; utilization of corporate resources to establish joint appointments or other programs/projects/activities to strengthen the Laboratory; and advancing excellence in stakeholder relations to include good corporate citizenship within the local community.

Objectives:

4.1 Leadership and Stewardship of the Laboratory

By which we mean: The performance of the laboratory’s senior management team as demonstrated by their ability to do such things as:

- Define an exciting yet realistic scientific vision for the future of the laboratory,
- Make progress in realizing the vision for the laboratory,
- Establish and maintain long-term partnerships/relationships that maintain appropriate relations with the scientific and local communities, and
- Develop and leverage appropriate relations with private industry to the benefit of the laboratory and the U.S. taxpayer.

Letter Grade	Definition
A+	The Senior Leadership of the laboratory has made outstanding progress (on an order of magnitude scale) over the previous year in realizing their vision for the laboratory and has had a demonstrable impact on the Department and the Nation. Strategic plans are of outstanding quality, have been externally recognized and referenced for their excellence, and have an impact on the vision/plans of other national laboratories. The Senior leadership of the laboratory may have been faced very difficult challenges and plotted, successfully, its own course through the difficulty, with minimal hand-holding by the Department. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this.
A	The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory and has through this has had a demonstrable positive impact on the Office of Science and the Department. Strategic plans are of outstanding quality and recognize and reflect the vision/plans of other national laboratories. Faced with difficult challenges, actions were taken by the Senior leadership of the laboratory to redirect laboratory activities to enhance the long-term future of the laboratory. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this.

A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are both exciting and realistic. Decisions and actions taken by the lab leadership align work, facilities, equipment and technical capabilities with the laboratory vision and plan. The Senior leadership of the laboratory faced difficult challenges and successfully plotted its own course through the difficulty, with help from the Department. Partners in the scientific and local communities are supportive of the laboratory.
B	The Senior Leadership of the laboratory has made little progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are exciting and realistic; however DOE is not fully confident that the laboratory is taking the actions necessary for the goals to be achieved. The Laboratory is not fully engaged with its partners/relationships in the scientific and local communities to maximize the potential benefits these relations have for the laboratory.
C	The Senior Leadership of the laboratory has made no progress over the previous year in realizing their vision for the laboratory or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are either unexciting or unrealistic. Business plans exist, but they are not linked to the strategic plan and do not inspire DOE's confidence that the strategic goals will be achieved. Partnerships with the scientific and local communities with potential to advance the laboratory exist, but they may not always be consistent with the mission of or vision for the laboratory. Affected communities and stakeholders are mostly supportive of the laboratory and aligned with the management's vision for the laboratory.
D	The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are neither exciting nor realistic. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, or unlikely. Affected communities and stakeholders are not adequately engaged with the laboratory and indicate non-alignment with DOE priorities.
F	The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are not aligned with DOE priorities or the mission of the laboratory. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, and unlikely, and/or the senior management team does not demonstrate a concerted effort to develop, leverage, and maintain relations with the scientific and local communities to assist the laboratory in achieving a successful future. Affected communities and stakeholders are openly non-supportive of the laboratory and DOE priorities.

4.2 Management and Operation of the Laboratory

By which we mean: The performance of the laboratory's senior management team as demonstrated by their ability to do such things as:

- Implement a robust contractor assurance system,
- Understand the costs of doing business at the laboratory and prioritize the management and allocation of these costs commensurate with their associated risks and benefits,
- Instill a culture of accountability and responsibility down and through the entire organization;
- Ensure good and timely communication between the laboratory and SC headquarters and the Site Office so that DOE can deal effectively with both internal and external constituencies.

Letter Grade	Definition
A+	The laboratory has a nationally or internationally recognized contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk and is working to help others internal and external to the Department establish similarly outstanding practices. The laboratory understands the drivers of cost at their lab and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that all the national laboratories and the Department as a whole benefit.
A	The laboratory has improved dramatically in the last year (Jan 1, 2025 – Sep 30, 2025) in all of the following: building a robust and transparent contractor assurance system that integrates internal and external (corporate) evaluation processes to evaluate risk; demonstrating the use of this system in making decisions that are aligned with the laboratory’s vision and strategic plan; understanding the drivers of cost at their lab, and prioritizing and managing these costs consistent with their associated risks and benefits to the laboratory and the SC laboratory system; demonstrating laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization; assuring communication between the laboratory and SC headquarters that is beneficial to both the lab and SC.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory has a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory can demonstrate use of this system in making decisions that are aligned with the laboratory’s vision and strategic plan. The laboratory understands the drivers of cost at their lab and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no surprises or embarrassments.
B	The laboratory has a contractor assurance system in place, but further improvements are necessary, or the link between the CAS and the laboratory’s decision-making processes are not evident. The laboratory understands the drivers of cost at their lab, but they are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is mostly evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no significant surprises or embarrassments.
C	The laboratory lacks a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory cannot demonstrate use of this system in making decisions that are aligned with the laboratory’s vision and strategic plan. The laboratory does not fully understand the drivers of cost at their lab, and thus are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Communication between the laboratory and SC headquarters and the Site Office is such that there has been at least one significant surprise or embarrassment.
D	The laboratory lacks a contractor assurance system, doesn’t understand the drivers of cost at their lab, and is not prioritizing and managing costs. SC HQ must intercede in management decisions. Poor communication between the laboratory and SC headquarters and the Site Office has resulted in more than one significant surprise or embarrassment.
F	Lack of management by the laboratory’s senior management has put the future of the laboratory at risk or has significantly hurt the reputation of the Office of Science.

4.3 Leadership of External Engagements and Partnerships

By which we mean: The performance of the laboratory leadership team to achieve the following:

- Establish a vision for shepherding technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory that aligns with the laboratory's unique expertise, facilities, and technology portfolio with the intent of advancing the DOE mission, national security, and economic prosperity for the United States.
- Implement an effective laboratory-wide technology transfer and commercialization strategy that is data-driven, grounded in evidence-based practices, and shows measurable progress towards achieving goals.
- Broadly deploy laboratory capabilities, intellectual property, and technologies to support and impact industry and other key non-DOE customer needs through Cooperative Research and Development Agreements (CRADA), Strategic Partnership Project (SPP) Agreements, and/or Agreements for Commercializing Technology (ACT), user facility access, and technology based economic development and Intellectual Property (IRP) management and licensing.
- Identify potential partners, implement outreach activities, and manage external engagements that enhance technology transfer and commercialization, education and workforce development, accomplish community-based objectives, and develop feedback loops with industry, academia, and community groups that inform planned and ongoing mission activities in the laboratory.
- Develop and leverage appropriate relationships with industry, academia, local, state, and federal government, community groups, and tribes (e.g., public-private partnerships and long-term research collaborations) to address barriers to technology transfer, commercialization, and dissemination and ultimately benefit the laboratory, DOE, the local and regional population, and the U.S. taxpayer.
- Facilitate regional partnerships and initiatives with industry, academia, including HBCUs, MSIs, and community colleges, K-12 schools, local, state, and federal government organizations, regional economic development organizations, community groups, and tribes, among other groups (e.g., STEM outreach programs) to improve technology transfer, commercialization, and dissemination, and ultimately contribute to the local economy, workforce development, and community-based activities.
- Foster a culture of entrepreneurship and community engagement at the laboratory that encourages staff at all levels to consider and implement new initiatives that enhance technology transfer and commercialization, education and workforce development, and community-based activities.

Letter Grade	Definition
A+	<p>Laboratory leadership has an exemplary vision for shepherding technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory that aligns with the laboratory’s unique expertise, facilities, and technology portfolio with the intent of advancing the DOE mission, national security, and economic prosperity for the United States.</p> <p>The laboratory is recognized across the DOE complex for its preeminent leadership and excellence in:</p> <ul style="list-style-type: none"> • identifying, engaging, and leveraging relationships with industry, other labs, academia, local, state, and federal government, community groups, and tribes to drive technology transfer and commercialization, education and workforce development, and community-based activities that benefit the laboratory, DOE, the local and regional population, and the U.S. taxpayer; • facilitating regional partnerships and initiatives that contribute to the local economy, workforce development, and community-based activities; • fostering a culture of entrepreneurship and community engagement at the laboratory that encourages staff at all levels to consider and implement initiatives that enhance technology transfer and commercialization, education and workforce development, and community-based programs; • developing and submitting, as the prime applicant, applications for funding to public and private sector institutions and receiving funding from such institutions for technology transfer and commercialization-related projects; • encouraging multi-lab collaborations and joint technology development partnerships by participating in the development and submission of funding applications; • leveraging funding from public and private sector entities, including philanthropic institutions, to advance and achieve DOE technology transfer and commercialization goals; • supporting regional innovation ecosystems through technical services, education and mentorship programs, and partnerships that support start-up incubation and technology acceleration of DOE- funded technologies and external technologies that support the DOE mission; • partnering with the public and private sectors to develop, contribute to, and review technology transfer and commercialization strategies based on robust market analyses to support the transfer and commercialization of technologies across the research, development, demonstration, and deployment (RDD&D) continuum; and, • contributing as members and serving in leadership positions in the Technology Transfer Working Group (TTWG), the National Laboratory Technology Transfer (NLTT) council, and other working and coordination groups established by DOE Headquarters. <p>The laboratory is recognized across the complex for being highly effective in developing national and regional public and private partnerships that significantly enhance DOE and laboratory outreach efforts and scientific missions. The laboratory staff are strongly encouraged to seek out and pursue potential technology transfer and commercialization, education and workforce development, and community- based activities that are clearly connected and/or complementary to their research and opportunities are available for staff to pursue such activities. The laboratory can demonstrate how this outreach informs its</p>

	<p>ongoing technology transfer and commercialization, education and workforce development, and community-based efforts, and they are at the forefront of technology transfer and commercialization, education and workforce development, and community-based outcomes.</p>
<p>A</p>	<p>Laboratory leadership has a substantive vision for shepherding technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory that aligns with the laboratory’s unique expertise, facilities, and technology portfolio with the intent of advancing the DOE mission, national security, and economic prosperity for the United States.</p> <p>The laboratory demonstrates leadership and excellence in:</p> <ul style="list-style-type: none"> • identifying, engaging, and leveraging relationships with industry, other labs, academia, local, state, and federal government, community groups, and tribes to drive technology transfer and commercialization, education and workforce development, and community-based activities that benefit the laboratory, DOE, the local and regional population, and the U.S. taxpayer; • facilitating regional partnerships and initiatives that contribute to the local economy, workforce development, and community-based activities; • fostering a culture of entrepreneurship and community engagement at the laboratory that encourages staff at all levels to consider and put into effect initiatives that enhance technology transfer and commercialization, education and workforce development, and community-based activities; • developing and submitting, as the prime applicant, applications for funding to public and private sector institutions and receiving funding from such institutions for technology transfer and commercialization, education and workforce development, and community-based related projects; and, • encouraging multi-lab collaborations and joint technology development partnerships by participating in the development and submission of funding applications and receiving funding from public and private sector entities, including philanthropic institutions, to advance and achieve DOE technology transfer and commercialization goals; and, • prioritizing technology transfer by leveraging non-federal funds to support technology transfer and commercialization activities. <p>The laboratory is highly effective in developing national and regional public and private partnerships that significantly enhance DOE and laboratory outreach efforts and scientific missions. The laboratory staff are encouraged to seek out and pursue potential technology transfer and commercialization, education and workforce development, and community-based activities that are clearly connected and/or complementary to their research and opportunities are available for staff to pursue such activities. The laboratory can demonstrate how this outreach informs its ongoing technology transfer and commercialization, education and workforce development, and community-based activities, and they are at the forefront of commercialization, education and workforce development, and community-based outcomes.</p>
<p>A-</p>	<p>Laboratory leadership performs better than expected (B+ grade) in these areas.</p>

<p>B+</p>	<p>Laboratory leadership has a vision for shepherding technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory that aligns with the laboratory’s unique expertise, facilities, and technology portfolio with the intent of advancing the DOE mission, national security, and economic prosperity for the United States.</p> <p>The laboratory demonstrates effectiveness in:</p> <ul style="list-style-type: none"> • identifying, engaging, and leveraging relationships with industry, other labs, academia, local, state, and federal government, community groups, and tribes to drive technology transfer and commercialization, education and workforce development, and community-based activities that benefit the laboratory, DOE, the local and regional population, and the U.S. taxpayer; • facilitating regional partnerships and initiatives that contribute to the local economy, workforce development, and community-based activities; and, • fostering a culture of entrepreneurship and community engagement at the laboratory that encourages staff at all levels to consider potential initiatives that enhance technology transfer and commercialization, education and workforce development, and community-based programs; • encourage the development and submittal, as the prime applicant, applications for funding to public and private sector institutions for technology transfer and commercialization, education and workforce development, and community-based related projects; and, • encouraging multi-lab collaborations and joint technology development partnerships by participating in the development and submission of funding applications to advance and achieve DOE technology transfer and commercialization goals. <p>The laboratory is effective in developing national and regional public and private partnerships that enhance DOE and laboratory outreach efforts and scientific missions. The laboratory staff are encouraged to seek out and pursue potential technology transfer and commercialization, education and workforce development, and community-based activities that are clearly connected and/or complementary to their research and opportunities are available for staff to pursue such activities. The laboratory can demonstrate how this outreach informs its ongoing technology transfer and commercialization, education and workforce development, and community-based activities, and they have strong evidence of progress in commercialization, education and workforce development, and community-based outcomes.</p>
<p>B</p>	<p>Laboratory leadership performs below (B+ grade) in these areas. Laboratory leadership supports development of a vision for technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory; however, this vision is not fully realized and requires more work in more than one of the areas described above including, but not limited to, identifying, engaging, and leveraging relationships with potential external partners, facilitating regional partnerships and initiatives that contribute to the local economy, workforce development, and community-based activities, and/or overcoming challenges in capturing intellectual property. The laboratory staff are allowed but not encouraged to seek out and pursue potential technology transfer and commercialization, education and workforce development, and community-based activities. The laboratory has developed few partnerships that will advance DOE and laboratory outreach and technology transfer and commercialization, education and workforce development, and community-based activities, and they have average technology transfer and commercialization, education and workforce development, and community-based outcomes.</p>

C	The laboratory lacks a vision and the mechanisms to implement a strategy to promote technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory and has little success in developing partnerships and there has been limited commercialization, education and workforce development, and community-based outcomes. This is evidenced in part by a lack of participation in funding opportunities and partnership activities that support technology transfer activities.
D	Laboratory leadership lacks a vision and has not supported the mechanisms/resources necessary to develop or implement an external engagement strategy to promote technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory including partnership efforts. Laboratory staff are discouraged from seeking out opportunities to solicit external partner input and are also discouraged from identifying potential activities for technology transfer and commercialization, education and workforce development, and community-based and from engaging in efforts to protect intellectual property.
F	Lack of vision and resources by the laboratory’s senior management has hindered the ability of the laboratory to identify, plan, and engage external partners to develop and promote technology transfer and commercialization, education and workforce development, and community-based activities at the laboratory that align with the laboratory’s unique expertise, facilities, and technology portfolio; this failure has significantly hurt the Department’s ability to achieve its mission.

4.4 Contractor Value-added

By which we mean: the additional benefits that accrue to the laboratory and the Department of Energy by virtue of having this particular M&O contractor in place. Included here, typically, are things over which the laboratory leadership does not have immediate authority, such as:

- Corporate involvement/contributions to deal with challenges at the laboratory;
- Using corporate resources to establish joint appointments or other programs/projects/activities that strengthen the lab, and
- Providing other contributions to the laboratory that that enable the lab to do things that are good for the laboratory and its community, and that DOE cannot supply.

Letter Grade	Definition
A+	The laboratory has been transformed as a result of the many, substantial, additional benefits that accrue to the laboratory as a result of this contractor’s support and operation of the laboratory.
A	Over the past year (Jan 1, 2025 – Sep 30, 2025), the laboratory has become demonstrably stronger, better and more attractive as a place of employment as a result of the many, substantial, additional benefits that accrue to the laboratory as a result of this contractor’s support and operation of the laboratory.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory enjoys additional benefits above and beyond those associated with managing the laboratory’s activities that accrue as a result of this contractor’s support and operation of the laboratory.
B	The laboratory enjoys few additional benefits that accrue as a result of this contractor’s operation of the laboratory; help by the contractor is needed to strengthen the laboratory.
C	The laboratory enjoys few additional benefits that accrue as a result of this contractor’s operation of the laboratory; the contractor seems unable to help the laboratory.
D	The laboratory enjoys few additional benefits that accrue as a result of this contractor’s operation of the laboratory; the contractor’s efforts are inconsistent with the interests of the laboratory and the Department.
F	The laboratory enjoys no additional benefits that accrue as a result of this contractor’s operation of the laboratory; the contractor’s efforts are counter-productive to the interests of the Department.

Notable Outcomes

- **ESQ:** N/A

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 4.0 – Provide Sound and Competent Leadership and Stewardship of the Laboratory				
4.1 Leadership and Stewardship of the Laboratory			40%	
4.2 Management and Operation of the Laboratory			40%	
4.3 Leadership of External Engagements and Partnerships			5%	
4.4 Contractor Value-Added			15%	
Performance Goal 4.0 Total				

Table 4.1 – Performance Goal 4.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

GOAL 5.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection

The weight of this Goal is 30%.

This Goal evaluates the Contractor’s overall success in deploying, implementing, and improving integrated ES&H systems that efficiently and effectively support the mission(s) of the Laboratory.

- 5.1 Provide an Efficient and Effective Worker Health and Safety Program
- 5.2 Provide Efficient and Effective Environmental Management System

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in protecting workers, the public, and the environment. This may include, but is not limited to, minimizing the occurrence of environment, safety and health (ESH) incidents; effectiveness of the Integrated Safety Management (ISM) system; effectiveness of work planning, feedback, and improvement processes; the strength of the safety culture throughout the Laboratory; the strength of the Nuclear/Facility Safety Programs; the effective development, implementation and maintenance of an efficient and effective Environmental Management system; and the effectiveness of responses to identified hazards and/or incidents.

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 5.0 - Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection.				
5.1 Provide an Efficient and Effective Worker Health and Safety Program			70%	
5.2 Provide an Efficient and Effective Environmental Management System			30%	
Performance Goal 5.0 Total				

Table 5.1 – Performance Goal 5.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 5.2 – Goal 5.0 Final Letter Grade

Notable Outcomes:

ESQ:

Utilizing the CAS toolset, demonstrate that the institution has addressed FY24 operational and ES&H concerns related to the following (Obj. 5.1):

- Condition assessments and preventative maintenance process gaps
- Inspections, licensing, and permitting
- Hazard analysis, work planning and control
- Timely notification and investigation
- Workplace accountability

GOAL 6.0 Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)

The weight of this Goal is 30%.

This Goal evaluates the Contractor's overall success in deploying, implementing, and improving integrated business systems that efficiently and effectively support the mission(s) of the Laboratory.

- 6.1 Provide an Efficient, Effective, and Responsive Financial Management System
- 6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property Management System
- 6.3 Provide an Efficient, Effective, and Responsive Human Resources and Talent Management Systems
- 6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality
- 6.5 Demonstrate Effective Transfer of Knowledge and Technology and the Commercialization of Intellectual Assets

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, recognized, evidence-based practices, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes, procedures, and data by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall consider the Laboratory's performance in making progress toward comprehensive collection and submission to OSTI of peer-reviewed accepted manuscripts for journal articles (and associated metadata) resulting from DOE-funded research as called for in the [DOE Public Access Plan⁹](#), and cooperation with the Department in meeting the relevant requirements to provide other forms of scientific and technical information to OSTI, per DOE O 241.1B. The DOE evaluator(s) shall also consider the stewardship of the pipeline of innovations and resulting intellectual assets at the Laboratory along with impacts and returns created/generated as a result of technology transfer, work for others and intellectual asset deployment activities.

Notable Outcomes

- N/A

⁹ <https://www.energy.gov/downloads/doe-public-access-plan>

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 6.0 - Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)				
6.1 Provide an Efficient, Effective, and Responsive Financial Management System(s)			25%	
6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property Management System			25%	
6.3 Provide an Efficient, Effective, and Responsive Human Resources and Talent Management Systems			25%	
6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality			20%	
6.5 Demonstrate Effective Transfer of Knowledge and Technology and the Commercialization of Intellectual Assets			5%	
Performance Goal 6.0 Total				

Table 6.1 – Performance Goal 6.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 6.2 – Goal 6.0 Final Letter Grade

GOAL 7.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs

The weight of this Goal is 25 %.

This Goal evaluates the overall effectiveness and performance of the Contractor in planning for, delivering, and operations of Laboratory facilities and equipment needed to ensure required capabilities are present to meet today's and tomorrow's mission(s) and complex challenges.

- 7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs
- 7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to Support the Continuation and Growth of Laboratory Missions and Programs

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in facility and infrastructure programs. This may include, but is not limited to, the management of real property assets to maintain effective operational safety, worker health, environmental protection and compliance, property preservation, and cost effectiveness; planning and executing strategies to promote the resilience and reliability of laboratory infrastructure; effective facility utilization, maintenance and budget execution; day-to-day management and utilization of space in the active portfolio; maintenance and renewal of building systems, structures and components associated with the Laboratory's facility and land assets; management of energy use, conservation, and sustainability practices; the integration and alignment of the Laboratory's comprehensive strategic plan with capabilities; facility planning, forecasting, and acquisition; the delivery of accurate and timely information required to carry out the critical decision and budget formulation process; quality of site and facility planning documents; and Cost and Schedule Performance Index performance for facility and infrastructure projects.

Notable Outcomes

- **FSO: Develop a draft master plan for the desired future utility configuration of Fermilab and a prioritized list of upcoming and proposed infrastructure and accelerator support work for FY25 and FY26 including major maintenance projects (>\$50K), proposed GPPs, and proposed AIPs (Obj. 7.2).**

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 7.0 - Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs.				
7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs			60%	
7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs			40%	
Performance Goal 7.0 Total				

Table 7.1 – Performance Goal 7.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 7.2 – Goal 7.0 Final Letter Grade

GOAL 8.0 Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems

The weight of this Goal is 15%.

This Goal evaluates the Contractor’s overall success in safeguarding and securing Laboratory assets that supports the mission(s) of the Laboratory in an efficient and effective manner and provides an effective emergency management program.

- 8.1 Provide an Efficient and Effective Emergency Management System
- 8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information
- 8.3 Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property

Notable Outcomes

- N/A

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 8.0 - Sustain and Enhance the Effectiveness of Integrated Safeguards and Security management (ISSM) and Emergency Management Systems.				
8.1 Provide an Efficient and Effective Emergency Management System			20%	
8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information			40%	
8.3 Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property			40%	
Performance Goal 8.0 Total				

Table 8.1 – Performance Goal 8.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 8.2 – Goal 8.0 Final Letter Grade

APPENDIX D

CONTRACTOR'S COMMITMENTS

**Applicable to the Operation of
Fermi National Accelerator Laboratory**

Appendix D: FermiForward Commitments

In this Appendix, FermiForward provides the list of resource commitments that support our plan to reinvest in the mission of the laboratory, at no additional cost to the Government. As shown in **Figure D-1**, each commitment is proposed separately, with a detailed description that includes the estimated total value, location, expected benefits to Fermilab, the date the commitment will be provided, and a summary of any required Governmental action. For each commitment we have identified not only tangible benefits to the Fermilab mission, but also significant areas of impact to science activities. We acknowledge that this list will be vetted for acceptance by the Government prior to incorporation as Section J, Appendix D, of an awarded contract. For commitments made by organizations other than FermiForward, we have also provided signed letters from individuals authorized to represent the institutions pledging resource commitments to the Fermilab management and operations contract.

ID No. / Organization / Commitment	Area of Impact				Alignment w/ Science Vision								
	A) Science Vision & Implementation	B) Mission Support	C) Workforce Development	D) User Community Enhancement	2.1 Understanding the Neutrino	2.2 Probing the Higgs and Energy Frontier	2.3 Using Muons to Explore New Physics	2.4 Discovering the Dark Universe	2.5 Transforming Accelerator S&T	3.1 Quantum Information S&T (QIST)	3.2 AI and Advanced Instrumentation (AI2)	3.3 Emerging Technologies and ME	4.1 Discovery on the Prairie (DoP)
1A University of Chicago Joint Task Force Initiative	➤		➤		➤			➤	➤	➤	➤	➤	➤
1B University of Chicago Joint Appointments	➤		➤		➤	➤		➤	➤	➤	➤		
1C University of Chicago Fermilab-Dedicated Corporate Support	➤	➤			➤			➤		➤			
1D University of Chicago College Tuition Scholarships	➤	➤	➤										
1E University of Chicago Makers' Space Equipment Contributions	➤			➤						➤	➤	➤	➤
2A URA Visiting Scholars Program	➤		➤	➤	➤	➤	➤	➤	➤	➤	➤	➤	
2B URA User Community Support				➤									
2C URA Workforce Development Support			➤										
2D URA Corporate Support	➤	➤		➤									
2E URA Building Awareness of and Support for HEP Priorities	➤	➤			➤	➤	➤	➤	➤	➤	➤		
3A FermiForward Director's Strategic Initiatives Fund	➤	➤	➤	➤									
3B FermiForward Strategic Leadership Investment	➤	➤	➤										
3C FermiForward Undergraduate Tuition Scholarships			➤										
3D FermiForward Academic Sponsorship Fund	➤		➤	➤						➤	➤	➤	
4A Amentum Mission Support		➤											
4B Amentum Community Support	➤		➤										

ID No. / Organization / Commitment	Area of Impact				Alignment w/ Science Vision								
	A) Science Vision & Implementation	B) Mission Support	C) Workforce Development	D) User Community Enhancement	2.1 Understanding the Neutrino	2.2 Probing the Higgs and Energy Frontier	2.3 Using Muons to Explore New Physics	2.4 Discovering the Dark Universe	2.5 Transforming Accelerator S&T	3.1 Quantum Information S&T (QIST)	3.2 AI and Advanced Instrumentation (AI2)	3.3 Emerging Technologies and ME	4.1 Discovery on the Prairie (DoP)
5A Longenecker & Associates Mission Support		➤											
6A State of Illinois Capital Appropriation for New Housing/ Conference Facility				➤									➤
7A Museum of Science and Industry Educational Outreach Events, Exhibits, and Consultation	➤			➤	➤	➤	➤	➤	➤	➤	➤	➤	➤
8A Centre National de la Recherche Scientifique Joint Appointments, Postdoctoral/Graduate Students, Conferences/Workshops	➤				➤	➤		➤	➤		➤		
9A California Institute of Technology Joint Appointments, Postdoctoral/Graduate Students, Facilities, Internships	➤		➤		➤		➤	➤		➤	➤	➤	
10A Chicago State University Joint Appointments, STEM Workforce Development			➤										
11A City Colleges of Chicago Student Internship Program	➤		➤									➤	
12A Columbia University Joint Appointments, Postdoctoral/Graduate Students, Workforce Development	➤		➤							➤		➤	
13A Hampton University STEM			➤										
14A Howard University Joint Appointments, Postdoctoral/Graduate Students, STEM	➤		➤		➤	➤		➤	➤		➤		
15A Illinois Institute of Technology Joint Appointments, Postdoctoral/Graduate Students, Workforce Development	➤		➤					➤	➤	➤	➤		
16A Northern Illinois University Joint Appointments, Postdoctoral/ Graduate Students, Facilities	➤		➤						➤				

ID No. / Organization / Commitment	Area of Impact				Alignment w/ Science Vision								
	A) Science Vision & Implementation	B) Mission Support	C) Workforce Development	D) User Community Enhancement	2.1 Understanding the Neutrino	2.2 Probing the Higgs and Energy Frontier	2.3 Using Muons to Explore New Physics	2.4 Discovering the Dark Universe	2.5 Transforming Accelerator S&T	3.1 Quantum Information S&T (QIST)	3.2 AI and Advanced Instrumentation (AI2)	3.3 Emerging Technologies and ME	4.1 Discovery on the Prairie (DoP)
17A Northwestern University Joint Appointments, Postdoctoral/ Graduate Students	➤							➤		➤	➤		
18A Purdue University Joint Appointments, Postdoctoral/Graduate Students, Internships, Workforce Development, Facilities, Career Fair	➤	➤	➤			➤	➤			➤	➤	➤	
19A South Dakota School of Mines Joint Appointments, Postdoctoral/ Graduate Students, Workshops	➤		➤		➤								
20A Spelman College STEM			➤							➤			
21A University of Illinois Chicago Joint Appointments, Postdoctoral/ Graduate Students, STEM	➤		➤			➤							
22A University of Illinois Urbana-Champaign Joint Appointments, Postdoctoral/ Graduate Students, Internships, Workforce Development, Data Science	➤		➤		➤	➤	➤	➤	➤	➤	➤	➤	
23A University of Illinois System Workforce Education and Training			➤										
24A University of Michigan Joint Appointments, Postdoctoral/Graduate Students, Workforce Development	➤		➤		➤	➤		➤			➤		
25A University of Notre Dame Joint Appointments, Postdoctoral/ Graduate Students, Facilities	➤		➤		➤	➤				➤	➤	➤	
26A University of Oxford Joint Appointments, Postdoctoral/ Graduate Students, Educational Programs	➤		➤		➤	➤		➤		➤	➤	➤	

Figure D-1: Proposed Resource Commitments. Our list of proposed resource commitments demonstrates our plan to reinvest in Fermilab's scientific mission through contributions to the scientific community, mission support, facilities and equipment, and human resources.

1.0 List of Individual Commitments

Commitment 1A:

University of Chicago – Joint Task Force Initiative

Resource Commitment 1A: Joint Task Force Initiative	
Organization	Area(s) of Impact
University of Chicago (UChicago)	Science Vision & Implementation, Workforce Development
Location(s)	Estimated Total Value
Fermilab and UChicago campus	\$1M annually; \$5M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Senior Associate VP for Strategic Initiatives, UChicago
Description	

FermiForward will draw on an outstanding workforce to achieve the science vision outlined in this proposal. This workforce will require specialized training and resources to reach its full potential. To meet this challenge, UChicago will amplify resources from the Joint Task Force Initiative (JTFI), which was launched by UChicago in 2018 to provide support for programs at Fermilab and Argonne National Laboratory (Argonne). Described below are the available programs that, through the \$5 million in total funding, will specifically benefit Fermilab in the initial five-year performance period.

Training Programs

Our proposed training programs will be available to develop the Fermilab workforce, with an estimated annual value of \$400k to the Fermilab program.

- **Strategic Laboratory Leadership Program (SLLP):** will leverage the outstanding executive education program at the UChicago Booth School of Business to provide leadership training to a total of 25 Fermilab and Argonne participants each year, as well as individuals at other participating laboratories in the DOE network of National Laboratories.
- **Leadership Academy for Women in Science and Engineering (LAWISE):** will provide training to women in scientific and engineering leadership roles at Fermilab and Argonne and help honor and build a network of support for leaders in science, technology, engineering, and mathematics (STEM).
- **Data Science Institute (DSI) Clinic Program:** will support teams of UChicago graduate students mentored by DSI faculty to pursue data science projects at Fermilab in scientific and mission support areas using artificial intelligence (AI) and machine learning techniques.
- **Science, Partnerships, and Research Collaborations (SPARC):** will equip outstanding emerging leaders from Fermilab, Argonne, and UChicago to enhance their careers by equipping them with the skills required to forge effective partnerships with industry, government, other academic institutions, and non-profit organizations.
- **Strategic Program for Innovation at the National Laboratories (SPIN):** will promote entrepreneurial thinking at Fermilab and Argonne through classes taught by UChicago Booth School of Business faculty and external industry experts.
- **Laboratory Innovation Fellows (LIF) Program:** will support participating postdoctoral fellows from Fermilab and Argonne in exploring commercialization of technologies, using resources from the UChicago Polsky Center for Entrepreneurship and Innovation.

Strategic Science Initiatives

The following initiatives will provide annual program support of roughly \$550k to the Fermilab S&T workforce.

Resource Commitment 1A: Joint Task Force Initiative

- **Fermilab International Workshops:** will leverage UChicago’s centers in London, Paris, and Delhi to host Fermilab scientific workshops and symposia for international audiences.
- **International Partnerships:** will provide Fermilab direct access to the Centre National de la Recherche Scientifique (CNRS) International Research Laboratory, which hosts scientists, postdoctoral fellows, and PhD students working in particle physics and cosmology.
- **Graduate Research Cooperative:** will provide administrative support for UChicago Physics graduate students conducting thesis research at Fermilab under the mentorship of Fermilab scientists.
- **JTFI Postdoctoral Fellowship:** will be fully funded by JTFI and administered by Fermilab to support outstanding postdoctoral fellows from a background that is underrepresented in STEM. Fellows can choose to join one of the existing research groups at Fermilab or initiate a new research track aligned with Fermilab’s mission, under the guidance and mentorship of a Fermilab scientist.
- **Technology Transfer:** will directly support participation of Fermilab startups in accelerator programs, and Fermilab startups will receive instruction, mentoring, and access to funding from staff members at the Booth School of Business. UChicago will also provide laboratory space to Fermilab start-ups in the new Hyde Park Labs building, due to open in the fourth quarter of 2024.
- **Outreach Efforts:** will provide new office space for Fermilab in the city of Chicago, adjacent to the space UChicago provides for Argonne on 53rd Street, from which to manage outreach programs to South Side communities and interactions with industrial partners in Chicago.
- **Pritzker Nanofabrication User Facility:** will provide Users of the Fermilab Superconducting Quantum Materials and Systems (SQMS) Center access to a 10,000-square-foot, ISO Class 5 cleanroom at UChicago that maintains less than 100 particles larger than 0.5 microns per cubic foot of air space. This access will be provided at a 60% discount in cost.
- **CMB-S4:** UChicago will jointly invest in the characterization and testing facility in the Fermilab IERC that will enable custom cryostats to accommodate the unique signal transmission and processing electronics required to fully qualify the CMB-S4 sensors in support of the CMB-S4 program.

JTFI Task Forces

The following proposed task forces will provide an estimated annual program support of \$50k to benefit Fermilab.

- **Inclusive Innovation Task Force:** will incorporate and support a wide range of educational programs aimed at improving the lives of Chicago South Side students and communities.
- **Cybersecurity Task Force:** will reduce response time to incidents by leveraging the expertise of and fostering greater collaboration among cybersecurity teams at Fermilab, Argonne, and UChicago.
- **Technology Transfer Task Force:** will continue to provide a forum for showcasing technologies developed at the laboratories to interested industry partners through the Polsky Center for Entrepreneurship and Innovation.

Expected Benefits to Fermilab

JTFI support will assist Fermilab in developing and retaining a highly skilled workforce. Through the JTFI, UChicago promotes Fermilab’s participation in research and education in scientific and technical fields of interest to DOE’s programs and the laboratory’s workforce needs. The JTFI represents a focused approach for maintaining, enhancing, and developing a cooperative and collaborative partnership with UChicago to enhance Fermilab’s leadership in the national and international R&D arenas.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 1B: University of Chicago – Joint Appointments

Resource Commitment 1B: Joint Appointments	
Organization	Area(s) of Impact
University of Chicago	Science Vision & Implementation, Workforce Development
Location(s)	Estimated Total Value
Fermilab and the UChicago campus	\$1.825M annually; \$9.125M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Executive Vice President for National Laboratories, UChicago
Description	
<p>FermiForward's ambitious science vision features new initiatives that will enhance Fermilab's international standing in high energy physics (HEP). Achieving this vision will require the recruitment and retention of the world's finest scientific talent. To help Fermilab meet this challenge, UChicago commits the following joint appointments:</p> <ul style="list-style-type: none"> • Faculty/Scientists: UChicago commits to hiring ten new scientists jointly with Fermilab. The scientific areas will be determined by the Fermilab Director and Chief Research Officer in collaboration with the corresponding UChicago sponsoring department chairperson. The joint hires will be in areas of opportunity determined by Fermilab, where Fermilab has sufficient funding available in its DOE-approved budget not to require new or additional support from DOE. At present, we envision these areas to be physics, accelerator physics, dark universe, and the emerging areas of quantum information, microelectronics, and AI2 We estimate the annual value of this commitment to be \$1M per year, for a total of \$5M over the initial five-year budget period. • Postdoctoral Fellows: UChicago will bear 50% of the cost for up to ten postdoctoral fellows per year working on projects of joint interest to Fermilab and UChicago scientists. We estimate the annual costs of these appointments to be \$450K per year, for a total of \$2.25M over five years. • Graduate Students: UChicago will bear 50% of the cost for up to ten graduate students per year working on projects of joint interest to Fermilab and UChicago scientists. We estimate the annual cost of these appointments to be \$375k per year, for a total of \$1.875M over five years. 	
Expected Benefits to Fermilab	
<p>FermiForward's approach for implementing its Science Vision requires attracting, developing, and retaining a highly skilled workforce of existing and new scientific personnel with high stature in their disciplines and a plan for joint appointments. Appointed in partnership with UChicago, these 30 new scientists will help Fermilab achieve its mission goals to develop and educate the next generation of scientists and engineers.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 1C: University of Chicago – Fermilab-Dedicated Corporate Support

Resource Commitment 1C: Fermilab-Dedicated Corporate Support	
Organization	Area(s) of Impact
University of Chicago	Science Vision & Implementation, Mission Support
Location(s)	Estimated Total Value
UChicago Hyde Park campus and UChicago international locations	\$750K annually; \$3.75M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Executive Vice President for National Laboratories, UChicago

Description

Fermilab will require significant corporate support to fulfill the ambitious science vision outlined in this proposal. To help Fermilab meet this challenge, UChicago commits to providing the corporate support outlined below, at no cost to the government:

- The administrative support necessary to lead and manage the JTFI program described in Commitment 1A for a program lead and staff support.
- Execute the Commitment Management Plan through the Commitments Manager and support staff, as described in Section 3.5.
- Make space available at no cost to Fermilab for hosting international symposia at UChicago's campus locations in London, Paris, and Delhi, which are managed by the UChicago Office of Global Engagement.
- Provide the administrative support necessary to manage joint appointments between Fermilab and UChicago through the Consortium for Advanced Science and Engineering (CASE) lead and support staff.
- Leverage the UChicago Office of Civic Engagement to provide support to Fermilab for the Inclusive Innovation Initiative and JTFI Task Force.
- Make resources available to Fermilab communications when needs arise through the UChicago Office of Communications.
- Lead and coordinate government relations staff to help ensure the successful provision of the \$30M capital appropriation from the State of Illinois outlined in commitment 4A.

Expected Benefits to Fermilab

The corporate resources described above will benefit Fermilab by ensuring the following:

- Effective management of the JTFI program
- Timely execution of all commitments outlined in this proposal
- Support of international symposia to enhance Fermilab's international scientific leadership
- Effective management of joint Fermilab-UChicago scientific appointments
- Assistance with Fermilab communications initiatives
- Oversight of the \$30M capital appropriation committed by the State of Illinois to FermiForward

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 1D:
University of Chicago – College Tuition Scholarships**

Resource Commitment 1D: College Tuition Scholarships	
Organization	Area(s) of Impact
University of Chicago	Science Vision & Implementation Mission Support, Workforce Development
Location(s)	Estimated Total Value
UChicago campus	\$100k annually; \$500k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Associate Vice President for National Laboratories, UChicago
Description	
<p>Fermilab competes with top research universities in recruiting outstanding talent. Most, if not all, of these competitors have tuition benefits for faculty, which enhance recruitment and retention. To help Fermilab meet this challenge, UChicago will provide tuition scholarships to the dependent children of Fermilab employees who are admitted to The College of the University of Chicago, one of the nation’s top-ranked colleges. These merit-based scholarships are of any amount, up to full-tuition, and are renewable for four years as long as the student is making satisfactory academic progress. This continuing commitment was made by UChicago after award of the current prime contract. Since the start of the current contract in 2007, UChicago has provided \$2.2 million in tuition scholarship support to Fermilab employee dependent children accepted to the College of the University of Chicago.</p>	
Expected Benefits to Fermilab	
<p>This resource commitment provides an additional incentive in the recruitment and retention of top scientific and engineering talent, and is a comparable benefit provided by Tier 1 research universities to the dependent children of their faculty.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 1E:
University of Chicago – Makers’ Space Equipment Contributions**

Resource Commitment 1E: Makers’ Space Equipment Contributions	
Organization	Area(s) of Impact
University of Chicago	Science Vision & Implementation, User Community Enhancement
Location(s)	Estimated Total Value
Fermilab	\$1M in-kind contribution
Date the Commitment Will Be Provided	Accountability and Oversight
One-time, in-kind contribution when the Makers’ Space facility is ready to accept the equipment	Executive Vice President for National Laboratories, UChicago

Description

This in-kind contribution of equipment will outfit a new ideation and prototyping space for Fermilab scientific staff, postdoctoral fellows, and students in the new Fermilab Makers’ Space Facility. The equipment will be provided by the UChicago Polsky Center for Entrepreneurship and Innovation as a means of helping Fermilab build its capacity for innovation and technology transfer. UChicago will pay shipping and set-up costs to position the equipment and evaluate it. The equipment consists of:

3D Printers

- LulzBot Mini 2 3D Printer
- LulzBot TAZ 4 3D Printer
- LulzBot TAZ 5 3D Printer
- Stratasys Objet500 Connex3 3D Printer
- uPrint SE Plus 3D Printer

Computer Numerically Controlled (CNC) Routers

- Inventables X-Carve CNC Router
- ShopBot PRSalpha 96-48 CNC Router

Electronics Kits

- Arduino Experimentation (ARDX) Kit
- BeagleBone Black Starter kit
- Circuit Stickers
- Discover Electronics
- Particle Photon Internet Button
- Particle Photon Maker Kit
- Raspberry Pi 2 Model B Starter Kit

Electronics Workbench Test Equipment

- Extech 382260 80W 3-IN-1 Switching DC Power Supply
- Fluke 87V Industrial Multimeter
- Instek AFG-2125 Arbitrary Function Generator 25MHZ
- Instek GDS-1152A-U 150 MHZ Digital Storage Oscilloscope
- Saleae Logic Pro 16 Logic Analyzer

Resource Commitment 1E: Makers' Space Equipment Contributions

Other Digital Fabrication Tools

- Roland GX-24 Vinyl Cutter
- Universal VLS 4.60 Laser Cutter

Wood Shop Support Tools

- DeWalt DWS780 Chop/Miter Saw
- Grizzly G0513 Bandsaw
- Grizzly G7947 Drill Press
- RIDGID Oscillating Edge Belt/Spindle Sander
- SawStop Professional 3HP Table Saw

Expected Benefits to Fermilab

This resource commitment will enhance Fermilab's capacity to innovate, prototype and transfer innovative technologies to the marketplace.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 2A:
URA – Visiting Scholars Program**

Resource Commitment 2A: Visiting Scholars Program	
Organization	Area(s) of Impact
Universities Research Association (URA)	Science Vision & Implementation, Workforce Development, User Community Enhancement
Location(s)	Estimated Total Value
All Fermilab locations	\$500K annually; \$2.5M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	URA President and CEO
Description	
<p>To further bolster research at Fermilab, enable the STEM workforce pipeline, and ensure an ongoing flow of researchers from across the nation and around the world, URA commits to continuing the Visiting Scholars program (VSP), which provides grants of up to \$50K to graduate students and faculty of member universities to conduct research at Fermilab. The annual contribution of \$500K, awarded through grants awarded twice per year, enables 30-50 researchers every year to contribute to critical Fermilab work. Chosen by a peer review committee from the community of Fermilab-focused faculty members from URA member universities, URA staff administer the applications, review committees, final report, and reimbursements. Fermilab staff serve as sponsors to the grantees.</p>	
Expected Benefits to Fermilab	
<p>Since the inception of VSP in 2007, Fermilab has benefited from the work of over 500 researchers from 85 universities across Fermilab’s scientific portfolio. VSP recipients contribute across the spectrum of Fermilab’s scientific work. VSP infuses new directions gained from academia by enabling networking between faculty members and Fermilab staff, facilitating collaborative research projects, and supporting professional development for young scholars at Fermilab. URA provides administrative support to the program, including applications review, final reports, and reimbursements. Under the new contract, VSP funded researchers will continue to work closely with Fermilab scientists to align their efforts with Fermilab scientific priorities to maximize contribution to Fermilab’s scientific mission. The most recent survey of the VSP stakeholder community revealed that 100% of Fermilab VSP sponsors agreed that “...the awardees make a substantive contribution...” and that 100% of awardees recommended continuation of the program and would recommend the program to their colleagues.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 2B: URA – User Community Support

Resource Commitment 2B: User Community Support	
Organization	Area(s) of Impact
Universities Research Association	User Community Enhancement
Location(s)	Estimated Total Value
Fermilab and Washington, DC	\$110K annually; \$550K in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Each spring and summer for the period of performance after contract award	URA President and CEO
Description	
<p>URA will:</p> <ul style="list-style-type: none"> • Host and provide planning and travel funding for the Fermilab Users, SLAC Users Organization (SLUO), and US LHC Users Association (USLUA) gathering in Washington, DC, each spring to meet with officials on Capitol Hill and in the Administration to communicate the enthusiasm they have for their science, to emphasize their consensus support for national priorities as expressed in P5, and to communicate the need for ongoing support. • Host the post-meeting networking event and reception. • Provide technical and programmatic support and travel funding for the annual Fermilab Users Meeting, held each summer at Fermilab. The summer meeting is a critical link in the chain of workforce development allowing early career scientists a chance to engage directly with laboratory leadership, contribute to Fermilab priorities, and better understand their various career opportunities. • As part of the renewed effort to engage the User Community in creating workable solutions, fund and administer an impartial annual survey of all Users to discover how the lab and its Users can continually improve the User experience as well as the scientific work at Fermilab. • Provide an executive secretary to enhance and coordinate the work of the newly reconstituted Users Executive Committee. 	
Expected Benefits to Fermilab	
<p>Fermilab's User community of over 2,100 scientists from around the world performs a substantial percentage of Fermilab's science mission. As stated in C.4 (b)(2) of the Statement of Work, the operation of User facilities at Fermilab includes developing and maintaining User communities for the facilities. An active, engaged, and empowered Fermilab User Community is critical to the ongoing success of Fermilab and the HEP vision set out in the P5 Report(s). URA contributions to organize and enable the User community will result in better communications between laboratory leadership and Users and will reduce obstacles to cooperation. The efforts to amplify the work of the Users will also enable collaborations and help stakeholders better understand the critical nature of the science at Fermilab. Fermilab will further benefit from a more engaged scientific User community that sees itself as a partner with Fermilab leadership.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 2C: URA – Workforce Development Support

Resource Commitment 2C: Workforce Development Support	
Organization	Area(s) of Impact
Universities Research Association	Workforce Development
Location(s)	Estimated Total Value
Washington, DC and Fermilab	\$340K annually; \$1.7M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	URA President and CEO
Description	
<p>URA will sponsor and fund annually the following honorary awards, each with a \$10K stipend:</p> <ul style="list-style-type: none"> • Doctoral Thesis Award: in recognition of outstanding doctoral thesis based on research conducted at Fermilab or in collaboration with Fermilab scientists. • Tollestrup Award for Postdoctoral Research: for outstanding work conducted by a young scientist during their postdoctoral years. • Early Career Award: for outstanding work conducted by a young researcher. • Engineering Excellence Award: for exceptional contributions to the advancement engineering work at Fermilab. <p>URA will also fund the URA-Fermilab Undergrad Women in STEM Internship to enable a group of approximately five students each year to enter the STEM workforce pipeline at Fermilab. Initiated in 2023, interns will be recruited from Minority-Serving Institutions and HBCUs and selected and mentored by Fermilab scientists. They will work on real-world science and engineering projects and have opportunities for professional networking. The internship includes a science and technology policy module in Washington, DC, where interns are familiarized with the organizations, processes, and people responsible for creating and implementing policy and the critical role policy plays in their careers. Interns will present their work at the annual summer Users Meeting at Fermilab.</p> <p>URA will establish and administer Science Policy & Advocacy for Research Competition (SPARC), a twice per year, virtual, eight-week course that provides for graduate students and postdoctorals working on Fermilab projects to raise awareness of the importance of science policy and to hone communications skills for presenting their work to nontechnical, policy-focused audiences. PhD-level URA staff and guest speakers will host the course, which can accommodate 20-40 STEM participants for each session. At end of series, SPARC participants deliver policy talks and an expert panel will choose three winners to visit Washington, DC, to deliver their presentations to congressional staff or other policy officials.</p>	
Expected Benefits to the Fermilab	
<p>All three commitments are focused on helping to ensure that DOE and Fermilab have a sustained STEM pipeline. The programs will create critical educational opportunities in science, engineering, and technology as well as both professional and social networking critical to employee retention and satisfaction. Targeted applicant pools will be from groups that represent under-served communities to encourage individuals from these groups to enter STEM careers and further diversify the STEM workforce.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 2D:
URA – Corporate Support**

Resource Commitment 2D: Corporate Support	
Organization	Area(s) of Impact
Universities Research Association	Science Vision & Implementation, Mission Support, User Community Enhancement
Location(s)	Estimated Total Value
Washington, DC and Fermilab	\$225K annually; \$1.125M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	URA President and CEO
Description	
<p>Fermilab will require significant corporate support to fulfill the ambitious mission outlined in this proposal. To help Fermilab meet this challenge, URA will provide corporate support outlined below, at no cost to the government:</p> <ul style="list-style-type: none"> • Making space available for planning and hosting the annual Spring Users HEP Advocacy meeting in Washington, DC, and for the post-meeting networking event and reception. • Administrative and programmatic support for all aspects of the VSP, including community outreach, applications processing, peer review panel, reimbursements processing, and communication of program results to stakeholders. • Administrative support to plan and manage the annual Summer Users Meeting and the associated breakouts and poster sessions. • Scientific and programmatic support to the Users Executive Committee to ensure a robust program engaged at the appropriate level and focused on Fermilab priorities. 	
Expected Benefits to Fermilab	
<p>Successful execution of critical programs requires dedicated, knowledgeable staff to ensure timely results. These programs add significant value by enhancing the professional experience of scientists at Fermilab, raising the visibility of Fermilab's scientific work, building a robust STEM workforce pipeline, and helping scientists and engineers at Fermilab be more effective in communicating the outcomes of their work.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 2E:
URA – Building Awareness of and Support for HEP Priorities**

Resource Commitment 2E: – Building Awareness of and Support for HEP Priorities	
Organization	Area(s) of Impact
Universities Research Association	Science Vision & Implementation, Mission Support
Location(s)	Estimated Total Value
Washington, DC	100K annually; 500K in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	URA President and CEO
Description	
<p>URA organizes the annual convention of presidents and vice presidents for research from our 94 member universities for discussions that focus on Fermilab and high energy physics. Each year this gathering provides a valuable opportunity to showcase Fermilab successes and opportunities and to raise the profile of HEP for a substantial portion of the nation’s research and development management officials. Fermilab’s Laboratory Director is a featured speaker each year and offers a Q&A session to engage participants. The January 2024 event included an overview of the new P5 report. Other officials who have spoken and helped set the stage for HEP discussions include Secretaries of Energy, Presidential science advisors, members of Congress, and Office of Science Directors, among others. Discussions prepare university presidents and vice presidents for research to advocate effectively and knowledgably for HEP-related topics and raise their awareness of the continuing need for academic support for faculty and students working in HEP.</p>	
Expected Benefits to Fermilab	
<p>Fermilab benefits from building enduring relationships with leadership at the universities whose support is critical to Fermilab’s overall scientific mission. Few venues provide a more sustained, concentrated, or high-level opportunity to engage with university leadership to help them understand how they can best engage with and support Fermilab’s work. Understanding the details of the P5 report, its impact on the community will broaden community support from university leadership.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 3A:
FermiForward – Director’s Strategic Initiatives Fund**

Resource Commitment 3A: Director’s Strategic Initiatives Fund	
Organization	Area(s) of Impact
Fermi Forward Discovery Group, LLC (FermiForward)	Science Vision & Implementation, Mission Support, Workforce Development, User Community Enhancement
Location(s)	Estimated Total Value
Fermilab	\$500k annually; \$2.5M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Financial Officer, FermiForward
Description	
FermiForward will create a Director’s Strategic Initiatives Fund to provide the Laboratory Director with a flexible pool of discretionary resources to allocate to new programs and emerging opportunities in support of the Fermilab mission. These initiatives will include new conferences and meetings that benefit the DOE mission, but for which DOE funding is not available; enhancements to the User community experience at Fermilab; and new award programs to bolster employee morale.	
Expected Benefits to Fermilab	
The Fermilab Laboratory Director needs flexibility in allocating discretionary resources in addition to funding from DOE to amplify DOE support, stimulate new initiatives, and meet emerging needs and opportunities.	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 3B:
FermiForward – Strategic Leadership Investment**

Resource Commitment 3B: Strategic Leadership Investment	
Organization	Area(s) of Impact
Fermi Forward Discovery Group, LLC (FermiForward)	Science Vision & Implementation, Mission Support, Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$500k annually; \$2.5M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Financial Officer, FermiForward
Description	
<p>Achieving the ambitious science vision outlined in this proposal requires an experienced leadership team with world-class science expertise. Recruiting and retaining this level of leadership requires commensurate compensation and benefits. FermiForward will meet this challenge by compensating its leadership team at a competitive level with peers. FermiForward thereby commits to investing approximately \$500k per year to fund appropriate unallowable/non-reimbursable compensation required to attract and retain suitable leadership talent.</p>	
Expected Benefits to Fermilab	
<p>This resource commitment provides laboratory management with funds to compete more aggressively and successfully for recruitment and retention of the best scientific and managerial talent, especially for those individuals in great demand in industry and in other parts of the research community.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 3C:
FermiForward – Undergraduate Tuition Scholarships**

Resource Commitment 3C: Undergraduate Tuition Scholarships	
Organization	Area(s) of Impact
Fermi Forward Discovery Group, LLC (FermiForward)	Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$250k annually; \$1.25M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
At contract start and in annual increments of approximately \$250k	Financial Officer, FermiForward
Description	
<p>Fermilab competes with industry and academia in recruiting top scientific and engineering talent. Many, if not most, of these competing institutions offer tuition benefits to faculty as a critical aid in recruitment and retention. To help Fermilab meet this challenge, FermiForward commits to providing \$250k per year to fund scholarships to full-time FNAL employees' children who are pursuing undergraduate college degrees at accredited US colleges. The scholarship award of \$5k per year will be continued for a maximum of four years providing the student remains in a four-year program with satisfactory academic progress.</p>	
Expected Benefits to Fermilab	
<p>This resource commitment provides an additional incentive in recruitment and retention of top scientific, engineering, and managerial talent.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 3D:
FermiForward – Academic Sponsorship Fund**

Resource Commitment 3D: Academic Sponsorship Fund	
Organization	Area(s) of Impact
Fermi Forward Discovery Group, LLC (FermiForward)	Science Vision & Implementation, Workforce Development, User Community Enhancement
Location(s)	Estimated Total Value
Fermilab	\$200k annually, \$1M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Financial Officer, FermiForward
Description	
<p>FermiForward will create an Academic Sponsorship Fund that will cover 50% of salary support for joint appointment commitments made by our HBCU and other Minority-Serving Institution partners as outlined in their respective institutional letters of support. The goal is two-fold: to ensure our partners have adequate financial resources to ensure their engagement with Fermilab is as robust as possible and that these commitments are no cost to the government.</p>	
Expected Benefits to Fermilab	
<p>The FermiForward team features strong engagement with leading HBCUs and other Minority-Serving Institutions, and this commitment will help ensure that joint appointments will be fulfilled and thereby significantly help Fermilab deepen its relationships with these vital partners.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 4A: Amentum – Mission Support

Resource Commitment 4A: Mission Support	
Organization	Area(s) of Impact
Amentum	Mission Support
Location(s)	Estimated Total Value
Fermilab	350 STP students at \$2,500 per student – \$0.875M 100 SafeUp students at \$1,500 per student – \$0.15M Corporate assistance to support VPP – \$0.25M \$1.275M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Senior Vice President for Technical Services, Amentum

Description

Amentum will make commitments in three primary areas, with the overall goal of bringing industry best practices to elevate supervisory skills and to transform Fermilab’s safety culture.

Amentum Supervisory Training Program (STP) Quickstart: a full-day, in-person learning and networking opportunity that will be provided by Amentum instructors on site at Fermilab. Through guided discovery, learners will leave with an in-depth understanding of the following critical mission support functional areas:

- **Safety:** This session provides an overview of ES&H policies, principles, and procedures a manager must execute with their team to instill and maintain a culture of safety.
- **Ethics:** Managers are asked to represent integrity and a culture of ethics as leaders of their teams and are expected to lead change within their teams to replicate these behaviors.
- **Teambuilding:** Activities are woven within the STP session to promote multiple management functions, such as problem solving, communication, and leadership.
- **Policies & Procedures:** Focused on Human Resources needs, this material touches on performance management, employee incentives, talent acquisition, and labor relations.
- RESERVED
- **Communications:** This exercise focuses on all forms of communication and helps managers navigate the challenges of initiating and resolving difficult conversations.

Amentum will provide STP Quickstart training to supervisors and managers identified by Fermilab leadership. The commitment valuation encompasses the training of 250 personnel in the first two years, followed by annual or biannual training for up to 100 new-hires or promoted supervisory personnel.

Amentum SafeUp Safety Program: will be deployed by Amentum to Fermilab to systematically train Fermilab safety staff in the principles underpinning Amentum’s commitment to ES&H excellence. The SafeUp program draws on a deep talent pool of safety professionals to customize and implement an outstanding safety program at Fermilab. Fermilab safety teams will be trained to achieve Certified Safety Professional credentials as well as Diamond Level Sponsor of Safety Trained Supervisor Certification. The Amentum-led Fermilab training regime will replicate the same rigorous training that has helped Amentum achieve industry-leading results, as recognized by membership in the National Safety Council’s Campbell Institute. The commitment valuation covers the delivery of SafeUp training for an estimated 100 Fermilab safety personnel and professionals in the first year of the contract.

Corporate Assistance to Support DOE Voluntary Protection Program (VPP): will build upon SafeUp training and help FermiForward achieve VPP Star Status. Amentum commits to assisting Fermilab with attaining Star status within the first five years of the new contract. Amentum has considerable experience with attaining VPP Star Status at its sites and will share best practices and resources as necessary

Resource Commitment 4A: Mission Support

to help FermiForward achieve this certification level. The commitment valuation reflects the corporate resources that Amentum will commit to this project.

Expected Benefits to Fermilab

Amentum’s commitment to FermiForward will significantly enhance Fermilab supervisory and managerial safety skills sets and help make mission-critical employees more effective in their leadership roles. Coupled with Amentum’s commitment to help FermiForward achieve DOE VPP Star Status, Amentum’s SafeUp program at Fermilab will instill a comprehensive and integrated ES&H culture to gain transparency and reduce safety risks.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 4B:
Amentum – Community Support**

Resource Commitment 4B: Community Support	
Organization	Area(s) of Impact
Amentum	Science Vision & Implementation, Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$250K annually, \$1.25M in total value over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Senior Vice President for Technical Services, Amentum
Description	
<p>Amentum will make a \$1.25M commitment to programs that support local community engagement and assist in the economic development of the towns and cities where Fermilab employees live and work. Examples include STEM programs with local area schools to encourage students to pursue careers in STEM-related fields as well United Way, Habitat for Humanity, local food banks, and other charitable organizations that serve the Fermilab’s surrounding communities. These vital organizations bring people together to equip families and volunteers in building resilient, equitable communities. Amentum contributions also support scholarships for local area universities and colleges, the administration of intern programs, and curriculum development with local colleges and universities.</p>	
Expected Benefits to Fermilab	
<p>Amentum contributions aim to strengthen the relationship and community support for Fermilab, its employees, and its mission. Amentum contributions support the development, education, and training of the next generation of Fermilab scientists and researchers.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 5A: L&A – Mission Support

Resource Commitment 5A: Mission Support	
Organization	Area(s) of Impact
Longenecker and Associates (L&A)	Mission Support
Location(s)	Estimated Total Value
Fermilab	\$80.3k annually; \$401.5k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	President, Longenecker & Associates, Inc.

Description

L&A will make the following commitments to the Fermilab proposal:

Mentor-Protégé Program: L&A commits executive-level sponsorship and participation in support of the mentor-protégé program for the duration of mentor-protégé agreements.

Leadership, Team, and Core Skill Development: L&A has highly experienced, certified facilitators in several learning programs and diagnostic tools focused on enhancing leadership and team effectiveness, developing core skills, and enhancing organization effectiveness. Learning programs include:

- **Franklin Covey:** Leading at the Speed of Trust, Trust in Team, Inclusive Leadership, Project Management for Non-Project Managers.
- **Kepner-Tregoe:** Problem Solving and Decision Making, System Troubleshooting.
- **Diagnostic Tools:** Myers Briggs Type Indicator, Kirton Adaption Innovation (KAI) Inventory
- **L&A-Developed Programs:** Team Effectiveness, Human Performance Improvement Concepts and Tools

Learning programs can be delivered virtually or in person. The program durations vary from one to three days (8-20+ hours of instruction time) and can be delivered using a variety of schedules and approaches. The cost of the learning programs depends on the duration, which impacts facilitator time and the cost of learner materials. The average facilitator cost per day is \$1,800. Material costs range from \$100 to \$450 per participant. L&A commits to providing the facilitators at no cost and supporting Fermi in the material purchases. L&A commits to providing two training sessions per quarter. The estimated value of this commitment is \$51k annually and \$254k total over five years.

Process Optimization: The ability to develop and implement optimized processes is essential to maximizing efficient use of resources on mission support activities. L&A has Lean Six Sigma-trained facilitators to lead structured Rapid Improvement Events that result in executable process optimization plans and actions. These structured events are typically conducted in two- to three-day sessions. L&A will provide the trained facilitators, a contribution that represents a cost of \$1,500-\$1,800 per day. L&A commits to facilitating one Lean event per quarter. The estimated value of this commitment is \$16.5k annually and \$82.5k total over five years.

Assessment/Audit/Readiness Review Support: L&A has subject matter experts (SMEs) in several areas including quality, performance assurance, project management, radiological controls, ES&H, nuclear safety, and training program management. These SMEs routinely serve as leads and/or team members for independent oversight assessments, management assessments, quality audits, project reviews, safety reviews, and the development and implementation of comprehensive programs in their respective areas. The cost to engage the skills and knowledge of these SMEs depends on their experience level and certifications and ranges from \$1,200-\$2,000/day. L&A commits to supporting one event per quarter. The estimated value of this commitment is \$12.8k annually and \$64k total over five years.

Resource Commitment 5A: Mission Support

Expected Benefits to Fermilab

L&A's participation as a mentor in the DOE Mentor-Protégé Program (Clause H.29), provides Fermilab additional mentoring capability to assist small businesses (SBs), disadvantaged businesses, woman-owned SBs, HBCUs, veteran-owned SBs, and service-disabled veteran-owned SBs in enhancing their business capabilities. The ability to meet mission deliverables consistently and achieve overall mission success is dependent on several factors, including the effectiveness of leaders and the ability of members of the workforce to function as high-performing teams. The organization also relies on collective capabilities in core skill areas, such as understanding and applying human performance tools, using effective problem-solving and decision-making frameworks, and the ability to systematically prevent problems and promote opportunities. L&A's skills development training will help Fermilab improve its capability to meet mission deliverables and achieve overall mission success.

The ability to develop and implement optimized processes is essential to maximize efficient use of resources on mission and mission support activities. L&A's process optimization training will help Fermilab trainees achieve these goals. L&A SMEs will provide assistance to key Fermilab mission support functions in maintaining a sustained level of readiness and performance.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 6A:
State of Illinois – Capital Appropriation for New Housing/Conference Facility**

Resource Commitment 6A: Capital Appropriation for New Housing/Conference Facility	
Organization	Area(s) of Impact
State of Illinois	User Community Enhancement
Location(s)	Estimated Total Value
Fermilab	\$30M in total
Date the Commitment Will Be Provided	Accountability and Oversight
As soon as possible following contract start and approval by DOE of the siting and construction plan	Executive Vice President for National Laboratories, UChicago
Description	
<p>FermiForward’s Discovery on the Prairie initiative will modernize the Fermilab Village to better serve the needs of the growing community of Users and affiliates following the completion of LBNF/DUNE. The first major element of Village modernization will be the construction of a new housing facility for visiting scientists that will also include dedicated spaces for conferences, dining, and recreation. To cover the full cost of construction and furnishing the facility, UChicago secured a \$30M capital appropriation from the State of Illinois. UChicago and its Illinois university partners will leverage their strong relationships with the State of Illinois to ensure the funds appropriated by the State are provisioned to FermiForward to fund the project. Upon notice of award to FermiForward, the Fermilab leadership team will develop a plan for siting and constructing the new facility, subject to DOE review and approval. Prior to and during this review, DOE will have the opportunity to augment funding from the State of Illinois to expand on this initiative and create a more ambitious facility design, if so desired. UChicago will also draw on its experience in successfully securing State capital funding in support of constructing the Guesthouse, Center for Nanoscale Materials, Advanced Protein Characterization Facility, and Energy Innovation Center at Argonne to oversee and manage allocation of these committed resources.</p>	
Expected Benefits to Fermilab	
<p>Over the next ten years, Fermilab’s User and affiliate communities will grow significantly as LBNF/DUNE comes online and new initiatives are launched. To meet this demand, the Fermilab Village will evolve to accommodate the growing needs of the User community while providing an enhanced User and visitor experience at Fermilab. A major element of the evolution of the Fermilab Village will be the new housing/conferencing facility described above. The new facility will allow Fermilab to retire out-dated accommodations by providing modern, energy-efficient housing space for the User community along with easy-to-access conferencing, dining, and recreation facilities.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
Review and approval of the new housing and conference facility siting and construction plan	None anticipated

**Commitment 7A:
Museum of Science and Industry – Educational Outreach Events, Exhibits, and Consultation**

Resource Commitment 7A: Educational Outreach Events, Exhibits, and Consultation	
Organization	Area(s) of Impact
Museum of Science and Industry (MSI)	Science Vision and Implementation, User Community Enhancement
Location(s)	Estimated Total Value
Fermilab and MSI Chicago Campus	\$34.4k annually; \$174k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	President/CEO, Museum of Science & Industry Chicago
Description	
<p>MSI is pleased to make the following resource commitments at no cost to the government:</p> <ul style="list-style-type: none"> • Host lectures and educational outreach events by Fermilab staff at the MSI. It is estimated that in the initial five-year period of the new contract, the museum would host five such events, valued at \$50k. MSI may also seek sponsorship for any event, lecture or demonstration which may include: <ul style="list-style-type: none"> – Behind-the-scenes donor engagement – Public lecture with VIP receptions – Private dinners and discussion • Collaborate with Fermilab staff to consult on new exhibits highlighting high energy physics, the dark universe, and accelerator technologies. The museum commits to consulting on each exhibit, for a total of 60 hours, valued at a total of \$18k. Additionally, MSI can provide space for prototyping at a cost of \$50k including a week-long camp themed around the exhibit topics. • Provide consultation and feedback from MSI exhibition experts to Fermilab staff developing Fermilab mission-themed exhibits and displays that will be showcased in the new Discovery on the Prairie complex on the Fermilab campus. MSI will contribute 150 hours of exhibit development staff time to this project in the initial performance period, valued at an estimated \$45k. <p>MSI commits to test prototypes in the initial performance period, each of which will be vetted with museum audiences at various times throughout the year through student and community outreach for potential use in the new Discovery on the Prairie complex on the Fermilab campus. MSI will contribute 30 hours of creative design staff time to this project in the initial performance period, valued at an estimated \$9k.</p>	
Expected Benefits to Fermilab	
<p>These unique contributions by MSI’s creative professionals will provide Fermilab with direct access to MSI Chicago campus space and programming and enhance Fermilab’s abilities to feature its science vision and its scientific and technological advances to a broad museum audience. The commitments will also directly help Fermilab showcase mission-themed exhibits in support of the Discovery on the Prairie complex initiative at Fermilab. As such, these commitments will assist Fermilab in maintaining its programs of cooperation with nonprofit institutions for the purpose of promoting research and education in scientific and technical fields of interest to DOE’s programs.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 8A:
Centre National de la Recherche Scientifique – Joint Appointments,
Postdoctoral/Graduate Students, Conferences/Workshops**

Resource Commitment 8A: Joint Appointments, Postdoctoral/Graduate Students, Conferences/Workshops	
Organization	Area(s) of Impact
Centre National de la Recherche Scientifique (CNRS)	Science Vision and Implementation; International Partnerships
Location(s)	Estimated Total Value
Fermilab and UChicago campus	Not specifically valued, as described below
Date the Resource Will Be Provided	Accountability and Oversight
At contract start and annually thereafter	Director of the European Research and International Cooperation Department, CNRS

Description

For the past fifty years, the CNRS has been a leading international actor in the fields of cosmology and particle physics, particularly as seen in the work of its National Institute of Nuclear and Particle Physics (IN2P3). IN2P3 researchers have been involved in a wide array of seminal discoveries, and they have made significant contributions to the fields of particle and hadronic physics, nuclear physics, astrophysics, and astroparticle physics and cosmology. International collaborations have been at the heart of the IN2P3’s research strategy, and the proposed International Research Laboratory (IRL), which will be only the sixth of its kind in the world, will build on long-established relationships between with UChicago and its colleagues at Fermilab and Argonne. These established relationships include:

- Cooperative Research & Development Agreement signed between IN2P3 and Fermilab in November 2017 and valid for ten years, a renewable agreement that aims to strengthen student mobility in the context of the LBNF and the superconducting particle accelerator at Fermilab, part of the DUNE.
- International partnership for the major particle accelerator PIP-II (Proton Improvement Plan-II), in which IN2P3 and the CEA are key partners alongside India, Italy, and the United Kingdom, formalized in July 2018.
- Memorandum of Understanding for Collaboration in DUNE signed on November 17, 2023.
- Signed statements expressing interest to collaborate on high-tech international particle physics projects that are planned to be hosted at Fermilab, formalized in December 2018 by the U.S. Department of Energy (DOE), the French Alternative Energies and Atomic Energy Commission, Commissariat à l’Énergie Atomique (CEA), and the CNRS.
- Plan beyond agreement by the three agencies to work together on the development and production of technical components for PIP-II, the CNRS, and the CEA to collaborate on the construction of the Fermilab-hosted DUNE project.

The proposed IRL is part of a strategic formalization of the long-established relationships between the CNRS and UChicago. This formalization came to fruition in December 2022 with the creation of the CNRS-UChicago International Research Center for Fundamental Scientific Discovery (IRC Discovery), signed into agreement by Antoine Petit, Chairman and Chief Executive Officer of the CNRS, and Paul Alivisatos, President of UChicago, marking only the second relationship of its kind in the United States. The IRL will include the long-term placement of CNRS scientists in Chicago and will support joint PhD students, postdoctoral fellows, and researchers working across CNRS, UChicago, Fermilab, and Argonne, as well as the programming of scientific conferences and workshops.

**Resource Commitment 8A: Joint Appointments,
Postdoctoral/Graduate Students, Conferences/Workshops**

Expected Benefits to Fermilab

The CNRS, through its partnership with UChicago in the framework of the IRC Discovery, will establish a new IRL focused on neutrino physics and cosmology. Through this partnership, CNRS will support tuition and mobility costs for an estimated 15 to 20 French PhD students supporting joint research, programming costs, and 2-3 staff scientists based in Chicago working in close collaboration with Fermilab staff. The estimated investment by CNRS in the initial five-year agreement is more than \$3.5M, though this amount will fluctuate with currency exchange rates. This amount of investment will provide indirect support to Fermilab science staff who participate in this unique international program.

Required Governmental Action	Liability to the Government
None anticipated	None anticipated

**Commitment 9A:
California Institute of Technology – Joint Appointments, Postdoctoral/Graduate Students, Facilities, Internships**

Resource Commitment 9A: Joint Appointments, Postdoctoral/Graduate Students, Facilities, Internships	
Organization	Area(s) of Impact
California Institute of Technology (Caltech)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and Caltech campus	\$925k annually; \$4.625M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Provost, California Institute of Technology

Description

Visiting and Joint Appointments

Caltech commits resources to support faculty members who accept visiting Fermilab appointments in the fields of quantum information, microelectronics, artificial intelligence, and advanced instrumentation. Caltech will cover 100% of the salary and benefits associated with such appointments, for an annual contribution of up to \$500k per year and a total of up to \$2.5M over the initial five-year term of the contract. Caltech also commits resources to support up to four joint postdoctoral fellow appointments for five years in the fields of quantum information, microelectronics, artificial intelligence, and advanced instrumentation. Caltech will cover 50% of salary and benefits associated with such appointments, for an annual contribution of up to \$325k per year and a total of up to \$1.625M over the initial five-year term of the contract.

Training Programs and Workshops/Collaboration Meetings

Caltech commits to allowing Fermilab employees to participate in selected training programs at no cost, with an estimated value of up to \$50k per year, or a total of up to \$250k for the first five-year term of the contract. Caltech also commits to hosting workshops and collaboration meetings at no cost to Fermilab with an estimated value of up to \$50k per year or a total of up to \$250k for the first five-year term of the contract.

Expected Benefits to Fermilab

These commitments will assist Fermilab in maintaining its programs of cooperation with academic and educational communities for the purpose of promoting research and education in scientific and technical fields of interest to DOE’s programs and Fermilab’s workforce needs. These visiting faculty and joint postdoctoral fellows, appointed in partnership with Caltech, will help Fermilab achieve its mission and help develop and educate the next generation of scientists and engineers. The opportunity to engage in selected training programs offered by Caltech as well as participation in workshops and collaboration meetings at Caltech will significantly contribute to Fermilab’s efforts to attract, retain, and develop a high-performing workforce.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 10A:
Chicago State University – Joint Appointments, STEM, Workforce
Development**

Resource Commitment 10A: Joint Appointments, STEM, Workforce Development	
Organization	Area(s) of Impact
Chicago State University	Scientific Vision and Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and Chicago State University Campus	\$140k annually; \$700k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Associate Provost of Research and Grants Administration, Chicago State University
Description	
<p>Chicago State University is pleased to pledge the following commitments, at no cost to the government:</p> <ul style="list-style-type: none"> • Supporting up to two joint faculty appointment(s) in fields including Physics and Computer Science. Chicago State will aim to cover up to 50% of each joint appointment for an annual contribution of approximately \$80k per year at the Assistant Professor level plus benefits (around 36% of base pay) for a total of \$108.8k per year and a total of \$544k over the initial five-year term of the contract. • Establishing an undergraduate student research internship and exchange program for up to two Chicago State undergraduate students to participate in research opportunities at Fermilab each year. Chicago State University will institute a formal internship application system, selection criteria, and a pre-internship mentorship program. When needed, Chicago State commits the faculty resources to administer the pre-internship training component of the program. The undergraduate students will be supported as part of the established DOE Science Undergraduate Laboratory Internships (SULI) programs or the Visiting Faculty Program (VFP) at Fermilab. • Funding for up to two staff members per year to participate in a new CSU-Fermilab Faculty/Staff Exchange Program. Fermilab laboratory staff can spend time at Chicago State University through sabbaticals or short-term appointments. During their time at the university, they can teach courses, engage in collaborative research, and offer their expertise in laboratory management. Chicago State aims to commit to funding the salaries at an Adjoint Professor level while involved in this exchange program, constituting a total contribution of up to \$12k per year and up to \$144k over the initial five-year contract. • Hosting joint seminars, workshops, and day-long events at no cost to Fermilab to share knowledge and research findings and to facilitate networking and collaboration among scientists and students. These event commitments can include transportation costs, parking, and refreshments. They have a total estimated value of up to \$3k per year or up to \$15k for the first five-year term of the contract. 	
Expected Benefits to Fermilab	
Chicago State University is the most affordable Chicago-area college that focuses on educational recruitment and achievement of African American students. These commitments will encourage individuals from underrepresented and underserved communities to enter careers in science and engineering and help to diversify the Fermilab workforce of tomorrow.	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 11A:
City Colleges of Chicago – Student Internship Program**

Resource Commitment 11A: Student Internship Program	
Organization	Area(s) of Impact
City Colleges of Chicago	Science Vision and Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$60k annually; \$300k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Provost, City Colleges of Chicago
Description	
<p>City Colleges of Chicago commits to establishing an internship program for students to conduct research with scientists at Fermilab. This internship program will be modeled on the existing, successful program in place with Argonne National Laboratory. The internships provided by the program are 10-week paid opportunities during the summer (from May through August) or during an academic semester. City Colleges of Chicago commits to supporting up to ten internships as part of this new program, for an expected annual contribution in the form of staff or faculty time of approximately \$60k per year and a total of \$300k over the initial five-year term of the contract. City Colleges will also participate in the South Side Science Festival, one of the largest science festivals on the South Side of Chicago.</p>	
Expected Benefits to Fermilab	
<p>The internship program and South Side Science Festival are part of a broader Inclusive Innovation in the Sciences (IIS) initiative, co-led by Fermilab, UChicago, UIUC, and Argonne National Laboratory. IIS aims to ensure that South Side residents benefit from the economic opportunities withing emerging science and technology fields. Key activities include internships, training, and resource funding for community-led initiatives. Fermilab participation in these efforts will expand access to underrepresented groups in STEM education, expand Fermilab impact in these fields, and aid in recruitment and development of promising scientists and engineers from this population.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 12A:
Columbia University – Joint Appointments, Postdoctoral/ Graduate Students,
Workforce Development**

Resource Commitment 12A: Joint Appointments, Postdoctoral/ Graduate Students, Workforce Development	
Organization	Area(s) of Impact
Columbia University (Columbia)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$195k annually; \$975k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Executive Vice President for Research, Columbia
Description	
<p>Columbia is pleased to make the following commitments to FermiForward, at no cost to the government:</p> <ul style="list-style-type: none"> • Covering up to 50% of salary and benefits for up to two joint postdoctoral fellows in engineering fields of study, annually for five years for an annual contribution of approximately \$90k per year and a total of \$450k over the initial five-year term of the contract. • Cover up to 50% of salary and benefits for up to two joint postdoctoral fellows in neutrino physics, annually for five years for an annual contribution of approximately \$90k per year and a total of \$450k over the initial five-year term of the contract. • Offering joint BS/MS courses in Microelectronics for high energy physics, which will be jointly taught by Columbia Engineering Faculty and Fermilab scientists. Columbia and Fermilab will equally share a stipend of \$6k and travel expenses per student, for up to five students, to spend ten weeks over the summer at Fermilab for the initial five-year term of the contract, for an estimated commitment value of \$15k per year and \$75k over five years. • Exploring the possibility of joint PhD students in Computational Science and AI, and PhD courses offered jointly by Columbia faculty and Fermilab Scientists. • Working with FermiForward and Fermilab to create new course offerings, to include on-site technical and pedagogical training at Fermilab. Columbia is launching its master's degree program in Quantum Science and Technology (MSQST) in Fall 2024. This three-semester program will train students through a set of core and elective courses, jointly taught by Columbia Engineering and the Columbia Physics Department. • Exploring tuition waivers for Fermilab employees to participate in the program. Columbia faculty and researchers will lead the pedagogical components in conjunction with Fermilab staff and scientists who will lead the technical facilities and equipment training aspects. 	
Expected Benefits to Fermilab	
<p>These commitments will assist Fermilab in maintaining its programs of cooperation with academic and educational communities for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. The joint postdoctoral fellow appointments with Columbia in neutrino physics and microelectronics for high energy physics will enhance Fermilab's engagement with Columbia and engage these talented researchers at reduced cost to pursue critical scientific mission needs. The joint BS/MS student summer stipend program will bring talented Columbia students to Fermilab for extended engagements, familiarizing these students to Fermilab, its mission, and opportunities to pursue to pursue scientific positions at the laboratory.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 13A: Hampton University – STEM

Resource Commitment 13A: STEM	
Organization	Area(s) of Impact
Hampton University	Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$146k annually; \$730k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice President for Research, Hampton University

Description

Hampton University, one of the nation's premier HBCUs and a research-focused institution, is pleased to make the following commitments at no cost to the government:

- Establishing a research training program for at least five Hampton undergraduate students to participate in research opportunities at Fermilab each year as part of the FermiForward coalition of universities. Hampton University will institute a formal internship application system along with selection criteria and pre-internship mentorship structures. Hampton commits the faculty resources to administer the pre-internship training component of the program, with an estimated annual contribution of up to \$10k per year, for a total of \$50k over the initial five-year contract. The undergraduate students will be supported as part of the established DOE SULI programs at Fermilab.
- Funding up to two faculty per year to participate in a new Hampton-Fermilab Faculty Exchange Program for Faculty from the School of Engineering, Architecture and Aviation (SEAA) and the School of Science (SOS) who are interested in Fermilab research activities. Hampton commits to funding 50% of the faculty salaries while they are engaged in this exchange program at Fermilab, constituting a total contribution of up to \$50k per year, for a total of \$250k over the initial five-year contract. The remaining 50% of the faculty salaries, along with the potential to apply for travel and housing assistance associated with the exchange program, will be provided through the support of the FermiForward Academic Sponsorship Fund.
- Providing resources to support up to two joint faculty appointments in fields including Physics and Computer Science. Hampton will cover up to 50% of the salary and benefits of each joint appointment for an annual contribution of approximately \$ 50k per year, for a total of \$250k over the initial five-year term of the contract.
- Providing resources to support up to two joint PhD graduate student appointments per year conducting research at Fermilab in the fields of computer science, physics, and engineering. The value of the graduate student salary and benefits is approximately \$ 36k per year, for a total of \$180k over the initial five-year term of the contract.

Expected Benefits to Fermilab

These commitments will encourage participation by a diverse group of faculty and students from Hampton University in Fermilab programs to bring their talents to bear on important research problems and to contribute to the education of future scientists and engineers. These commitments will also encourage members of underrepresented societal groups to enter careers in science and engineering needed by Fermilab. By working with Hampton University, Fermilab will endeavor to facilitate the laboratory workforce of tomorrow.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 14A:
Howard University – Joint Appointments, Postdoctoral/Graduate
Students, STEM**

Resource Commitment 14A: Joint Appointments, Postdoctoral/Graduate Students, STEM	
Organization	Area(s) of Impact
Howard University	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and Howard University campus	\$306k annually; \$1.53M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Senior Vice President for Research, Howard University

Description

Howard University, a nationally ranked HBCU and top producer of on-campus African American PhDs, is pleased to make the following commitments at no cost to the government:

- Howard University postdoctoral research associates or fellows will work on joint collaborative projects with Fermilab scientists, which will include exchange visits during the academic year and summer sessions. We expect to engage up to thirty postdoctoral fellows through this partnership. The postdoctoral fellows will be based at Howard University and will travel to Fermilab for these exchanges for periods of up to one month. Postdoctoral fellows who are currently on staff at Howard University will be encouraged to engage in this collaborative research opportunity. Postdoctoral research associates or fellows will be available to existing postdocs who are currently on staff at Howard University. The average annual salary range for a postdoctoral research associate or fellow in Washington, DC, is \$70k, constituting an annual in-kind contribution of up to approximately \$140k per year for two postdoctoral fellows, for a total of approximately \$700k over the initial five-year term of the contract.
- Howard University will commit to identifying undergraduate and graduate students to work on joint collaborative research projects with Fermilab scientists through summer internships at Fermilab. Howard University student participants will be identified from applicants to existing DOE internship programs, Howard University grant and institutional research programs, and other programs established to promote student research.
- To establish a Summer Faculty Research Fellowship Program for Howard University faculty at Fermilab, Howard University will serve as the employer of record. The Office of Research at Howard University currently hosts a Summer Research Faculty Fellowship Program at Howard University for tenure-track faculty. Awardees of the Summer Research Faculty Fellowship receive an award of \$12k in salary per summer to conduct research in their respective disciplines. A maximum of five currently hired tenure track faculty awardees will be eligible to participate in the Summer Research Faculty Fellowship program and conduct their research at FNAL. The University is responsible for paying the summer salary and the benefits of the program. This agreement facilitates collaborative research projects and opens new avenues for seeking joint research funding and supporting the research and education goals of the consortium. Howard University commits resources to support up to three Summer Research Faculty Fellows for five years in fields to include Physics and Astronomy, Computer Science, Electrical Engineering, and Mechanical Engineering. The Summer Research Faculty Fellows will be available to existing faculty currently on staff at Howard University. Howard will cover 100% of the summer salary and benefits of each Faculty Fellow for an annual contribution of approximately \$60k per year for five fellows, for a total of \$300k over the initial five-year term of the contract.
- Howard University will host regional, national, and international professional meetings on jointly discussed research topics that align with the research expertise of Fermilab, Minority Serving Institutions, and additional universities that are part of the consortium. These meetings or symposia can occur during Research Month, which is held annually in April. The Office of Research at Howard University

**Resource Commitment 14A: Joint Appointments,
Postdoctoral/Graduate Students, STEM/DEIA**

hosts and organizes Research Month, which is the appropriate venue for a research symposium. Howard University commits to hosting these convenings at no cost to Fermilab, with an estimated value up to \$5k per year for a total of up to \$25k for the five-year term of the contract.

- Howard University will be deeply engaged in research training experiences for students at the undergraduate and graduate academic level at Fermilab. These joint PhD students would be focused in areas that are of strong mutual interest to both Howard University faculty and Fermilab, including for example, Neutrino Physics, Dark Matter Research, Particle Collider Physics, Astroparticle Physics, Accelerator Physics and Technology, Theoretical Physics, Data Analysis and Computational Physics. The overarching goal is for the students to receive significant research experience with research scientist mentors at FNAL, and thus be adequately prepared to pursue scientific careers. We aim to engage approximately thirty currently enrolled undergraduate, master’s, and doctoral students per year to be trained in joint research projects. Approximately three currently enrolled and funded doctoral students will participate in the opportunity to have joint research experiences with FNAL. The total expected annual value of the Ph.D. student salary and benefits for three students actively engaged in joint research activities is approximately \$75k per year (\$25k per doctoral student) and a total of \$375k over the initial five-year term of the contract.
- Howard University will provide opportunities for joint research undergraduate student exchange programs to provide academic year and summer session immersive training programs in QISE. The students selected to participate in this program will be expected to conduct select research projects, which utilize the User facilities at FNAL. The undergraduate students will be recruited from current STEM students at Howard University. Howard University commits to hosting these convenings at no cost to Fermilab with an estimated value of up to \$1k per year or a total of up to \$5k for the first five-year term of the contract.
- Howard University will collaborate with researchers at Fermi National Lab on joint research projects that involve training and use of Fermi National Lab User Facilities. Potential research project collaboration topics include Neutrino Physics, Dark Matter Research Particle Collider Physics, Astroparticle Physics, Accelerator Physics and Technology, Theoretical Physics, Data Analysis and Computational Physics.
- Howard University will collaborate with the operation of the U.S. Particle Accelerator School. The university will provide faculty and administrative experts to contribute to curriculum development, outreach, and instruction. We expect to engage up to ten faculty members and five administrators to engage in this collaboration. This support has an estimated value of \$25k per year or a total of \$125k for the first five-year term of the contract.
- Howard University educators in our Middle School of Math and Science Howard University faculty in relevant areas of research and STEM education will collaborate with researchers at FNAL to create specialized teacher workshops, field trips, enhanced science curriculum, and special speaker series designed to educate the students and inspire them to pursue college degrees in STEM.
- Howard University will work with FNAL researchers and administrators to develop experiential learning courses in areas of research priority for the symposium. For example, a certificate in Quantum Science and Technology.

Expected Benefits to Fermilab

These commitments will encourage participation by a group of faculty and students from Howard University in Fermilab programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. These commitments will also encourage members of underrepresented societal groups to enter careers in science and engineering needed by Fermilab. By working with Howard University, as a Historically Black College and University, Fermilab will seek to facilitate the laboratory workforce of tomorrow.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 15A:
Illinois Institute of Technology – Joint Appointments, Postdoctoral/Graduate
Students, Workforce Development**

Resource Commitment 15A: Joint Appointments, Postdoctoral/ Graduate Students, Workforce Development:	
Organization	Area(s) of Impact
Illinois Institute of Technology (Illinois Tech)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and Illinois Tech Campus	\$737k annually; \$3.69M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Provost, Illinois Institute of Technology
Description	
<p>Illinois Tech commits the following:</p> <ul style="list-style-type: none"> • Resources to support up to ten joint scientist/faculty appointments for five years (up to two hires per year) in the fields of Quantum Information Science, Microelectronics Research and Technology, and Artificial Intelligence and Advanced Instrumentation. Illinois Tech will cover 50% of salary and benefits for an annual contribution of up to approximately \$100k per year per hire and a total of up to \$1.5M in salary and benefits over the initial five-year term of the contract. • Resources to support up to two joint postdoctoral fellow appointments for two years in the fields of Quantum Information Science, Microelectronics Research and Technology, and Artificial Intelligence and Advanced Instrumentation. Illinois Tech will cover 50% of salary and benefits for an annual contribution of up to approximately \$50k per year per postdoc and a total of up to \$200k over the initial five-year term of the contract. • Matching its half tuition waiver policy for on-campus research by providing at least ten half-tuition waivers for PhD students per year who are working on Fermilab programs at Fermilab. This support has an estimated value of at least \$154k per year or a total of at least \$770k for the first five-year term of the contract. • Resources to grant up to two full undergraduate tuition scholarships to the dependent children of Fermilab employees per year. These scholarships will be provided on a competitive basis and will be renewed based on sufficient academic progress. This support is valued at an estimated \$42k per student per year (i.e., \$84k in Year 1, \$168k in Year 2, \$252k in Year 3, \$336k in Year 4, and \$336k in Year 5), for a total of \$1.176M over the initial five-year term of the contract. • Hosting two collaboration meetings on its Bronzeville campus on the south side of Chicago at no cost to Fermilab over the first five-year term of the contract. This has an estimated value of \$20k per meeting for a total of \$40k over the first five-year term of the contract. 	
Expected Benefits to Fermilab	
<p>These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These commitments will help Fermilab develop a cooperative and collaborative partnership with a local academic partner, help train the next generation of scientists, expand research collaborations and enhance workforce development.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 16A:
Northern Illinois University – Joint Appointments, Postdoctoral/Graduate
Students, Facilities**

Resource Commitment 16A: Joint Appointments, Postdoctoral/Graduate Students, Facilities	
Organization	Area(s) of Impact
Northern Illinois University (NIU)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and NIU campus	\$350k annually; \$1.75M total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	President, Northern Illinois University
Description	
<p>As the nearest Illinois public research university to Fermilab, NIU pledges the following commitments, at no cost to the contract, in support of FermiForward’s proposal to manage and operate Fermilab.</p> <ul style="list-style-type: none"> • NIU commits resources to support up to three joint scientist/faculty appointments over five years in research areas that are of mutual interest and engagement for both Fermilab and NIU, including significant research efforts in Neutrino Physics, Beams and Accelerator Science and the emerging field of Quantum Information Science. NIU will cover up to 50% of salary and benefits of each joint appointment for a total of up to \$400k over the initial five-year term of the contract. • NIU commits resources to support up to six PhD graduate student appointments over five years in these field(s). The value of the graduate student salary and benefits is approximately \$30k/year for a total of up to \$500k over the initial five-year term of the contract. • Through the Department of Energy supported traineeship programs in Computational High Energy Particles Physics and Beams and Accelerator Science, NIU commits to support Masters physics, engineering and computer science students working on Fermilab-related projects with joint Lab-NIU mentorship. These commitments to FermiForward constitute a contribution of up to \$150k/year with an estimated total of up to \$750k for the initial five- year contract. • NIU is also pleased to provide the resources and personnel to continue support for the U.S. Particle Accelerator School, which provides significant and highly valued education, crucial to Fermilab’s mission, in beam physics and accelerator technology at both the national and international levels. • NIU is prepared to support the continuing educational needs of Fermilab staff and scientists through enrollment in degree programs at NIU in areas such as Physics and Engineering. NIU administrative support for these programs, combined with the tuition waivers for Fermilab staff, constitutes a total contribution of up to \$20k/year, and a total of up to \$100k over the initial five-year contract. 	
Expected Benefits to Fermilab	
<p>These commitments from NIU will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE’s programs and Fermilab’s workforce needs. NIU’s designation as an Emerging Hispanic Serving Institution will also encourage members of underrepresented societal groups to enter careers in science and engineering needed by Fermilab. Overall, these commitments will encourage participation by a group of faculty and students in Fermilab programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 17A: Northwestern University – Joint Appointments, Postdoctoral/Graduate Students

Resource Commitment 17A: Joint Appointments, Postdoctoral/Graduate Students	
Organization	Area(s) of Impact
Northwestern University (Northwestern)	Science Vision & Implementation
Location(s)	Estimated Total Value
Fermilab and Northwestern Campus	\$1.325M annually; \$6.625M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice President for Research, Northwestern

Description

As a member of the FermiForward coalition of universities and in support of the FermiForward proposal to manage and operate Fermilab, Northwestern is pleased to make the following commitments at no cost to the government:

- Northwestern commits to providing \$50k per year over a five-year period for research equipment to support dark matter experiments and quantum research, for a total of \$250k over the initial five-year term of the contract.
- Northwestern commits up to four joint faculty appointments between FNAL and Northwestern, using the strengths of both institutions to recruit top-tier scientists for five years. Positions will be sought in research areas that are of mutual interest to Fermilab and Northwestern. Northwestern commits to covering as much as an average of 50% of salary and benefits across all joint appointments, leading to an expected annual contribution of up to \$380k/year and a total of up to \$1.9M over the initial five-year term of the contract.
- Northwestern commits resources to support up to ten joint postdoctoral fellows for five years and will cover up to an average of 50% of salary and benefits across all joint appointments for an annual contribution of up to \$375k/year and a total of up to \$1.875M over the initial five-year term of the contract.
- Northwestern commits resources to support up to ten PhD graduate students for five years and will cover up to an average of 50% of salary and benefits across all student appointments. The expected value of the graduate student salary and benefits is up to approximately \$500k/year for a total of up to \$2.5M over the initial five-year term of the contract.
- Northwestern commits to provide summer internships for Northwestern undergraduates working at Fermilab through collaboration with our robust summer undergraduate research program. Northwestern will support up to ten undergraduate student trainees, providing up to an average of 50% of the stipend across all summer trainees. The value of the undergraduate traineeships is approximately \$20k/year and a total of \$100k over the initial five-year term of the contract.
- Northwestern commits to providing input to the operation and management of FNAL by serving on the Advisory Council and attending all related events.

Expected Benefits to Fermilab

These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These faculty scientists, postdoctoral fellows, and graduate students, appointed in partnership with Northwestern, will help Fermilab achieve its mission goals and help develop and educate the next generation of scientists and engineers. The opportunity to host internships for Northwestern undergraduates will contribute to Fermilab's efforts to attract, retain, and develop a high-performing workforce.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 18A:
Purdue University – Joint Appointments, Postdoctoral/Graduate Students,
Internships, Workforce Development, Facilities, Career Fair**

Resource Commitment 18A: Joint Appointments, Postdoctoral/ Graduate Students, Internships, Workforce Development, Facilities, Career Fair	
Organization	Area(s) of Impact
Purdue University	Science Vision & Implementation; Mission Support, Workforce Development
Location(s)	Estimated Total Value
Fermilab and Purdue Campus	\$1.4M annually; \$7M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Executive Vice President for Research, Purdue

Description

Purdue commits to the following:

- Resources to support eight joint graduate research assistantships each year for five years in the fields of microelectronics, quantum, instrumentation, high energy physics, and computing. Purdue will cover salary, fringe benefits, and fee remissions for an annual contribution of approximately \$510k per year or a total of \$2.55M over the initial five-year term of the contract.
- Resources to support three joint postdoctoral fellow appointments each year for five years in the fields of microelectronics, quantum, instrumentation, high energy physics, and computing. Purdue will cover salary and benefits for an annual contribution of approximately \$375k per year for a total of \$1.87M over the initial five-year term of the contract.
- Supporting the hiring of joint scientist/faculty appointments in the fields of microelectronics, quantum, instrumentation, high energy physics, and computing. Purdue anticipates that these hires could be made in partnership with the Purdue Computes and Dream Hires initiatives as qualified individuals are identified and recruited. We estimate the value of this commitment to be \$400k per year for a total of \$2M over the initial five-year term.
- Providing Fermilab employees a tiered discount program for Purdue University Online micro-credentials programs in microelectronics, quantum, and AI. The Table in Purdue University’s supporting commitment letter reflects the discount at each tier. Assuming 300 enrollments by Fermilab employees per year, we estimate the value of the discount to be \$21,250 per year for a total of \$206,250 over the initial five-year term of the contract. The value of the discount and overall commitment can increase depending on enrollments as detailed in the letter.
- Supporting the university’s world-leading experts across the fields of microelectronics, quantum, high energy physics, instrumentation, and computing to serve on Fermilab advisory boards and committees and participate in relevant workshops. Purdue will cover a portion of salary and benefits for individuals serving in these roles for an annual contribution of approximately \$80k per year or a total of \$400K over the initial five-year term of the contract.
- Facilitating the development of large interdisciplinary teams through allocating time of the Associate Vice President for Strategic Interdisciplinary Research to projects with Fermilab. This support has an estimated value of \$20k per year or a total of \$100k for the first five-year term of the contract.
- Facilitating the pursuit of joint research and partnering opportunities through allocating time of the Director of Partner Relations for Federal Laboratories and the deployment of Research Innovation and Strategic Initiatives personnel for Purdue- Fermilab research collaborations. This support has an estimated value of \$15k per year or a total of \$75k for the first five-year term of the contract.

**Resource Commitment 18A: Joint Appointments, Postdoctoral/
Graduate Students, Internships, Workforce Development, Facilities, Career Fair**

Expected Benefits to Fermilab

These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These faculty scientists, postdoctoral fellows, and graduate students, appointed in partnership with Purdue, will help Fermilab achieve its mission goals and help develop and educate the next generation of scientists and engineers. The opportunity to engage in selected training and workforce development programs offered by Purdue as well as gaining access to the unique facilities outlined in Purdue's letter of support, will contribute to Fermilab's efforts to attract, retain, and develop a high-performing workforce.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 19A:
South Dakota School of Mines – Joint Appointments, Postdoctoral/
Graduate Students, Workshops**

Resource Commitment 19A: Joint Appointments, Postdoctoral/Graduate Students, Workshops	
Organization	Area(s) of Impact
South Dakota School of Mines	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and South Dakota Mines campus	\$455k annually; \$2.275M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice President for Research, South Dakota Mines
Description	
<p>At South Dakota Mines, three physics faculty members are leading research initiatives closely tied to Fermilab. These involve a diverse range of projects, including DUNE far and near detector developments, DUNE Phase II proposals, MicroBooNE, and ANNIE. Furthermore, our undergraduate and graduate students have benefitted significantly from extended research visits to Fermilab.</p> <p>South Dakota Mines is committed to supporting these ongoing and future projects. In the context of these important activities, South Dakota Mines commits resources to support these three faculty appointments for at least five years in the science of neutrinos. South Dakota Mines will cover 100% of salary and benefits for an annual contribution of approximately \$350k per year and a total of \$1.75M over the initial five-year term of the contract. South Dakota Mines will continue to offer in-kind assistance to graduate students involved in Fermilab endeavors, contingent upon the availability of funds.</p> <p>Pending approval from the University Administration, the South Dakota Mines Physics Department is in the process of dedicating its next open faculty line to the realm of Quantum Information Technology. This step is intended to foster a close collaboration with Fermilab’s Quantum Institute. Upon approval of the hiring process, we are committed to inviting a representative from Fermilab to participate as a member of the faculty hiring committee. For this potential faculty hire, South Dakota Mines will cover 100% of salary and benefits for an annual contribution of approximately \$100k per year and a total of \$300k over the initial five-year term of the contract.</p> <p>South Dakota Mines provides Mine Safety and Health Administration (MSHA) training to the region and is pleased to provide the following support, as needed:</p> <ul style="list-style-type: none"> • MSHA Underground New Miner Training (40 hours): 50% reduced cost, at \$80/person. • MSHA Underground Annual Refresher Training (8 Hours): 50% reduced cost, at \$40/person. <p>South Dakota Mines commits to providing these training resources, with an estimated value of \$45k per year or a total of \$225k for the first five-year term of the contract.</p> <p>In addition, there is expertise in the Mining Engineering and Management Department to provide expertise and support on mine safety-related and mine ventilation projects, including heat, refrigeration, and pollutant transport (dust/gas/blast fumes).</p>	
Expected Benefits to Fermilab	
<p>These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE’s programs and Fermilab’s workforce needs. These commitments from South Dakota Mines will deepen Fermilab scientific engagement with a major South Dakota university closely located near the Sanford Underground Research Facility. South Dakota Mines also features</p>	

**Resource Commitment 19A: Joint Appointments,
Postdoctoral/Graduate Students, Workshops**

specialty designed safety programs in Mine Safety and Health Administration that will assist Fermilab staff in acquiring the health and safety skill sets necessary to operate safely in underground locations.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 20A: Spelman College – STEM

Resource Commitment 20A: STEM	
Organization	Area(s) of Impact
Spelman College	Workforce Development
Location(s)	Estimated Total Value
Fermilab and Spelman campus	\$4k annually; \$20k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	President, Spelman College
Description	
<p>Spelman College commits to recruiting at least eight undergraduate students to participate in research opportunities at FermiForward over the next five years. We will arrange for sessions in which Fermilab leaders and/or researchers can share information about the assorted opportunities. We understand that the undergraduate students will be supported as part of the established DOE SULI programs at Fermilab, which we were informed provides funding for the students' travel, lodging, and stipends.</p> <p>In addition, Spelman commits to informing faculty of the opportunity to participate in the Fermilab Faculty Exchange Program for Spelman faculty who are interested in Fermilab research activities. Spelman College will encourage up to three faculty members to participate in the new Spelman-Fermilab Faculty Exchange program over the next five years. For those faculty who elect to participate and are eligible for sabbatical, Spelman College will commit to paying 50% of their salary if approved for a one-year sabbatical leave (per the College's sabbatical leave policy) and the other 50% salary will be funded by the FermiForward Academic Sponsorship Fund. Since lodging costs may be prohibitive for faculty, we are grateful for the housing assistance (e.g., housing stipend and/or moving expenses) associated with the exchange program, which will be provided by the FermiForward Academic Sponsorship Fund. Because these joint faculties have not yet been identified, Spelman is unable to provide an estimate of its share of faculty salaries. These amounts will be provided in annual commitment reports to DOE.</p> <p>Laboratory staff and scientists from Fermilab can spend time at Spelman College, either through sabbaticals or short-term appointments. During their time at the College, Spelman leaders may ask these individuals to support various departments in the Division of Natural Sciences & Mathematics, through the offering of lectures or engagement in collaborative research. Since Fermilab will be providing salary support for these Fermilab scientists, researchers, or staff, Spelman commits to providing housing support and funding of \$10k for up to two laboratory scientists on short-term appointments at the college over the next five years.</p>	
Expected Benefits to Fermilab	
<p>These commitments will encourage participation by a group of faculty and students in Fermilab programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. By working with Spelman, a Historically Black College, Fermilab will seek to facilitate the laboratory workforce of tomorrow. These commitments will also encourage members of underrepresented societal groups to enter careers in science and engineering needed by Fermilab.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 21A:
University of Illinois Chicago – Joint Appointments,
Postdoctoral/ Graduate Students, STEM**

Resource Commitment 21A: Joint Appointments, Postdoctoral/Graduate Students, STEM	
Organization	Area(s) of Impact
University of Illinois Chicago (UIC)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and the UIC Campus	\$1.47M annually; \$7.35M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Joanna Groden, Vice Chancellor for Research
Description	
<p>UIC commits to the following:</p> <ul style="list-style-type: none"> • Resources to support up to five joint scientist/faculty appointment(s) for the next five years in UIC fields of Quantum Information; Microelectronics Research and Technology; Artificial Intelligence and Advanced Instrumentation; High Energy Particle Physics; and in the Quantum Directorate and Neutrino Science at Fermilab. UIC will cover an average of 50% of salary and benefits for up to an annual contribution of approximately \$125k per year per faculty member for a total of \$635k a year and \$3.125M over the initial five-year term of the contract. • Resources to support up to six joint postdoctoral fellow appointment(s) for the next five years in the same fields. UIC will cover 100% of salary and benefits for up to an annual contribution of approximately \$420k per year and \$2.1M over the initial five-year term of the contract. • Fifteen tuition waivers for PhD students per year who are working at Fermilab in joint Fermilab programs. This support has an estimated value of \$25k per year per student, amounting to \$375k in support per year and a total of \$1.875M over the initial five-year term of the contract. • Resources from the UIC Office of the Vice Chancellor for Research (OVCR) to host one annual meeting and up to three workshops annually at no cost to Fermilab with an estimated value of \$50k per year or a total of \$250k for the first five-year term of the contract. 	
Expected Benefits to Fermilab	
<p>These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These commitments will help Fermilab develop a cooperative and collaborative partnership with a local academic partner, help train the next generation of scientists, expand research collaborations, and enhance workforce development.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 22A:

University of Illinois Urbana Champaign – Joint Appointments, Postdoctoral/Graduate Students, Internships, Workforce Development, Data Science

Resource Commitment 22A: Joint Appointments, Postdoctoral/Graduate Students, Internships, Workforce Development, Data Science	
Organization	Area(s) of Impact
University of Illinois Urbana Champaign (UIUC)	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and the UIUC Campus	\$1.8M annually; \$9M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice Chancellor for Research & Innovation, UIUC

Description

UIUC pledges the following commitments to the FermiForward proposal:

- The UIUC Grainger College of Engineering (GCOE) will commit resources to jointly support with Fermilab, five joint scientist/faculty appointment(s) for five years in the field(s) of dark matter experiments, experimental collider physics, experimental astrophysics (all in the Department of Physics), microelectronics or quantum technologies (in the Department of Electrical and Computer Engineering), and AI or data science (in the Department of Computer Science). GCOE will cover 50% of salary and benefits for an annual contribution of approximately \$440k/year and a total of \$2.2M over the initial five-year term of the contract.
- GCOE will commit resources to jointly support with Fermilab, a total of nine joint postdoctoral researcher appointment(s) for five years in the field(s) of dark matter experiments, experimental collider physics, experimental astrophysics, microelectronics or quantum devices, and AI or data science. GCOE will cover 50% of salary and benefit for an annual contribution of approximately \$414k/year and a total of \$2.1M over the initial five-year term of the contract.
- The National Center for Supercomputing Applications (NCSA)-based Center for AstroPhysical Surveys (CAPS) at UIUC will commit up to two graduate student lines and one postdoctoral fellow line for joint NCSA-Fermilab efforts within the DOE Cosmic Frontiers portfolio for five years. These research lines are expected to work specifically and closely with collaborators at Fermilab. This is an annual contribution of \$220k/year and a total of \$1.1M over the initial five-year term of the contract.
- NCSA will commit to supporting joint students and trainees by providing up to 2,000 node-hours/year on Delta and DeltaAI and access to the CAPS cluster to facilitate collaborative work. This contribution has an estimated total value of \$320k.
- NCSA will commit to providing office space for Fermilab visitors (both drop-in space for short term visitors and at least three offices for long-term visitors), as well as appropriate meeting space to accommodate collaborative work, workshops, seminars, and symposia. This contribution has a value of \$20k/year and a total of \$100k over the initial five-year term of the contract.
- NCSA is committed to continuing its partnership with Fermilab in Astrophysical Surveys and the Cosmic Frontiers projects. Additionally, we will work to expand this effort to include Artificial Intelligence.
- GCOE will commit to twelve tuition waivers for PhD students per year who are working at Fermilab or at UIUC on Fermilab programs. This support has an estimated value of \$480k/year for a total of \$2.4M for the first five-year term of the contract. It is anticipated that these students will be appointed to funded research projects.
- The Department of Astronomy in the College of Liberal Arts and Sciences (LAS) will commit to two tuition waivers for PhD students per year who are working at Fermilab or at UIUC on Fermilab programs. This support has an estimated value of \$80k/year for a total of \$400k for the first five-year term of the contract. It is anticipated that these students will be appointed to funded research projects.

**Resource Commitment 22A: Joint Appointments,
Postdoctoral/Graduate Students, Internships, Workforce Development, Data Science**

- GCOE will commit to providing a 0.5 FTE in staff time in the Materials Research Laboratory (MRL) or the Illinois Quantum Information Science and Technology (IQUIST) center with the goal of strengthening the collaboration between UIUC and Fermilab in the areas of quantum materials and quantum communications. This support has an estimated value of \$74k/year for a total of \$370k for the first five-year term of the contract.
- GCOE will commit to co-developing a cleanroom & microelectronics training program in the Holonyak Micro- and Nanotechnology Laboratory (HMNTL), open to Fermilab engineers, at no cost to the government.
- GCOE will commit to creating 0% departmental affiliate appointments in the Department of Physics for visiting Fermilab scientists. We also look forward to establishing new relationships for staff at Fermilab who have affiliate appointments at UIUC to develop education programs that benefit the UIUC and Fermilab shared mission such as Particle Acceleration Physics Training Programs.
- We will also commit to partnering with Fermilab (work that has already begun), in collaboration with Innovate Illinois to compete for a Department of Commerce funded National Heterogenous Integration Packaging facility located at Fermilab and participate in the governance of the packaging facility in service to the nation and to the Department of Energy.

Expected Benefits to Fermilab

These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These commitments will help Fermilab develop a cooperative and collaborative partnership with a local academic partner, help train the next generation of scientists, expand research collaborations, and enhance workforce development.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

Commitment 23A:

University of Illinois System – Workforce Education and Training

Resource Commitment 23A: Workforce Education and Training	
Organization	Area(s) of Impact
University of Illinois System	Workforce Development
Location(s)	Estimated Total Value
Fermilab and UI Campuses	No financial value estimated
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Campus Vice Chancellors for Research
Description	
<p>The University of Illinois campuses at Chicago and Urbana-Champaign, both of which have long and accomplished histories of scientific involvement at Fermilab, have provided separate, campus-specific letters committing their enthusiastic support. These University of Illinois campuses bring excellence to Fermilab. The HEP program at UIUC is one of the largest in the country, and UIC, which is designated as a Minority Serving Institution and the University that was a driving force behind the formation of the Alliance of Hispanic Serving Research Universities, brings not only excellence in HEP research but also a strong history of educating minorities and underrepresented groups.</p> <p>Of note in this regard is the Workforce Education Exchange (WEX), a platform for workforce education and training developed by the Illinois Innovation Network (IIN), which consists of the 12 public universities in Illinois as well as the U of I System’s Discovery Partners Institute and links with Illinois’s 48 community colleges and a growing number of K-12 schools. The Workforce Education Exchange connects education, workforce development, and industry resources to ensure a skilled and job-ready work-force for in-demand and emerging industries in Illinois. The University of Illinois is enthusiastic about potential collaborations with Fermilab to encourage more young people to pursue careers in science and technology. Developing tomorrow’s science and technology leaders is essential if we are to compete in the global marketplace.</p>	
Expected Benefits to Fermilab	
<p>Advancing the economic well-being of Illinois, the Midwest, and the nation is an important responsibility of the University of Illinois System. We share DOE’s mission to broaden and strengthen economic growth and development through investments in discovery research and the accelerated development, transfer, and commercialization of technologies for public benefit. The University of Illinois System therefore pledges its unwavering support to help design strategies and develop successful programs that enable Fermilab to foster rapid technology deployment to market, thus achieving local, regional, and national economic impact.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 24A:
University of Michigan – Joint Appointments, Postdoctoral/Graduate Students,
Workforce Development**

Resource Commitment 24A: Joint Appointments, Postdoctoral/Graduate Students, Workforce Development	
Organization	Area(s) of Impact
University of Michigan	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab	\$80k annually; \$400k in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice President for Research & Innovation, Michigan
Description	
<p>The University of Michigan commits resources to support one joint research scientist appointment(s) for five years in the field(s) of AI, Quantum, or Microelectronics. The University of Michigan will cover 50% of salary and benefits for an annual contribution of approximately \$80k per year and a total of \$400k over the initial five-year term of the contract.</p>	
Expected Benefits to Fermilab	
<p>These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. The joint appointment described above and in the supporting letter from the University of Michigan will provide an important programmatic link between the University of Michigan and Fermilab and thereby further the scientific mission of the laboratory.</p>	
Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 25A:
University of Notre Dame – Joint Appointments, Postdoctoral/
Graduate Students, Facilities**

Resource Commitment 25A: Joint Appointments, Postdoctoral/Graduate Students, Facilities	
Organization	Area(s) of Impact
University of Notre Dame	Science Vision & Implementation; Workforce Development
Location(s)	Estimated Total Value
Fermilab and Notre Dame campus	\$1.96M annually; \$9.8M in total over initial 5-year term
Date the Commitment Will Be Provided	Accountability and Oversight
Annually following contract award	Vice President for Research, Notre Dame

Description

The University of Notre Dame commits resources to support up to five joint scientist/faculty appointments for five years in fields to include Physics, Computer Science, Applied and Computational Mathematics and Statistics, and Engineering. Notre Dame will cover up to 50% of salary and benefits of each joint appointment for an annual contribution of approximately \$471K/year and a total of \$2.4M over the initial five-year term of the contract.

The University commits resources to support up to five joint postdoctoral fellow appointments for five years in these fields and will cover up to 50% of salary and benefits of each joint appointment for an annual contribution of approximately \$348K/year and a total of \$1.7M over the initial five-year term of the contract.

The University commits resources to support up to ten PhD graduate student appointments for five years in these fields. The value of the graduate student salary and benefits is approximately \$515K/year and a total of \$2.6M over the initial five-year term of the contract. In addition, Notre Dame commits to provide tuition scholarships for up to ten PhD students per year who are enrolled at Notre Dame and working on Fermilab programs at Fermilab. This support has an estimated value of \$625K/year or a total of \$3.1M for the first five-year term of the contract.

Notre Dame is well positioned to play a leadership role in computational efforts and expects a number of joint appointments to be engaged with our Center for Research Computing in support of computational science.

Notre Dame is one of three founding member institutions of the Compact Accelerator System for Performing Astrophysical Research (CASPAR), a National Science Foundation (NSF) funded underground accelerator laboratory housed in the Sanford Underground Research Facility (SURF), located in the Black Hills of South Dakota. CASPAR resides 4850 ft underground and is dedicated to the study of nuclear reactions fueling stellar environments and elemental production. CASPAR is the only deep underground accelerator laboratory in the U.S. A strong focus of the laboratory is the education and training of the next generation of nuclear physicists through strong graduate and undergraduate student involvement.

The University is open to assisting Fermilab in the development and provision of training in the areas of Open Access Data, Human Resources and Organizational Effectiveness, and Safety. This training could be provided at no cost for the first initial program year with a goal of a long-term engagement in a fee-based training program.

**Resource Commitment 25A: Joint Appointments,
Postdoctoral/Graduate Students, Facilities**

Expected Benefits to Fermilab

These commitments will assist Fermilab in maintaining its programs of cooperation with the academic and educational community for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs and Fermilab's workforce needs. These faculty scientists, postdoctoral fellows, and graduate students, appointed in partnership with Notre Dame, will help Fermilab achieve its mission goals and help develop and educate the next generation of scientists and engineers. The opportunity to engage in selected training and workforce development programs offered by Notre Dame will contribute to Fermilab's efforts to attract, retain, and develop a high-performing workforce.

Governmental Action Required/Related to the Commitment	Liability to the Government
None anticipated	None anticipated

**Commitment 26A:
University of Oxford – Joint Appointments, Postdoctoral/Graduate Students,
Educational Programs**

Resource Commitment 26A: Joint Appointments, Postdoctoral/Graduate Students, Educational Programs	
Organization	Area(s) of Impact
University of Oxford	Science Vision and Implementation Workforce Development International Partnerships
Location(s)	Estimated Total Value
Fermilab	TBD upon commitment fulfillment and reported to DOE on an annual basis
Date the Resource Will Be Provided	Accountability and Oversight
At contract start and annually thereafter	Head of Physics, University of Oxford
Description	
<p>Oxford will be a strong and unwavering partner to Fermilab in the scientific and technological initiatives spearheaded by FermiForward and is committed to engaging with and supporting the FermiForward proposal. Oxford is pleased to make the following commitments to Fermilab at no additional cost to the government. Please note that the U.S. dollar value of this commitment cannot be estimated with accuracy due to future fluctuations in currency valuations. Oxford commits to reporting resources provided to support the following commitments, converted to U.S. dollars at the time of commitment execution, on an annual basis.</p> <p>On February 13, 2024, Oxford approved a new master’s course in Quantum Engineering. Commencing in 2025 we intend this to be the world’s premier course in this crucial subject. At the same time, their colleagues at UChicago are embarking on a similar course with similar goals. For the past 18 months Oxford has been exploring ways to make this a new joint UChicago-Oxford Master’s Degree program and is making substantial progress towards this goal. The course will be made available to Fermilab staff. The silicon sensor testing and development facilities at Oxford will be made available to Fermilab scientists working in conjunction with Oxford on the new initiatives for future colliders. Oxford will also host Fermilab scientists and engineers on extended visits to its extensive facilities in the UK. In addition, we share interests in artificial intelligence and joint activity there is being explored.</p> <p>Oxford University will commit the necessary resources to support the collaborative work of Oxford faculty and Fermilab staff in Physics with a particular emphasis on the areas of Particle Physics, Quantum Science, and Instrumentation. Those resources include the salary of Oxford faculty, staff, students, and postdocs. We currently anticipate that eight faculty members, eight PhD students, and six postdoctoral fellows will engage in the FermiForward partnership over the initial five-year term of the contract.</p>	
Expected Benefits to Fermilab	
<p>Oxford and Fermilab have a decades long scientific partnership. Oxford has a wealth of experience and ongoing scientific collaborations with Fermilab in multiple areas, currently including the experimental efforts in Neutrino Science with the DUNE and SBND projects, as well as in efforts to explore the Dark Universe through novel experimental approaches such as the MAGIS project. The success of LBNF-DUNE, SBND and MAGIS is of utmost importance to Oxford University. Through the commitments described above, Oxford intends to deepen and extend this profoundly important international collaboration.</p>	
Required Governmental Action	Liability to the Government
None anticipated	None anticipated